

BENJAMINS

TRANSLATION

Fundamental Aspects
of
Interpreter Education

David B. Sawyer

LIBRARY

Fundamental Aspects of Interpreter Education

Benjamins Translation Library

The Benjamins Translation Library aims to stimulate research and training in translation and interpreting studies. The Library provides a forum for a variety of approaches (which may sometimes be conflicting) in a socio-cultural, historical, theoretical, applied and pedagogical context. The Library includes scholarly works, reference works, post-graduate text books and readers in the English language.

General editor

Gideon Toury
Tel Aviv University

Associate editor

Miriam Shlesinger
Bar Ilan University

Advisory board

Marilyn Gaddis Rose
Binghamton University

Yves Gambier
Turku University

Daniel Gile
Université Lumière Lyon 2 and ISIT Paris

Ulrich Heid
University of Stuttgart

Eva Hung
Chinese University of Hong Kong

W. John Hutchins
University of East Anglia

Zuzana Jettmarová
Charles University of Prague

Werner Koller
Bergen University

Alet Kruger
UNISA

José Lambert
Catholic University of Leuven

Franz Pöchhacker
University of Vienna

Rosa Rabadán
University of León

Roda Roberts
University of Ottawa

Juan C. Sager
UMIST Manchester

Mary Snell-Hornby
University of Vienna

Sonja Tirkkonen-Condit
University of Joensuu

Lawrence Venuti
Temple University

Wolfram Wilss
University of Saarbrücken

Judith Woodsworth
Mt. Saint Vincent University Halifax

Sue Ellen Wright
Kent State University

Volume 47

Fundamental Aspects of Interpreter Education: Curriculum and Assessment
by David B. Sawyer

Fundamental Aspects of Interpreter Education

Curriculum and Assessment

David B. Sawyer

Monterey Institute of International Studies

John Benjamins Publishing Company
Amsterdam/Philadelphia



™ The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences – Permanence of Paper for Printed Library Materials, ANSI Z39.48-1984.

Library of Congress Cataloging-in-Publication Data

Sawyer, David B.

Fundamental aspects of interpreter education : curriculum and assessment
/ David B. Sawyer.

p. cm. (Benjamins Translations Library, ISSN 0929-7316 ; v. 47)

Includes bibliographical references and index.

1. Translators--Training of. I. Title. II. Series.

P306.5S29 2004

418'02'0711-dc22

2003062995

ISBN 90 272 1653 3 (Eur.) / 1 58811 460 0 (US) (Hb; alk. paper)

© 2004 – John Benjamins B.V.

No part of this book may be reproduced in any form, by print, photoprint, microfilm, or any other means, without written permission from the publisher.

John Benjamins Publishing Co. · P.O. Box 36224 · 1020 ME Amsterdam · The Netherlands
John Benjamins North America · P.O. Box 27519 · Philadelphia PA 19118-0519 · USA

Table of contents

Figures and tables xi

Preface and acknowledgements xv

CHAPTER 1

Introduction 1

1. Challenges facing interpreter education 3
2. The integrative role of assessment 5
3. The objectives of this book 9
4. Methodological considerations 10
5. Overview of contents 15

CHAPTER 2

Interpreter education literature 19

1. Curriculum 26
2. Expertise 29
3. Assessment 31
4. Language transfer competence 35
5. Conclusions 37

CHAPTER 3

Fundamental aspects of curriculum 39

1. Definitions 41
 - 1.1 The official curriculum 41
 - 1.2 The hidden curriculum 42
2. Foundations 43
 - 2.1 Philosophy 44
 - 2.2 History 46
 - 2.3 Psychology 48
 - 2.4 Sociology 49

- 3. Guidelines 50
 - 3.1 Educational philosophy 53
 - 3.2 The aims of instruction 55
 - 3.3 Program goals 55
 - 3.4 Teaching objectives 58
 - 3.5 Curricular implications 59
- 4. Approaches 60
 - 4.1 Scientific – curriculum as process 60
 - 4.1.1 The computational view of the mind 61
 - 4.1.2 Skills and abilities in Instructional Systems Design 63
 - 4.1.3 The cognitive psychology of expertise 65
 - 4.1.4 Levels of expertise in interpreting 70
 - 4.1.5 Implications for curriculum sequencing 73
 - 4.2 Humanistic – curriculum as interaction 74
 - 4.2.1 A community of professional practice 75
 - 4.2.2 Cognitive apprenticeship 76
 - 4.2.3 Reflective practice 79
 - 4.2.4 Situated cognition and learning 81
 - 4.2.5 Implications for the learning environment 84
- 5. Models 85
 - 5.1 Curriculum models according to Arjona 85
 - 5.2 Curriculum components 88
- 6. Steps toward effective curriculum design 90
- 7. Conclusions 91

CHAPTER 4

- Foundations of interpreter performance assessment 93**
 - 1. Concepts 95
 - 1.1 Validity 95
 - 1.2 Reliability 101
 - 1.3 Subjective and objective testing 103
 - 1.4 Measurement scales 105
 - 1.5 Formative, summative, and ipsative assessment 106
 - 1.6 Test specifications 107
 - 2. Integrating curriculum and assessment:
Developmental milestones 108
 - 2.1 Entry-level assessment 109
 - 2.2 Intermediate assessment 112

- 2.3 Final assessment 113
- 3. Evidential bases of construct validity 114
 - 3.1 Scientific approaches: Criteria 114
 - 3.2 Humanistic approaches: Domain 116
 - 3.3 Guidelines: Standards 118
- 4. Standardization in testing 119
- 5. Authenticity 121
- 6. Alternative assessment: Portfolios 125
- 7. Steps toward valid and reliable assessment 128
- 8. Conclusions 129

CHAPTER 5

- Introduction to the case study 131**
- 1. Research questions 131
 - 2. General comments on method and scope 131
 - 3. Content analysis of GSTI curriculum documents 133
 - 3.1 Aims, goals, objectives 133
 - 3.2 Process: Knowledge and skill sequencing 135
 - 3.3 Interaction: Educational environment 142
 - 3.4 Assessment and the curriculum 143

CHAPTER 6

- Case study Part I: Translation and interpretation competence 145**
- 1. Introduction 145
 - 2. Method 147
 - 2.1 Quantitative description of curriculum in the GSTI 147
 - 2.1.1 First-year curriculum for MATI and MACI 147
 - 2.1.2 Second-year curriculum for MATI and MACI 149
 - 2.1.3 Second-year translation coursework for MATI 151
 - 2.1.4 Second-year interpretation coursework for MATI and MACI 153
 - 2.1.5 Advanced-entry course of study 156
 - 2.1.6 The GSTI hidden curriculum 156
 - 2.2 Subjects 157
 - 2.3 Materials – Professional Examinations in the GSTI 159
 - 2.3.1 Text selection 161
 - 2.3.2 Text delivery 161
 - 2.3.3 Examinations in consecutive interpretation 162

2.3.4	Examinations in simultaneous interpretation	162
2.3.5	Jury composition	162
2.3.6	Scoring criteria	163
2.3.7	Scoring procedure	163
2.4	Procedures – data collection	163
2.5	Analysis	168
3.	Results	169
4.	Discussion	171

CHAPTER 7

Case study Part II: Survey of exam jury members	177	
1.	Introduction	177
2.	Method	178
2.1	Subjects	178
2.2	Materials – survey content	178
2.2.1	Background of jury members	179
2.2.2	Exam procedures	179
2.2.3	Purpose of the exams	180
2.2.4	Assessment criteria	180
2.2.5	Jury conduct and role of external examiners	182
2.2.6	Additional comments	182
2.3	Procedures	182
2.3.1	Questionnaire design	182
2.3.2	Questionnaire administration	183
2.3.3	Return rate	183
2.4	Analysis	183
2.4.1	Data preparation	183
2.4.2	Data analysis	184
3.	Results	184
4.	Discussion	187

CHAPTER 8

Case study Part III: Analysis of exam texts	191	
1.	Introduction	191
1.1	Analytical tools	191
1.2	Exam texts and the curriculum	192
1.3	Exam texts as documents	193

2. Method	194
2.1 The corpus	195
2.2 Procedures	196
2.3 Analysis	197
2.3.1 English source language materials	197
2.3.2 French source language materials	200
2.3.3 German source language materials	201
3. Results	203
3.1 Exam texts for consecutive interpretation	203
3.2 Exam texts for simultaneous interpretation	204
4. Discussion	204
4.1 Length	204
4.2 Propositional content	205
4.3 Illocutionary force	206
4.4 Conclusions	207

CHAPTER 9

Implications of the case study	209
1. Part I: Translation and interpretation in the GSTI curriculum	209
2. Part II: Standardization, authenticity, and professional judgement	210
3. Part III: Exam materials and test method facets	212
4. Addressing the research questions	213

CHAPTER 10

Curriculum enhancement: An integrated Y-track model	215
1. Aims and goals of the curriculum	220
2. Integrated assessment	224
3. Curriculum as process	225
4. Curriculum as interaction	227
5. Flexibility and streamlining	228
 Outlook: On the political and ethical consequences of test validation	 231

Notes 237

APPENDICES

Appendix A 241

Appendix B 244

Appendix C 252

References 265

Name index 303

Subject index 307

Figures and tables

Figures

Chapter 1

- 1.1 Relationships between curriculum and assessment 7

Chapter 3

- 3.1 Aims, goals, and objectives in the curriculum 52
3.2 Process of defining aims, goals, and objectives for the curriculum 54
3.3 Levels of expertise in interpreter education programs 72
3.4 Curriculum models according to Arjona 87
3.5 Competence areas in a Y-track curriculum model 89

Chapter 6

- 6.1 Quantitative differences in GSTI's modified Y-track curriculum 146

Chapter 10

- 10.1 Program entry and Curriculum Component I 216
10.2 Curriculum Component II 217
10.3 Curriculum Component III 218
10.4 Concentration studies and program exit 219

Tables

Chapter 3

- 3.1 Goals for levels of expertise in interpreter education 74

Chapter 4

- 4.1 Categories of validation evidence: Definitions, features and examples 97
4.2 Categories of reliability evidence: Definitions, features, and examples 102

4.3	Measurement scales, distinguishing features, and examples	106
4.4	Types of assessment, distinguishing features, and examples	107
4.5	Developmental milestones and the roles of assessment	110
4.6	Bachman's test method facets in the context of interpreting	122
4.7	Sample materials for an interpretation class portfolio	127
4.8	Portfolios and reflective practice	127

Chapter 5

5.1	Skills-based progression of GSTI curriculum	136
5.2	Domain-based progression of GSTI curriculum	139
5.3	Progression of professional knowledge and identity in GSTI curriculum	140

Chapter 6

6.1	Number of words translated by second-year MATI-2 students	152
6.2	Number of words translated by second-year MATI-3 students	152
6.3	Number of interpretation class hours for MATI-2 students	154
6.4	Number of interpretation class hours for MATI-3 students	154
6.5	Number of interpretation class hours for MACI-2 students	155
6.6	Number of interpretation class hours for MACI-3 students	155
6.7	Frequencies of MATI and MACI students who took GSTI's Professional Examinations in interpretation between 1994 and 1999	157
6.8	Frequencies of students who took GSTI's Professional Examinations in interpretation between 1994 and 1999 by A, B and C language	157
6.9	Frequencies of students who took GSTI's Professional Examinations in interpretation between 1994 and 1999 by degree track and language combination	158
6.10	GSTI's Professional Examinations in translation by degree track and A, B, C language combination	160
6.11	GSTI's Professional Examinations in consecutive interpretation by degree track and A, B, C language combination	160
6.12	GSTI's Professional Examinations in simultaneous interpretation by degree track and A, B, C language combination	161
6.13	Number of students who failed consecutive general A into B	172
6.14	Number of students who failed simultaneous general B into A	172
6.15	Number of Asian-language students who failed consecutive general A into B	172

6.16 Number of European-language students who failed simultaneous
 general B into A 173

Chapter 8

- 8.1 Facets of input in English exam texts 198
- 8.2 Facets of input in English exam texts – simultaneous with text 199
- 8.3 Facets of input in French exam texts 201
- 8.4 Facets of input in German exam texts 202

Chapter 10

10.1 A criterion-based assessment rubric for proficiency testing 236

Preface and acknowledgements

As the world presses eagerly forward toward the accomplishment of new things, education also must advance no less swiftly. It must provide the intelligence and the aspirations necessary for the advance; and for stability and consistency in holding the gains. Education must take a pace set, not by itself, but by social progress. (Bobbit 1971:iii)

This exploratory volume contributes to the theoretical discussion of curriculum and assessment in interpreter education programs, an area that is under-researched and under-studied. In this book, I view expertise, or interpretation competence, as an outcome of curriculum design and implementation and review procedures used to assess these outcomes. I adopt a holistic approach by focusing on a description of general curriculum frameworks and the processes and environments that contribute to learning. While the theoretical and empirical portions of this study are scientific in nature, other sections, in particular the introduction, the suggestions for enhancing curriculum, and the outlook, reflect my personal viewpoint on the need to improve interpreter education and steps that can be taken. My intention is not to be prescriptive but rather to stimulate debate.

While the body of literature on language interpreting has been growing rapidly for several decades, readers of this research are sometimes asked to take a leap of faith when the conclusions of scientific and humanistic thinking are discussed in the context of interpretation pedagogy. There is general agreement in the community of researchers that the field of Interpreting Studies (IS) is by definition interdisciplinary. Nevertheless, little work has been done to relate literature from the fields of education to the pedagogy of interpreting. The purpose of this volume is to help interpreter educators, program administrators, industry professionals, students, and alumni involved in interpreter training and testing take a step forward. A leap of faith becomes a manageable step when goals are explicit, clear links between theory and practice are forged, and descriptions of how to apply theory and research in the classroom are provided. I hope that I have been successful in the initial effort that this book represents.

Before this project began, a process of curriculum and assessment review was underway in the Graduate School of Translation and Interpretation (GSTI) of the Monterey Institute of International Studies (MIIS). Before I completed this manuscript, the curriculum and examinations in the GSTI had been restructured. Given the need to update curricula and tests on an ongoing basis, GSTI's curriculum and examinations will have continued to evolve. Although the curriculum and examinations described in this book have since been reviewed and updated, the information presented here documents fundamental aspects of curriculum and assessment that – it is my hope – interested parties will find useful as a basis for comparison with other programs.

I wish to extend a heartfelt thanks to the many individuals who contributed to this book. First and foremost are my dissertation adviser, Prof. Dr. Karl-Heinz Stoll, and co-adviser, Prof. Dr. Franz Pöchhacker. Without their untiring feedback and effort in seeing my dissertation through to completion, there would not have been a manuscript to revise for publication. I would also like to extend special words of thanks to Diane de Terra, former dean of the GSTI. Her enthusiasm in seeing the case study as part of an ongoing effort to improve pedagogy and instruction made it possible to complete this research.

I must also express my gratitude to friends and colleagues in the language testing community. In matters regarding assessment, testing, and methodology, I owe thanks in particular to Jean Turner of the Graduate School of Language and Educational Linguistics, MIIS, whose support was unflinching during both the dissertation and subsequent revision of the manuscript. Frances Butler of the Center for the Study of Evaluation, UCLA, commented on the introduction, chapter on assessment, and outlook with insight, enthusiasm, and grace. The experience of working with Frances and Jean in test development and validation in the language industry continues to broaden and deepen my thinking about interpreter assessment. The opportunity to implement ideas that were explored in my dissertation in a collaborative effort with language testing specialists has been an invaluable educational experience.

I must mention the many colleagues who provided feedback at various stages of the writing and review process, in particular Miriam Shlesinger as editor of the Benjamin Translation Library series, the anonymous reviewer, Daniel Gile, Don Kiraly, Holly Mikkelsen, Sabina Matter-Seibel, and Charles Stansfield. Leslie Nelman, Laurence Petit, and John Wunderley provided assistance with manuscript mechanics at various stages of the project. Special thanks also go to Isja Conen who provided friendly support and coordination as acquisitions editor at John Benjamins.

I am indebted to GSTP's outstanding and dedicated faculty who showed interest in the project and participated in the faculty survey. The research presented here was also supported by a Joseph and Sheila Mark Faculty Development Award and a Robert W. and Betty C. Lundeen Faculty Development Award from the Monterey Institute of International Studies. These awards funded release time from some of my teaching responsibilities during crucial stages of the dissertation.

Finally, I would be remiss were I not to mention my family and friends in the United States and Germany who lived through the various stages of the dissertation and book process with me over the years. I thank them for their patience and words of encouragement.

David B. Sawyer
Monterey, June 2003

CHAPTER 1

Introduction

Any inherited system, good for its time, when held to after its day, hampers social progress. It is not enough that the system, fundamentally unchanged in plan and purpose, be improved in details. (Bobbit 1971:iii)

As the world grows smaller and its inhabitants communicate increasingly with one another, it becomes ever more vital that the barriers of language and culture be overcome to promote and safeguard the interests of individuals, public institutions, and private organizations on all levels – from the local community to international organizations. To ensure that these barriers are eliminated, the services of professionals who are trained to mediate between languages and cultures are required. It is therefore no surprise that interpreter education, which was institutionalized in Europe after the Second World War (Bowen 1995:252), grew in volume and economic importance significantly during the latter half of the twentieth century (Snell-Hornby 1998a:32). By one account, the number of university-level institutions offering degrees or diplomas in translation or interpretation rose from 49 to 80 between 1960 and 1980, and had reached a total of more than 250 by 1994 (Caminade & Pym 1998:283). A more recent estimate cites 300 as a figure, depending on the criteria used to define a program (Pym 1998:34).

Despite the globalization of this day and age, professional language mediators – interpreters and translators – are educated in institutional settings that are shaped by highly specific political, cultural, legislative, and market-specific constellations in their country and region of the world (Snell-Hornby 1998a:32). In addition, the environment in which the official curriculum is implemented is shaped by many entities, including public institutions, policymakers, ministries, donors, the media, the private sector, and direct participants, i.e., instructors, students, and alumni (Freihoff 1995:150). As a result, a wide variety of curriculum models have emerged, and they differ substantially from one another, even within Western Europe (Caminade & Pym 1998:282). A discussion of curricular diversity has been neglected to date in the scientific literature and in the community of translation and interpretation schools (Pym 1998:35).

A major hurdle in the area of curriculum research is the lack of reliable sources (Pym 1998:34), i.e., both internal and external curriculum documents. Collecting such documents from a range of schools of translation and interpretation is a daunting task, as these documents, particularly those on course sequencing, may not be available from a central administrative office on the school level. Rather, they are often developed and circulated within individual programs or departments. Learning objectives may also differ among language combinations, making in-depth comparisons among schools more problematic. When internal documents are readily available to the public, as in the CIUTI¹ handbook, they are often limited to an objectified, terse description that provides little information as to how the curriculum is implemented and how it is subjectively experienced. In this respect, Freihoff ventures to state that the hidden curriculum, i.e., the curriculum that exists in the minds of the participants, is the only curriculum with practical impact (1995:152). Hence, there is not only a lack of data on curriculum models; there is lack of clarity on what constitutes reliable data and how these data can be obtained.

Moreover, although the momentum driving interpreter education has gathered force, interpretation pedagogy has led an existence in the shadows of academe since its inception (see Snell-Hornby 1998a:32). From the vantage point of the language professional, this lack of academic status and its persistence is surprising. Change is underway, however, as the language industry undergoes increasing consolidation and professionalization, marked by surging revenues and attractive employment opportunities for multilingual communication specialists (Wood 1998). Most notable in this context is the emergence of finer distinctions according to expertise in subdomains, related professional qualifications, e.g., advanced degrees and certification, the growing movement toward standardization,² and calls from industry to define quality and to conduct valid and reliable assessment.

After the Second World War, much time and effort was spent on heightening the profile of the professional conference interpreter to improve and maintain adequate working conditions and levels of remuneration. These efforts have been successful, thanks to the work of professional associations, such as the International Association of Conference Interpreters (AIIC) and The American Association of Language Specialists (TAALS). These organizations continue to work persistently for the profession, as is reflected in the movement towards formal recognition of conference interpretation as a profession through an international convention, and formal recognition of translation and interpretation as professions by the United States Immigration and Naturalization Service.

An objective of defining conference interpretation as a profession is to distinguish it from other related activities, more often than not multilingual in nature.³ The distinction between interpretation and other multilingual activities is reflected in the pedagogy of interpretation, which has separated itself from the field of foreign language teaching (Arjona 1984a: 3–4), particularly in Europe. This distinction has also been vital from the viewpoint of pedagogy, as language is a means to an end in translator and interpreter education and the profession. In other words, language competence is a foundation upon which language transfer skills are built, rather than a goal of study, as in language and literature programs (Snell-Hornby 1998a: 33; Hönig 1995a).

Nevertheless, leaving the assumption unquestioned that teaching interpretation is an activity fundamentally different from teaching foreign languages, interpreter trainers have been perhaps too quick to dismiss the gains made in the fields of second language teaching and in particular language testing as irrelevant to interpreter education. There have been some exceptions, however. Arjona (1984a, 1984b), for example, rejects any affiliation with foreign language teaching yet adopts many of its testing and measurement concepts. More recently, Hatim and Mason have called for a more solid pedagogical foundation in translator and interpreter education, as well as the improvement of assessment methods (1997). Similarly, Kiraly has developed an approach to translation pedagogy based upon constructivist principles of learning and instruction (2000, 1997a, 1997b, 1995, n.d.). Kiraly's work in the area of translation attests in particular to the fact that these fields have emerged as highly productive, sophisticated areas of scholarly inquiry and research over the years. Yet despite this initial movement towards leveraging educational theory for translation and interpretation pedagogy, many interpreter educators remain skeptical that there is much to be learned from colleagues across the academic hallway. This stance is puzzling at best, as researchers in Interpreting Studies (IS) have long recognized the need for interdisciplinary approaches and have drawn on fields such as cognitive psychology, information processing, and psycho- and sociolinguistics.

1. Challenges facing interpreter education

The need for curricular enhancement in interpreter education emerges from current and future challenges facing these educational programs. To ensure that the demand for well-qualified applied linguists is met and that graduates thrive in the professional world, interpreter educators must address multiple

constraints, some of which have been recognized in interpreter training for many years. They include:

- a. The adaptation of training to the workplace, which is reflected in specialization according to service sector (often a function of language combination), e.g., public/governmental, private, entertainment, legal, health-care, and social services, and the ability to work with complex subject matter in a wide variety of domains, e.g., political, scientific and technical, economic and financial (Snell-Hornby 1998a: 32–33)
- b. The economical use of resources, including instructors, equipment and materials, as well as time
- c. The training of the interpreter as intercultural consultant (Bowen & Bowen 1987b)
- d. Training in the use of information technology for subject preparation before, during and after assignments (Gile 1995a)

This set of exigencies has been complemented by an additional set of constraints in recent years (see Setton 1999: 283), which place a severe strain on program resources. These challenges include:

- a. The reduction in length of training periods, resulting in the need to streamline
- b. A rise in quality requirements in all sectors of the language interpreting industry
- c. An increase in the technicality and specialization of subject matter
- d. The erosion of working conditions (length of day, number of interpreters)
- e. Fast and/or recited discourse, together with larger numbers of speakers with little or no training in public speaking
- f. The concurrent specialization in subdomains of interpreting
- g. A rise in demand for training in less commonly spoken languages, i.e., emerging conference languages
- h. The changing role of technology, with hybrid forms of translation and interpretation gaining ground (videoconferencing, voice recognition software, use of superscript, news broadcast interpreting, voice-over-IP [internet protocol]; written text to voice)

In addressing such challenges, decision-makers must consider issues of program resources, efficiency, and waste. We must ask ourselves how much we need to know about how well programs function and the nature of learning to make principled decisions and arrive at sound conclusions on multiple issues, beginning with appropriate levels of program intake, attrition, and graduation

rates. For example, may we assume that high intake is required to graduate even a low number of competent interpreters? Or should a program pursue an alternative strategy of low intake and proportionally high output? How should we arrive at appropriate conclusions in addressing these challenges? May we assume that they are program- and field-specific and that only translation and interpreting professionals can provide appropriate guidance? What contributions can specialists from other fields of education make? While decision-making in educational contexts is necessarily dictated by economic realities, curriculum and assessment decisions that have no solid theoretical foundation may jeopardize the long-term health of a program. It seems reasonable to propose that those educational disciplines that have strong, long-standing theoretical and methodological traditions should be explored.

In addressing the challenges such as those outlined above, interpreter educators inevitably grapple with three areas, which are linked. (1) Curricula must be designed for new programs. Concurrently, curricula in existing interpreter education programs must be constantly updated. (2) Student performance must be assessed appropriately, meaningfully, and usefully at all stages of the curriculum. (3) Academic environments and instructional settings must be optimized through efficient syllabus design and lesson planning, the use of cutting-edge teaching methodology, innovative technology, proven classroom management techniques, and other pedagogically sound practices. Taken together, these measures enable the learner to develop expertise more rapidly and efficiently to the skill levels required at the top of the language industry.

Given the central role of curriculum design, implementation, evaluation, and assessment, we should reflect carefully as to whether curriculum and assessment theory have the potential to assist in making significant strides in interpreter education. A central premise of this book is that they can; interpreter educators cannot afford to ignore the theoretical foundations and methodologies offered by these disciplines, if schools and programs are to rise successfully to the challenges facing them.

2. The integrative role of assessment

High quality education is based upon sound assessment. In effective instructional programs, assessment provides convincing evidence to the participants that the curriculum goals and objectives are being met. The importance of appropriate, useful, and meaningful assessment practices has been recognized in the measurement community for over a half century. As Tyler comments in

1951, educational measurement is not “a process quite apart from instruction, but an integral part of it” (47).

Over time, views on the role of assessment in instruction have broadened, as the fields of measurement theory, assessment theory, and language testing have evolved both in theory and practice. Gipps, for example, describes a transition “from psychometrics to a broader model of educational assessment” (1994:1). In her development of a comprehensive assessment theory, she stresses a shift “from a testing and examination culture to an assessment culture” (1). In this broader context, educators “have a better understanding of the design, functioning, impact, as well as inappropriate uses, of assessment” (2). As a result, they are in a better position to “understand, explain and predict” student performance (2).

Given this comprehensive role, the ramifications of assessment and testing are far-reaching and have an impact on many different areas of education. In identifying salient trends in the field of educational measurement, Linn (1989a:2–9) lists areas that are also influential in translator and interpreter education. They include technological developments, in particular the use of computers in testing; the demands and expectations of testing, including accountability and instructional use; and social and legal issues in testing, such as bias in test use and test score interpretation, professional standards, litigation, and legislation. The importance of these areas will continue to grow.

In their landmark text, Glaser and Nitko (1971:625) note that “testing and measurement represent one of the critical components of the educational environment – *they provide the essential information for the development, operation, and evaluation of this enterprise.*” The links between curriculum and assessment implied in this quotation are shown in Figure 1.1. The aims and goals of the curriculum determine the design of the curriculum, which in turn creates a framework for the implementation of the curriculum. Through assessment and evaluation within this theoretical and practical framework, determinations are made as to the degree of success of the curriculum. At the same time, it is only through the implementation of the curriculum that its aims and goals can be reached. The outcomes of assessment and evaluation also aid in improving curriculum design.

Assessment and testing therefore have a pervasive role in educational enterprises; assessment has an integrative function. Strengthening the linkages between curriculum and assessment, which are depicted in Figure 1.1, therefore improves the quality of the educational program. Indeed, a primary means to enhance the efficiency and usefulness of the curriculum is through greater integration of the processes of curriculum design, implementation, evaluation,

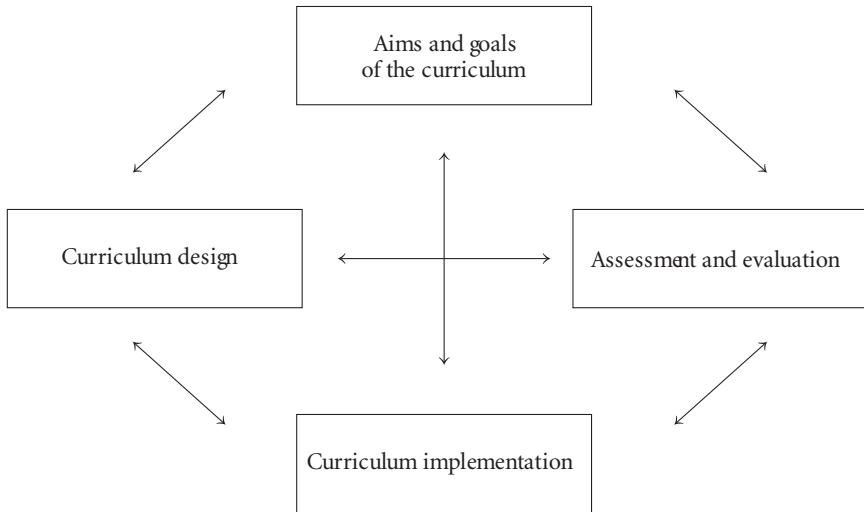


Figure 1.1. Relationships between curriculum and assessment

and assessment by ensuring that the results of these processes feed back into one another.

Therefore, the importance of valid and reliable forms of assessment transcends the learner, as crucial as validity and reliability are for a student in an educational program. Reaching far beyond individual decisions concerning program entry, degree-track selection, and degree conferral, assessment provides invaluable feedback on learning and instruction for an entire program of study and serves as a basis for its evaluation – without valid and reliable assessment, the success of a program cannot be gauged accurately. Hence, valid and reliable forms of assessment inform the process of curriculum design and implementation, which is, as Roy states in her remarks on interpreter education, “the hallmark of professional training. Without it, you have guesswork, choices of tradition, and sometimes chaos. With it, you have a higher probability of successful education and training” (1984:36).

Nevertheless, assessment practices cannot provide guidance in the design and implementation of the curriculum if the purpose of the instructional program – its aims and goals – has not been clearly defined. Glaser and Nitko (1971:632) note:

In an educational system, the specification and measurement of the outcomes of learning in terms of observable human performance determine how the system operates. Vague statements of the desired educational outcomes leave

little concrete information about what the teacher and the student are to look for and what the designers of the system are to strive to attain.

(Glaser & Nitko 1971:32)

Therefore, the aims and goals of the curriculum need to be developed and documented explicitly. Greater clarity about the purposes and uses of the various forms of assessment outcomes also needs to be gained.

In this regard, Gipps (1994:3) asks two questions that relate the role of assessment to the program of instruction and its curriculum: “what is the assessment for?” and “what kind of learning do we wish to achieve”. These questions are not to be answered definitively; rather, the curriculum participants should revisit them regularly to call to mind the aims of instruction. Responses to these questions serve as constant reminders of the nature in which we wish the official curriculum to manifest itself in its multifaceted forms. The ensuing hidden curriculum is therefore shaped by educational philosophy; it is a statement of the underlying rationale for a course of study, thus determining how interpreter educators and their students define themselves in the classroom and in the field. Given the vital role of assessment, it is therefore not surprising that its neglect has consequences for educational programs: a lack of clarity as to whether educational goals are being met masks the degree of success or failure of a program.

Concerns about the inadequacy of assessment practices are voiced repeatedly in the professional community and in Translation and Interpreting Studies literature. While the body of literature dedicated to the evaluation of quality in translation and interpreting has been growing (Lee-Jahnke 2001b), we must also ask ourselves whether educational practice is keeping abreast of theoretical developments. It is insufficient, for example, to simply hand a student a text, as is sometimes still done in diagnostic testing, and ask him or her to translate it, without much thought given to text selection, criteria for performance assessment and use of the test results. In interpretation, it is reprehensible that inconsistencies in examination procedures create an uneven playing field for examinees and that a lack of clear assessment criteria allows strong-minded individuals to sway jury votes. Such situations contribute to the “unease felt by many at the unsystematic, hit-and-miss methods of performance evaluation which, it is assumed, are still in operation in many institutions” (Hatim & Mason 1997:198).

The challenges of assessment are therefore very real to instructors and students, who are both extremely interested in improving assessment practices. Instructors in particular want to know whether theoretical constructs are useful

and specifically how theory can be applied in the classroom and the field. Given the multiple demands on the time and resources of instructors and students, the utility and practicability of theory must be evident. This book is intended to be a contribution to this discussion.

3. The objectives of this book

The primary objective of this book is to explore the potential contributions of the fields of curriculum and assessment (language testing) for improving interpreter education. This objective is concurrent with the aims of Interpreting Studies, which have been (re-)stated by Pöchhacker and Shlesinger (2002:3–4) and described in relation to the parent discipline of Translation Studies (Holmes [1972]/1988). In this sense, the book's objective is to describe aspects of interpreting in the context of pedagogy and to establish general explanatory and predictive principles in interpreter education. This primary objective is supported through a series of broad and narrow objectives.

The broad objectives are general in nature. The intention is to provide a philosophical discussion of educational principles underlying interpreter education to serve as food for thought in deliberations about the nature of curriculum and the role of assessment in schools and programs. An overview of the Interpreting Studies literature on curriculum and assessment places this discussion in the context of education and training. An outline of current thinking with regard to curriculum definitions, foundations, and guidelines suggests a framework based upon scientific and humanistic approaches – *curriculum as process* and as *interaction*. Similarly, in the area of assessment, fundamental concepts from the field of language testing are introduced and related to interpreting, and means of integrating valid and reliable assessment into the curriculum are explored. To take the general discussion one step further, an enhanced curriculum is presented as a practical model reflecting the theoretical discussion that precedes it. It is the hope that the proposed model can serve as a basis for further discussion.

The narrow objectives are scientific in nature and are pursued primarily in a case study, through which fundamental aspects of curriculum and assessment are explored in the context of a specific program. The case study provides a close examination of different, yet related, aspects of curriculum implementation and assessment procedures in the Graduate School of Translation and Interpretation (GSTI) of the Monterey Institute of International Studies (MIIS). In this sense, the case study is intended to be a practical example of

program concerns that can be explored through the fields of curriculum and assessment. In addition to the overarching research questions presented in the introduction to the case study, specific hypotheses and research questions are stated in the introductory sections of each part of the study. The case study provides sample data on pass/fail rates in degree examinations, information on exam parameters (test method facets) and scoring criteria, as well as text selection.

The case study does not aspire to be a comprehensive evaluation of the curriculum in the GSTI, nor does it aspire to be a study of the validity and reliability of the Professional Examinations in the GSTI. It merely explores the possibility that the fields of curriculum and assessment provide descriptive tools that are useful in interpreter education and looks at the fundamental relationship between translation instruction and interpretation competence in a specific curriculum model (Part I). When it becomes evident that no firm conclusions can be drawn, a further analysis of aspects of the Professional Examinations is conducted to see why this may be the case (Parts II and III). Towards the end of this exploratory, iterative process, the conclusion is reached that test validation is relevant for interpreter education programs and greater awareness of the need for validity and reliability should be cultivated. Research programs with program evaluation and test validation as objectives are a separate enterprise and a logical next step.

These theoretical underpinnings are of interest mainly to scholars of Interpreting and, it is hoped, Translation Studies. Nevertheless, this book aims to provide an accessible and informative discussion that will be of equal interest to interpretation and translation instructors, program administrators, and language industry professionals who must grapple with the practical side of curriculum design and the logistics of teaching and testing. At the same time, this discussion also presents a new area of application for curriculum and language testing specialists.

4. Methodological considerations

It is widely recognized that the field of Interpreting Studies is by definition interdisciplinary and borrows methodologies from related fields in pursuing its objects of research and discussion. As a result, the methodologies adopted by researchers in Interpreting Studies have been diverse and multifaceted, and a wide range of methodological possibilities is available, which can result in a high degree of complexity in discussions in the field. The following

outline provides background information concerning the rationale for the approaches adopted in this book. Methodological considerations voiced in the Interpreting Studies community are first highlighted and then set in relation to considerations prevalent in the educational community. This discussion is intended to provide general orientation for the chapters on curriculum and assessment and the case study that follows them.

As a young, independent academic discipline, Interpreting Studies must identify its objects of study and develop a rationale for doing so internally. It must also relate its research to the fields that it draws upon to inform its discussion – in this particular instance, the literature and thinking, theoretical constructs, and methodologies from the fields of curriculum theory and assessment (language testing). There does not seem to be a clear consensus on the principles and hierarchical relationships governing interdisciplinary work of this nature. Nor is a consensus required, although greater clarity would be useful, particularly if Interpreting Studies is (1) to evolve autonomously (a general purpose) and (2) focus on questions that educators and practitioners believe need to be addressed (as in this study). Despite this situation, a consensus does seem to be evolving in the yet small community of Interpreting Studies researchers who have been contributing research in this area roughly since the 1960's. It would be that interpreting is a complex cognitive activity that occurs in social situations – a real-world phenomenon requiring, at its higher levels, considerable linguistic (hence mental) dexterity.

Given the complexity of the phenomenon of interpreting itself, the methodological turmoil of the 1980's and 1990's is not surprising. Interpreting Studies was establishing itself as a discipline in its own right, and much writing on research methodology centers around two related concerns: (1) the development of interdisciplinary research models, and (2) the lack of sufficient samples of data.⁴ A casual reader of the Interpreting Studies literature could, for example, identify two major research paradigms – one seemingly pitted against the other. The first has been defined broadly as a school of researchers drawing on concepts in cognitive science and linguistics (Setton 1999:3). This strand was presumably the 'empirical research' group that has also been described as the "natural science community" (Moser-Mercer 1994b:17), although the latter term may also be a misnomer intended to denote the 'hard sciences.'⁵ The second paradigm consisted of researchers who wish to provide a "more unified and holistic account" (Setton 1999:3); they have also been described as the "liberal arts community" (Moser-Mercer 1994b:17) and tended to group themselves around the Interpretive Theory of Seleskovitch (1981; Seleskovitch & Lederer 1986, 1989). Furthermore, Setton states that "there is little or no di-

alogue between the two schools, which are sharply divided over training and theoretical issues such as the importance of language-specific factors” (1999: 3; see also Moser-Mercer 1994b).

Approaches to thinking about interpreting have moved beyond this dualistic, divisive approach. In the first comprehensive anthology compiling major contributions to the field since the mid-1950’s, Pöchhacker and Shlesinger comment on “a remarkably heterogeneous series of loosely connected paradigms” (2002: 4). They see this methodological array as a result of the “panoply of modes, modalities, settings, norms, institutional constraints and interactional constellations [that] make for fuzzy boundaries and a continual struggle to delineate the interpreting researcher’s purview” (4). Within this broad array, Gile (2000: 92) stresses the relevance of cognitive psychology, linguistics, and sociology in particular. Similarly, Setton (1999) and Shlesinger (1995) describe a range of research paradigms in their literature reviews. These paradigms include, among others, language processing, second language acquisition, and text linguistics (Shlesinger 1995), as well as computational linguistics and information-processing (Setton 1999). In describing the debate on the epistemological foundations of research on language interpreting, Pöchhacker (1998, 2001) advocates a plurality of complementary methodologies in exploring this multidimensional, socio-psychological, textual phenomenon. In perhaps the most comprehensive review of the development of the field of Interpreting Studies to date, Pöchhacker (2000) pursues a descriptive approach focusing on institutions (society and culture), situations (functional interaction), and products (text).

The emerging consensus on methodology therefore acknowledges that reliance on isolated methodologies is inadequate. The methodological discussion is no longer reduced to the paradigm of the ‘real world’ vs. ‘lab’ or ‘experimental’ vs. ‘observational’ (see also Garzone & Viezzi 2002: 2). Indeed, as a field, Interpreting Studies has moved beyond the concerns voiced (Massaro & Shlesinger 1997; see also Setton 1999: 284) about the preoccupation in the literature with the advancement of Interpreting Studies through the isolation of specific variables and analysis of representative samples (Shlesinger 1995; Tommola & Lindholm 1995). Overcoming the limitations of isolated paradigms would seem a logical conclusion for a centuries-old area of discussion that has fairly recently been widely described as interdisciplinary (García-Landa 1995: 398). There can be little doubt that an approach based upon “unity in diversity” (Pöchhacker 1998; Bowker et al. 1998) allows for productive flexibility. Hence, the approach adopted here is that – as an act of communication involving intercultural, interlingual mediation – interpreting is a real world

phenomenon requiring real world research. As such, at a minimum, the array of quantitative and qualitative methodologies with fixed and flexible designs routinely employed by social scientists and practitioner-researchers is available (Hobson 2002).

The overriding methodological concerns in the case study are the issues of adequacy, appropriateness, and confidence. After pertinent research questions have been developed, the adequacy of the selected methodologies to provide information allowing us to ‘tell what we want to tell’ and the appropriateness of these methodologies to ‘make the determinations we wish to make’ are seen as being of primary importance. Similarly, the degree of confidence that we have in the answers to our research questions is considered to be a basic determiner of the quality of this research.

With regard to the potential methodological contributions of the fields of curriculum theory and assessment (language testing) to Interpreting Studies, a comprehensive review of tools and approaches cannot be provided here. However, two methodological considerations from these fields require mention and further discussion: the context specificity of curriculum and program evaluation and the collection of evidence in test validation. Consideration of these aspects of methodology is informative and useful, particularly given the need for further research. They also pertain to the overriding concerns of adequacy, appropriateness, and confidence.

The *context specificity* of program evaluation and assessment requires that empirical research take into account the local aspects of curriculum and assessment in particular. Student learning is driven to a considerable degree by factors in the local environment. It is driven by the institution’s educational philosophy, from which the curriculum objectives are derived. The dynamics of the learning environment are also a function of the cultural values of the institution. As Glaser and Nitko comment, “measurement in learning and instruction should be discussed in light of certain instructional design requirements and specific models or systems of instruction” (1971:627–628). They reiterate this view in their discussion of the purpose of assessment:

the purpose of measurement for instruction can best be illustrated in terms of a particular model for an educational system since different patterns of instruction have different measurement requirements. In general, the model should recognize that the educational process is concerned with behavioral change and that instruction provides the conditions to foster the processes by which change takes place. (Glaser & Nitko 1971:630)

Given this context-specific relationship between curriculum, assessment, and learning outcomes, an approach focusing on one educational institution was adopted for this exploratory research. This interrelationship is the primary reason why the empirical research in this project has taken the form of a case study, rather than attempting a synoptic evaluation of a wide variety of interpreter education programs. Therefore, after key aspects of the literatures on curriculum and assessment are related to interpreter education, the focus is placed narrowly on the curriculum at the GSTI.

Using the GSTI program as an example, this case study concurrently illustrates the linkages between curriculum, assessment, and expertise in educational models and the need for validation as a universal principle of interpreter education. Given its exploratory, iterative nature, however, this study is not a comprehensive program evaluation of the GSTI (for program evaluation methodology, see Lynch 1996; Herman et al. 1987).

The principle of *evidence gathering* pervades methodologies employed in the area of test validation. Of particular interest is the analogy of the lawyer's argument presented by Brown and Hudson (2002:240) on the basis of Messick's definition of validity (1989:13). According to this view, validity is an argument or series of arguments for the effectiveness of a test for a particular purpose. In this instance, information is gathered to collect evidence for (or against) the justification for a test. Collectively, the body of evidence makes a case for test validity, which may inspire varying degrees of confidence in the test, depending on whether the evidence presented is more or less convincing. The type of validation evidence collected and the methodology employed will depend on the type of validation desired, whether internal (face, content, response) or external (concurrent, predictive, construct). In-depth discussions are provided by Brown and Hudson (2002:212–248), Bachman and Palmer (1996:133–156), and Alderson, Clapham, and Wall (1995:170–196).

In summary, the research presented in this descriptive, naturalistic, exploratory study is thus grounded in theoretical and empirical approaches to understanding interpreting. The study proceeds by applying logical analysis in the discussion of the literatures on curriculum, assessment, and language interpreting and relates these areas to one another. The ex-post facto case study employs an array of complementary methodological tools: the statistical and textual analyses are those employed in the fields of language teaching and testing, while the jury member survey employs a widespread social science research methodology. Through the comparison and contrast of the results of these individual sections, the methodological vulnerability of isolated research paradigms is diminished.

The use of an interdisciplinary, iterative approach reflects the complex nature of interpretation as a human activity requiring illumination from various viewpoints. In this respect, quantitative and qualitative methodologies are regarded as complementary to one another and, one could argue, even essential. This multifaceted approach thus reflects scientific and humanistic views of curriculum.

The study adopts a holistic view of curriculum, in which the relationship between translation competence and interpretation competence is seen as a key factor in the design of a curriculum framework. This relationship manifests itself in the type, amount and sequencing of instruction in each of these areas in a specific curriculum model. This research does not pursue a detailed study of translation or interpretation competence. The nature of component skills and their importance in curriculum and assessment are discussed in relevant passages, but the study does not attempt to illuminate the nature of these component skills or develop theories or models thereof.

Although this empirical research must concentrate on curriculum and assessment in a specific program, readers will find the theoretical discussion of these topics in the first half of the book useful in other educational contexts. The results of the case study cannot be generalized to curriculum models that differ fundamentally from the one under study; nevertheless, the research process and conclusions are intended to be thought-provoking and the research questions worthy of pursuit in other settings. Similarly, the type of language interpreting at the focus of this study is the subdomain widely referred to as conference interpretation (both consecutive and simultaneous), but the theoretical framework, discussion of curriculum and pedagogy, and principles of assessment may also apply to other subdomains, such as legal and health-care interpreting.

5. Overview of contents

This introductory chapter reviewed current and future challenges for interpreter education programs in order to document the need for research on improving the quality of instruction. The integrative role of assessment in educational programs was introduced before the objectives of the book and fundamental methodological considerations were discussed.

In Chapter 2, the overview of literature reviews key contributions to interpretation pedagogy before focusing on the theoretical discussion of curriculum, expertise and assessment. In the last section, a discussion of the funda-

mental relationship between translation and interpretation in curricula and instruction identifies this particular topic as one that is actively debated among educators of interpreters and translators; the overview also shows that little empirical work has been done in this area.

Chapter 3 develops definitions, foundations, guidelines (aims, goals, objectives) and approaches to curriculum by integrating literature on curriculum with literature from Interpretation Studies. Two pertinent approaches – the scientific and humanistic – are particularly relevant to interpreter education. While the evolution of interpretation competence (*curriculum as process*) is represented in the computational view of the mind and the cognitive psychology of expertise, social aspects of curriculum and expertise (*curriculum as interaction*) are taken into account by bringing the community of professional practice into the classroom to situate learning, and by establishing mentoring relationships through cognitive apprenticeship. Reflective practice plays a fundamental role in these processes. Educational philosophy, aims, goals, and objectives serve as guidelines in curriculum design. Widespread curriculum models describing the relationship between instruction in translation and in interpretation are reviewed.

Chapter 4 discusses how fundamental concepts from assessment literature relate to interpretation pedagogy. Assessment is seen from the viewpoint of the curricularist; thus, a description of the nature of assessment in various stages of the curriculum is included. The necessary balance between standardization of assessment procedures and test authenticity is stressed. Further discussion of test method facets and the use of test specifications are also advocated. At the same time, the potential uses of alternative forms of assessment, in particular portfolio assessment, are explored as a means to improve the range and depth of performance samples and other student work.

Chapter 5 introduces the case study by delineating its underlying research questions and methodology. The content of the GSTI documents is analyzed and described in terms of the principles developed in the theoretical discussion. This discussion forges links between the theoretical discussion in the preceding chapters and the empirical study that follows.

The case study itself consists of three parts: Chapter 6 (Part I) is a quantitative analysis of scores from the Professional Examinations in interpretation (final degree examinations). Chapter 7 (Part II) provides a qualitative analysis of exam philosophy, exam procedures, and assessment criteria. Chapter 8 (Part III) addresses the nature of the exam materials in a text analysis. Parts II and III explore the question of the validity and reliability of the data employed in the statistical analysis. The quantitative and qualitative analyses complement one

another, incorporating both scientific and humanistic views of curriculum and assessment.

In an effort to gather initial evidence on the outcomes of the curriculum in the interpretation degree tracks, the relationship between instruction in translation and performance in GSTI's summative degree examinations (Professional Examinations) is analyzed using a statistical procedure (chi-square). The two tracks in question are those leading either to a MATI degree (Master of Arts in Translation and Interpretation) or a MACI degree (Master of Arts in Conference Interpretation). The qualitative analysis is a jury member survey that explores examination administration, including the test purpose, format, and scoring procedures. The qualitative text analysis examines the comparability of exam materials across exam types and three language programs (English, French, and German).

Chapter 9 explores the implications of each of the three parts of the case study individually and collectively. It returns to the general research questions presented in Chapter 5 and addresses fundamental aspects of curriculum and assessment, such as the relationship between translation and interpretation in the curriculum, the role of standardization, authenticity, and professional judgement, and exam materials and text method facets.

In Chapter 10, an integrated Y-track model is proposed as an example of introducing greater flexibility and streamlining in an existing curriculum model. This enhanced curriculum incorporates the theoretical discussion of principles of curriculum and assessment and the conclusions of the case study. Prospects for further research are presented in the conclusions to the individual sections of the case study and in this summary chapter.

The final chapter provides a discussion of the ethical and political importance of test validation in interpreter education programs. This outlook toward the future describes the personal, institutional, and professional consequences that arise when the validity of assessment is not demonstrable. It is therefore a call for further research.

CHAPTER 2

Interpreter education literature

The primary purpose of this discussion of the literature on interpreting pedagogy is to provide food for thought as to the nature, purpose, and usefulness of literature grounded in educational theory in the field of Interpreting Studies (IS). After introductory comments and brief reviews of some of the major monographs published on the teaching of interpreting, the discussion turns to contributions in four main areas: curriculum design and implementation, building expertise in interpreting, assessment practices, and the pedagogical aspects of language transfer competence. By using pertinent examples, the overview considers in greater detail the extent to which constructs from curriculum, expertise, and assessment theory have been related to interpreting pedagogy and the role of translation instruction in building interpretation competence.

The purpose of this overview is not to provide an exhaustive review of the literature on the pedagogy of interpretation – such an endeavor can only be accomplished through a joint effort of a group of researchers who adequately represent the wide variety of languages in which this literature is published. This discussion presents primarily published writings in the most widely spoken Western European languages, focusing particularly on those in English, French, and German. Contributions in the Asian languages, Arabic, Russian, and those dedicated primarily to court, medical, and community interpreting, and signed language interpreting, are beyond the scope of this overview.

The literature on interpreting pedagogy is potentially very broad and overlaps with related areas of study; often, the pedagogical implications of research that is not focused primarily on teaching are discussed when the results of such research are presented. The beginnings of the literature on interpreting pedagogy are also difficult to pinpoint. Indeed, writing on aspects of interpretation that interact with pedagogy reaches back to antiquity.¹

Three well-known monographs from the early post-war period are examples of this broad literature.² Herbert's *The Interpreter's Handbook: How to Become a Conference Interpreter* (1952), Rozan's *La prise de notes en interprétation consécutive* (1956), and van Hoof's *Théorie et pratique de l'interprétation*

(1962) have achieved the status of classics. They lay out key issues in consecutive interpretation, offer pertinent information to the novice interpreter, and for these reasons are recommended reading in many interpreter education programs. Nevertheless, it could be argued that the primary character of these contributions, now over four decades old, is their nature as historical documents of the profession. As early contributions to the Interpreting Studies literature, the approach employed is experiential and impressionistic, and the authors do not attempt to place their discussion in the context of educational or instructional theory.

Similarly, in an area related to teaching methodology, numerous authors have also described the development of interpreting services and the institutionalization of teaching in their respective countries.³ Most writing of this nature postdates the Nuremberg Trials, although on-the-job training extends further back in time. Bowen, for example, describes the emergence of the conference industry in the late eighteenth century and special training programs offered by employers (1995:252). Delisle documents 1936 as the year in which translation instruction was introduced at the University of Ottawa (1981b:7–9). Many formal training programs were established in Europe in the 1940s (Geneva 1941; Vienna 1943; Germersheim 1947; Saarbrücken 1948, and Heidelberg 1950). A training program was also established at Georgetown University in Washington DC in 1949 (see Bowen 1995:252). These informative descriptions document processes of professionalization and thereby assist in community building through the formation of a professional identity. Although these contributions are valuable, they are not the focus of this discussion.

This overview concentrates primarily on writing that typically contains an explicit statement of purpose: either the advancement of the theory and practice of teaching interpreting or intended use as instructional material in the interpretation classroom. This decision was made in light of the above-mentioned goal of ascertaining the extent to which constructs stemming from educational theory are reflected in teaching practices. For this reason, contributions are of special interest if they draw upon such constructs in addition to experience derived from professional practice.

Bibliographies on interpretation may be grouped into two rough categories: general bibliographies of Translation and Interpreting Studies literature and specialized bibliographies on interpretation pedagogy. General bibliographies include, for example, the annually published *Translation Studies Abstracts* and accompanying *Bibliography of Translation Studies* (Bowker, Kenny, & Pearson) and the *Annotated Bibliography on Interpretation* (1997), provided by

Patrie and Mertz. The latter is dedicated primarily but not exclusively to the signed languages. The bibliography of the International Association of Conference Interpreters (AIIC, <http://www.aiic.net>) and Henry and Henry's *International Bibliography of Interpretation* (1987) are additional examples, and on-line and hard-bound bibliographical resources continue to appear. Web-based resources, such as Daniel Gile's semiannual Conference Interpreting Research Information Network (CIRIN) Bulletin, may be maintained and updated regularly. Specialized bibliographies on interpretation pedagogy appear less frequently. They include, for example, Etilvia Arjona-Tseng's *Bibliography of Pedagogy and Research in Interpretation and Translation* (1993) as well as Altman's bibliography on *Teaching Interpreting: Study and Practice* (1987), which contains 172 citations. Roberts and Blais's "The Didactics of Translation and Interpretation: An Annotated Bibliography" (1981) is an early bibliography that predates the upsurge in interest in Interpreting Studies during the eighties.

Most comprehensive reviews of the literature on interpretation have not focused on the pedagogy of interpretation per se, although this topic is sometimes included within their purview. In addition to discussions of the literature in many of their publications, Pöchhacker (2000, 1998) and Gile (1998a, 1998b) both provide quantitative analyses of material published in the late 1980's and 1990's in perhaps the most comprehensive summary descriptions of the Interpreting Studies literature to date.

Some reviews tend to be contributions to interdisciplinary research on interpretation and research methodology in general.⁴ As such, they are organized according to discipline, or field of inquiry, rather than area of pedagogy. A pertinent example is cognitive processing in interpretation, which has received much emphasis since the late seventies. Gerver's widely lauded review in *Empirical Studies of Simultaneous Interpretation: A Review and a Model* (1976) was updated by Dillinger in *Component Processes of Simultaneous Interpretation* (1989). Moser-Mercer retraces the development of cognitive models of the interpretation process in "Process Models in Simultaneous Interpretation" (1997c). As a result of this research, the modeling of cognitive processes in interpretation has emerged as one of the major themes in the literature. However, this field of inquiry is not devoted explicitly to interpretation pedagogy.

Matyssek (1989) provides a review of the literature on interpretation pedagogy, and in particular on notetaking. Matyssek concentrates on key contributions to this area, including the work of Rozan, Herbert, Minyar-Belorutchev, Seleskovitch, and van Hoof. Additional comments on Matyssek's *Handbuch der Notizentechnik für Dolmetscher* are provided below. In 1996, Ilg and Lambert published an extensive review of the literature on "Teaching

Consecutive Interpretation.” A similar review on the teaching of simultaneous interpretation has not been completed at this writing. In summary, there are still few bibliographies and reviews of the literature dedicated specifically to interpretation pedagogy. This situation is an indicator that, as a field, Interpreting Studies may still be in an early stage of development.

Nevertheless, perhaps due to the interest of many “practisearchers” in professional activities in the field (Gile 1994b), there are numerous articles and essays devoted to interpreting pedagogy, published more often than not in conference proceedings.⁵ Indeed, Mackintosh identifies interpreter education as a central theme of Interpreting Studies (1995; see also Pöchhacker 1994a: 244). Many contributors have selected specific aspects of interpreter training, which they discuss on the basis of their professional practice and personal experience in the classroom. Most of these articles and essays are highly focused, and their authors do not have the intention of integrating pedagogical theory from the other educational fields.

Much of this experience-based literature on interpreting pedagogy has been characterized as lacking in methodological rigor (Gile 1990, 1994a, 1997b; see also Pöchhacker 2000: 101–103) or hampered by deficiencies in basic research design (Gile 1998a: 168; Shlesinger 1995: 8). As a result, the quality of this literature is sometimes questioned. Dillinger, for example, states that “it is not clear how to treat the information experts provide in the absence of a body of experimentally-based theory,” and excludes it summarily from his review (1989: 17).

Interest in providing a solid foundation for the teaching of interpretation has continued to grow rapidly since the eighties. Mackintosh cites the numerous conferences and symposia dedicated to the training of interpreters in her “Review of Conference Interpretation: Practice and Training” (1995). In this paper, Mackintosh postulates that a single paradigm in interpreter training exists (121). Kalina, however, expresses reservations about the existence of such a paradigm in interpreter education (1998: 236). A salient example of the lack of theoretical and pedagogical unanimity is the unresolved controversy on the usefulness of shadowing in interpreter training, and there seems to be two distinct camps – one for and the other against the use of shadowing as an introductory exercise.⁶

In this vein, Déjean Le Féal (1998) identifies two broad instructional approaches: language pair-independent and language pair-dependent pedagogies. The first group is centered around the Paris School, Seleskovitch, and *la théorie du sens*. The second group cites the lack of empirical evidence of deverbalization and thus advocates greater attention to language pair-specific

strategies. Déjean Le Féal states that a fundamentally new pedagogy has not emerged as a result of the language pair-dependant viewpoint. In the second half of this article, Déjean Le Féal outlines a sequence of instruction that forms a framework for most curricula. It begins with consecutive interpretation and sight translation in an initial phase and continues with an introduction to simultaneous interpretation, which occurs before simultaneous interpretation with text and the interpretation of specialized texts is taught. Courses in professional ethics complete the final stages of the curriculum. Despite this general framework, which could indeed be the one referred to by Mackintosh above, Déjean Le Féal mentions introductory simultaneous interpretation exercises as an area in which instructors hold a wide variety of different opinions, in particular with regard to shadowing. Additional areas characterized by fluctuation become apparent when the curious reader reviews the wide variety of curricula and examination requirements within the *Conférence Internationale permanente des Instituts Universitaires de Traducteurs et Interprètes* (CIUTI). For example, final examinations in consecutive interpretation range between five and fifteen minutes at member institutes (CIUTI 1999).

Relatively few comprehensive monographs have been devoted explicitly to the pedagogy of interpretation (Kalina 1998:236). Most of this literature is instructional material. A key example is Gile's *Basic Concepts and Models for Interpreter and Translator Training* (1995a), a practical sourcebook, or manual, that provides theoretical content structured in modules for use in both the interpretation and translation classrooms. Although *Basic Concepts and Models* is "the result of much research," it "is not a presentation of research" (xii) in that it focuses on research results and "ventures beyond research results into some speculation" (xii–xiii). At this writing, *Basic Concepts and Models* is perhaps the only monograph drawing upon interdisciplinary research (cognitive psychology, psycholinguistics) to develop instructional material.

Seleskovitch and Lederer's *La pédagogie raisonnée de l'interprétation* (1989) "describes the principles and methods used to train conference interpreters both at the *École Supérieure d'Interprètes et de Traducteurs (ESIT) de l'Université Paris III Sorbonne Nouvelle* and by the Joint Conference Interpretation Service of the Commission of the European Communities" (1995:iii). This volume recapitulates and expands Seleskovitch's previous work on pedagogy (1981). *La pédagogie raisonnée* "is not intended to be a manual. It represents a systematic approach to the teaching of interpretation, incorporating principles from a great number of observations of various types of classes and practice sessions . . . Nor is [it] a course in so many lessons which any teacher might pick up and follow to the letter" (iii), but rather a "true guide" (i) based upon the obser-

vation of “several hundred hours of consecutive and simultaneous classes and practice sessions” (iii). Although written in 1989, well over fifteen years after the inception of cognitive science (Gardner 1987:5), Seleskovitch and Lederer do not acknowledge the usefulness of interdisciplinary research for interpretation pedagogy. On the contrary, Seleskovitch and Lederer remain convinced as late as 1986 that contemporary linguistics fails to take context into account and is therefore of limited use in the study of interpretation: “[l]es grands courants de la linguistique actuelle s’en tiennent à l’étude de la langue hors contexte” (264).⁷

Matyssek’s *Handbuch der Notizentechnik für Dolmetscher* (1989) is dedicated to the teaching of notetaking for consecutive interpreting. In his “manual,” Matyssek provides an overview of the modes of interpretation and interpretation as a profession and lays out a systematic approach to the development of individual notetaking strategies. He explains a wide range of specific strategies from which the interpreter may select and advocates the use of metalinguistic elements, e.g., symbols, in particular. His principles of notetaking, described summarily on pages 220–228, emphasize the importance of meaning and economy in any notetaking system. Although the proliferation of symbols in Matyssek’s theoretical discussion is extraordinary, his stance on the fundamental aspects of notetaking is in agreement with that of Rozan, Herbert, and other predecessors. The final chapter outlines procedures for the development of a personal notetaking technique and constitutes in this respect an important contribution to the discussion of reflective practice in interpreter education. His position emerges clearly in this context: the student is not advised to adopt Matyssek’s system and symbols wholesale, but to use this information as food for thought and develop a personal system that meets the needs of the individual. Matyssek points to the usefulness of exposure to highly developed systems of experienced interpreters for this purpose.

Weber’s *Training Interpreters and Translators* (1984) “deals neither with linguistics, nor with psycholinguistics, nor with the importance of translation and interpretation in the communicative process” (ix), but rather with “the importance of translation and conference interpretation as well-established academic professions and how they should be taught” (ix). Weber begins his discussion of interpreter and translator pedagogy with an answer to the question – “Can translation and interpretation be taught?” – which reflects the state of interpretation pedagogy at the time of writing. Weber’s monograph is more comprehensive in nature than that of Seleskovitch and Lederer, or Gile, as Weber provides a discussion of curriculum, testing, career options and professional ethics, in addition to classroom methodology. This is an

ambitious goal to accomplish within seventy pages, making it nearly impossible to provide more than a rough framework for translator and interpreter training on the whole, as coherent, practical and necessary as that framework may be even at this writing.

In *Steps to Consecutive Interpretation* (1980), David and Margareta Bowen provide a manual for a fourteen-week introductory course to consecutive interpretation. Consecutive interpretation skills are broken down coherently into types of assignments and related texts, component skills such as note-taking and memory, and individual aspects of these skills (figures, names, legibility of handwriting, redundancy, relationships, and symbols). The result is a useful framework for structuring a course for novice interpreters. However, being introductory in nature, this manual does not aspire to impart higher-level consecutive skills. Rather, it is representative of the ‘how-to’ literature on teaching interpreting, covering, for example, pedagogical planning, the use of appropriate materials, and classroom management techniques.⁸ This volume is grounded in an experience-based pedagogy and does not provide a general theoretical framework that transcends the level of the individual course.

With regard to instructional material for the interpretation classroom, Weber’s comment from 1984 still applies:

It is always surprising to people wanting to add a translation and interpretation component to their language instruction that there are very few – if any – textbooks in these fields. The reason for this state of affairs is that instruction is based primarily on personal professional experience and that teaching methods are constantly being improved and adjusted on the basis of this ongoing experience. (11)

A more recent discussion of the interdisciplinary underpinnings of interpretation pedagogy is provided by Silvia Kalina’s *Strategische Prozesse beim Dolmetschen: Theoretische Grundlagen, empirische Fallstudien, didaktische Konsequenzen* (1998). Concentrating on “strategic processes in interpretation,” the empirical component of this dissertation is based upon protocols from retrospective reports given by interpreters as test subjects. After a comprehensive discussion of the widely recognized limitations of this research methodology, Kalina comes to the conclusion that data from retrospective protocols can nevertheless result in knowledge that is useful for interpretation pedagogy (156), and thus takes the welcome step of utilizing interdisciplinary research for pedagogical purposes. Kalina presents the results of approximately twenty individual research projects on consecutive interpretation, simultaneous interpretation, communication processes, and research methodology (178–181).

Kalina's case studies range from concepts as broad as systematic note-taking (183) to those as specific as anticipation in simultaneous interpretation (191–192). Perhaps as a result of this comprehensive approach, the conclusion to this study assumes the character of a research report, which is in itself useful. Kalina advances the state of interpretation pedagogy in that she explicitly applies an interdisciplinary methodology to the teaching of interpretation. At the very least, Kalina's contribution reveals the vast potential for research on interpretation pedagogy and the need to link this research to the existing literature of Interpreting Studies and other disciplines.

1. Curriculum

Published literature that relates curriculum theory to interpreter education is sparse. Much of the literature on interpretation pedagogy discusses isolated aspects of interpreter training from the instructor's personal viewpoint, e.g., how note-taking skills in consecutive should be taught, how diagnostic testing should be conducted, or how to structure an introductory course in simultaneous interpretation. Individual events of instruction are in the limelight. Rarely is the attempt made to integrate educational theory on the program level, i.e., to reflect explicitly on curriculum theory as a field of education and/or on educational psychology in the discussion of curriculum. This is clearly a desideratum, as curriculum theory has been a productive field, particularly in the Anglo-Saxon context, since Dewey. Thus, the potential for research on curriculum issues in Translation and Interpreting Studies is great (see Arjona 1990:259).

The lack of a comprehensive discussion of curriculum issues grounded in educational theory is surprising; Weber remarks in his practical recommendations on curriculum: "As in all teaching endeavors, it is important never to make too many demands on the good will, the patience, and the abilities of the students. This implies that the curriculum as a whole, and the course contents in particular, must be carefully sequenced" (1984:24). Similarly, Gabr (2001) calls for more extensive program evaluation in translator education programs. These goals are achievable. Freihoff comments that the discipline of Translation Studies offers materials, descriptive models and suggestions for teaching methods that can be productive in the context of training (1998:26).

The literature that does exist on the broad aspects of curriculum may be divided into essays and articles on the theoretical aspects of curriculum and curriculum documents from interpreter education institutions. Much

early writing on interpreter training programs makes no distinction between discussions of curriculum and pedagogy.⁹ Some articles may be described as cursory discussions of philosophies of interpreter training in view of market demands of the time (Coughlin 1984; Coveney 1976; Gold 1975). As a general rule, statements on German curriculum models, which are the most prolific in this area, have been developed in the context of curriculum reform, as in the case of Gerzymisch-Arbogast and Pfeil (1996), Hönig (1995a: 159–172), Snell-Hornby (1992), and Ammann and Vermeer (1990). Arntz (1989, 1999) deals specifically with curriculum innovation relative to translation and focuses on innovation in translator education at one German institution.

Arjona is a pioneering force in the field of curriculum in translator and interpreter education. Unfortunately, much of her work remains unpublished. Her dissertation (1990) presents a comprehensive review of the educational literature in Translation and Interpreting Studies, in which she describes three phases of writing about training practices (61–62). In a first period, particular schools or programs are described. In a second period, attention turns to training practices within a country, region, or geographic area. The third period “shows a shift from such predominantly descriptive work to first attempts at examining the T&I activity from a comprehensive, or system-based perspective” (62). Arjona also presents curriculum models common among translator and interpreter training institutes and a detailed description of a curriculum model to be implemented at the Monterey Institute of International Studies, although the model was never introduced (1984a; Mikkelson, personal communication).

Freihoff has also been an active contributor to the discussion on curriculum theory in interpreter education with three published articles (1993, 1995, 1998). He comments on the urgency of a comprehensive discussion of curriculum in translator and interpreter training (1993: 197) and advocates the integration of literature from curriculum theory (199). Central conclusions include the need to describe curriculum goals in greater detail and to introduce greater flexibility in translator and interpreter education programs through modules (212; see also Hönig 1995a: 162–164).

On the whole, scholars in Translation Studies have been more productive in developing curriculum theory specific to translation. To cite only two examples, Hatim and Mason systematically apply principles of text linguistics to curriculum design (1997: 179–196); Kiraly advocates a “new pedagogy for translation” based upon the communicative approach to second-language teaching (1995: 33–35) and applies theoretical constructs from social constructivism to establish a collaborative approach between instructor and learner in translator education (2000).

A curriculum model may not correspond to the curriculum as it is actually implemented and experienced by the individual, whether instructor or student. This discrepancy between the official and hidden curriculum (Freihoff 1995:153–154, 1998:30) may be observed in varying degrees. In many German institutions, perhaps the considerable length of training and high washout rates have led to calls for greater flexibility – or options for students. This trend stands in stark contrast to the desire for greater structure and sequencing – in the interest of rapid knowledge and skill acquisition – prevalent in the Anglo-Saxon tradition. The exigencies mandating curricular reform should be considered within these contexts; they include financial considerations (Gerzymisch-Arbogast & Pfeil 1996: 307, 311) and the lack of correspondence between training and practice often cited by students (Ammann & Vermeer 1990:25).

Snell-Hornby (1992) provides an extended discussion of trends in translator education and the ensuing need for curriculum reform. She focuses in particular on the educational philosophy and model envisaged for the program at the University of Vienna. As this contribution presents a comprehensive curriculum model, the role of interpretation in the educational program is dealt with peripherally. Snell-Hornby draws attention to the need for training in a professional context (18) and advocates the implementation of alternative forms of testing that reflect the realities of future professional life (19).

Renfer (1992) speculates on the relative merits of four curriculum models: the sequential (two-tier), parallel, post-graduate, and Y-models. In particular, Renfer compares the two-tier system in Zurich with the postgraduate model, which distinguishes itself from the former by not providing a foundation in translation on the undergraduate level. Renfer's discussion is based mainly upon his personal experience and insight. No hard data are provided to substantiate the claim, for example, that the failure rate is higher in final degree examinations in postgraduate programs than in undergraduate programs.

Curriculum documents are produced for internal and external reference and to create a framework for the practical implementation of the curriculum (Freihoff 1995). The systematic comparison of curriculum documents from a large number of translator and interpreter training institutes has not been completed to date, although surveys of programs do exist (Harris 1997; Park 1998). A productive approach is the publication of course profiles in journals such as *The Translator*, e.g., Davidson and Wakabayashi (1997), which makes the in-depth analysis and comparison of training courses more feasible. A cursory review of the CIUTI website does, however, reveal broad fluctuation in the length of training periods, training content, and examination requirements

for the awarding of certificates and degrees. Only in the context of a large-scale study can the content of existing curricula be compared, the relationship between official and hidden curricula assessed, and a common paradigm of translator and interpreter education described, if one is at all desirable.

In conclusion, the relation of curriculum theory and instructional design to the development of professional translation and interpretation skills can aid in providing a more precise description of curriculum objectives, principles governing the acquisition of skills and abilities, and successful enculturation of students into the community of professional practice. The systematic, holistic discussion of curriculum and the application of constructs from this field presuppose detailed knowledge of how skills and abilities in interpretation are acquired, i.e., the evolution of expertise in interpreters. Such constructs can be developed for interpretation pedagogy through a discussion of those interdisciplinary areas devoted to the description of the cognitive and social aspects of interpreting and their relation to curriculum sequencing and situated cognition and learning.

At the same time, a considerable effort is required in documentation for general research purposes. A comprehensive, centralized database of curriculum documents, including in particular program and course descriptions and other writings that normally remain unpublished, would create a sound material basis for international research on translator and interpreter education and contribute greatly to professionalization.

2. Expertise

An exploration of differences in performance among experts and novices is an essential prerequisite for methodological reflections on education and training and, for this reason alone, is not new to the study of interpreting.¹⁰ A number of studies have shown that there are qualitative and quantitative differences between expert and novice performance in interpreting (see Liu 2001:22–26). Despite the widespread use of this paradigm, Moser-Mercer comments that “the object of [this] research has never been to isolate particular differences in approach or strategy that could then be exploited for pedagogical purposes” (1997b:256). Research based upon the cognitive psychology of expertise (Hoffman 1997a) could aid in remedying this situation, as it provides a theoretical framework to more thoroughly describe processes governing the evolution of interpretation competence. These contributions from Hoffman and Moser-Mercer – the first employing methodology explicitly from the

cognitive psychology of expertise¹¹ for the study of interpretation – have led to initial theory-building based upon the results of research in other domains.

Expertise studies has a wide array of methodological tools, including those of the social sciences (see Hoffman et al. 1995). Much research on expertise in interpreting has been experimental to date (Liu 2001; Moser-Mercer et al. 2000; Moser-Mercer 2000, 1997b; Dillinger 1998). Given the social aspects of expertise, in particular the social norms governing the definition of expert behavior and the identification of experts by their peers within a community or domain (Hoffman 1997a), research on expertise in interpreting is perhaps an area where observational and experimental studies complement each another ideally. Methodologies from the social and educational sciences are particularly appropriate given the principles thought to characterize ‘expert’ learners in educational settings, such as the role of motivation and affect (Bereiter & Scardamalia 1992).

Moser-Mercer’s primary interest in researching the expert-novice paradigm is to identify and describe sub-skills or sub-processes of language processing where professional interpreters may differ from students and to exploit these differences for pedagogical purposes, in particular aptitude testing (Moser-Mercer et al. 2000; Moser-Mercer 2000, 1997b). Moser-Mercer (2000: 349) cites the ability to concentrate as a key success factor in the early stages of acquiring interpretation skills and abilities. Furthermore, Moser-Mercer et al. (2000: 126–127) find significant differences between experts and novices in the language combination French (native) and English (acquired) in a reading exercise under delayed auditory feedback conditions, but no significant differences in shadowing or verbal fluency tasks.

In comparison, Liu (2001) finds that expert interpreters working from acquired English into native Chinese perform significantly better than non-experts on domain-related tasks. She cites the ability of selective encoding, better monitoring of output, and more efficient allocation of working memory resources as pertinent areas (93). She found that experts were more selective in terms of what to and what not to interpret (90). Positive for training in simultaneous interpreting is her conclusion that expertise may be achieved by acquiring identifiable domain-specific skills rather than relying on general qualities such as a large working memory span (89). Liu also found evidence suggesting that expertise may be acquired more easily in the target task than in similar but non-domain-related strategies (interpreting vs. shadowing) (91). Finally, her results also suggest the importance of real-world experience in attaining expertise (91). Although further research is required, the conclusions drawn by Liu are an indication that Hoffman is correct in stating that expertise

research can inform curriculum design through the development of an empirical base (1997a:217–218). Interestingly, these findings correspond to the general principles of high-performance skill acquisition described by Schneider in other domains (1985).

In the study of translation, expertise research and the expert-novice paradigm have also yielded intriguing results for translator education. Although a comprehensive discussion of this literature is beyond the scope of this study, two examples with pedagogical implications are briefly presented. First, Risku builds upon the work of Justa Holz-Mänttari and provides a detailed discussion of the evolution of expert cognitive processes in translators (1998:79–115). In her conclusions, Risku stresses the inherent value of a process-oriented, empowering approach to instruction emphasizing self-assessment, dialogue, and interaction among participants and instructors (234). Second, in comparing expert vs. non-expert use of information sources in translation, Künzli (2001) finds a correlation between the range of information sources used, expertise of translation, and translation quality. Calling into question a long-standing premise in translator education, Künzli presents preliminary evidence that criticism expressed towards the use of bilingual dictionaries may be unjustified.

In summary, expertise studies provides a range of quantitative and qualitative methodologies that can inform the processes of learning and instruction in interpreter (and translator) education. In addition to further investigations of specific (sub-)skills and processes of learning and instruction, a next step in this area of research could be the exploration of broad curricular frameworks against the backdrop of empirically derived principles of expertise.

3. Assessment

Although literature on interpreter assessment is more comprehensive than the literature on curriculum and expertise, the potential for developing this literature is equally vast. The issue of the role and purpose of assessment and testing in the broader educational context of curriculum design and implementation is an area of increasing interest. Developing an overarching understanding of the role of assessment in learning and instruction necessarily involves approaching multiple areas, not all of which can be explored thoroughly here. They include, for example, (1) the role of assessment and testing in all stages of the curriculum, (2) the role of various types of assessment in learning and specific events of instruction, (3) the relationship between assessment for educational

purposes and the evaluation of quality in professional practice, and (4) the similarities and differences in assessment for the teaching of interpreting and the teaching of translation.

In general, three areas of testing are apparent in interpreter education programs: (1) entry-level aptitude or, more appropriately, diagnostic testing for selection purposes; (2) intermediate, formative testing for entry into or confirmation of the interpretation degree track; (3) and final, summative testing for the purpose of degree or certificate conferral. The first two categories may not be separate in some training programs. The quantity and quality of literature in each of these areas varies, with diagnostic testing having received by far the most attention.¹² Most writing on testing in interpreting has been in the form of descriptive reporting of existing test practice, although headway has been made in the application of principles from cognitive science to interpreter testing, notably once again in the area of diagnostic testing (Moser-Mercer 1984, 1994a, 2000; Moser-Mercer et al. 2000; Pippa & Russo 2002). Some of this literature is reviewed in the following.

One of the most comprehensive discussions of testing and assessment from a bird's-eye perspective is given by Arjona (1984b), who discusses fundamental aspects of testing in the context of interpreter education programs. Arjona refers to the Monterey Institute of (then) Foreign Studies as an example. In describing the focus of assessment in a course of study, Gile (2001) advocates a shift in perspective from a process-oriented to a product-oriented approach as students progress in the curriculum. In drawing attention to the complex nature of the skills and abilities required for professional interpreting, i.e., conference and sign-language interpreting, Clifford (2001) explores the possibilities of approaches based upon discourse theory and performance-based assessment as vehicles for overcoming the limitations of lexico-semantic assessment. Although Clifford does not discuss educational implications, he advocates the development of rigorous assessment methodologies on a par with those that have been developed for educational purposes and for use in other fields (373).

Little literature on intermediate testing is extant, other than Arjona's brief comments (1984b) on the examinations formerly in place at the Monterey Institute of International Studies. Neff (1989) describes the role of on-going assessment as part of an intermediate-level selection process in courses offered at the University of Mainz in Gernersheim. More recently, Gile (2001:381) discusses the need for assessment during training, which has the dual function of selection and, more importantly, taking stock of progress in learning and providing feedback to students.

In discussing formative assessment, Schjoldager (1996) presents a feedback sheet that she uses in her interpretation courses at the Aarhus School of Business. Her essay describes her efforts to provide students with formative feedback on their performance that is perceived as substantive and fair. Schjoldager's instructional approach is innovative in that it contains formalized self-assessment and thus utilizes an ipsative component to generate constructive criticism and encourage class participation. The perspectives of both the speaker and the listener are considered in this article advocating the development of explicit assessment criteria.

In the area of final testing, Belisle and Bowen (1983) describe the procedures in place in the certificate program at Georgetown University. Apart from this article, design and administration issues in final testing have hardly been discussed in scholarly texts. This lacuna exists for both interpretation and translation, as Hatim and Mason (1997: 197) remark:

The assessment of translator performance is an activity which, despite being widespread, is under-researched and under-discussed. Universities, specialized university schools of translating and interpreting, selectors of translators and interpreters for government service and international institutions, all set tests or competitions in which performance is measured in some way. Yet, in comparison with the proliferation of publications on the teaching of translating – and an emergent literature on interpreter training – little is published on the ubiquitous activity of testing and evaluation.

Two areas of growing interest are contributing to the theoretical discussion of interpreter testing. They include the discussion of quality (and norms) and the use of corpus-based linguistics. Both of these areas have received the attention of Translation Studies scholars for some time.

The need for the development of a sound theoretical base is recognized by Lindquist (2002), who advocates the use of empirical data to develop assessment criteria, i.e., corpus-based linguistics, rather than intuitively derived criteria and preconceived notions about interpreter performance. Similarly, Sawyer et al. (2002:38) stress the use of empirical data to develop materials and procedures for interpreter testing as an indication that a test is based upon real needs, which is an important type of validation evidence (content validity). Such calls reflect the increased interest in corpus linguistics that has been prevalent in Translation Studies for some time. Reviewing research in corpus-based Translation Studies, Shlesinger (1998) also explores the problems and benefits of corpus-based studies of interpreting. Bowker (2000, 2002) presents method-

ologies that can be further developed and utilized for translation evaluation for pedagogical purposes.

As a topic related to assessment but not synonymous with assessment (for educational purposes), quality in interpreting is an area of rapidly increasing interest, and literature in this area is growing.¹³ Shlesinger (1997:131) points to the “need to find out more about quality, in the interest of teaching and providing simultaneous interpreting at its best”, and Kutz (1997:243) mentions the fluctuation observed in interpreter assessment practices. Pöchhacker (2001, 2002) presents an extensive review of the literature on quality, including in particular the area of community interpreting, and proposes a quality assessment model based upon multiple perspectives and multiple, complementary methodologies. Kurz (2001) reviews the survey literature on quality in conference interpreting, which has user expectations as its focus. The conclusions of these two comprehensive research reviews are discussed in greater detail in Chapter 4.

Interest in applying corpus-based translation studies to interpreting draws attention to the more fundamental consideration of similarities and differences in approaches to assessment in translation and interpreting. In general, it is accurate to state that Translation Studies is leading the way in the application of fundamental principles from the field of evaluation and assessment (language testing) to translator (and potentially interpreter) education. Lee-Jahnke (2001a), Melis and Albir (2002), and Waddington (2002) in particular address the multiple issues of validity and reliability, the types and purposes of assessment, and research needs. Hatim and Mason (1997:209) suggest the use of descriptive profiles in the framework of criterion-referenced testing for translation in their tentative application of Gipps (1994) and Bachman (1990b) to the applied language arts. Identified as a meaningful framework for assessment by Arjona (1984b) over fifteen years ago, the possibility of applying criterion-referenced testing to interpretation has gone virtually unnoticed.

Nevertheless, it is safe to say that Interpreting Studies, particularly through its parent discipline Translation Studies, is beginning to discover constructs from the field of assessment, measurement theory and language testing. At this stage, little literature on validation is extant. Three unpublished Applied Linguistics Research papers¹⁴ written under Jean Turner in the School of Languages and Educational Linguistics at the Monterey Institute of International Studies are an exception. These papers report the research results of three graduate students who examined the Qualifying Examinations (intermediate, formative testing) in the Graduate School of Translation and Interpretation. Their focus was on discrepancies between student and faculty perceptions of

examinations and student anxiety (Houba 1996) and the predictive validity of diagnostic testing for performance on Qualifying Examinations (Monty 1998; Tapalova 1998).

Finally, the general framework of testing, or test method facets (Bachman 1990), is an area where research from the field of language testing could be explored in the context of interpreter testing. Greater documentation of existing test practices would be a first step. Although many schools of interpretation have internal documents which stipulate examination guidelines (for example, Monterey and Geneva), it would be useful to make these documents known to a wider public, which could lead to greater collaboration across institutions in the development of test specifications.

4. Language transfer competence

The relationship between written and oral translation is of fundamental importance for the design of curriculum and instruction. This fact is self-evident, as schools and programs offer degrees with a specialization in either translation or interpretation. Nevertheless, few empirical studies have been conducted on the relationship between translation competence and interpretation competence in training and practice. Numerous philosophical statements and viewpoints can be found in the Translation (and Interpreting) Studies literature, however, including in particular those advanced by representatives of Interpretive Theory (IT) and *Allgemeine Translationstheorie* (ATT).

The oral mode of translation is generally seen as the primary language transfer competence. In their proposal for curriculum reform in the University of Heidelberg, Ammann and Vermeer (1990) suggest an approach to curriculum and pedagogy grounded in general interpretation skills from which specialized translation and interpretation skills are then developed (see also Nord 1997). Similarly, Hönig (1995a:166) advocates the integration of oral text production and oral translation exercises into the early stages of both interpreter and especially translator education to a much greater degree than has been done in the past. Hönig (1998:342) even explores the hypothesis that interpreters are better at translation than translators themselves. He comes to the conclusion that teaching methods developed for interpretation should be adapted to the traditional translation classroom, as factors governing interpretation, e.g., oral text presentation, holistic text analysis and comprehension, and working under time pressure, may contribute substantially to the streamlining of cognitive processing. Similarly, Kalina (1998:235) discusses general

differences between teaching translation and teaching interpretation and refutes the notion that interpretation pedagogy can simply take up a methodology based upon the study of written translation and adapt it to an oral medium. On the contrary, Kalina expresses the view that interpreting pedagogy must be based upon knowledge of processes, conditions, and requirements specific to oral translation.

Seleskovitch and Lederer have also addressed the relationship between translation instruction and interpretation instruction in programs and have advanced their line of thinking in the context of IT. Similar to the viewpoints expressed by some proponents of ATT, these authors regard translation and interpretation as one activity leading to two distinct products, as Lederer writes in “L’Interprétation, manifestation élémentaire de la traduction” (1985:27–28). Seleskovitch and Lederer (1986) regard oral translation as the foundation of translator and interpreter education. In *Interpréter pour traduire*, they state their conviction unequivocally:

Nous voyons dans l’interprétation le modèle de base, la forme élémentaire, de toute traduction de textes, car il n’y a pas de texte sans message, il n’y a pas de texte sans auteur et sans présupposés, sans éléments cognitifs non explicitement exprimés mais devant être pris en compte. (1986: 10)

Lederer proceeds to explore a pedagogy of translation based upon the primacy of orality in *La traduction aujourd’hui : le modèle interprétatif* (1994).

Despite these strong statements that oral translation skills serve most aptly as a foundation for the development of higher level translation and interpretation skills, it is translation that serves as a pedagogical basis for the development of higher level competence in both areas in many, if not most, training programs. Areas in which written translation skills often serve as a basis for decision-making include diagnostic testing and degree track selection. In addition, the bulk of core coursework in schools and programs is often in the area of translation, regardless of whether instruction in interpretation is offered concurrently or sequentially in the curriculum model.

García-Landa’s position on this issue of pedagogy is unequivocal; he draws attention to the Westernist premise of the debate in stating that

it never occurs to a professor to remember that much before writing was invented, and for many thousands of years, people lived in strictly oral cultures. Even today, from the more than 4000 languages spoken in this planet [sic] less than 100 have an alphabet and can be written, all the others remaining in the oral phase. People in Western culture are so intellectualized

(textified) that they cannot even start imagining what it is to live in an oral culture, to be an oral personality. (1995:403; see also 1985, 1981)

García-Landa's position draws attention to the broader issue of the fundamental relationship between Translation Studies and Interpreting Studies, in which Interpreting Studies has often been relegated to a subordinate role (Cronin 2002; Pöchhacker 2000: 106–111). Moreover, the relationship between oral and written translation may be seen as a reflection of the relationship between orality and literacy in general. Greater exploration of this relationship in the context of interpreter education also serves to heighten the attention given to orality even within the field of Interpreting Studies, which has been neglected to date (Cronin 2002).

5. Conclusions

While it would seem self-evident that oral translation skills should serve as a foundation for building high-level skills in both translation and interpretation, little attention has been paid to this topic in the teaching and research community. Although interpretation instructors have addressed issues surrounding pedagogy and instruction with interest and dedication, the number of publications devoted to the teaching of interpretation is relatively low in comparison to other areas of educational research. Articles and essays devoted to interpreter education range widely in terms of substance, methodology, and scope. In the individual areas of focus in this study – curriculum, assessment, expertise, and language transfer competence – much of the literature is based primarily upon the personal experience and insight of professional interpreters. This situation is indicative of the fact that, in the theoretical reflection on interpreter education, research is in an exploratory phase.

A theoretical discussion can further the process of laying the pedagogical groundwork for improved instruction in interpreter education. A logical starting point is the recognition of the interrelated nature of curriculum design and implementation, the building of expertise in skills-based fields, and the role of valid and reliable assessment in determining whether the curriculum and instruction could be more useful and effective. Such a discussion has the potential to improve interpretation pedagogy by:

- a. Solidifying the foundations of pedagogy and instruction
- b. Improving transparency for all parties involved
- c. Improving consistency of quality in pedagogy and instruction

- d. Providing information and guidance to instructors who are new to the classroom
- e. Providing a clearer framework for the evaluation of educational systems and procedures, as well as administrators, instructors and students

These processes also aid in describing similarities and differences between interpreting and translation. Furthermore, a better understanding of how linguistic and cultural mediation differs from other language-related activities can be achieved. Therefore, much stands to be gained from greater reflection of educational theory in discussions about curriculum and assessment in schools and programs, beginning with greater autonomy through a more coherent identity and conceptualization of this field of pedagogy.

CHAPTER 3

Fundamental aspects of curriculum

If a theory is a set of related statements that are arranged so as to give functional meaning to a set or a series of events, a curriculum theory is a set of related statements that gives meaning to a school's curriculum by pointing up the relationships among its elements and by directing its development, its use, and its evaluation. (Beauchamp 1975:58)

In a field as “elusive, fragmentary, and confusing” as curriculum (Ornstein & Hunkins 1989: 1), one is well advised to “choose an approach and definition, a school of philosophy and psychology, developmental and design models, theory and practice relationships, and curriculum responsibilities [one wishes] to promote” (27).¹ The discussion of definitions, foundations and approaches in this chapter presents principles from the literature on curriculum and relates them to writings, discussions, and research in the field of Interpreting Studies (IS). The objective is to make more explicit the usefulness of traditional areas of educational theory in providing a framework for curriculum and instruction in interpreter education.

Beauchamp's definition of curriculum theory, cited above, draws attention to the relationships between curriculum components and the need to recognize these relationships in the development, use, and evaluation of the curriculum as a whole. In translator and interpreter education, these components are diverse in nature and include, for example, skills-based components (translation and interpretation), knowledge-based components (acquisition of domain expertise), and deontological components (knowledge of the profession, e.g., professional identity, ethics, and business practices). The relationship between these components is described with varying levels of explicitness in different curriculum models. Establishing greater clarity about the nature of these components, their interaction, and appropriate sequencing can only serve to enhance the quality of interpreter education.

The distinction between curriculum and pedagogy is a blurry one. As Walter Doyle remarks, “[t]he meeting point between these two domains has always been somewhat fuzzy, in part because the terms denote separate but interrelated phenomena” (1992:486). In defining the role of each area, he

states that “curriculum is intended to frame or guide teaching practice and cannot be achieved except during acts of teaching” (486). Indeed, three levels of curricular interaction, which are by definition overlapping, may be identified: interaction on the program level, in specific courses, and among individuals – administrators, instructors, students, and alumni, among others.

The discussion in this chapter focuses primarily on the broad program level, i.e., “the issues of content selection and arrangement that float well above the surface of particular classrooms” (Doyle 1992:486). This discussion would be incomplete, however, without considering interaction on the level of courses and between individuals when they have a substantial impact on the program level. Therefore, individual events of instruction – the “processes or the ‘how’ of schooling, the human interactions that occur during actual teaching episodes” (486) – are referred to when appropriate.

This chapter is structured according to curriculum definitions, foundations, approaches, guidelines, and models. According to Ornstein and Hunkins, the *foundations* of curriculum “set the external boundaries of the knowledge of curriculum and define what constitutes valid sources of information from which come accepted theories, principles, and ideas relevant to the field of curriculum” (1998:13). Accordingly, they reflect a person or institution’s “philosophy, view of history, view of psychology and learning theory, and view of social issues” (16). The foundations of curriculum encompass philosophy, history, psychology, and sociology, and reference to each is made in the following to illustrate how each has been implicitly present in interpreter education and the Interpreting Studies literature. The objective of this discussion is not to be exhaustive in scope, but to “analyze and synthesize what is known” about these areas of study using selected examples and to “present implications that are relevant to curriculum” (16).

Guidelines are derived primarily from the philosophical and social foundations of curriculum, and they are embodied in the aims, goals, and objectives of instruction. Here once again, the relationships between the levels of the program, the course, and the individual emerge. The aims of instruction reflect the educational philosophy of the institution and are expressed in concrete terms as the goals of the program. Teaching objectives are defined on the course level and serve as milestones in attaining goals.

Curriculum *approaches*, in turn, reflect “a *holistic* position or *metaorientation*, encompassing the foundations of curriculum . . . , domains of curriculum (common and important knowledge within the field), and the theoretical and practical principles of curriculum” (Ornstein & Hunkins 1998: 16). Psychology, philosophy, and sociology are of fundamental importance in this discussion of

approaches to the curriculum. In developing an approach, a researcher must review, contrast, and juxtapose concepts from the interdisciplinary literature on educational psychology and the Interpreting Studies literature. It is primarily through such a discussion that links between disciplines can be established and made explicit in an effort to strengthen the theoretical base of interpreter education programs. The approaches explored in the following fall into two general categories: scientific, or behavioral (3), and humanistic (8).²

The relationships between foundations, guidelines, and approaches are complex and, as discussed in the introduction to this book, are shaped by factors that vary by country and institution. These relationships manifest themselves in curriculum *models*, which therefore take different shapes. A discussion of basic types of curriculum models in interpreter education is presented at the end of this chapter.

1. Definitions

1.1 The official curriculum

As stated in *Websters Revised Unabridged Dictionary* (1913), curriculum generally refers to “a course; particularly, a fixed course of study, as in a university,” and originates from the Latin term for “a race course; a place for running.” This definition implies that a curriculum has a progression, and that the student proceeds through a structured, ordered course in the pursuit of a defined goal. In a comprehensive discussion of the evolution of the term, Jackson (1992a) writes that “at the heart of the word’s educational usage . . . lies the idea of an organizational structure imposed by authorities for the purpose of bringing order to the conduct of schooling” (5). Similarly, Greeno, Collins and Resnick regard curriculum as “a set of educational goals and a sequence of learning activities that are intended to promote development toward those goals” (1996: 33). Many alternative types of definitions have also been proposed. In reviewing these definitions, Ornstein and Hunkins state that curriculum can be defined according to five basic views: as plan, experience, system, field of study, or subject matter (1998: 10–11). In contrast, Freihoff defines curriculum operationally as a text providing information on a course of studies (1995: 152, 155).

The discussion in this chapter adopts two of these definitions. The first is the view of curriculum as a written *plan of action*, which is reflected in curriculum documents that contain clearly stated learning objectives. A plan of action is based upon a curriculum model and its underlying objectives;

its educational philosophy is grounded in the psychological foundation of and scientific approach to curriculum. The view of curriculum as a plan of action is a view of *curriculum as process*; that is, a sequence of curriculum components that serves as a framework for an individual's learning. The second viewpoint defines curriculum as encompassing all of the *learning experiences* of the student. This view of curriculum is a view of *curriculum as interaction* between student and instructor in the professional community of interpreters. It is a definition rooted in Dewey's philosophy of experience and education (1916, 1938), which has evolved into the concept of reflective practice. Hence, this view of curriculum is grounded in the philosophical and sociological foundations of the curriculum and the humanistic approach to it.

1.2 The hidden curriculum

Für das Individuum existiert nur das individuell verstandene, erlebte und gelebte Curriculum, das letztlich den Geist einer Institution ausmacht.
(Freihoff 1995:152)

A written curriculum document is a plan of action, i.e., a guide to curriculum implementation. However, this description of the official curriculum does not document the curriculum in its entirety. A curriculum plan depicts an ideal, not the curriculum in practice. The theoretical framework of instruction must first be filled with life as the individual personally experiences the curriculum (Freihoff 1995:152). Hence, when discussing curriculum documents, it is useful to look beyond the conceptual framework on paper and draw upon an insider's knowledge of the program of instruction:

If we only consider the planned curriculum, the official curriculum evident in a written document, or if we are too prescriptive in our approach, in our delivery of instruction, we can ignore the numerous positive and negative consequences that can result. We may fail to realize the power of the hidden curriculum, that part of the curriculum that, while not written, will certainly be learned by students.
(Ornstein & Hunkins 1998: 12)

Thus, the hidden curriculum instills values and beliefs that shape future members of the professional community. If, for example, simultaneous interpretation into the non-native language is not offered officially in the curriculum and remains in the hidden curriculum, students may come to believe that it is not a legitimate practice. If court interpretation or translation theory is not offered in the curriculum, students may have the impression that such content is not valued in the professional community (12). Learning in these areas therefore

becomes part of the hidden curriculum. To return to the quotation of Freihoff above, the only curriculum that truly exists for the learner is the curriculum as it is individually experienced. In turn, this curriculum shapes the spirit of the institution.

Therefore, a case study of curriculum must also take into account those factors that are not codified in curriculum documents. The knowledge of an insider is required to fully evaluate those variables that are not apparent to the external observer and may nevertheless have an impact on curriculum outcomes. This information about the hidden curriculum should be thoroughly documented and exposed for the benefit of the external observer.

2. Foundations

Ornstein and Hunkins (1998) present four fields of study that form the principle foundations of curriculum: philosophy, history, psychology, and sociology. Each of these foundations is implicitly present in the Interpreting Studies literature, and some areas are more highly developed than other areas. In the discussion in this chapter, which presents some of the pedagogical implications of these areas of study, a curricularist perspective is adopted to describe how established areas of research in Interpreting Studies relate to the foundations of curriculum. Representatives of these four foundations contribute differently to interpretation pedagogy, both implicitly and explicitly. It is the perspective of the curricularist that the foundations of curriculum do not vie against one another, but rather constitute alternative perspectives that complement one another in educational practice. The following discussion of curriculum foundations is not intended to be exhaustive, but rather to show through individual examples how each foundation is implicitly present in the Interpreting Studies literature.

In the past, much of the discussion in Interpreting Studies has centered on the relative merits of specific research methodologies. The direction of such a discussion is not the central concern of the curricularist. Rather, the interpreter educator as curricularist is primarily interested in the potential of these foundations to inform educational practice. Often, this is an issue of the extent to which teaching methods are addressed explicitly within the research paradigm, and the extent to which research results, whether derived from conceptual analysis or empirical study, can be implemented with relative ease in the interpretation classroom.

2.1 Philosophy

As Ornstein and Hunkins point out, philosophy provides educators “with a framework for broad issues and tasks, such as determining the goals of education, the content and its organization, the process of teaching and learning, and in general what experiences and activities they wish to stress in schools and classrooms” (1998:32). Philosophy thus provides one basis for the discussion of educational objectives and the principles according to which the curriculum is designed.

The educational philosophy of *John Dewey* (1916, 1929, 1938) emerges as a pervasive force in most discussions of curriculum,³ and the tenets of his *science of education* constitute the groundwork for the humanistic approach to curriculum outlined in Section 4.2 of this chapter. Chief among them are the concepts of an *experience-based pedagogy* in which *situated learning* takes place – *learning by doing* through *intelligent problem-solving*, with the *instructor as coach*. A key task in curriculum design is therefore structuring the learning environment and learning processes according to these principles, which helps to ensure that instructional events are sequenced effectively and the desired learning outcomes are attained.

Focusing on the child and school, Dewey’s educational philosophy has been instrumental in the evolution of educational concepts. Dewey was one of the first to advocate a ‘science of education.’ Dewey, for whom education begins with experience, outlines the main tenets of his educational philosophy in *The School and Society* (1900) and *The Child and the Curriculum* (1902). Education begins with the interests of the learner. The interplay of thinking and doing is required. The teacher is to be seen as a guide and coworker, and the educational objectives include all areas of growth in the student. This approach to curriculum and instruction has been subsumed in the term ‘discovery learning.’ In *The Child and the Curriculum* (1902), Dewey stresses that the child and the curriculum are merely two limits of the same process and that it is the teacher’s task to bridge that gap (11). In other words, the child’s experience is intertwined with the subject material covered in courses, and instruction does not emerge simply from the ‘fixed and ready-made’ organized knowledge presented as ossified subjects of study.

Although Dewey was not the sole contributor to this line of reasoning, he was the major force in educational thinking of his time that gave rise to the concept of curriculum as educative experience (Jackson 1992a:6–7). For example, his focus on the role of reflection in problem-solving serves as a basis for Donald Schön’s conceptualization of reflective practice (1983, 1987).

Recently, the Translation Studies literature has incorporated principles of the progressivist movement, which is shown in an emphasis on *how* to think, not *what* to think, problem-solving, and cooperative behavior (Ornstein & Hunkins 1998:46).

One educational philosophy that has emerged from Dewey's work is constructivism, which may be seen as a unifying concept for a multiplicity of views, or "sects," subsumed under the one label (Phillips 1995). Duffy and Cunningham identify two unifying principles of constructivism and its impact on instructional practice: "1) learning is an active process of construction rather than acquiring knowledge, and 2) instruction is a process of supporting that construction rather than communicating knowledge" (1996: 171). Kiraly, a pioneer in the application of constructivist principles to translation pedagogy, explores the impact of these instructional concepts and calls for instructional reform (2000). His objective is to provide guidance in the development of an educational culture for the study of translation that empowers the learner (193–196):

Constructivism ... is based on the epistemological viewpoint that each individual creates or constructs meanings – or knowledge – of the world through an internal process of reacting to perceived relationships in the environment. From this perspective, structures in the mind cannot be imposed from without; knowledge cannot be passed on from those who know to those who do not; it is only through personal experience that individuals can increase their own knowledge (or understanding of the world around them).

(Kiraly 1997a: 144)

The adoption of a constructivist stance implies that the pedagogical value of a theory lies in its meaningfulness to the student, i.e., the student's ability to utilize a given theoretical construct to advance his or her learning processes. Therefore, the most relevant question from a pedagogical standpoint is whether students can make use of the concept as they construct their personal knowledge of how to interpret. In this vein, Kiraly concludes that the

concept of teaching, in the traditional sense of distributing knowledge, might better be replaced by that of 'facilitating' learning, in that the instructor's job can be seen to consist essentially of situating or contextualizing cognitive tasks, modeling translation processes, and promoting a multiplicity of perspectives for the solving of translation problems and the development of translation strategies.

(1997a: 146)

2.2 History

The historical foundation of curriculum recognizes that all human activities take place within time and context (Ornstein & Hunkins 1998:62). This foundation contributes to an awareness of the historical development of educational programs and, more specifically, of changes in philosophies and even basic attitudes toward curriculum and instruction that fall into the realm of the sociology of knowledge. Through historical analyses,

we gain a multiplicity of views and a realization of and an appreciation for the complexity of interpretations. In studying this foundation of curriculum, we . . . come to appreciate that it is under constant revision. New knowledge of the foundation requires such action. (Ornstein & Hunkins 1998:62)

This last point is particularly salient, as philosophies of curriculum and instruction have a tendency to become ossified in interpreter education, as in other fields. Through an awareness of the historical dimension of training programs and how programs are shaped by prevailing philosophies of education and social contexts, the interpreter educator comes to realize that curriculum is by definition in a state of flux. To attempt to freeze it in place and leave it unaltered despite advances in knowledge, technological and social progress, shifting value systems, and changes in political and economic life is to condemn it to becoming outdated and increasingly disassociated from the educational needs at hand.

An examination of the early development of curriculum in interpreter training demonstrates this point. Acknowledgement of the need for a comprehensive educational background led, for example, to the introduction of law, philosophy, and history classes at the University of Vienna in 1944/45 (Kurz 1996:31–32). The inclusion of simultaneous interpretation in a course of study is perhaps an even more salient example. Kurz draws attention to differences in the attitudes of program administrators and instructors to simultaneous interpretation in the late forties and early fifties, and how these attitudes differed between the University of Vienna and the University of Geneva when this particular mode of interpretation began gaining ground in the marketplace (1996). In Geneva, the prevailing sentiment was initially against the teaching of simultaneous interpretation, but individual practice sessions were introduced into the curriculum in 1947. Separate courses became part of regular course offerings in 1950. In Vienna, the first simultaneous interpretation sessions were launched using the university telephone system in the late 1940s, and instruc-

tors were open to this development. Formal classes were added to the course listings in the early 1950s (1996: 28–34).

The evolution of the official name of the School of Applied Linguistics and Cultural Studies of the University of Mainz in Germersheim also reflects changes in the philosophy underlying interpreter and translator education. This particular school was established in 1947 by the French military in the occupation zone following the Second World War and was called the *Staatliche Dolmetscherhochschule Germersheim* (literally, the ‘State Interpreters School Germersheim’). In 1949, it was integrated into the University of Mainz as the *Auslands- und Dolmetscherinstitut* (‘Foreign Studies and Interpreter Institute’). In 1972, it was renamed *Fachbereich Angewandte Sprachwissenschaft* (FAS; School of Applied Linguistics), which emphasizes the role of academic studies and research in the curriculum. Hönig attributes this name to the dependence of translator and interpreter education on structural linguistics as a theoretical foundation for curriculum and instruction (1995: 170). In 1992, the institution’s name was changed to *Fachbereich Angewandte Sprach- und Kulturwissenschaft* (FASK; School of Applied Linguistics and Cultural Studies) to reflect an added emphasis on area studies (history and political systems, literature and the arts) in the countries where the languages of study are spoken.

Originally, three degrees were offered by this institution: translation, commercial correspondence, and interpretation. The graduate degree in interpretation (*Diplom-Dolmetscher*) was thought to be an avenue of further study only for the best students who had already completed either a degree in translation or a degree in commercial correspondence. Students who continued in interpretation were required to have a good general education and perfect spoken and written mastery of their future working languages.⁴ This sequential curriculum model later gave way to a Y-track version. The degree in commercial correspondence disappeared from the curriculum, although courses in this area continued to be offered. More recent curriculum reforms (1998) include the modularization of degree tracks and individual study components to make the curriculum more flexible (Ordnung 1998).

These curriculum changes are several examples of how interpreter education has evolved since the Second World War. According to Ornstein and Hunkins (1998), such knowledge serves several purposes in curriculum design and implementation. First, “an understanding of historical foundations in education helps us integrate curriculum, instruction, and teaching” (69). Furthermore, the historical perspective facilitates the development of a common or core curriculum. It aids in understanding how content and process

in subject areas relate to one another, and it provides an opportunity to add a moral dimension to education, in particular through the discussion of case studies and ethics (60). Perhaps most importantly, through a historical sense of interpreter education, we “will comprehend that curricular activity exists within various ‘configurations of factors that are time bound and context-specific’ and out of such dynamics emerge appropriate actions for particular times, rather than one best system” (96). In other words, we realize that curriculum evolves continuously as we adapt the content and teaching methods to changing social, political, and economic circumstances, as well as individual and group needs.

2.3 Psychology

The field of psychology, a third curriculum foundation, complements that of philosophy by providing an understanding of teaching and learning processes. According to Ornstein and Hunkins, all curriculum scholars “agree that teaching the curriculum and learning the curriculum are interrelated, and psychology cements the relationship” (1998: 100). Therefore, this foundation is “much in evidence in education ... both in direct and indirect form,”⁵ and psychologists have played a major part in advancing the understanding of “learning so as to better inform curriculum development and teaching.”⁶

The psychological foundation encompasses a scientific approach to curriculum. In their review of the scientific tradition in curriculum studies, Darling-Hammond and Snyder stress that a

scientific approach seeks to justify curricular decisions by reference to a growing base of knowledge about the nature of learning and the effects of teaching choices on various learning outcomes. This approach might be viewed as standing in contrast to, or complementary with, approaches that seek to justify curriculum decisions on more purely philosophical or humanistic grounds, referencing values and beliefs as the cornerstones of evaluative judgments and actions. (1992: 41)

In line with the focus on empirical studies in interpretation, “[t]he scientific tradition offers a range of procedures for attempts to understand and advance curricular theory and practice by grounding them empirically in systematic studies of student learning and classroom undertakings” (41). The scientific approaches to pedagogy and instruction reported in Section 4.1 of this chapter include information processing and the curriculum theory derived from it – instructional systems design – as well as the cognitive psychology of expertise.

Prevalent in the discussion of the impact of cognitive psychology on curriculum and pedagogy is the relationship between knowledge gains and their application in the classroom. It has not been made sufficiently explicit how the knowledge of cognitive psychology can be exploited for pedagogical purposes. The “new methods, as studied by psychologists, yielded new knowledge, but it was not always ready to be put into a form for the teacher to use” (Hilgard 1996: 1001). Some interpreter educators may be guided by this impression when reviewing the literature of cognitive psychology and cognitive models of interpreting that have been advanced since the seventies. In this vein, Sternberg remarks that “those who have actually attempted to apply cognitive principles to instruction know that the relationship between cognition and instruction is not an untroubled one” (1986: 375); Sternberg cites the areas of theory, student and teacher ability, and student and teacher motivation as hurdles. A particular difficulty is the merging of theories of cognition and theories of instruction that are applicable at the level of the classroom unit and that of the individual (275). For example, a theory may specify performance processes at a level of analysis that is inappropriate for instruction (too macroscopic or too microscopic) and is therefore instructionally irrelevant (377). These problematic aspects of cognitive psychology are not prevalent in the literature on instructional design systems, which is in widespread use in business and industry (Gagné, Briggs, & Wager 1992).

2.4 Sociology

The fourth curriculum foundation, sociology, draws attention to the fact that the curriculum reflects society and the values that shape it. Societal factors have a direct impact on the subject matter that is taught in the curriculum, the aspects of the subject matter that are emphasized, and the delivery of the content. In interpreter education, these values become apparent, for example, through the role that cultural studies, literature, and history play in the curriculum model. An additional factor is the degree to which a program is ‘business-friendly,’ which refers to the degree to which a program simulates industry practices, ethics, and professional conduct, thus providing a seamless transition into the workplace. The statement sometimes made in programs that only the very best students of translation proceed in the curriculum and attain a degree in conference interpretation, as mentioned in the section on history above, is an expression of the esteem in which interpretation is held in some institutions. At the same time, it reflects how translation, relegated to a subordinate role, is seen and valued. Whether

mentioned explicitly in the official curriculum or conveyed indirectly in the hidden curriculum, these views are inevitably perpetuated from one generation of students and practitioners to the next. As Ornstein and Hunkins state, the “values, beliefs, and norms of a society are maintained and passed to the next generation not merely by teaching about them, but also by embodying them in the very operation of the educational system” (1998: 138). The point of this discussion is not to judge whether the values advocated are good or bad, but merely to draw attention to the fact that social values shape our educational systems and that they therefore require consideration in curriculum design and implementation.

Values are also driven by social dynamics that are both internal and external to the profession. External factors include the fact that campuses of schools of translation and interpretation are by definition multicultural. Although the dominant academic culture is unambiguous – it is that of the country in which the program is located – integration is necessary across programs and languages in an effort to promote multicultural understanding.

The organization of theoretical, practical, and productive knowledge in the curriculum is a pertinent example of how educational values lead to differences in curricular frameworks. While some programs stress general knowledge and one specific field of specialization, for example medicine, business and finance, science and technology, or law (University of Mainz in Germersheim, *Studienordnung* 1998), another program may strive to achieve breadth and depth of professional currency in all of these fields concurrently (Monterey Institute of International Studies). Yet another curriculum framework may offer a range of possible subject matter specializations that is limited only by the courses taught in the university as a whole (University of Tampere, Freihoff 1993: 214).

In summary, both the official and the hidden curriculum are influenced by sociological factors that are internal and external to the program. Program content and teaching methods are shaped by the worth attached to the program content by those individuals who design the curriculum. The educational philosophy of the institution is thus an expression of their values, which serve as guidelines in the design and implementation of curriculum.

3. Guidelines

In the landmark text *Basic Principles of Curriculum and Instruction*, Tyler (1949) opens his discussion by asking the question, “What educational pur-

poses should the school seek to attain?” (3). His response highlights the importance of clearly defining the aims of instruction and provides food for thought for interpreter education programs as well:

Many educational programs do not have clearly defined purposes. In some cases one may ask a teacher of science, of English, of social studies, or of some other subject what objectives are being aimed at and get no satisfactory reply. . . . if an educational program is to be planned and if efforts for continued improvement are to be made, it is very necessary to have some conception of the goals that are being aimed at. *These educational objectives become the criteria by which materials are selected, content is outlined, instructional procedures are developed and tests and examinations are prepared.* All aspects of the educational program are really meant to accomplish basic educational purposes. Hence, if we are to study an educational program systematically and intelligently we must first be sure as to the educational objectives aimed at.

(Tyler 1949:3; emphasis added)

Tyler sees the purposes of instruction as a source of guidance in designing, structuring, and implementing the curriculum. These purposes are manifested in the educational philosophy, aims of instruction, program goals, and teaching objectives. Clarity of purpose on each level of the curriculum – program, course, and unit – improves instructional design. Moreover, the precise definition of instructional outcomes informs decisions concerning skill sequencing, content selection, and use of appropriate materials. In other words, the “best way to design instruction is to work backward from its expected outcomes” (Gagné, Briggs & Wager 1992:39). In addition, clarity about program goals facilitates the integration of valid and reliable forms of assessment into the instructional regime.

Objectives, then, are useful in providing a sound basis (1) for the selection or designing of instructional content and procedures, (2) for evaluating or assessing the success of the instruction, and (3) for organizing the students’ own efforts and activities for the accomplishment of the important instructional intents. In short, if you know where you are going, you have a better chance of getting there.

(Mager 1975:6)

Educational aims, goals, and objectives are sometimes considered synonymous. In the curriculum literature, however, these three levels are distinguished from one another. Aims are generally attributed to the institutional level, goals to the program level, and objectives to the course level. See Figure 3.1. Freihoff describes this hierarchy as a division of labor resulting in a series of curriculum and teaching documents. The aims of instruction are defined through

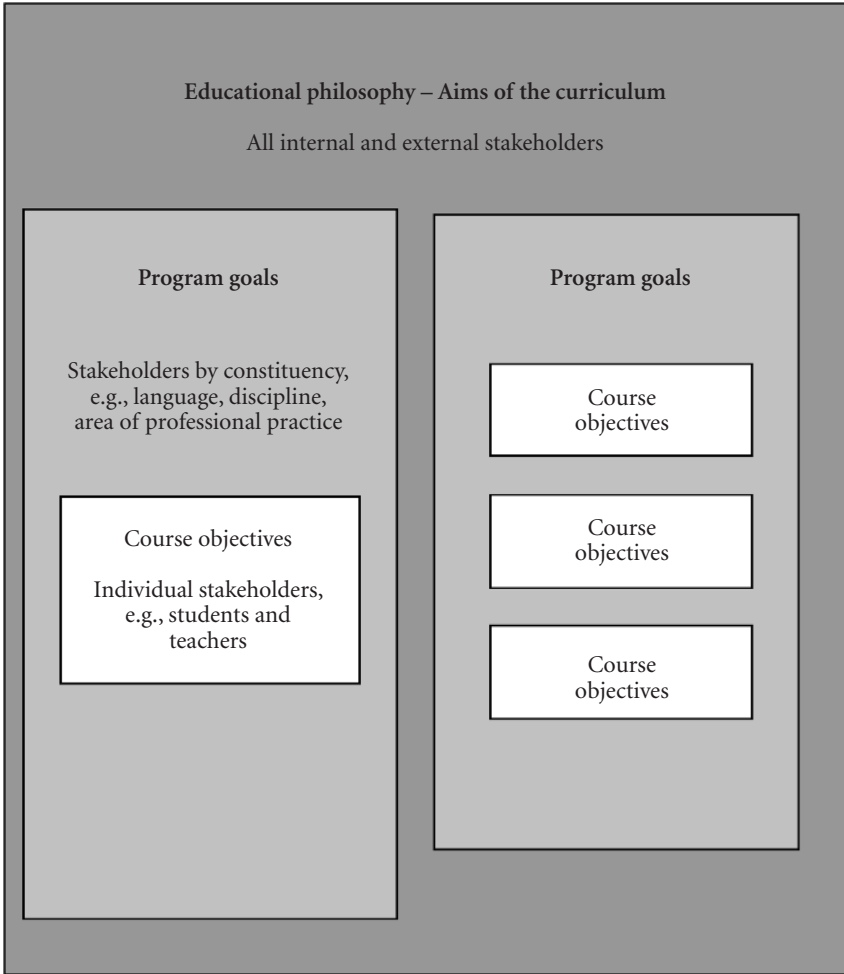


Figure 3.1. Aims, goals, and objectives in the curriculum

mission statements and guidelines. Program goals are formulated by defining the domains, activities, and contents of instruction. Finally, teaching objectives emerge through the identification of specific topics and process planning (1995: 157–158). All three areas, however, are shaped by educational philosophy. Ornstein and Hunkins thus describe the process of defining educational outcomes as a progression beginning with educational philosophy, from which the aims of instruction are derived. Goals are derived from the aims, and finally objectives from the goals (1998: 274).

3.1 Educational philosophy

A curriculum is grounded in the educational philosophy of the institution, in which academic tradition and culture play a significant role (Freihoff 1998: 26–27; Arjona 1990: 239–242). National traditions in translation and interpretation are discussed in Baker's *Encyclopedia of Translation Studies* (1998b). Manifestations of national traditions with direct impact on curriculum design include specific legislative and administrative requirements for the educational system, e.g., examinations required to enter and graduate from programs and the process of approving changes to the curriculum and examination guidelines, as discussed in the introduction to this book.

In this regard, Forstner stresses the need for equivalence among programs while allowing for diversity:

Es ist nicht die Aufgabe und auch nicht die Absicht der in der C.I.U.T.I. zusammengeschlossenen Institute, die Ausbildung von Übersetzern und Dolmetschern zu vereinheitlichen oder gar zu standardisieren. Dies wäre, zumindest zum augenblicklichen Zeitpunkt, kaum möglich, da in Europa die jeweiligen nationalen rechtlichen Vorschriften sehr unterschiedliche Rahmenbedingungen setzen. ... Ziel ist also nicht die Gleichförmigkeit in der Ausbildung; vielmehr wird *Gleichwertigkeit in Vielfalt* angestrebt. Die Wege, die zu den akademischen Abschlüssen führen, sind unterschiedlich. (1995: XV)

Differences in culture, educational philosophy, and national legislation result in a wide variety of curriculum models, and the objective of CIUTI is to strive for comparability across programs rather than the uniformity of all programs. As a result of this diversity, different educational programs have different factors to consider in curriculum implementation, different challenges to take up, and different problems to solve. Therefore, Forstner draws attention to the need to strike a balance between unity and diversity based upon the compatibility of curriculum outcomes in the community of institutions that educate translators and interpreters.

The educational and social philosophy of the interpreter education program is normally reflected in its mission statement and curriculum documents, which delineate the aims of the instructional program. A mission statement of the Graduate School of Translation and Interpretation of the Monterey Institute of International Studies, for example, stresses that

faculty ... are committed to helping students in a supportive and stimulating environment to develop the analytical skills, cultural literacy, conduct, competence, professional integrity and loyalty needed to become superior

professional translators and interpreters.

(Monterey Institute of International Studies 1998: 2)

Content in each of the areas of knowledge and skill listed in this mission statement and a framework for teaching this content are developed through a process of interaction between various stakeholders who are both internal and external to the educational institution. This process is depicted in Figure 3.2.

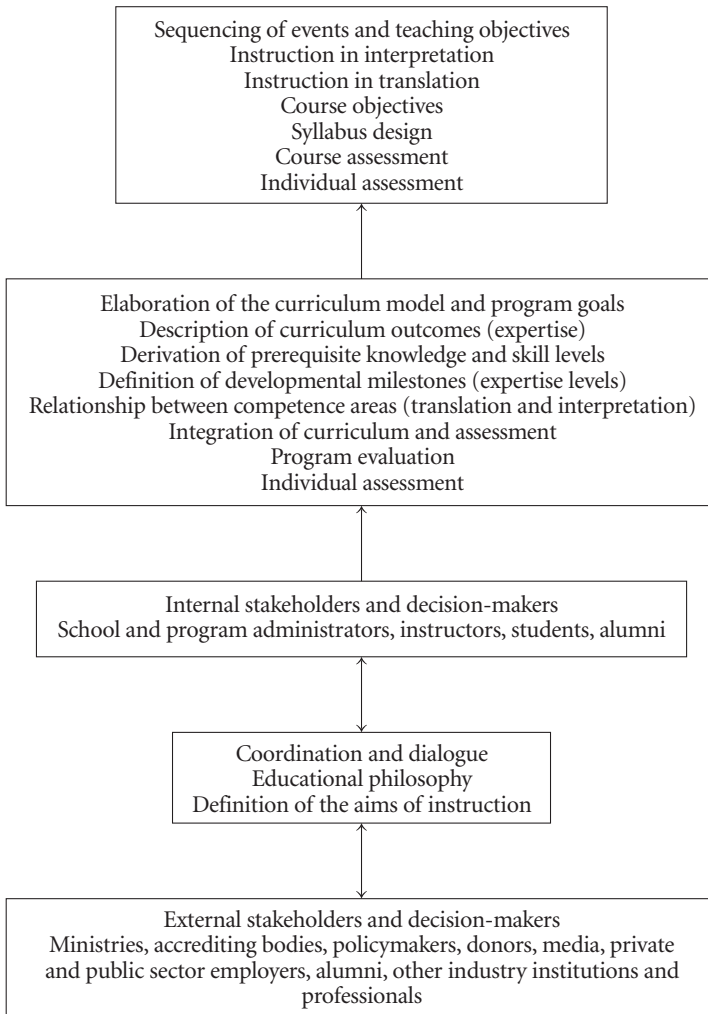


Figure 3.2. Process of defining aims, goals, and objectives for the curriculum

3.2 The aims of instruction

In their definition of aims, Ornstein and Hunkins (1998) draw attention to the visionary character of aims, which reflect the values of the educational philosophy. Aims do not refer directly to events of instruction, but rather to the belief system upon which the program is founded:

Aims are general statements that provide both shape and direction to the more specific actions designed to achieve some future product or behaviors. Aims are starting points that suggest an ideal or inspirational vision of the good. They reflect value judgments and value-laden statements, and they furnish educators with guides for the educational process.

(Ornstein & Hunkins 1998:269)

The aims of instruction vary according to educational philosophy. A program of instruction in a professional school within the graduate school system of the United States, for example, will often stress professional practice in a (simulated) workplace environment. According to Arjona, professional education “entails a comprehensive and integrated course of study designed to prepare the student for freelance or full-time practice in the field” (1984a:4). In contrast, a course of study in a department of a German research university may stress the unity of research and teaching following the conceptions of Humboldt, and a prerequisite for graduation will be the fulfillment of a research component. There are few statements of aims in interpreter education formulated explicitly by degree-awarding institutions. If the aims of instruction are not stated explicitly, the hidden curriculum may grow in influence.

3.3 Program goals

In contrast to statements of aims, statements of goals are not expressions of values or judgments; rather, they are statements of learning outcomes to be achieved through an educational program. Goals are situated on the program level and are equivalent to the outcomes of the curriculum. Ornstein and Hunkins define goals as “statements of purpose with some outcome in mind” (1998:272). They identify goals as the “desired outcomes for students as a result of experiencing the curriculum” (272). As such, they serve as guidelines for the design and implementation of the program. The formulation of explicit goals in interpreter education is more widespread than the formulation of aims. Examples are discussed in the following.

There seems to be a consensus in the Interpreting Studies literature that the overarching goal of interpreter training is to produce interpreters who are able to work immediately and reliably on the market. Willet states, for example, that the goal of a course of study is to become “ein fertiger Konferenzdolmetscher” (1984), in the sense that the program graduate is competent and ready to work directly after graduation. Giving the rationale for this statement, Willet stresses that new entrants to the profession are immediately and solely responsible for the quality of their output (see Déjean Le Féal 1998:363). This absolute statement does not make allowances for mentoring by senior interpreters on the job, which is often done as fresh graduates are incorporated into teams and work with experienced colleagues. Mentoring and internship possibilities are also becoming more widespread in the institutional markets, with programs aimed at the recruitment of young interpreters who are expected to broaden and deepen their qualifications, for example at the European Union.

The description of curriculum goals for the European Masters in Conference Interpreting focuses in particular on the need to train young interpreters in language combinations for which interpreters are in short supply:

Within the framework of the European Union’s drive towards the promotion of knowledge through wider access to specialist education and of the objective of improved employability through the acquisition of specialist competence, this intensive course is designed to equip young graduates with the professional skills and knowledge required for conference interpreting. The course seeks to meet the demand for highly-qualified conference interpreters, particularly in the area of the less widely used and less-taught languages and in view of the expansion of the Union and of the Union’s increasing dialogue with its non-European partners. (<http://www-gewi.kfunigraz.ac.at/emci/>)

This statement of curriculum goals is similar to those of other programs of instruction. Freihoff (1998:27) defines as one of the goals of an interpreter education program, for example, the ability of graduates to conduct themselves appropriately in the professional role of the language expert, i.e., as translator or interpreter. Similarly, Amman and Vermeer (1990:17) state that the goal of interpreter and translator education programs is the ability to translate and/or interpret in a manner that is appropriate for the target culture and recipient – “zielkulturadäquates und rezipientenspezifisches translatorisches Handeln.” The latter definition is an indication that curriculum goals may be complex. It may be useful to break down the comprehensive goal – “ability to work as an interpreter” – into a series of goals that are explicitly related to individual components of the curriculum.

One of the clearest and most complete documents on curriculum and learning outcomes in interpreter education has been produced by the Conference of Interpreter Trainers in the United States. The *National Interpreter Education Standards* (1995), which pertain to the education of American Sign Language (ASL) interpreters, identify three areas in which instructional goals are to be formulated: “the knowledge, skills, and perspectives students need to gain in order to enter the field of professional interpreting” (1). In the CIUTI Handbook, these goals in skill and knowledge development are subsumed under translation competence, both written and oral, which is then subdivided into four components: competence in the mother tongue, competence in the foreign language(s), translation (transfer) competence, and cultural competence (Forstner 1995). The 1999 *Studienordnung für die Diplom-Studiengänge Übersetzen und Dolmetschen* of the School of Applied Linguistics and Cultural Studies of the University of Mainz follows this model. It focuses on skills and abilities to be acquired during training, which include competence in the native and foreign languages of study, cultural competence, competence in linguistics, and subject matter competence in one field of specialization.

In comparison, Arjona (1984a:4) lists four professional objectives of a course of study, which fall under the category of program goals:

1. *Understanding* by the student of issues and problems he/she is called upon to address in real life situations
2. *Fluency* or familiarity with the vocabulary, symbol system, and traditions of the field
3. *Continuity of learning*, thus ensuring that the student will be able to continue to learn and develop professionally after exiting the program
4. *Resourcefulness* in the student, thereby training him/her in the manipulation of human and intellectual resources to ensure successful professional work

Arjona distinguishes goals from related objectives, which she terms “ancillary skills training ... the teaching of certain T/I techniques and methods and the exposure to limited practical experience in translation and/or interpretation” (5). Ancillary objectives aim to (1) enhance students’ personal development, (2) improve their proficiency in foreign languages, or (3) complement the students’ foreign language programs of study (5).

Similar to the *National Interpreter Education Standards* (1995) and Arjona (1984a), Freihoff (1998:26) describes goals as the activities, competencies, attitudes, knowledge, and abilities that enable graduates to complete complex

translation and interpretation tasks independently and responsibly through analysis and problem-solving and to justify their approach to task solutions:

Ziel der Ausbildung ist, verantwortungsbewußte, eigenständig denkende, tatkräftige Persönlichkeiten, Translationsexperten, heranzubilden, die komplexe Vermittlungsaufgaben übernehmen, analysieren und lösen und ihr Vorgehen argumentativ vertreten können. (28–29)

In summary, there seems to be widespread agreement in the professional community of conference interpreters that graduates need to be well-equipped to work independently in the profession. Nevertheless, a period of initiation into the specific demands of a given workplace is required and often provided through mentoring or other forms of in-house training. The consensus is not as strong as to the nature of second-order goals that contribute to the attainment of this overarching curriculum outcome. This diversity of opinion is also reflected in the wide range of curriculum models that exist in translator and interpreter education. The discussion of the scientific and humanistic approaches to curriculum design is intended to aid in building a framework for a more precise description of program goals.

3.4 Teaching objectives

Compared to aims and goals, teaching objectives have a higher degree of specificity. Derived from the educational philosophy of the institution, aims of instruction, and program goals, teaching objectives describe the outcomes of course instruction. As Ornstein and Hunkins remark, “[w]ithin the context of educational aims and goals, it is necessary to formulate objectives that will indicate in more specific terms the outcomes of the curriculum or project being considered.” (1998:274). Although this study focuses on curriculum and a detailed discussion of instructional objectives for the classroom is beyond its purview, a discussion of interaction between the course and curriculum levels, i.e., between goals and objectives, is offered here.

Bloom’s seminal *Taxonomy of Educational Objectives* establishes a breakdown of objectives into the cognitive and affective domains, which correspond to the scientific and humanistic approaches to curriculum. In the cognitive domain, the categories proposed include knowledge (scientific) in its various types and intellectual abilities and skills, i.e., comprehension, application, analysis, synthesis, and evaluation (1956). The affective domain (humanistic) consists of receiving (attending), responding, valuing, organizing (values), and characterizing a value or value complex. For Ornstein and Hunkins, cogni-

tive and affective domains are not all-encompassing; they therefore add the psychomotor domain (1998:281).

More recently, Gagné, Briggs and Wager (1992) advance five categories of learning outcomes: intellectual skills, cognitive strategies, verbal information, motor skills, and attitudes. Each of these areas is represented on both the course and the program levels. “Intellectual skills enable individuals to interact with their environment in terms of symbols or conceptualizations . . . Learning an intellectual skill means leaning *how to do* something of an intellectual sort,” and may be equated with procedural knowledge (43). The intellectual skill ‘how to interpret’ would fall into this category. Cognitive strategies, a term generally attributed to Bruner (Bruner, Goodnow, & Austin 1956), “are the capabilities that govern the individual’s own learning, remembering, and thinking behavior” and are generally domain specific (44–45). Verbal information is “the kind of knowledge we are able to *state*. It is *knowing that*, or *declarative knowledge*” (46). World knowledge and knowledge of subject matter are pertinent examples in interpretation. Motor skills make motor performance possible, e.g., riding a bicycle, drawing a straight line, or printing letters, and are also required for speaking, listening, reading and writing (47). Finally, attitudes are in the affective domain and “amplify an individual’s positive or negative reaction toward some person, thing, or situation” (48). They are important in education, because they are persisting states that modify the individual’s choices of action (48). In translator and interpreter education, objectives have also been defined more broadly as individual tasks, situations, topics, processes, tools and means of expression (Freihoff 1998:27). It would seem plausible that attitudes play a crucial role in the hidden curriculum.

In summary, goals and objectives seem to fall into two general categories: the development of the knowledge and skills required to interpret and the development of an awareness of appropriate conduct and membership in a professional community.

3.5 Curricular implications

Aims, goals, and objectives provide guidelines for curriculum design that are grounded in the educational philosophies, values, and belief systems of the educational stakeholders. The distinction between these three levels can aid in gaining greater clarity about how the curriculum functions, how its individual elements relate to one another, and how goals can be reached. In addition, these distinctions aid in defining with greater clarity the purposes of assessment and how assessment is to be conducted. Thus, the process of defining aims,

goals, and objectives and determining whether they have been met is inherent to the circular process of designing curriculum and assessing the outcomes of instruction as described in the introduction to this study.

Based upon the descriptions of goals and objectives included in the discussion in Sections 3.3 and 3.4, four basic categories can be readily discerned: (1) language skills, (2) transfer skills, (3) domain knowledge (subject matter), and (4) knowledge of the profession / professional identity. As shall be argued in the discussion of curriculum approaches, these individual areas should also be reflected in the design and sequencing of instruction. For an educational program to be successful, the competence levels in each of these domains must be attainable. Therefore, the statement of goals should not be overly ambitious. As Tyler states,

An educational program is not effective if so much is attempted that little is accomplished. It is essential therefore to select the number of objectives that can actually be attained in significant degree in the time available, and that these be really important ones. Furthermore, this group of objectives should be highly consistent so that the student is not torn by contradictory patterns of human behavior. (1949:31)

Therefore, according to Tyler, if instructional goals are to be attained as efficiently as possible, it is important to determine whether these goals overlap, whether they work at cross purposes, and therefore whether they are easier to reach if pursued sequentially or concurrently. In interpreter education programs, variations in the role of translation instruction (a subtype of language transfer skill) are a pertinent example of how curriculum models differ substantially from one another.

4. Approaches

4.1 Scientific – curriculum as process

Of the many scientific approaches to curriculum, behaviorism stands out as a pioneering field. In comparing the behavioral approach to other major curriculum approaches,⁷ Ornstein and Hunkins describe this view as “the oldest and still major approach to curriculum” (1998:2) and as “a frame of reference against which other approaches to curriculum are compared” (3). Furthermore,

[i]t relies on technical and scientific principles, and includes paradigms, models, and step-by-step strategies for formulating curriculum. Usually based on a plan, and sometimes called a blueprint or document, goals and objectives are specified, content and activities are sequenced to coincide with the objectives, and learning outcomes are evaluated in relation to the goals and objectives.

(Ornstein & Hunkins 1998:2)

The behavioral approach was the major foundation for curriculum for much of the previous century. Early behavioral approaches to curriculum design had the goal of making schools and curriculum more scientific or precise and reducing teaching and learning to behaviors with corresponding activities that could be measured. Later, Tyler (1949) combined behaviorism with progressivism, thus incorporating the influence of Thorndike (objectives), Dewey (needs of the learner), and the scientific approach to curriculum that had been developing prior to Tyler's landmark text. As a result, behavioral approaches broadened and came to regard the learner as a cognitive functioning individual within a social context. In doing so, they could better address the complex nature of human learning (Ornstein & Hunkins 1998:3).

For Darling-Hammond and Snyder (1992), the behaviorist perspective is but one of many scientific approaches to the study of curriculum. Although behaviorism evolved to allow the investigation of the inner workings of the mind (49), they conclude that "we must look outside of the behaviorist orientation for explanations of how certain interventions produce their effects, why they seem to be more effective in some circumstances than in others, and whether the effects produced support or detract from other desirable goals" (49). Additional traditions of scientific inquiry include the developmental, cognitive structuralist, and cognitive science perspectives. Two research paradigms in Interpreting Studies that may be described in terms of curriculum approaches fall into the last category – the computational view of the mind and the cognitive psychology of expertise.

4.1.1 *The computational view of the mind*

The computational view of the mind, and information processing (IP) in particular, originated in the work of Miller, Cherry, and Broadbent, and Bruner in the 1950s.⁸ In Interpreting Studies, Gerver (1976), Massaro (1978) and Moser (1976; 1978) first applied information processing to interpretation.⁹ In terms of curriculum and pedagogy, researchers "who follow an information-processing paradigm for examining learning tend to focus more on the cognitive structures built up by the learners themselves," according to Darling-Hammond and Snyder (1992:54). They state further that in this process "humans develop

increasingly powerful cognitive structures [frameworks] for organizing and applying their knowledge” (54). The IP approach holds promise of providing a “unique contribution” to learning and instruction due to its “sharpened focus on the process of thinking and the relationship between mental processes and performances” (55).

Interestingly, Darling-Hammond and Snyder (1992) view the IP approach as a constructivist one. From this perspective,

learning is influenced not only by how information is presented but also by the learner’s understanding of the learning goals, by the schemas or framework used to interpret and process information, by prior knowledge (including conceptions and misconceptions) and the manner in which it is addressed in a new context, and by his or her own learning strategies. (55)

Instrumental in the discovery of these principles has been the observation of how different modes of information presentation have an impact on learners’ performances on certain types of tasks. These studies include subjects with varying levels of proficiency, as in comparisons of experts to novices (55).

Moser-Mercer (1997c) reviews process models of interpreting that have been developed since the late seventies, in particular through computational modeling, i.e., “the formal, quantitative description of behavior by the interaction of a set of simpler component processes” (Massaro & Shlesinger 1997:20). A conceptual understanding of the process of interpreting is provided through this “multi-stage view,” which generally includes “some mention of speech recognition, storage mechanisms, transfer, production and output monitoring” (Moser-Mercer 1997c:3). Despite Moser-Mercer’s application of her model to a beginner’s course in interpreting (1978), Massaro and Shlesinger state that it “remains to be determined to what extent an information-processing approach will increase our understanding of SI [simultaneous interpretation] and improve training and practice” (1997:46). They remark that “we have gained some significant insights into the perception and production of language, but the application of this knowledge and its scientific study within the SI situation remains at its infancy” (21). Particularly problematic is the transfer of knowledge from this line of research to the general community of interpreters, even the community of interpreter educators (21).

Therefore, although IP has proven to be a strong tool for the conceptual analysis of interpretation, the value of IP to the pedagogy of interpretation has not yet been made explicit. It is important to bear in mind that lack of clarity

concerning the pedagogical usefulness of IP applies not only to interpretation pedagogy. Bruner remarks with regard to education in general that

[t]he issue ... is whether the computational view of mind itself offers an adequate enough view about how mind works [sic] to guide our efforts in trying to “educate” it. It is a subtle question. For in certain respects, ‘how the mind works’ is itself dependent on the tools at its disposal ... So, in a sense, the mere existence of computational devices (and a theory of computation about their mode of operating) can (and doubtless will) change our minds about how “mind” works, just as the book did. (1996:2)

Furthermore, IP has offered little in descriptive power for the types of shifts in mental resources that may well take place in interpreter training. IP capacity is considered by many researchers to be finite, with no means of expansion available (Bereiter & Scardamalia 1993; Setton 1999). Setton (1999:3) identifies mental representation as the layer currently lacking in most cognitive models of interpretation based upon IP (and Interpretive Theory as well).

In comparison, the cognitive psychology of expertise offers a set of constructs to describe these shifts in cognitive processing, as Moser-Mercer illustrates in her analysis of challenges self-diagnosed by novice interpreters (2000). Given the centrality of mental representation in the cognitive sciences, which Gardner identifies as the major accomplishment emerging from this set of disciplines (1987:383), interpreter educators should perhaps devote more attention to this type of metacognitive analysis in instruction, i.e., students’ personal conceptualizations of their cognitive processes and difficulties they encounter. This instructional method can be pursued through reflective practice, a humanistic approach to the curriculum.

An example of an IP model developed specifically for pedagogical purposes is Gile’s Efforts Model (1995a). which seems to be a powerful metaphor for the novice interpreter and has been used effectively in reflective practica (de Terra & Sawyer 1998). The Efforts Model apparently allows students to build a simple yet efficient personal construct of their interpreting skills and manipulate that mental representation purposefully in pursuit of expertise.

4.1.2 *Skills and abilities in Instructional Systems Design*

Breaking down higher order skills into component skills has long been recognized as a useful approach to skill training. This curriculum approach may be associated with the behaviorist/empiricist view outlined by Greeno, Collins, and Resnick, in which

procedural and factual knowledge is divided into components that are arranged in a learnable sequence. Typical sequences of instruction begin with training in a procedure, facts or vocabulary in a simplified context, for example, followed by presentations of the material in somewhat more complicated settings. (1996:33)

Although IP has served as a theoretical basis for empirical research in interpretation, there has been little discussion of its counterpart in curriculum theory – Instructional Systems Design (ISD), or Instructional Design (ID).

ISD emerged during the sixties under the leadership of Robert M. Gagné, who is generally considered to be the founder and the most influential theorist of the field. The history of ISD is retraced in Derry and Lesgold (1996:790), who delineate the problems this field encountered as constructivist models of learning became widely recognized. The marriage of constructivist thinking and ISD led to the development of a second generation of ISD, referred to as ISD₂ (see also Merrill 1992).

The central premises of this instructional theory are that “complex competence is built by adding coordination and other structure to simpler pieces of knowledge” and that “instruction is most likely to be effective if severe constraints are placed on the amount of new structure that must be added to already known atoms to yield each new knowledge unit” (Derry & Lesgold 1996:787). As a result, curriculum is defined as “the specification of a set of capabilities” (Gagné, Briggs, & Wager 1992:165), which is in line with a systems view of education in that “any particular capability is preceded by the learning of prerequisite capabilities and is followed, on other occasions, by learning more complex capabilities” (165).

According to this curriculum approach, the key to instructional design lies in the sequencing of courses and course modules within programs of instruction in a manner that promotes effective learning, which entails, for example, proceeding from simple (prerequisite) skills to complex (target) skills and/or by sequencing objectives in increasing order according to the degree of meaning in what is being learned (Gagné, Briggs, & Wager 1992:165). In interpretation, these principles of instructional sequencing have been applied mainly on the level of introductory courses (van Dam 1989; Weber 1989a), although there has been some discussion on the program level as well.

In reviewing approaches to interpretation pedagogy, Déjean Le Féal (1998) describes an instructional system in which skill and knowledge areas are introduced as the curriculum progresses. An introduction to consecutive interpretation and sight translation precede initial instruction in simultaneous

interpretation, which is then followed by simultaneous interpretation with text and the interpretation of complex subject matter. In the final stages of the curriculum, the student is introduced to codes of conduct and professional ethics. Déjean Le Féal does not describe the role of translation in this widespread instructional progression. A survey of schools of translation and interpretation could lead to conclusive information in this area.

There are little empirical data on whether translation ability, or basic competence in consecutive interpreting, should be required at specific points in the curriculum progression or whether translation ability should be a prerequisite for consecutive course work, which in turn would be a prerequisite for classes in simultaneous interpreting. In this matter it is interesting to note that, on the program level, the notion has been challenged in traditional instructional design “that a large amount of prerequisite instruction must take place before a student is ready to practice complex, real-world performance” (Derry & Lesgold 1996: 804).

4.1.3 *The cognitive psychology of expertise*

A field that opened up to Interpreting Studies in the 1990's is the cognitive psychology of expertise (Hoffman 1997a; Moser-Mercer 1997b, 2000). Expertise is defined in the American Heritage Dictionary as “skill or knowledge in a particular area”, and “skill in doing or performing that is attained by study, practice, or observation.” This area of inquiry is particularly promising for interpreting pedagogy as its implications for teaching in general have been made explicit (Bereiter & Scardamalia 1993). Hoffman provides a concise overview of the development of Expertise Studies and how it dovetails with interpretation in “The Cognitive Psychology of Expertise and the Domain of Interpreting” (1997a). Hoffman describes expertise as an attribute governed by underlying characteristics that span many professions. Chief among these characteristics are “(1) performance and skill, (2) the developmental progression, (3) expert knowledge and memory organization, and (4) expert reasoning processes” (193).

Expertise Studies emerged from research in information processing and artificial intelligence in the mid- to late 1960's (Glaser & Chi 1988:xv, xxi). Much of this early research focused on chess, including the work of de Groot (1965), Newell and Simon (1972), and Chase and Simon (1973). One of the main objectives of this research was to elicit domain knowledge from experts, especially with regard to pattern recognition and perceptive abilities (xv). This knowledge was then to be used in the development of computer programs and expert systems in the early 1970's. At this juncture, it was recognized that

research on expertise could offer crucial insight into knowledge-rich tasks, i.e., activities that require hundreds of hours of learning and experience to perform at high levels (xxi).

Since the beginning of the 1970's, psychologists have explored domains as diverse as nursing, air traffic control, aerial photo interpretation (meteorology), software engineering, and livestock judging, among others, and applied a research methodology that has grown in sophistication over time (Hoffman et al. 1995). There emerged a general interest in systematically describing traits that characterize the performance of experts across domains, the objective being to amass bodies of knowledge that can enhance training in a wide variety of fields.

The domains under study have been characterized as requiring "high levels of situational awareness" and involving "high levels of mental workload" (Hoffman 1997b), which are also characteristics of interpreting. In addition, some of these tasks are completed under substantial levels of stress. High mental workload is a scalable variable; it is based on the current skill level of the participant completing a given task and dependent on whether the participant perceives the task as difficult. Hence, research on expertise has been conducted in areas that, at first blush, may appear to be more routine and mundane than one might expect, such as reading, typing, and the memorization of restaurant orders.

Expertise is sometimes described in terms of criteria used to identify experts. Factors cited informally include the number of years of experience on the job, professional criteria like degrees, training, publications, and membership licensing, as well as job experience and polls conducted in the domain. Some researchers state that high-performance skills, i.e., those involving a special form of expertise, have been defined as those requiring more than 100 hours of training for minimum levels of proficiency (Anderson 1982:369).

These types of definitions are based on principles of expert performance rather than the traits of experts, such as time on the task, which may fluctuate widely from domain to domain (Salthouse 1991:286–287). Livestock judges, for example, often require over 20 years of experience before they are considered experts in their domain. A figure cited for achieving the level of master in chess is 10,000 to 20,000 hours (Posner 1988:xxxi). Hoffman (1997a:200) cites 10,000 hours for the level of master as well, or a minimum of 10 years of professional experience, if one assumes five hours of time on the task per day.

Summary descriptions of processes and abilities required to complete tasks have sometimes been vague (Hoffman 1997a). One researcher, for example, defines expertise as "the ability to do the right thing at the right time"

(Holyoak 1991:309). Nevertheless, common to almost all descriptions are the mention of “extreme or exceptional performance” (Salthouse 1991:286) and the demonstration of a certain “kind of operative knowledge” (Johnson, Zuolkernan, & Tukey 1993:162) that is related to perceptual ability. An expert, in other words, appears to be able to “see” things that the novice cannot (Klein & Hoffman 1993), which in turn allows him or her to perform “beyond natural abilities” (Bereiter & Scardamalia 1993:4). According to the latter view, experts have “effortfully acquired abilities, abilities that carry us beyond what nature has specifically prepared us to do” (3).

Hoffman integrates many of these aspects into his comprehensive operational definition of expertise. He states that an expert is

one whose judgments are uncommonly accurate and reliable, whose performance shows consummate skill and economy of effort, and who can deal effectively with rare or tough cases, and who has special skills or knowledge derived from extensive experience with sub-domains. (1997a:199–200)

This definition implies that there are observable differences in the performance of experts and novices, and that these differences can be measured if operational constructs and assessment criteria are defined for a specific domain.

According to Hoffman’s definition, the career of the expert is typically characterized by knowledge of subdomains, which is one area where the career paths of experts and non-experts differ. Bereiter and Scardamalia (1993) also discuss differences in career development among expert and nonexpert members of a field. They state that

[t]he career of the expert is one of progressively advancing on the problems constituting a field of work, whereas the career of the nonexpert is one of gradually constricting the field of work so that it more closely conforms to the routines the nonexpert is prepared to execute. (11)

These differences are also evident during training. Bereiter and Scardamalia (1993) draw upon constructs from the field of Expertise Studies for pedagogical purposes by developing areas that are relevant for curriculum. When describing pedagogical implications of expertise theory, they hypothesize that it is possible to identify the mental attributes of expert learners. They cite principles of learning like the role of creativity and the importance of reinvesting mental resources in the processes of knowledge and skill acquisition. Areas of reinvestment include the ongoing learning of new procedures and staying abreast of developments in the field in question, actively seeking out more difficult problems, and tackling more complex representations of recurrent problems

(93–94). They describe these forms of reinvestment as an inherently creative enterprise (123). Expert learners possibly guide their progressive problem solving, which requires risk-taking, using a knowledge of *promisingness* – that is, an ability to judge how successful a specific approach, strategy, or activity may be in tackling a given task. Therefore, according to Bereiter and Scarmadalia, “[c]reative experts are experts at taking successful risks in their domains” (125).

In the case of expertise in written translation, considerable emphasis has been placed on the social role of the translator as expert, i.e., the necessity of clearly recognizing that the translator is indeed an individual with a particular form of competence, or expertise (see Hönig 1995a; Risku 1998). In the case of interpretation, in contrast, attention has focused on describing underlying differences between the cognitive processes of novices and experts. Both approaches are relevant, as they lead to the identification of social and cognitive traits that may aid in describing expertise in interpreting. With the help of such descriptions, the interpreter educator can focus on skills and abilities that transcend language learning, which is sometimes mistaken with interpreter training. Curriculum models are now appearing that utilize the characteristics of expert learners. Trainees with functional proficiency in translation are placed on a fast track in special courses for language combinations new to them (Arntz 1999).

In Expertise Studies, the basic distinction between novices and experts is attributed to their perceptual ability and the ensuing impact on the execution of innate skills (Klein & Hoffman 1993). Posner proposes that perceptual ability is probably more closely related to a specific type of semantic memory than to a general reasoning process (1998:xxxv). More elaborately, Glaser and Chi describe differences in the “interplay between knowledge structure and processing abilities,” with experts possessing “an organized body of conceptual and procedural knowledge that can be readily accessed and used with superior monitoring and self-regulation skills” (1988:xxi).

Similarly, building on Glaser (1987), Hoffman (1997a:193) identifies three areas in which experts distinguish themselves from novices. One difference lies in the areas of *cognitive development*, with experts reaching higher levels in a developmental progression. Through proceduralization, shifts in cognitive development result in changes in the following areas:

Variable awkward performance becomes consistent, accurate, complete, and relatively fast.

Individual acts and judgments are integrated into overall strategies.

Perceptual learning occurs so that a focus on isolated variables shifts to perception of complex patterns.

There is increased self-reliance and ability to form new strategies when required. (Klein & Hoffman 1993:205)

The relationship between declarative and procedural knowledge is well known in cognitive psychology (Anderson 1995), and is discussed at length in Kurz (1996) and more recently in the context of novice interpreters by Moser-Mercer (2000).

Shifts also occur in *knowledge structure*, or the organization of knowledge, as the learner develops more elaborate mental models (Hoffman 1997a:203; Johnson-Laird 1989). Schumacher and Czerwinski define mental models as “a complex, physical dynamic device, system, or process that allows an operator to understand and explain system components and their interactions, and to predict system outcomes from system input” (1992:65). According to their definition, multiple models of the same phenomenon are possible, and these may be either stable or derived for a particular situation that is not a regular occurrence in the domain (66). Similarly, Anderson refers to the dimension of problem representation in expertise as the process of “developing a new set of constructs for representing the key aspects of a problem” (1995:292).

Mental models provide a conceptual understanding of components underlying the interpretation process and how they may interact, as is the case with Gile’s Efforts Model (1995a), which learners report to be pedagogically useful.¹⁰ In this respect, it can be hypothesized that the mental model facilitates the integration of relevant sub-skills into an intuitive, macro-approach to the interpretation task – an essential step in the progression beyond the level of proficient to that of expert.

Bereiter and Scardamalia (1993) include three types of hidden knowledge in their discussion of expert learning: informal knowledge as educated common sense (51); impressionistic knowledge as feelings that are an essential and inseparable part of knowledge, sometime referred to as ‘intuition’ or ‘instinct’ (54); and self-regulatory knowledge as self-knowledge relevant to performance in some domain (59). They contrast these types of informal knowledge with formal knowledge, generally regarded to be the textbook knowledge of a domain. Traditionally, academic education is commonly thought to focus on formal knowledge. Bereiter and Scardamalia (1993) seek to strike a balance between formal and informal knowledge in education and the acquisition of expertise, with each area playing a specific role in training. While it can be argued that the objective of any interpreter education program must be to

translate formal knowledge into informal knowledge and skill, the role of formal knowledge in training should not be neglected. It is not only essential for dealing with issues of truth and justification, but also plays a key role in communication, teaching and learning, as well as the development of professional ethics. In addition, it provides starting points for the construction of informal knowledge and skills (63–65). Bereiter and Scardamalia identify the relationship between informal and formal knowledge in the acquisition of expertise as a central issue in gaining a full understanding of the developmental progression from novice to expert (65).

The use of both formal and informal knowledge is thus reflected in the *reasoning processes* of the expert, who seems to have more highly developed problem-solving strategies than the novice and to be more adept in terms of perceptual skill. Experts demonstrate flexibility in reasoning, which seems to be more case-based: they “often refer to illustrative prototypical examples of past cases when asked to justify or explain their decisions or actions” (Hoffman 1997a:211; Klein & Hoffman 1993). In developing increasingly higher levels of expertise, it seems to be helpful if one works “at the edge of one’s competence, but accepting the strains and the risks that go with doing so” (Bereiter & Scardamalia 1993:73). The development of increasingly efficient reasoning processes is apparently a process of striving to gain greater understanding “against a constant background of awareness of the complexities that one is not yet dealing with” (73). In this respect, the acquisition of expertise involves progressive problem solving that goes beyond normal learning by (1) reinvesting in learning, (2) seeking out more difficult problems, and (3) tackling more complex representations of recurrent problems (92–96).

Differences in cognitive development, knowledge structure, and reasoning processes seem to result in qualitative differences in performance, content knowledge, and developmental milestones (Klein & Hoffman 1993:221–222). The value of these shifts for curriculum design lies in the possibility of defining levels of expertise and developing descriptions of observable performance that can be used for assessment purposes. In other words, a framework for the progression of curriculum can be described more fully, and the principles of expert knowledge and skill acquisition can be fostered through the creation of environments conducive to learning and skill development.

4.1.4 *Levels of expertise in interpreting*

To date, interpreter proficiency levels have been described for use in the language industry only in Australia, where the National Accreditation Authority for Translators and Interpreters (NAATI) sets standards and serves as a test-

ing and accreditation agency mainly in the area of community interpreting (<http://www.naati.com.au>).¹¹ These categories differ from those defined in Expertise Studies in that they are static; they characterize abilities in working professionals rather than dynamically evolving skills in trainees.

Hoffman (1997a:199) describes the developmental progression of expertise in terms of categories stemming from medieval craft guilds. These levels have been adopted by Moser-Mercer (2000) and Kiraly (2000). The categories include the naïve or *naïvete*, novice, initiate, apprentice, journeyman, expert, and master. While a *naïve* is completely ignorant of a domain, a *novice* has had some minimal or introductory exposure to it. The *apprentice* is undergoing a program of instruction and has progressed beyond the introductory stage. The student enrolled in an interpretation program would fall into this category. A *journeyman* is an experienced and reliable worker who can perform a day's competent labor unsupervised although working under orders. Hoffman (1997a:199) describes a journeyman interpreter as "the graduate who has just passed his final interpreting exams and is deemed fit to 'sit in the booth.'" The *expert* distinguishes him/herself from the journeyman in that his/her judgments are "uncommonly accurate and reliable ...[and his/her] performance shows consummate skill and economy of effort". The expert can "deal effectively with certain types of rare or tough cases" and has "special skills or knowledge derived from extensive or concentrated experience with subdomains" (199). The *master* is at the highest level and defined as "an expert who is also qualified to teach others. Traditionally, the masters comprise an elite group whose judgments set the regulations, procedures, standards, or ideals" (199). These categories are related to educational programs in Figure 3.3.

The levels of expertise described by Klein and Hoffman (1993:206) are defined primarily in terms of the characteristics of expert performance, e.g., the "limited and inflexible behavior" of novices, the ability to see "actions in terms of long-range goals or plans," the "ability to cope with and manage a variety of types of situations" among the competent, and the "intuitive grasp of each situation" among experts who are "no longer aware of features and rules." In contrast, the guild terminology used by Hoffman et al. (1995:132) features the social aspects of expertise to a greater extent by defining the learning environment and how members of the professional community see individuals at various stages. The apprentice, for example, is "immersed in the domain by living with and assisting someone at a higher level"; the expert is "highly regarded by peers"; whereas the master is "one of an elite group of experts whose judgments set the regulations, standards, or ideals." A master

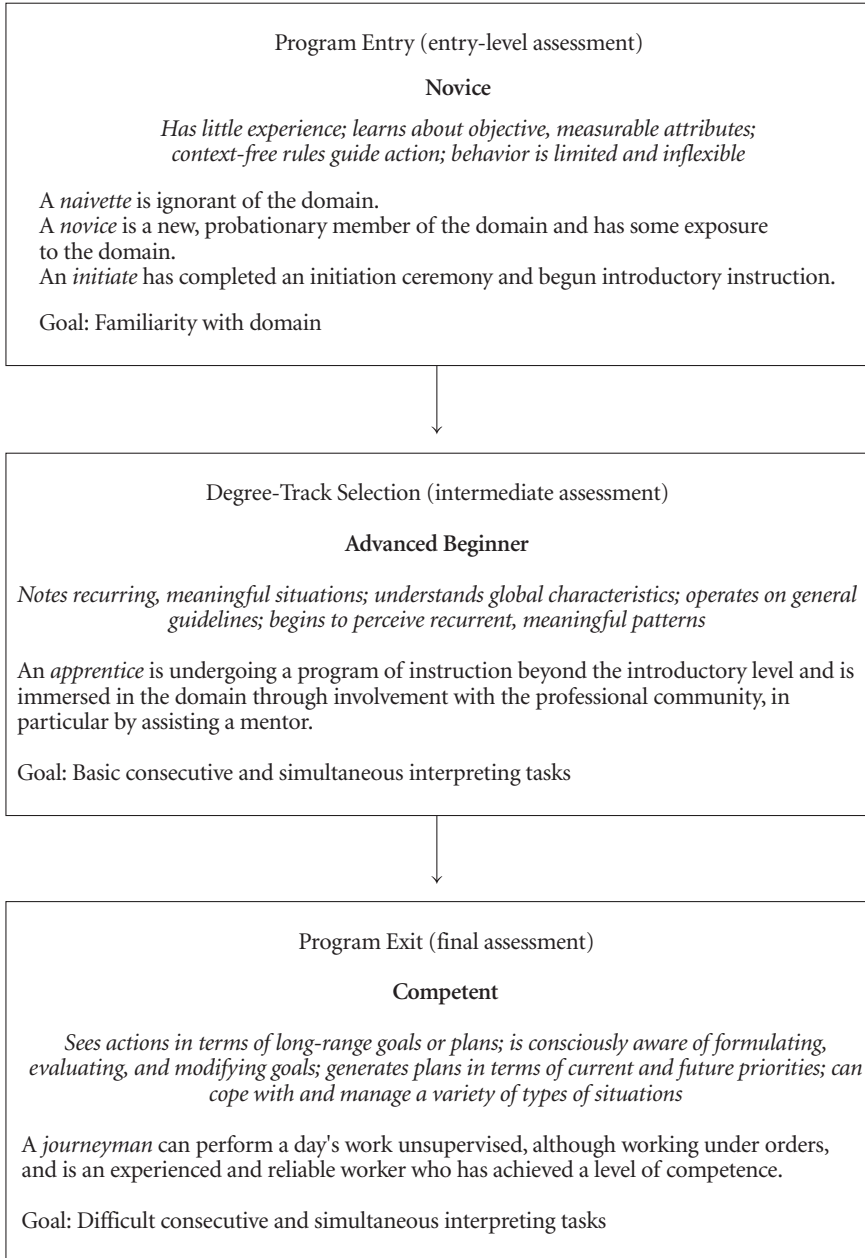


Figure 3.3. Levels of expertise in interpreter education programs (adapted from Klein & Hoffman 1993:206; Hoffman et al. 1995:132)

is “regarded by the other experts as being ‘the’ expert, or the ‘real’ expert, especially with regard to subdomain knowledge” (132).

In terms of sequencing the curriculum, a program of instruction hypothetically takes the naïve or novice to the journeyman level. A statement of curriculum goals would ideally take these proficiency levels into account. It stands to reason that the constructs underlying expertise at various levels can be operationalized for pedagogical purposes and described in terms of observable performance for use in the classroom. However, this task is not necessarily straightforward. In Hoffman’s estimation, a “general challenge to scientific psychology is to generate a definition of expertise that focuses on cognitive functionality and yet can be used operationally to identify experts” (1997a:193). This challenge can be overcome in the case of interpretation by characterizing attributes of performance at various levels. To be employed as assessment constructs, these aspects of performance should be observable. In other words, the goals and content of instruction should be derived from empirical data.

4.1.5 *Implications for curriculum sequencing*

The scientific approach to curriculum provides a framework for instructional design by viewing the acquisition of interpretation competence as process. This viewpoint stresses the breakdown of composite skills into component skills and their subsequent reintegration, as well as the sequencing of learning events according to the difficulty and increasing complexity of tasks. An appropriate sequence of instruction can be identified for an educational program through the description of skill levels and developmental milestones grounded in principles of expertise. Instruction in translation and instruction in interpretation are core components in the education of language professionals and present in most curriculum models. The degree of similarity or dissimilarity between translation and interpretation competence is thus key information in determining whether a curriculum design is as efficient as possible. The overlap of component skills at various stages of the learning progression, the transfer of one type of competence to another, and the level of specialization required as an instructional goal of the program or degree track are issues for the curriculum designer to address. An overview of possible competence levels based upon the goals and objectives of instruction is presented in Table 3.1.

Table 3.1. Goals for levels of expertise in interpreter education

Expertise level: Introductory to Intermediate

Goal: Successful completion of basic oral and written language transfer tasks

- Completion of simple translation and/or interpretation tasks of moderate length
- Demonstration of ability and aptitude:
 - Language skills as defined by ASTM tables
 - Transfer skills: content and form appropriate as defined by assessment rubric, no specialized material or vocabulary
 - Professional knowledge: awareness of professional goals

Expertise level: Intermediate to Advanced

Goal: Completion of advanced translation or interpretation tasks in one domain

- Successful completion of translation and/or interpretation tasks of considerable length and complexity in one domain
- Demonstration of stable skills and abilities:
 - Language skills as defined by ASTM tables, demonstration of these levels in translation or interpretation tasks
 - Transfer skills: content and form appropriate as defined by assessment rubric; specialized material and vocabulary in one domain
 - Professional knowledge: demonstration of ability to define professional goals

Expertise level: Advanced to Competent

Goal: Completion of a range of advanced translation or interpretation tasks representative of the field

- Successful completion of translation and/or interpretation tasks of considerable length and complexity in several domains
 - Demonstration of a specialization
 - Demonstration of professional-level skills and abilities:
 - Language skills as defined by ASTM tables, demonstration of these levels in a range of translation and interpretation tasks
 - Transfer skills: content and form appropriate as defined by assessment rubric; specialized material and vocabulary in a range of domains
 - Professional knowledge: demonstration of ability to attain initial professional goals
-

4.2 Humanistic – curriculum as interaction

Humanistic approaches to curriculum focus on the “personal and social aspects of curriculum and instruction; . . . consider the need for self-reflectiveness and self-actualization among learners; and the sociopsychological dynamics of classrooms and schools” (Ornstein & Hunkins 1998:8). In this view of curriculum, which is rooted in progressivism, emphasis is placed on cooperative learning, independent learning, small-group learning, and social activities. The

learner provides input into the curriculum and shares responsibility in planning classroom instruction. Professional collegiality and mentoring systems are featured highly in this approach (8). Humanists argue in particular that education “must focus on both the personal and the interpersonal” and thus overcome a long tradition of “regarding cognition as something separate from feeling”; instead they “advance strong arguments that it is the total person – the cognitive, the affective, and even the spiritual self – who is involved in gaining knowledge and working toward wisdom” (9). This view of curriculum thus focuses on individuals as social entities interacting with other participants in the educational setting and drawing upon this interaction to self-reflect and guide their learning.

Curriculum as interaction thus considers the social nature of learning and instruction, which is also reflected in the view of expertise as a trait defined in part by social forces. The following discussion begins by situating the program of instruction in the community of professional practice. It then turns to the nature of interaction between instructor and student and adopts the concept of cognitive apprenticeship to promote collaborative learning. The possibility of utilizing a variety of instructional formats is stressed as a means of stimulating reflective practice.

4.2.1 *A community of professional practice*

The participants in any program of instruction are part of a larger community of professional practice that is subject to its own social dynamics. Thus, introductory courses for interpretation or translation have the initiation of the learner in this community as one of their primary tasks. They provide a forum in which students can become acquainted with the profession and the workplace by introducing the learner to the skill in a reflective context. While this goal is accomplished in some curriculum models under the guise of theory, i.e., theory of translation is taught as an introductory course before students actually begin to translate, evidence from Instructional Design suggests that skill training should be provided in the context of the workplace (Derry & Lesgold 1996). In addition, research on cognitive skills training suggests that there is little reason why training on the task should not begin immediately (804). Becoming familiar with the habits and strategies of the working professional serves in this case as initiation into the community of professional practice.

One theoretical construct that has emerged in the context of professional communities is distributed intelligence. According to Bruner, “[t]he gist of the idea is that it is a grave error to locate intelligence in a single head” (1996: 154).

Gardner states that it “makes sense to think of human cognitive competence as an emerging capacity, one likely to be manifested at the intersection of three different constituents: the ‘individual,’ ... the structure of a ‘domain of knowledge,’ ... and a set of institutions and roles” (1993:172–173). Bereiter and Scardamalia also see “no *a priori* reason for stipulating that the process [of expertise] must go on within an individual mind” (1993:117–118). According to this view, for example, teams of interpreters may be seen as forming “expert teams, or ‘high-performance’ teams” that may develop “ways as a unit to achieve higher goals or to achieve goals more successfully” (Bereiter & Scardamalia 1993:118).

In interpreter education, distributed intelligence can be leveraged for learning through the creation of second-order environments, which Bereiter and Scardamalia define as “ones in which the conditions ... change progressively as a result of the successes of other people in the environment” (1993:106). Ongoing adaptation to these changing conditions is required of all participants. In this case, it is the instructor who consistently presents challenges to the student by “setting a higher standard of performance, by reformulating problems at more complex levels, or by increasing the amount of knowledge that is presupposed” (106). This process “override[s] the rigidifying effects of habit and practice, by progressively altering the conditions to which individuals in the environment must adapt” (106).

An open question is the degree to which translators and interpreters form distinct groups within a larger community of professional practice. A closer examination of skills sets, competencies, and task descriptions would serve the purpose of describing in greater detail the extent to which these professions overlap and should overlap in curriculum and instruction. To date, little concrete data are available on this fundamental sociological and psychological question and in particular how the relationship between skill sets should be reflected in curriculum design.

4.2.2 *Cognitive apprenticeship*

The student cannot be taught what he needs to know, but he can be coached.
(Schön 1987:17)

Although leading interpreter education programs are situated in an academic environment, interpreter training has never truly left the realm of apprenticeship. Apprenticeship in some form was an important means of acquiring the skills and abilities necessary to interpret for centuries before the introduction of formalized training (Caminade & Pym 1998:281). Most professional in-

interpreters continue to be wary of distancing training from the apprenticeship mode, in which practical skills training takes precedence over the scholarly acquisition of abstract knowledge. Membership in the apprenticeship tradition, however, should not be misconstrued as a weakness of interpreter education as an academic field, much less as evidence of a misconceived inappropriateness of situating training in the university setting. The need for highly developed intellectual skills and a broad education in order to interpret professionally is a received notion in the community of conference interpreters and the Interpreting Studies literature. It finds its expression, for example, in the recommendation of the International Association of Conference Interpreters (AIIC) that interpreter education programs be situated on the post-graduate level.

In his discussion of educational traditions and knowledge, Francis Schrag describes the apprenticeship tradition of learning and instruction, “surely the oldest and most universal,” as the “principle means by which most people obtain technical know-how in fields as diverse as bricklaying, hairstyling, glassblowing, courtroom litigation, and neurosurgery” (1992:269). Although Schrag notes that the home of the apprenticeship was originally the workplace, not the school (270), apprenticeship is not to be equated strictly with vocational skills. Indeed, the scope of the apprenticeship tradition has often been underestimated due to a “dearth of philosophical formulations or justifications for apprenticeship as an educational mode” (269). Duffy and Cunningham (1996:184) attribute a resurgence of interest in cognitive apprenticeship to the work of Resnick (1987) and Brown, Collins, and Duguid (1989).

Given the importance that apprenticeship has played throughout the history of interpretation, it is surprising that this form of education has been neglected in discussions of training and the implementation of programs. Perhaps the most powerful form of apprenticeship can be achieved through a reflective practicum, which is situated both internally and externally to the educational institution. Such a practicum provides an environment that encourages reflective practice as described in Section 4.2.3.

Cognitive apprenticeship focuses on “authentic learning environments in which the cognitive demands in learning are qualitatively the same as the cognitive demands of the environment for which the instruction was preparatory” (Duffy & Cunningham 1996:184). In this event, “the emphasis is not on master-apprentice but rather on the learner as a member of a larger community of practice who, through legitimate peripheral participation and the affordances of the environment, begins to assume greater responsibility in that community of practice” (184).

One characteristic of this educational tradition is also key: the identification of knowledge with know-how, a source of know-how being “that of master practitioners, ideally those who not only can perform at a high level but also can explain the rationale for their performance” (Schrag 1992:269). Master practitioners comment on the nature and execution of their performance thus allowing students to gain insight. This teaching method dovetails with Schön’s concept of reflective practice, which he applies to fields as complex as architectural design, psychotherapy, town planning and business management (1983, 1987). In moving from “the sage on the stage to the guide on the side” (King 1993), as Kiraly (n.d.) advocates in translation pedagogy, the coach as an expert guide provides a context for learning to occur through demonstration, observation, and reflection – “the scaffolding for the learner” (Duffy & Cunningham 1996:184). While the explanatory power of the instructor is highly developed, classroom demonstrations may also assume a role similar to that of the master class for musical performance. In such situations, perhaps ironically in the case of interpretation, meta-commentary is de-emphasized, as the instructor ‘shows’ the student one possible approach to completing the task at hand. These ideas are not new to interpreter education. The value of instructor demonstrations in the classroom has been stressed by Thiéry (1989) and Altman (1989b).

In cognitive apprenticeship, a sensitive, delicate balance must also be maintained in the relationship between student and instructor. In describing how teaching and learning processes can go wrong, Schön (1987) cites *stance* as an impediment to the exercise of learning and the development of competence for reciprocal reflection-in-action:

Some studio masters feel a need to protect their special artistry. Fearing that students may misunderstand, misuse, or misappropriate it, these instructors tend, sometimes unconsciously, under the guise of teaching, to actually withhold what they know. Some students feel threatened by the studio master’s aura of expertise and respond to their learning predicament by becoming defensive. Under the guise of learning, they actually protect themselves against learning anything new. (Schön 1987:119)

The discussion of reflective practice in the following section aims to illuminate the opportunities for effective learning afforded by cognitive apprenticeship – opportunities that are lost when the adoption of a negative stance, either by the instructor or the student, creates a learning predicament.

4.2.3 *Reflective practice*

Education in an academic setting, whether in the traditional university or professional school, is based upon the premise that training is not a haphazard process and that reflection on the nature of skill acquisition is beneficial to the student. Interpreter education may be regarded as the acquisition of a high-performance skill that is subject to the general dynamics of skill acquisition widely observed in other domains (Schneider 1985). In addressing the relationship between theory and practice in skill acquisition, Bruner makes the following general statement:

[P]raxis most typically precedes *nomos* in human history (and, I would add, in human development). Skill to put it another way, is not a “theory” informing action. Skill is a way of dealing with things, not a derivation from theory. Doubtless, skill can be improved with the aid of theory, as when we learn about the inside and outside edges of our skis, but our skiing doesn’t improve until we get that knowledge back into the skill of skiing. Knowledge helps only when it descends into habits. (1996: 152)

In his conceptualization of reflective practice, Donald Schön (1983; 1987) proposes an approach to teaching that takes into account this fundamental relationship between *praxis* and *nomos* – the relationship between acquisition of skill for professional practice and structured, orderly theory-building. In a reflective practicum – “a setting designed for the learning of a practice” (1987: 37) – collaborative learning through knowing-in-action, reflection-in-action, and reflection on reflection-in-action is the objective. In his concept of knowing-in-action, Schön links the works of Dewey, Ryle (proceduralization), and Polanyi (tacit knowledge) in his description of professional artistry. Specifically, knowing-in-action refers to “the sorts of know-how we reveal in our intelligent action ... We reveal it by our spontaneous, skillful execution of the performance; and we are characteristically unable to make it verbally explicit” (25). Reflection-in-action refers to the fact that we “may reflect *on* action, thinking back on what we have done in order to discover how our knowing-in-action may have contributed to an unexpected outcome” (26). More importantly, in the construction of knowledge, reflection-in-action

has a critical function, questioning the assumptional structure of knowing-in-action. We think critically about the thinking that got us into this fix or this opportunity; and we may, in the process, restructure strategies of action, understandings of phenomena, or ways of framing problems ... Reflection gives rise to on-the-spot experiment. We think up and try out new actions intended to explore the newly observed phenomena, test our tentative under-

standings of them, or affirm the moves we have invented to change things for the better. (28)

Similar to the process described metaphorically by Klein and Hoffman in Expertise Studies as learning to see the invisible, reflective practice sharpens perceptual skills, which enables learners “to make more rapid and accurate judgments about the nature of the situations they are in” when executing innate skills (1993:215). Perception features prominently in Klein and Hoffman’s description of experts, according to which we

generally know who the experts are. They notice the subtle but critical cues that others miss. They can reliably make discriminations that are opaque to others. They have clear judgments of the appropriate way to act in a situation. They can anticipate what is supposed to happen next, and their expectancies are so clear that they quickly notice when they are wrong, so they can rethink their interpretation of what is going on. (1993:221)

Schön’s language may be considered to be vague. While it can be argued that the fuzziness of his terminology is due to the fact that procedural knowledge, e.g., knowing ‘how to interpret,’ is non-verbalizable to a considerable degree, we do find a discussion of higher level constructs in Bereiter and Scardamalia’s work on expertise (1993) that can be exploited for pedagogical purposes.

A distinction upon which Bereiter and Scardamalia base their reasoning is the one made between *implicit* and *explicit learning*.¹² The recognition of the role of tacit knowledge in the individual is widely attributed to Polanyi (1966), who “reconsiders human knowledge by starting from the fact that *we know more than we can tell*” (4). Drawing on Gilbert Ryle’s (1949) distinction of “knowing what” and “knowing how,” Polanyi traces the recognition of tacit knowledge, which has resulted in the distinction between ‘wissen’ and ‘können,’ or declarative and procedural knowledge, to Plato’s *Meno* (22).

Reber (1993) relates tacit knowledge to implicit learning in his comprehensive discussion of the development of research on implicit learning. Reber defines this type of learning as “the acquisition of knowledge that takes place largely independently of conscious attempts to learn and largely in the absence of explicit knowledge about what was acquired” (5). Therefore, although the clear separation of different levels of consciousness in cognitive activity is necessary for empirical research purposes (Massaro & Shlesinger 1997; Moser-Mercer 1997c:14), attempting to maintain clear divisions between them may not be necessary in some pedagogical instances and for some types of learners. Indeed, a clear separation may even not be possible in teaching and learning.

In discussing the role of implicit learning as a principle of the evolution of our species, Reber remarks that

we need to be careful not to treat implicit and explicit learning as though they were completely separate and independent processes ... [t]here is, so far as I [Reber] am aware, no reason for presuming that there exists a clean boundary between conscious and unconscious processes or a sharp division between implicit and explicit epistemic systems – and no one from Sigmund Freud on has ever argued that there was. (1993:23)

Nevertheless, greater recognition of the interaction between explicit and implicit learning would benefit interpretation pedagogy. The distinction between implicit and explicit knowledge has been identified and applied in second language pedagogy (Ellis 1994, 1997). Initial suggestions have been made to move in this direction in translation and interpretation as well. Extensive discussions of the role of conscious and unconscious strategies exist for written translation, but they do not always take the literature on implicit learning into account. In his convincing argument in favor of a fundamental distinction between natural translation and professional translation, Shreve defines a “strategic position” in translation theory as one which refers “explicitly to consciously learning and learning to use explicit procedures to factor situational variables ... into the translating process” (1997:122).

In his discussion of curricula for interpreter and translator training programs, Freihoff advocates an approach to instruction in which students learn to analyze their performance and relate their progress in learning to the goals of the program. He regards self-diagnosis and self-correction in the foreign language as particularly important, as students will not always have access to instructors and native speakers and must learn to judge the quality of their performance independently (1993:210). The ability to make these types of distinctions empowers the student, which is an underlying objective of reflective practice.

4.2.4 *Situated cognition and learning*

The concept of situated cognition ascribes to the view that “all knowledge is fundamentally situated in the environment within which it was acquired” (Derry & Lesgold 1996:791). Cognitive apprenticeship relies heavily on the “processes of enculturation through which students develop and adopt the tools and conceptual categories of a practice community as they participate in the community” (804). Therefore, situating cognition in the instructional setting recognizes the “need for the learning experience to be situated in real-

world contexts” (Bednar et al. 1992:25). In other words, “the reason for solving the problem must be authentic to the context in which the learning is to be applied” (26).¹³

It is this authenticity¹⁴ that Thiéry identifies in stressing “The Sense of Situation in Conference Interpreting” (1990). He states that “the budding interpreter should make a deliberate effort to be constantly aware of the situation he is operating in” (40), in particular, the fact that “the speaker does not address the interpreter, but the people he is talking to” (42). A conference assignment takes place in “a real-time communication situation: what is happening is happening now, among people who are physically present” (42). The implication for pedagogy is that the novice interpreter should be provided with an environment that is not removed from the working environment of the interpreter. Throughout training, the student interpreter should not lose sight of the communication situation in which the professional interpreter works. Thiéry cites two factors that contribute to this awareness: “1) the interpreter/group situation, i.e., the position of the interpreter vis-à-vis the people he is working for; [and] 2) the group situation itself, i.e., the relative positions of the members of the group vis-à-vis each other” (42).¹⁵

In the interpretation classroom, Kurz stresses the need to place “emphasis on confronting students with *life-like* situations” and advocates the use of videotapes in instruction to complement mock conferences and guest speakers (1989:213). For translation, situated cognition implies that “instead of focusing on formal and functional equivalents for isolated elements in the text, the instructor could set the stage for realistic translation by offering real or simulated information to the students about the translation situation in which it had occurred” (Király 1997a:148). Instructional events in this form, as the mainstay of the curriculum, facilitate the evolution of translation competence as the result of intentional exposure to certain types of professional translation experience (Shreve 1997). These teaching methods can be utilized in the traditional interpretation classroom and also in the framework of a reflective practicum, in which students are responsible for the organization and staffing of interpreted events.

Cognition is therefore situated with varying degrees of authenticity vis-à-vis the professional world in the settings in which individual events of instruction occur. This does not necessarily imply that there is a single or “ideal” instructional format that is of particular value in conference interpreter education, however. While exposure to conferences and conference simulations is vital to interpreter training, complementary instructional formats may also be utilized to add experiential value and maximize learning outcomes.

Klein and Hoffman (1993) distinguish between four types of experiences that contribute to the evolution of expertise: personal, directed, manufactured, and vicarious experiences. Different instructional formats lend themselves to these experiences; for example, an educational setting can differ from the workplace in that it can be structured to provide greater task exposure within a limited timeframe and concurrently target a range of specific subtasks.

Personal experiences are usually gained in the workplace, i.e., are equivalent to learning on the job by doing the job, which Klein and Hoffman describe as “straightforward, but inefficient” (1993:215). Kalina draws attention to the logical paradox in the viewpoint that interpreter training can be left to an unstructured apprenticeship in the field:

Die Argumentation, die für das Dolmetschen erforderlichen Strategien und Vorgehensweisen würden dem Dolmetscher durch Erfahrung von allein erwachsen, beißt sich allerdings in den sprichwörtlichen Schwanz. Wie soll der Dolmetscher ohne spezifische Ausbildung diese Erfahrung machen, ohne zunächst einmal unzureichende Leistung – weil unerfahren und somit ohne die erforderliche Technik erbracht – zu bieten? (1998:233)

In other words, if personal experiences were all that is necessary, formal training would be superfluous. Similarly, Schneider identifies the idea that one should always train in the format of the total task as a widespread fallacy of training high-performance skills (1985). Accelerated learning and skill acquisition are driven by a variety of factors, including “the number, range, and difficulty of challenges faced, and . . . the way a person is able to learn from each incident, along with factors such as degree of engagement with the task” (Klein & Hoffman 1993:216).

Directed experiences involve one-on-one tutoring, mainly through an apprenticeship in the workplace, which entails access to the field, e.g., conferences, courts, and/or hospitals. Directed experiences provide opportunity for the “observation of performance, assessment, modeling, guiding motivation and attitudes, relieving anxiety, [and] developing a professional identity” (Klein & Hoffman 1993:216). Structured, supervised internships are a pertinent example.

In contrast, *manufactured experiences* are provided in the classroom. To be particularly effective, manufactured experiences provide highly concentrated training by exposing the student to tough cases, preferably through simulations of the workplace. In this context, Derry and Lesgold recognize the importance of identifying “non-routine but important tasks that occur irregularly or rarely in the daily work environment and consequently do not lend themselves to

training through participation in daily work routines” (1996:804; see also Hoffman 1997a:199). This approach to training provides an environment that allows the student to sharpen discriminations and perceptual ability; the student must make finer distinctions and develop situation assessment skills (Klein & Hoffman 1993:217).

Finally, the “use of *vicarious experiences* treats expertise as a resource” (219), as the expert engages in storytelling from the field. “For example, stories are accounts of the experiences of others and are often sufficiently vivid to serve as additions to the experience base” (217). A valuable pedagogical practice, the usefulness of stories of experience and narrative inquiry has been demonstrated particularly in the training of medical nurses (Connelly & Clandinin 1990). A goal of interpreter educators could be to remove the anecdotal from storytelling and leverage their professional knowledge by relating their practical experience systematically to classroom tasks. In this respect, vicarious experiences can be used to develop instructional modules similar to case studies.

Therefore, knowledge gained from the study of expertise indicates that training programs benefit by including all four types of learning experiences. A combination of personal, manufactured, directed and vicarious experiences can be achieved by offering a range of instructional events, e.g., classroom instruction, internships in the workplace, and reflective practica (de Terra & Sawyer 1998). The attainment of a synthesis of learning experiences and instructional events that are clearly related to curriculum goals is a hallmark of effective curriculum design.

4.2.5 *Implications for the learning environment*

The humanistic approach to curriculum describes the social interaction that emerges as the curriculum is implemented. Interpreter education programs are part of a broader community of professional practice; pedagogy is thus driven by collaborative relationships between all participants and is grounded in real-world experience. Instruction provides enculturation into the professional community, in particular through cognitive apprenticeship and situating cognition in settings that are typical of the interpreter’s workplace, although some instructional formats may deviate from the workplace setting for pedagogical reasons. Reflective practice is seen as a means to enhance educational experience by recognizing and heightening the role of metacognition in training. The learner uses higher-level cognitive skills in problem-solving, thereby forming and honing procedural knowledge on the basis of declarative knowledge. In this light, reflective practice is regarded as a “purposeful” activity “directed to achieving goals, and to removing obstacles to those goals” (Ander-

son 1995:237). The curriculum designer must therefore structure the curriculum and events of instruction so as to promote and facilitate the integration of the professional community, cognitive apprenticeship through mentoring relationships, and reflective practice.

5. Models

Noteworthy in the traditional definition of curriculum are two conditions that are generally met in curriculum planning: a prepared environment for instruction and a planned sequence of instructional events (Schrag 1992:276). These two conditions are subsumed in the humanistic and scientific approaches to curriculum. Thus, they also bring with them a twofold problem to curriculum design: “the selection, conceptualization, and organization of content, and the design of institutional settings congruent with the educational aspirations that undergird that selection” (297). In translator and interpreter education, varying approaches aimed at addressing this twofold challenge are apparent in the sequencing and overlapping of instruction in translation and interpretation in different curricula.

Curriculum designers have addressed the task of structuring and sequencing instruction in two basic models: open and closed curricula. Closed curriculum models are strictly sequenced. Open curriculum models afford the learner greater choice in determining the content and progression of the curriculum. In translator and interpreter education, Freihoff (1993, 1995) also distinguishes between open and closed curriculum models. The discrepancy between the official and hidden curriculum may be greater in open systems, which could lead to a decrease in cost-effectiveness due to longer periods of study, as a result of a looser sequencing of activities requiring continuous skill building.

5.1 Curriculum models according to Arjona

Proceeding from Velleman’s model of the 1941 Geneva curriculum, Arjona (1984a) discusses five basic curriculum models in translator and interpreter education. It is arguable that the vast majority of programs fall into one of these five categories. All five models contain five constituent parts identified by Velleman: applied language arts and linguistic studies, practicum courses, area studies, multidisciplinary studies providing a subject specialization, and deontology or professional ethics. The models are general in nature and show only the relationship between translation and interpretation (see Figure 3.4). They

describe a variety of constellations of translation and interpretation courses on the program level. The content and objectives of individual curriculum components are not specified.

The *linear model* sequences the program so that instruction in translation precedes interpretation. Arjona draws attention to the beliefs underlying this model: practical experience in translation aids the interpreter in acquiring a solid foundation in terminology and basic linguistic tools. A high level of skills that build upon translation competence is thus assumed to be required for the study of interpreting. The *modified linear model* focuses on specialization and parallel tracking; entry to either the interpretation or translation degree track is possible after completion of a core translation curriculum. The *Y- or forked-track model* includes a core curriculum for all students, after which students specialize in either translation or interpretation. The *modified Y-track model* offers specialization not only in translation or interpretation after a core curriculum, but also in multidisciplinary studies, such as business or political science. In the *parallel track model*, entry to the program is possible at different levels and is based upon entry examinations, professional credentials, and prior academic experience. Students may specialize in either translation or interpretation at any level. With experience in the community of professional practice, the student may therefore choose from a range of curriculum alternatives. Normally, students experience primarily the model of the institution they are attending, although it is possible for the student to experience additional models through transfer from one program to another or exchanges with other educational institutions. There has been little discussion of the comparability of skill levels at various stages of the curriculum across models.

Renfer (1992) provides a preliminary, experience-based analysis of several curriculum models by comparing the sequential and Y-track models in particular. He comes to the conclusion that the sequential model is superior. In this case, Renfer seems to be advocating the study of translation on the undergraduate level and subsequent interpreter training in a graduate program. The resulting conclusion – the superiority of the sequential model over the Y-track model – may be based upon reservations about training conference interpreters on the undergraduate level. Renfer's discussion is yet another example of how various factors – level in the educational system, background of students, translation experience – impact curriculum design and implementation. Indeed, few conclusions can be drawn without further contemplation of the aims of instruction, foundations and approaches to the curriculum, and empirical data on the models in question.

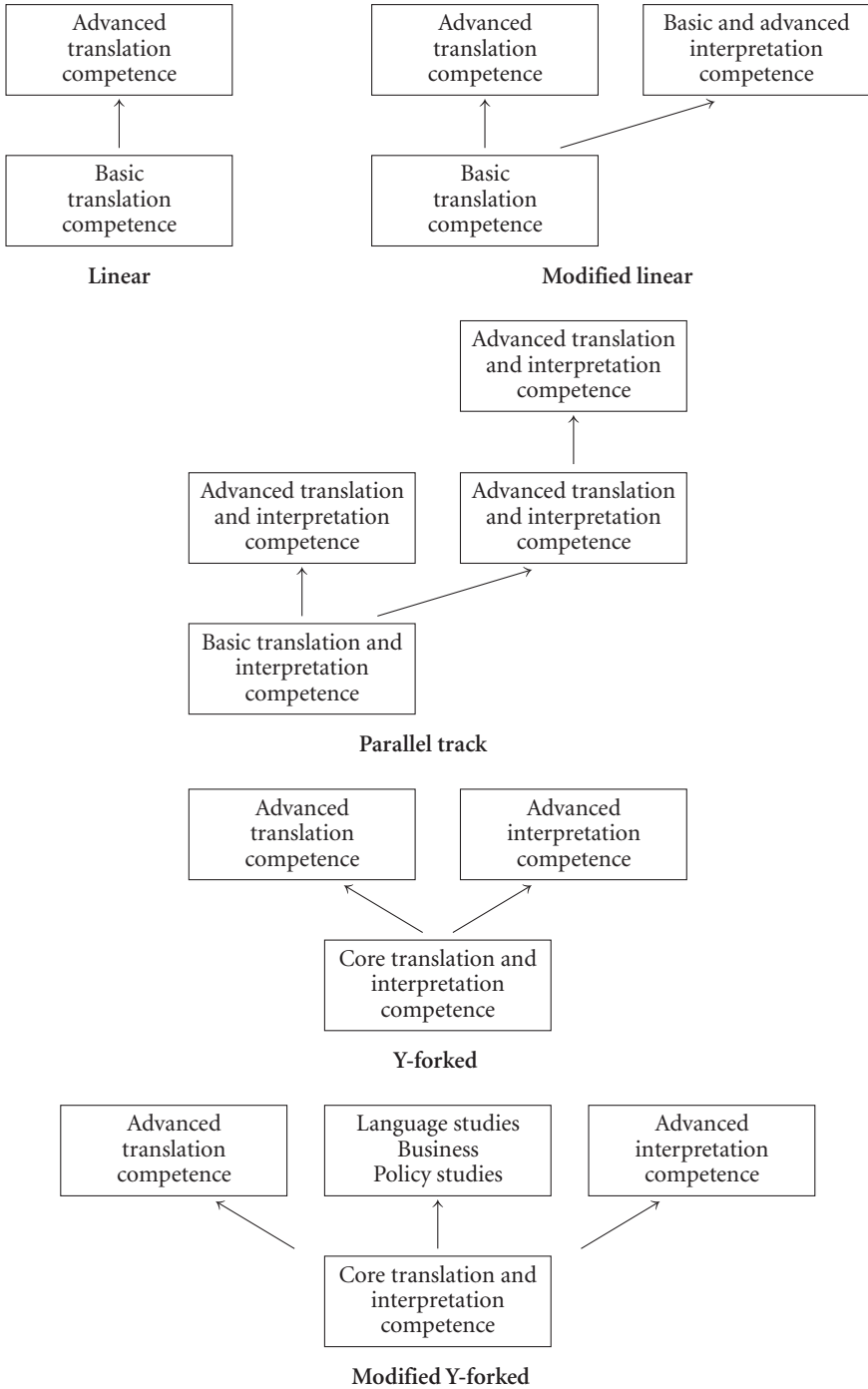


Figure 3.4. Curriculum models according to Arjona (1984a: 10)

5.2 Curriculum components

In the process of curriculum reform in Germany and Austria during the 1990's, the introduction of curriculum modules was repeatedly advocated to bring greater flexibility in curriculum implementation (Hönig 1995a: 161–162; Snell-Hornby 1992: 15). This need may be derived from the broadening of professional skills sets and employment opportunities in the language industry and related sectors. A modular approach is seen as an appropriate means to address such needs.

Hönig (1995a) advocates a process of opening, diversification, and modularization in interpreter and translator education – the hallmarks of an open curriculum model – through the introduction of a broad course of studies in multilingual communication. In extreme form, modularization most likely provides greater opportunity for flexibility in structuring and sequencing skill and knowledge components than any of the curriculum models outlined by Arjona. Hönig provides a more detailed level of analysis than is presented in Arjona's models, which also presents a challenge to comparing and contrasting these models.

Hönig's course of studies (1995a) begins with a core module, through which the student acquires communicative competence in the mother tongue and at least one foreign language. This core module must be completed during the initial semesters of this eight-semester course of study. Complementary subject areas, chosen as electives, include courses aimed at building cultural competence (literature and media studies), research competence (print media, electronic databases, computer-aided translation tools, meeting planning), and a subject matter specialization (among others, business and economics, law, medicine, science and technology). A set of intermediate examinations and student advising are required to continue beyond the first semesters of study. Students may then enter a track leading to a degree in text production, interpretation, translation, and/or specialized translation. Research may follow on the postgraduate level in intercultural studies, the cognitive sciences including linguistics, or the use of technology in translation and/or interpretation.

Thus, the flexibility of Hönig's modular course of studies allows students to assemble programs of instruction based upon their skills and abilities, interests, previous professional qualifications, and personal goals. As a result, the course of study is not subject to strict curriculum sequencing. Given the core requirement aimed at building communicative competence during the initial semesters of study, which is then followed by specialization in translation and/or interpretation, this multilingual communication curriculum model

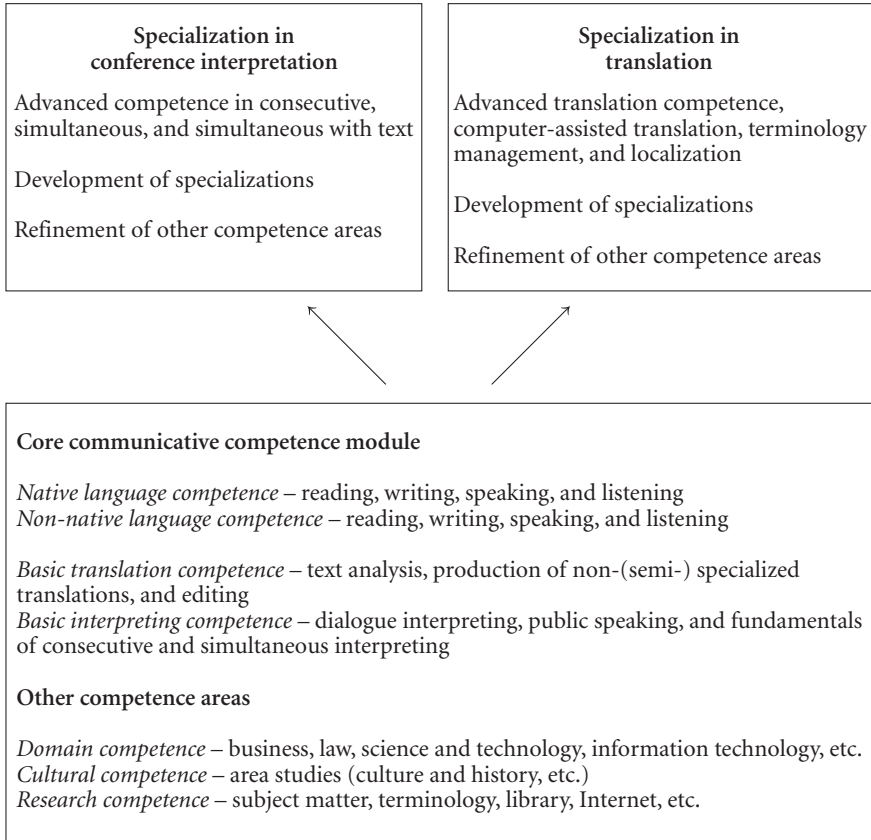


Figure 3.5. Competence areas in a Y-track curriculum model (see Höniç 1995a: 160, 165)

corresponds most closely to Arjona's modified Y-forked model. Competence areas described by Höniç are related to the Y-track model in Figure 3.5.

Increasingly, strong domain specializations and expertise in computer-assisted translation tools and software localization are required for translators. Interpreters must have several working languages and knowledge that is both broad in scope and substantial in detail for high-level assignments in government, international organizations, and the private sector conference market. At the same time, the range of jobs for individuals with translator and interpreter training has increased considerably over the past few decades (Kurz & Moisl 1997). These diverging trends do not pose a dilemma if the standards and criteria for modules offered in open systems, such as Höniç's (1995a), are ex-

plicit. This transparency would also facilitate the description of clearer profiles for translation and interpretation modules, which also aids in counteracting the widespread perception that the study of translation and interpretation leads to a broad-based, general degree in languages and the humanities. A separate issue is whether the opening and diversification of programs allows key problems of some large universities to be addressed, such as overcrowding, faculty understaffing, and correspondingly high faculty-student ratios (see Snell-Hornby 1992).

Hönig's curriculum proposal has the characteristics of a loose, open curriculum model and provides little information on course sequencing and the delivery of instruction. Descriptions of course content, proficiency levels, and course sequencing according to skill and domain can be addressed in other curriculum documents and in course syllabi. If instruction is quantified in such documents, it would not be difficult to estimate the impact of adding a language or domain specialization, or changing degree tracks, on the length of studies and the ability of a student to reach a given goal (degree) within a defined period of time.

In her proposal for curriculum reform at the University of Vienna, Snell-Hornby outlines a model with stricter sequencing (1992: 13). The relationship between curriculum components (16) emerges more clearly than in Hönig's model. An explanation of the rationale underlying this model would be useful for the curriculum designer, as would a precise definition of the goals and contents of instruction, e.g., "Fachsprachen," "Arbeit an/mit Texten" (13). It must be assumed that neither Hönig nor Snell-Hornby had the intention of spelling out explicitly how these curriculum models are to be implemented. Nevertheless, the question remains how curriculum and instruction can be optimized, i.e., higher skill levels attained within the same or a shorter period of time, or by a larger pool of students, without a greater degree of specificity in curriculum documents.

6. Steps toward effective curriculum design

This section describes general steps that can be taken to enhance curriculum design in interpreter education programs. These suggestions are intended to provide practical guidance to program administrators and instructors who wish to begin reviewing their curricula. Given the vast nature of the literature on program evaluation, these suggestions can only be a starting point. The reader is referred to Diamond (1998) and Lynch (1996) as initial sources.

These steps are roughly sequential but are also iterative in nature. Internal and external discussions among all curriculum stakeholders – administrators, instructors, students, alumni, and employers – will be desired as depicted in Figure 3.2. Given the interrelated nature of curriculum and assessment, these steps also introduce language-testing concepts that are explained in greater detail in the following chapter. Discussions during the curriculum design process will come to terms with aspects of (1) *interaction* among participants within the curriculum, (2) the *processes* inherent to the curriculum, (3) the relationship between curriculum and assessment, and finally (4) the role of curriculum evaluation and test validation as sources of evidence of the usefulness of the curriculum model. Collaboration with curriculum specialists is highly advisable throughout this process. The steps are the following:

1. Develop explicit statements of educational philosophy and the aims of instruction and program goals based upon needs analyses.
2. Begin with aims and goals and, working backwards, sequence skills and knowledge-building to meet these aims and goals; check against entry-level knowledge and skills.
3. Develop teaching objectives to enable participants to reach curriculum aims and goals.
4. Design instructional delivery formats that integrate all types of assessment (formative, summative, ipsative, traditional, and alternative).
5. Gather data on the appropriateness of the curriculum model and evidence of the validity and reliability of assessment practices.

7. Conclusions

At the beginning of this chapter, the need to select among the plethora of definitions, foundations, and approaches to curriculum is stressed. Curriculum is then defined as a plan of action (*process*) and as the learning experiences of the student (*interaction*). These two definitions are reflected in the psychological and philosophical foundations of curriculum. Literature from the scientific and humanistic approaches to curriculum is then related to interpreter education. The concepts of *curriculum as process* and *curriculum as interaction* advance the notion that interpreter competence can be achieved more rapidly and effectively if principles of cognitive development are taken into consideration through appropriate forms of social interaction among participants in a program of instruction and through reflective practice.

The discussion also takes up Arjona's curriculum models, which show that the role of instruction in translation and instruction in interpretation varies among programs and therefore that interaction between translation and interpretation competence is a valuable topic to be explored. The collection of evidence indicating the nature of the relationship between these two areas would seem necessary if interpreter education programs are to be improved. In designing a curriculum, therefore, key considerations include (1) whether translation and interpretation are more similar or dissimilar to one another in terms of knowledge and skill acquisition processes (*curriculum as process*); (2) whether training in translation and training in interpretation should take place concurrently, sequentially, or independently of one another (*curriculum as process* and *as interaction*); and (3) the skill level and language combination required for graduation (*curriculum as interaction*). In the absence of empirical data, answers to these questions are based upon personal opinion and viewpoint. Part I of the case study explores these fundamental aspects of curriculum in a local context – that of the Graduate School of Translation and Interpretation (GSTI) of The Monterey Institute of International Studies (MIIS) in Monterey, California.

CHAPTER 4

Foundations of interpreter performance assessment

In validation, a vigorous, questing intellect has further importance for analyzing the values and rights embodied in – or sacrificed to – a testing program, and also for appreciating the beliefs and wants of members of the community that will arbitrate the validity argument. (Cronbach 1988: 14)

The overview of assessment in interpreter education presented in this chapter begins with a review and definition of fundamental assessment concepts and places them in the context of interpreter education. In the Interpreting Studies (IS) literature, the adoption of well-established assessment concepts from the fields of assessment and language testing has been advocated by Hatim and Mason (1997) and Arjona (1984b). *Assessment* is seen in this context as an enterprise focusing on the individual, as opposed to an enterprise focusing on the curricular program, otherwise known as *evaluation* (Ornstein & Hunkins 1998: 319). The terms ‘assessment’ and ‘test’/‘testing’ are used interchangeably in this discussion.

The assessment concepts presented here serve as a theoretical foundation for a description of assessment practices used at various stages of the curriculum. An integrated view of assessment is stressed, i.e., an approach that views assessment as providing feedback and guidance to the learner throughout the course of instruction. Standards for assessing performance and providing feedback are consistent from one assessment event (homework, in-class performance, final exam) to the next, although different types of assessment serve different purposes. At the same time, the results of these multiple assessment opportunities may also be used to evaluate the effectiveness of the curriculum and instruction. Central concerns include the need to conduct validity and reliability studies and to foster greater awareness of the role of professional judgment in assessment practices.

In interpreter assessment, a distinction has been made between evaluating quality and evaluating performance (Hatim & Mason 1997), in which quality looks at a product and performance at a process. Generally, though, quality

refers to the features of a performance as product, that is, whether an interpretation is accurate, complete, stylistically appropriate, etc. In education, it must be determined whether a student has acquired the ability to *produce* an acceptable product, or to *perform* acceptably. Performance assessment can serve this purpose; it may be defined as testing that requires students to demonstrate their achievement of understandings and skills by actually performing a task or set of tasks, for example, writing a story, giving a speech, conducting an experiment, or operating a machine (Gronlund 1998:2). In other words, tasks that exist in the real world are used as the basis for performance assessment, such as interpreting a speech from a conference or completing a translation project. Given this real world significance, it is logical to conclude that the test content and the criteria for assessing an interpreter's performance should be empirically established and validated.

Hence, the learner's ability to perform the task is assessed, and the quality of the final product is seen as a measure of the degree to which the processes of interpreting have been learned. Similarly, Gile (2001) draws attention to the differences between assessing interpreter performance in the classroom and assessing quality in the field in calling for process-oriented assessment during the course of study and product-oriented assessment as final testing draws near. Process-oriented assessment focuses on the skills required to carry out a task, i.e., the processes of interpreting, whereas product-oriented assessment focuses on the interpretation as product. The use of portfolio assessment is a means to gather a greater range and depth of sample performances and facilitate both process- and product-oriented assessment as complementary approaches.

Performance assessment is an established concept within the field of language testing and, in the case of interpreting, can be seen as a 'direct' measure of 'real-life' performance (see Bachman 1990: 304–305). Performance testing is generally seen as a means to achieve greater authenticity in assessment, i.e., greater congruence between tasks to be completed in the test situation and in the field. Thus, performance assessment differs from other types of testing in that it provides for greater realism and task complexity. It also requires more time for assessment and greater judgment in scoring (Gronlund 1998: 14–15). A key concern is the degree to which the test task or tasks are representative of the set of tasks that must be routinely carried out by professionals in the field (see Brown & Hudson 2002: 21–22). For this reason as well, empirical data should serve as a basis for test development and test validation.

1. Concepts

1.1 Validity

Validity has long been regarded as the touchstone of educational and psychological measurement and has therefore been defined repeatedly with varying nuances in the assessment literature. In the *Standards for Educational and Psychological Testing* (1999) of the American Psychological Association (APA), validity is described as “the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests. Validity is, therefore, the most important consideration in developing and evaluating tests.” (9). In other words, the purpose for which an assessment instrument is to be used is the key consideration in the process of designing, administering, and updating it. Similarly, Messick (1989) defines validity as

an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the *adequacy* and *appropriateness* of *inferences* and *actions* based on test scores or other modes of assessment . . . Broadly speaking then, validity is an inductive summary of both the existing evidence for and the potential consequences of score interpretation and use. (13)

The definitions cited above stem from Garret’s early definition of validity as “the extent to which an assessment measures what it purports to measure,”¹ which Gipps (1994) also draws upon. Gipps adds that if “an assessment does not measure what it is designed to measure then its use is misleading” (vii). A logical conclusion from this statement is that if an assessment regime is not demonstrably valid, the political and ethical basis for its use is undermined.

Validity cannot be ignored if curriculum and assessment are to complement and support one another. In this respect, validity is a comprehensive concept. For example, the social consequences of test use must also be considered (Messick 1989: 18–20). For this reason, as Cronbach summarizes, the validation “*argument must link concepts, evidence, social and personal consequences, and values*” (1988: 4).

Determining whether assessment practices and the decisions inferred from them are valid entails a process of evidence gathering. This evidence is used to assess how well the tests are performing and whether they need to be modified. In turn, this information aids in evaluating how well a given curriculum model is designed and whether the aims and goals of the model are being met. Hence, validity is not to be regarded as an absolute criterion, but rather as a result of an iterative, on-going process. Messick clarifies that “validity is a matter of

degree, not all or none” (13). In this regard, according to the APA *Standards*, the “process of validation involves accumulating evidence to provide a sound scientific basis for the proposed score interpretations. It is the interpretations of test scores required by proposed uses that are evaluated, not the test itself” (1999:9).

A comprehensive discussion of validity has not yet been conducted in the community of interpreter educators. Although initial discussions of criteria for assessing performance are provided by Riccardi (2001), Ackermann, Lenk and Redmond (1997), Hönig (1997b), Kutz (1997), Altman (1994), and Déjean Le Féal (1990), the concept of validity and evidence thereof is not the subject of debate. Increasingly, however, service providers are recognizing the need for studies of validity (and reliability) in spoken-language interpreting and the community of language testing specialists is discovering interpreting as a new area seeking out their expertise (Sawyer, Butler, Turner, & Stone 2002a, 2002b; Stansfield & Turner 2001; Sawyer 2000).

In the past, validity has been classified into broad types with overlapping, interrelated categories.² Three broad types of evidence for validation have emerged: content, criterion, and construct validity (see Table 4.1). Over time, however, “measurement specialists have come to view these as aspects of a unitary concept of validity that subsumes all of them” (Bachman 1990b:236). This change in perspective to a unitary view of validity, in which all types of validity are subsumed under one concept, is documented in the 1985 APA *Standards*. Messick notes, for example, that the text of the standards “no longer refers to *types* of validity, but rather to categories of validity evidence called content-related, criterion-related, and construct-related evidence of validity.”³ Messick stresses that the objective is to avoid the misconception that demonstration of one type of evidence is sufficient to ascertain validity for all aspects of the assessment procedure. On the contrary, validation requires by definition the specification of the type of evidence, i.e., whether the evidence supports construct-, content-, or criterion-related validity.

Of the three types of evidence, *construct validity* is recognized as a force unifying all types of validity evidence (Messick 1988:40). A construct has been defined as “some postulated attribute of people, assumed to be reflected in test performance” (Cronbach & Meehl 1955:283; see Table 4.1). Similarly, Gipps ascertains that “[c]onstruct validity itself relates to whether the test is an adequate measure of the construct, that is the underlying (explanatory) skill being assessed. Important to the development of an assessment then is a clear and detailed definition of the construct” (1994:58). According to the APA *Standards*,

Table 4.1. Categories of validation evidence: Definitions, features, and examples

Definition	Features	Examples
Construct	Attribute or characteristic of individual, reflected in test performance	Ability to <ul style="list-style-type: none"> – Interpret with faithfulness to the meaning and intent of the original – Use appropriate language and expression – Apply world knowledge and knowledge of subject matter – Demonstrate acceptable platform skills and resilience to stress
Content	Degree to which test content represents the domain	Consecutive interpretation Liaison interpretation Simultaneous interpretation
	Is the content relevant and well-covered Is the test content representative of the domain? Is it prototypical? Does the test cover the skills necessary?	Simultaneous interpretation with text
Criterion	Relationship between test scores and external criterion being measured, e.g., level of expertise	Graduates are able to work in their market sector. Graduates can pass same or similar tests again in the future, including those administered in industry

[v]alidation logically begins with an explicit statement of the proposed interpretation of test scores, along with a rationale for the relevance of the interpretation to the proposed use. The proposed interpretation refers to the construct or concepts the test is intended to measure. Examples of constructs are mathematics achievement, performance as a computer technician, depression, and self-esteem. (1999:9)

To date, constructs for assessment in interpreter education have not been precisely defined. Kutz, for example, lists the following areas for performance assessment: overall impression (behavior), information content, language use, and a summary statement in reference to the interpretation assignment (252–253). Kutz does not describe, however, the criteria to be applied to these areas. A description of the criteria for assessment is necessary to determine possible errors in measurement and to gather evidence for or against validity. In comparison, Riccardi (2001) places her discussion of assessment criteria in the context of the Interpreting Studies literature on quality. Basing her discussion on Viezzi (1996), she defines four macrocriteria for the evaluation of quality in professional situations: equivalence, precision, appropriateness, and functionality. In educational settings, she defines fourteen microcriteria for both summative and formative assessment. These categories, which include register, omissions, deviations in content, successful solutions, among others, are then used as scoring criteria (none, some, many) for a feedback sheet (278). Examples of other constructs often referred to in the context of interpreter assessment are cited in Table 4.1. In a next step, it would be useful to describe in greater detail the relationships among these macro- and microcriteria, constructs, and scoring criteria and establish an empirical foundation for their use in specific tests.

The notion of construct-related evidence is pervasive in the assessment context. For example, Bachman states that “[c]onstruct validity concerns the extent to which performance on tests is consistent with predictions that we make on the basis of a theory of abilities, or constructs” (1990b:254–255). Therefore, constructs cannot be developed and measured in isolation from one another, but must be part of an integrated viewpoint. As explained in the *APA Standards*,

[a] detailed description [of the construct] provides a conceptual framework for the test, delineating the knowledge, skills, abilities, processes, or characteristics to be assessed. The framework indicates how this representation of the construct is to be distinguished from other constructs and how it should relate to other variables. (1999:9)

While a holistic viewpoint is necessary, constructs are also multifaceted and will vary according to the type of assessment and its purpose (formative, summative, ipsative; see Section 1.5) and the stage of assessment in the curriculum (entry-level, intermediate, final testing; see Section 2). In addition, there may be differing opinions concerning the purpose of assessment, and therefore the relative importance and weighting of constructs, depending on the perspective of the rater, e.g., whether the rater is an interpreter, end-user, employer, or educator, among others (Kurz 1998: 391–392).

Although quality is sometimes seen as an elusive concept, (Shlesinger et al. 1994: 121) the discussion of quality can inform the discussion of assessment constructs and their development. As shown in the discussion of Riccardi (2001) above, in the past, constructs for interpreter assessment have often been derived from existing Interpreting Studies literature. Similarly, Ackerman, Lenk and Redmond (1997) draw attention to the pedagogical value of the literature on quality. Beyond the ability to inform, research on quality yields empirical data that can serve as a foundation for the development of assessment constructs. The *AIIC Survey on Expectations of Users of Conference Interpretation* distinguishes, for example, between content match (completeness of rendition, terminological accuracy, faithfulness to meaning) and formal match (synchronicity, rhetorical skills, voice) (Moser 1995). Other surveys point to similar constructs (Kurz 1996; Bühler 1986; Kopczinski 1994). Professional judgment and the philosophy of the educational institution and its educational objectives are influential factors in the discussion to reach a consensus on construct definitions.

Evidence of *content validity* is inseparable from evidence of construct validity (Messick 1988: 38). This link between test construct and test content is reflected in the *APA Standards*: “Important validity evidence can be obtained from an analysis of the relationship between a test’s content and the construct it is intended to measure. Test content refers to the themes, wording, and format of the items, tasks, or questions on a test, as well as the guidelines for procedures regarding administration and scoring” (1999: 11; see Table 4.1). An example from the field of language interpretation is the frequency with which the topic of an interpretation exam is encountered in real-life interpreting situations, and thus the degree of authenticity of the subject matter and terminology being tested. Gipps reiterates the importance of “the representativeness with which the content covers that domain” (1994: 58–59). In addition to the frequency of topic occurrence in the field, several other examples of rudimentary factors to be weighed in determining the content validity can be readily cited. They include the difficulty of the exam material

and the modes of interpreting covered in exams, for example, whether a test series includes simultaneous interpretation both with and without texts. In the latter case, studies correlating valid and reliable exam scores from both exam types could provide evidence of whether both exams are necessary. In this sense, Gipps states that content validity “concerns the coverage of appropriate and necessary content i.e. [sic] does the test cover the skills necessary for good performance, or all the aspects of the subject taught?” (1994: 58–59).

Therefore, content validity can be subdivided further into aspects of test content and the coverage of the domain being tested. Building on Messick, Bachman defines these two types of evidence for content validity: *content relevance* requires “the specification of the behavioral domain in question and the attendant specification of the task or test domain” (Messick 1980: 1017), while *content coverage* is “the extent to which the tasks required in the test adequately represent the behavioral domain in question” (Bachman 1990b: 245).

In the determination of appropriate content, there is agreement in the assessment community that, as stated in the *APA Standards*,

[e]vidence based on test content can include logical or empirical analyses of the adequacy with which the test content represents the content domain and of the relevance of the content domain to the proposed interpretation of test scores. Evidence based on content can also come from expert judgments of the relationship between parts of the test and the construct. (1999: 11)

The role of professional judgment is particularly problematic (Messick 1989: 91) and is discussed in greater detail in Section 1.3.

The third type of evidence is based on an external criterion measure, i.e., a test, observation, or judgment that is external to the test in question (see Table 4.1). The issue is whether performance on the external criterion can be predicted from scores on the test (*APA Standards* 1999: 14); for example, whether a student who passes a final interpretation test will be a successful interpreter on the market. Bachman describes *criterion-related evidence* as the

kind of information we may gather in the validation process ... which demonstrates a relationship between test scores and some criterion which we believe is also an indicator of the ability tested. This ‘criterion’ may be level of ability as defined by group membership, individuals’ performance on another test of the ability in question, or their relative success in performing some task that involves this ability. (1990b: 248)

In the context of curriculum and expertise, the criterion measure could be, for example, status as a novice, apprentice, or journeyman, which depends upon which level of examinations – degree track entry, intermediate, or final –

has been successfully completed. In this sense, a criterion measure for a final degree examination might be whether graduates who pass the examination perform satisfactorily as journeymen in the field. The reverse could also apply: whether successful professional practitioners perform satisfactorily on the final examination in question (see Table 4.1).

Two types of criterion-related evidence are typically distinguished from one another: predictive and concurrent. “A predictive study obtains information about the accuracy with which early test data can be used to estimate criterion scores that will be obtained in the future. A concurrent study serves the same purpose, but it obtains prediction and criterion information simultaneously” (Bachman 1990b:248). Gipps ascertains that the two types are often combined “because they both relate to predicting performance on some criterion either at the same time or in the future” (1994:59). Concurrent validity “is concerned about whether the test correlates with, or gives substantially the same results as, another test of the same skill,” e.g., whether final degree examinations are comparable between two translation and interpretation schools. In contrast, predictive validity “relates to whether the test predicts accurately or well some future performance” (58).

1.2 Reliability

As defined by the APA *Standards*, reliability “refers to the consistency of . . . measurements when [a] testing procedure is repeated on a population of individuals or groups” (1999:25). The APA *Standards* clarify that “measurement error” refers to inappropriate fluctuation between scores, i.e., the “hypothetical difference between an examinee’s observed score on any particular measurement and the examinee’s true or universe score for the procedure” (25). Without reliability, decisions made based upon test scores cannot be considered meaningful and useful. In other words, reliability is a prerequisite for test validity.

Various types of reliability are commonly distinguished from one another (Gipps 1994:67, see Table 4.2). *Test-retest reliability* can be ascertained by giving the same test on multiple occasions. In this context, Bachman refers to the “stability” of the test (1990b:181). *Parallel forms*, or “equivalence”, (182) use “alternate forms of the ‘same’ test to compare performance of similar populations” (Gipps 1994:67). A pertinent example in interpretation is whether speeches used as exam material vary in difficulty from one year to the next. *Inter-rater reliability* is defined as “agreement between raters on the same assessment.” In this instance, jury members give the same or very similar

Table 4.2. Categories of reliability evidence: Definitions, features, and examples

Category	Definition	Features and Examples
Test-retest reliability	Same test is administered on separate occasions.	Impractical in interpretation due to familiarity with source speech
Parallel forms	Same test has multiple versions.	Same test with different, but equivalent, source speeches Exam difficulty is same from one exam session to the next.
Intra-rater	Same rater gives the same score for equivalent test performance on separate occasions.	Same criteria are applied consistently on separate occasions. Rater has established criteria.
Inter-rater	Different raters give the same score on the same test.	Same criteria are applied consistently on separate occasions. Raters have common criteria.

scores to the same performance. In contrast, *intra-rater reliability* is regarded as “agreement of the same rater’s judgments on different occasions” (67). This type of reliability implies that the jury member gives the same or very similar scores to similar performances. Finally, *internal consistency reliability* examines “how different parts of a test relate to each other” (Brown & Hudson 2002: 164).

To gather evidence of the reliability of test scores, it is necessary to identify the “major sources of measurement error, the size of the errors resulting from these sources, the indication of the degree of reliability to be expected between pairs of scores under particular circumstances, and the generalizability of results across items, forms, raters, administrations, and other measurement facets” (1985:19). Gipps’ definition highlights a slightly different aspect – consistency in scoring: reliability is “the extent to which an assessment would produce the same, or similar, score on two occasions or if given by two assessors. This is the ‘accuracy’ with which an assessment measures the skill or attainment it is designed to measure” (1994:vii).

One of the most relevant types of reliability for interpreter assessment is the consistency of scoring across raters. Since inter-rater reliability presupposes that the raters apply “the same set of criteria consistently in rating the language performance of different individuals” (Bachman 1990b:178–179), a uniform basis for scoring needs to be established. The training of raters is therefore essential.

1.3 Subjective and objective testing

Two terms often used very generally in testing are ‘subjectivity’ and ‘objectivity’. Consistent use of these terms would aid greatly in clarifying the fundamental nature of interpreter testing. In an objective test, “the correctness of the test taker’s response is determined entirely by predetermined criteria so that no judgment is required on the part of scorers” (Bachman 1990b:76). In a subjective test, “the scorer must make a judgment about the correctness of the response based on her subjective interpretation of the scoring criteria” (76).

Since the evaluation of interpreter performance requires professional judgment, interpreter testing is inherently subjective in nature. The only means to achieve objectivity in interpreter testing would be to match the transcription of the test taker’s output against a (subjective) translation of the original speech, thereby eliminating all decision-making, i.e., application of the scoring criteria, on the part of the scorer. The catch-22 is evident. For, as Pilliner describes in a landmark article,

[i]f the examiner has to exercise judgment; if he has to decide whether the answer is adequate or inadequate; if he has to choose between awarding it a high or low mark; then the marking process is ‘subjective’. If, on the other hand, he is precluded from making judgments; if he is forced to accept decisions made beforehand by someone else; if, in short, he is reduced, for the purpose of marking, to the status of a machine (and in some cases can even be replaced by a machine); then the marking process is ‘objective.’ (1968:21)

This raises a traditional view in the assessment community underscored by Pilliner (1968:21): “all examinations are ‘subjectively’ compiled and ‘subjectively’ answered. According to this view, only scoring may be ‘subjective’ or ‘objective’. The distinction between a ‘subjective’ and “objective’ examination rests only on the manner in which the marks are to be assigned” (see also Bachman 1990b:37–38). Possibilities for limiting the negative impact of subjective testing include a better discussion and understanding of test method facets, the development of test specifications, the use of empirical data in test development and validation, and the training of raters. All of these measures contribute to the exercise of sound professional judgment.

Professional judgment is a double-edged sword. The ability to apply judgment stemming from professional practice as an interpreter is widely regarded in the interpretation community as a prerequisite of jury membership – perhaps in an effort to ensure that unqualified non-interpreters are excluded from juries. However, professional judgment fluctuates widely and therefore should not be relied upon exclusively to ensure equity and fairness in testing. The

role of professional judgment as outlined in the *APA Standards* is an interesting case in point. “Although the evaluation of the appropriateness of a test or application should depend heavily on professional judgment, the *Standards* can provide a frame of reference to assure that relevant issues are addressed” (1999:2). Despite this statement stressing the need for professional judgment, the *APA Standards* also stipulate that knowledge of the field alone is insufficient. Not only do explicit assessment criteria need to be established, special training in the application of these criteria is required, among other things:

[E]valuating acceptability involves (a) professional judgment that is based on a knowledge of behavioral science, psychometrics, and the professional field to which the tests apply; (b) the degree to which the intent of the standard has been satisfied by the test developer and user; (c) the alternatives that are readily available; and (d) research and experiential evidence regarding feasibility of meeting the standard. (1999:4)

Indeed, Messick stresses that professional judgment is not the prerequisite, but rather the factor for which allowances are made in the verifiability network:

There is, indeed, a good rationale for why sound professional judgment should have veto power in practice: otherwise the standards would be completely prescriptive and, hence, unresponsive to compelling local exceptions. But in the absence of enforcement mechanisms, where is the protection against unsound professional judgment? And how could one tell the difference, if not on the basis of the validity principles and testing standards themselves? . . . Much of this variation stems from appropriate allowance for sound professional judgment, as previously indicated. But the same allowance for professional judgment that facilitates flexibility in test validation also permits perpetuation of less desirable uses of the past.” (1989:91)

In other words, professional judgment may be a prerequisite for testing in interpretation, but it should be wielded with considerable care and circumspection and should not be regarded as a starting point for assessment and testing. Professional judgment alone is an insufficient basis for decision-making. Rather, empirical data may be used to reduce subjectivity in the selection of test content and the development of assessment criteria (see Section 5 on authenticity). Greater awareness of the appropriate role of professional judgment can also counteract the negative perceptions associated with subjective testing, particularly among examinees. This transparency can instill greater confidence in the assessment process and aid in building trust among concerned parties.

1.4 Measurement scales

To date, various types of measurement scales are rarely distinguished from one another in interpreter testing. There is little acknowledgement of the fact that the nature of the test, for example its inherent subjectivity or objectivity, has a direct impact on the type of measurement scale that should be employed. The result is a haphazard, intuitive (i.e., impressionistic) approach to grading that undermines the reliability of examinations and other assessment instruments. Bachman describes the unwanted fluctuation in measurement that can occur if test criteria are unclear and measurement scales are used inappropriately:

Practically anyone can rate another person's speaking ability, for example. But while one rater may focus on pronunciation accuracy, another may find vocabulary to be the most salient feature . . . Ratings such as these can hardly be considered anything more than numerical summaries of the raters' personal conceptualizations of the individual's speaking ability. (1990b:20)

For the purposes of interpreter testing, three types of scales should be distinguished from one another: nominal, ordinal and interval (See Table 4.3). A *nominal scale* consists of "classes or categories of a given attribute" (27) e.g., 'native language' or 'pass'/'fail'. Code numbers may also be assigned to these attributes, but the categories are not ordered in relationship to one another and therefore cannot be averaged. An *ordinal scale*, in comparison, "comprises the numbering of different levels of an attribute that are ordered with respect to each other" (28), i.e., the order establishes a ranking in which the levels of the attribute may be characterized as 'greater than' or 'less than' each other. With ordinal scales, numerical averaging is not possible, as the levels of the attribute are not equidistant from one another. This is the case, however, with an *interval scale*, "in which the distances, or intervals, between the levels are equal" (28).

Most scales used in interpreter testing are either nominal (pass/fail) or ordinal (e.g., high pass, pass, borderline fail, fail). The distinction between ordinal and interval scales is particularly salient in the case of interpretation, as interval scales allow numerical averaging and ordinal scales do not. Few assessment regimes used in interpreter testing are based upon interval scales that have been empirically verified. An example is the Federal Court Interpreter Certification Examination (FCICE) Oral Exam in the United States. Nevertheless, calculations using averaging and factoring are not infrequent.

Table 4.3. Measurement scales, distinguishing features, and examples

Type of Scale	Distinguishing Features	Examples
Nominal	Classes or categories of a given attribute; no ranking in relationship to one another Cannot be averaged	Pass/fail; mother tongue
Ordinal	Classes or categories of a given attribute that are ranked in relationship to one another on a scale Categories are not equidistant from one another on the scale Cannot be averaged	Rankings with 'greater than', 'less than' relationships High pass, pass, borderline fail, fail
Interval	Classes or categories of a given attribute that are equidistant from one another on a scale Can be averaged	100-point multiple-choice test with each item worth one point

1.5 Formative, summative, and ipsative assessment

Various types of assessment and assessment instruments have been distinguished from one another for use for different purposes (see Table 4.4). Gipps' definition of assessment reflects this range: assessment includes "a wide range of methods for evaluating pupil performance and attainment including formal testing and examinations, practical and oral assessment, classroom based assessment carried out by teachers and portfolios" (1994 vii).

With regard to the purposes of assessment, three types are commonly distinguished from one another: *formative*, *summative*, and *ipsative*. "Formative assessment takes place during the course of teaching and is used essentially to feed back into the teaching/learning process" (Gipps 1994: vii). In contrast, "[s]ummative assessment takes place at the end of a term or a course and is used to provide information about how much students have learned and how well a course has worked" (vii). A third category is *ipsative assessment*, "in which the [student] evaluates his/her performance against his/her previous performance" (vii). This third type is particularly relevant for the reflective practitioner (Schön 1983, 1987), as it provides a vehicle and framework for problem-solving through self-assessment. Ideally, ipsative assessment continues throughout the professional career. A determining factor in the training context is the degree to which ipsative assessment is purposefully integrated into the curriculum and thus allows the student to fully benefit from self-

Table 4.4. Types of assessment, distinguishing features, and examples

Formative	Instructor evaluation during course of teaching Feeds back into teaching and learning process Grading on assignments Feedback on coursework Feedback on ipsative assessment (self-assessment statements, journal, field notes, or log)
Summative	Jury / instructor evaluation at end of program or course Determines how well student has learned and whether teaching is effective Degree and course examinations, thesis or portfolio projects
Ipsative	Self-evaluation by a reflective practitioner Evaluation of current performance against previous performance and performance of other participants On-going reflection on learning Integrates instructor and peer feedback Formalized in self-assessment statements, journal, field notes, or log Ideally continues throughout the professional career

assessment opportunities to enhance his/her learning. From the humanistic view of curriculum, formative assessment may be regarded as assessment stemming from a colleague, summative assessment from a mentor, and ipsative assessment from reflective practice.

1.6 Test specifications

Test specifications are a written document providing guidelines for the development of multiple forms of a test by an individual or group of individuals. By explicitly stating “what the test is designed to measure and what language content or skills will be covered in the test” (Brown & Hudson 2002: 87), test specifications help build a case for the validity and reliability of a test or set of tests. Specifications contribute to the meaningfulness, usefulness, and consistency of the test development and administration processes by documenting all facets of test design and use (see Section 4). In doing so, similar to the use of product specifications in industry, test specifications provide “an efficient generative blueprint by which many similar instances of the same assessment task can be generated” (Davidson & Lynch 2002: 4; see also Alderson, Clapham, & Wall 1995: 9; Popham 1981, 1978).

Although there is no single best format for test specifications, they generally contain the following components: a general description of the test, a

description of the source materials (prompt attributes), a description of the desired output (response attributes), sample materials or speeches (items), a description of the skills and attributes being tested (constructs), and a description of the criteria and procedures for scoring the test (for a description of typical sections in test specifications for language testing, see Davidson & Lynch 2002: 20–33; Brown & Hudson 2002: 86–95; Popham 1981, 1978). Thus, test specifications address issues such as the *purpose* of the test, its *role* in the course and/or curriculum, the sort of *learner* taking the test, the number of *sections* or passages, the test *situation*, the *text types* or speeches and other materials to be used, the *language* and *interpreting* skills being tested, including the *mode of interpreting*, and the procedures for *test administration* and *scoring*, including advance briefings and modalities for jury selection and jury deliberations (see Alderson, Clapham & Wall 1995: 11–14). These categories are neither obligatory nor exhaustive. On the contrary, the format of a set of specifications is adaptive and reflects the purpose and situation for use of the test.

The development of test specifications is an iterative process requiring discussion among those individuals with an interest in the test, piloting of test tasks, and multiple revisions of the test specifications based upon the results of the discussion and piloting. The iterative nature of test specifications development, which requires trial and error over an extended period of time, and the explicitness of the final product, i.e., the written test specification document, make test specifications development a useful means for reconciling differences in viewpoint concerning the purpose, nature, and format of tests. In particular, the development process can aid in establishing a balance between the seemingly contradictory needs for standardization and authenticity (see Sections 4 and 5). Once test specifications are in place, they need to be reviewed periodically to determine whether they have remained current.

2. Integrating curriculum and assessment: Developmental milestones

As the review of literature on assessment has revealed, there is little extant literature on the role of assessment in the curriculum. To date, Arjona (1984b) is perhaps the sole author who has related different types of testing at various stages in a curriculum to one another. For this reason, the discussion of key assessment concepts and issues that is provided above is now followed by an overview of interpreter assessment at various stages of a curriculum. This overview serves the purpose of setting various types of assessment in relation

to one another and indicating the vast potential for further, much needed research.

In conference interpretation, testing is normally carried out in two arenas: academia, i.e., interpreter training programs, and in the field. In the latter case, examinations form the gateway to contract work and staff positions at international organizations (European Union, Council of Europe, United Nations, among others), and governmental ministries and agencies usually on the national level. Generally, testing is not done in business and industry, although exceptions exist, such as in the hiring of staff in a few international corporations and large-scale providers of interpretation services, e.g., in telephone interpreting. Hospitals and courts are increasingly seeking to establish scientifically based testing regimes. Degree qualifications, professional experience, reputation and/or word of mouth fulfill this role in the corporate arena, where the vast majority of work is carried out by teams of freelancers.

In most interpreter education programs, apart from on-going formative testing in individual courses, three levels of testing can be distinguished from one another: entry-level testing, intermediate testing, and final testing. Similarly, Gronlund draws attention to three stages during which instructors are called upon to make decisions with regard to student learning: at the beginning of instruction (placement assessment), during instruction (formative and diagnostic assessment) and at the end of instruction (summative assessment) (1998:4–8). These three stages of assessment correspond to levels of expertise and may be seen as developmental milestones for student interpreters in the curriculum. In Table 4.5, a description providing a definition and characteristics of each skill level is given for these three stages – the novice, apprentice, and journeyman. The types of assessment prevalent at each stage are also listed, as well as examples of questions for students and instructors to address.

2.1 Entry-level assessment

In terms of expertise, entry-level testing is assessment on the level of the novice. It is used for diagnostic purposes to determine eligibility for entry to a degree track. In conducting this type of assessment, teachers must determine the extent to which students possess the skills and abilities that are needed to begin instruction, and the extent to which students have already achieved the intended learning outcomes of the planned instruction (Gronlund 1998:4–5). The use of efficient entry-level testing seems more crucial the shorter the course of study, as entry-level skills must normally be consolidated to a higher degree in order for the candidate to be ready to enter the profession within

Table 4.5. Developmental milestones and the roles of assessment

Level of Expertise	Characteristics	Type of Assessment	Questions to be Addressed
Novice	<p>New to domain; minimal or introductory exposure</p> <p>Sees task features that can be recognized without experience of situation; limited inflexible behavior</p>	<p>Entry-level assessment</p> <p>Formative, Ipsative</p>	<p>Is student ready to start the program? Are the language skills and educational background strong enough?</p> <p>Is student motivated and open to instruction and learning?</p> <p>Will student receive instruction in translation or interpretation or both? In which languages?</p> <p>Are there obstacles to learning?</p>
Apprentice / Advanced beginner	<p>Undergoing instruction beyond introductory level</p> <p>Sees recurring, meaningful situations; global characteristics as experienced in situations; needs help setting priorities</p>	<p>Intermediate assessment</p> <p>Summative, Formative, Ipsative</p>	<p>How well is the student progressing? Which degree track should the student pursue – translation, interpretation, or both?</p>
Journeyman / Competent	<p>Can perform competent work unsupervised, but little experience with subdomains and tough cases</p> <p>Can manage a variety of situations; can define and work toward long-term goals</p>	<p>Final assessment</p> <p>Summative, Formative, Ipsative</p>	<p>Is the student ready to work on the market, i.e., ready to graduate?</p> <p>Is remedial work necessary? Are all language and transfer skills on a professional level? Language rating?</p>

a shorter period of time. Even in longer programs, some of which may last over four years, students may benefit from diagnostic testing early on, as large introductory classes with a wide range of skill levels among students can result in lower program efficiency and perhaps even poor student modeling that detracts from the learning experience.

There does not seem to be a consensus among interpreter educators that entry-level testing must show predictive validity. For example, many faculty at the Monterey Institute of International Studies take the position that diagnostic testing has the sole purpose of determining whether a candidate is ready to begin training, or perhaps can begin his/her studies but needs additional language training (see Arjona 1984b: 114–115). In such cases, no determination is intended as to the probability of success in the program, although strong and weak candidates are immediately recognizable. In this sense, the term ‘aptitude testing’ in reference to this stage of assessment is a misnomer, as aptitude for interpreter training is not being measured, but rather skill levels necessary for the initiation of T&I training. In fact, a study at the Monterey Institute showed no relationship between oral diagnostic testing and performance on final examinations (Tapalova 1998). Under these circumstances, it would appear appropriate to avoid the term ‘aptitude’ in reference to a specific diagnostic test unless evidence of predictive validity can be provided through scientific methods, e.g., score correlation with GPA, intermediate, and/or final exams.

Logistically, diagnostic, entry-level assessment falls into two categories: *off-campus testing*, often in the form of a written translation, essay or precis-writing task, as part of an application package completed at home by the candidate, and *on-campus testing*, a form of in situ testing through a series of oral interviews and written translation tasks. In the latter case, diagnostic assessment may take place over an extended period of time, perhaps even within the framework of a first-semester or introductory course (Neff 1989). In some programs, on-campus diagnostic testing may overlap with intermediate testing. There is considerable literature on the content of diagnostic tests.⁴ Although these assessment instruments may include pre-interpreting exercises, such as dual-task training and shadowing, over which there is much debate, Hyang-Ok (n.d.) determines that the most widespread diagnostic tool is the skill to be trained in the target task format.

The diagnostic test regime of the Graduate School of Translation and Interpretation (MIIS), for example, includes both off- and on-campus tests, which are carefully coordinated with one another. The off-campus, early diagnostic test (EDT) establishes a working relationship with the potential student and is used for entry into the degree program. An initial, albeit non-binding, assess-

ment concerning the specific degree track is then explored during the first (and sometimes second) semester of study in introductory translation and interpretation courses. The selection of a degree track is generally confirmed during intermediate testing. The EDT itself consists of written and oral portions, which include essay-writing, translation, and precis-writing exercises as well as pronunciation, extemporaneous speech, abstract thinking, and self-assessment tasks. In view of the instantaneous communication possible through the Internet, the global dispersion of GSTI's languages and cost of travel which many of GSTI's applicants face, this combination of off- and on-campus testing has proved to be useful. This has been the case especially since initial oral testing can be conducted using a standardized format and a cassette tape with a follow-up telephone conversation.

Finally, the issue must be raised whether diagnostic testing should be used to establish an A, B, C language rating for training purposes. There are several factors against the use of this terminology of the International Association of Conference Interpreters (AIIC) during training. The A, B, C language categorization normally applies to working languages in the field and for this reason is perhaps best established upon entry into the profession, for example as part of final testing. Earlier use may generate unrealistic expectations on the part of students, inappropriate judgments concerning students on the part of practicing professionals and, if the categories are strictly applied, inappropriate stress for students.

2.2 Intermediate assessment

Intermediate testing is assessment on the level of the apprentice. It is normally conducted after introductory courses have been completed. Formative and diagnostic assessment occurs during instruction leading up to such tests as well. Formative assessment of performance-based tasks involves periodic assessment of a product or process (Gronlund 1998:7). Hence, intermediate testing consists of consecutive interpretation and in many cases simultaneous interpretation as well. Questions to be addressed include the following: On which learning task is the student progressing satisfactorily? On which ones is additional help needed? Which students are having such severe learning problems that they need remedial work? (6). As intermediate testing has the purpose of assessing whether the candidate has the potential to continue and successfully complete the degree program, the predictive validity of this type of assessment should, by definition, be high.

In intermediate assessment, which is both formative and summative in nature, the aim is to monitor learning progress and to provide corrective prescriptions to improve learning (Gronlund 1998:7). Hence, periodic assessment over time is required. As a result, the evolution of student work and the ability to continue to build skills successfully can be assessed with greater accuracy. It is in this regard that intermediate testing is both formative and summative – formative in that feedback is given on a student’s work, which guides decision-making for continuation in the degree program, and summative in that learners demonstrate baseline competence on specific occasions.

2.3 Final assessment

In terms of expertise, final testing is assessment on the level of the journeyman. It is a form of summative assessment aimed at determining whether the candidate is ready to enter the profession. A widespread position among raters is that coursework is not taken into account in final testing, as interpreters on the market must be capable of performing acceptably on any given day; their worst performance should still be sufficient for the task at hand. Arjona (1984a), for example, identifies baseline quality, or routine performance, as a possible test construct. In this instance, it is argued that candidates face the same type of spot assessment when applying for work in the field (ministries, international organizations), and final testing in a training program, when conducted appropriately and constructively, provides useful practice.

Summative assessment at the end of a course or program also provides essential information on the effectiveness of the instruction. According to Gronlund, when

the majority of the students do poorly on an assessment, it may be the fault of the students but the difficulty is more likely to be found in the instruction. The teacher may be striving for learning outcomes that are unattainable by the students, may be using inappropriate materials, or may be using ineffective methods for bringing about the desired changes. (1998:11)

Therefore, high fail rates, for example, are an indication that the educational objectives of the program are not being met.

3. Evidential bases of construct validity

The following discussion focuses on establishing evidence of construct validity as a tool to determine whether curriculum aims, goals, and objectives are being reached. The intention is to elaborate a framework for assessment by making reference to criteria, domain, and standards (Gipps 1994).

3.1 Scientific approaches: Criteria

McMillan draws attention to the fact that criteria are not merely numerical grading scales, but rather “clearly articulated and public descriptions of facets or dimensions of student performance” (1997:29). As such, they are more informative of actual student performance than a numerical system, as Kiraly aptly demonstrates in stressing the need for holistic translator assessment (2000:153). Criteria are laid out in scoring rubrics, or scoring guidelines, as shown in the discussion of assessment for the integrated Y-track model in Section 2 and Table 10.1 in Chapter 10. In this case, the scoring rubric is intended to serve as an example of descriptions of proficiency levels, which would ideally be established and validated empirically through the analysis of performance samples. The rubric differs, for example, from an itemized breakdown of assessment categories as presented by Kutz (1997:252–253). Kutz’s criteria are a mixture of component skills, performance features, and assessment constructs, rather than a scoring rubric per se.⁵

With reference to criteria, Arjona (1984b) applies the distinction between norm-referenced and criterion-referenced testing to translation and interpretation. The difference between these two forms of assessment has been acknowledged in the measurement community since Glaser’s introductory article “Instructional Technology and the Measurement of Learning Outcomes” (1963). The distinctions between norm-referenced and criterion-referenced forms of testing are highlighted for explanatory purposes in the following discussion. It is important to note, however, that some tests are a combination or are situated on a continuum between the two.

The differences between criterion-referenced and norm-referenced testing are summarized succinctly by Glaser: “criterion-referenced measures depend upon an absolute standard of quality, while what I term norm-referenced measures depend upon a relative standard” (1963:519). Norm-referenced tests “are designed to enable the test user to make ‘normative’ interpretations of test results. This is, test results are interpreted with reference to the performance

of a given group, or norm” (Bachman 1990b:72). In contrast, criterion-referenced tests

are designed to enable the test user to interpret a test score with reference to a criterion level of ability or domain of content. An example would be the case in which students are evaluated in terms of their relative degree of mastery of course content, rather than with respect to their relative ranking in the class.” (74)

Glaser further stipulates that

[u]nderlying the concept of achievement measurement is the notion of a continuum of knowledge acquisition ranging from no proficiency at all to perfect performance ... along such a continuum of attainment, a student’s score on a criterion-referenced measure provides explicit information as to what the individual can or cannot do ... [It] thus provide[s] information as to the degree of competence attained by a particular student which is independent of reference to the performance of others. (1963:519–520)

Arjona states that criterion-referenced testing is a more meaningful approach to testing in interpretation than norm-referenced testing, given the need for the interpreter to perform adequately in all situations. In this case, interpreters should not be judged primarily in relation to one another, but rather against a scale of absolute criteria (1984b:6). To apply criterion-referenced testing meaningfully, the question “what are the criteria?” must be addressed. Ideally, explicit criteria would be empirically established for all forms of assessment on the course and program levels and across the profession.

In this context, one may distinguish between a *maximum level of attainment* and a *minimum level of competency* in interpreter education. Arjona draws attention to the need for a definition of baseline performance by describing the study of translation and interpretation as minimal competency education, which is a case for a focus on criterion-related testing. In her words,

what is of essence within the educational setting ... is that the program take the student to the level in which he or she can, in fact, *routinely* translate or interpret the message accurately and appropriately, thus bridging the existing communication gap in a meaningful manner ... To say this in another way, in our field, what is of paramount importance is whether the professional or the graduation candidate can in fact ‘*routinely and safely* fly the plane’ – not whether he/she can ‘almost’ or ‘more or less’ fly the plane. Curriculum design and planning in T/I therefore ... are inextricably linked to evaluation and assessment and the curriculum planner in designing the program must not overlook this crucial relationship. (1984a:6–7)

Also a question of degree, the maximum level of attainment may refer to a learner's fulfillment of his or her potential to build interpretation skills, which may not be reached due to any number of reasons. For example, the period of study may be too short for a specific student. Students may take final examinations, even though they have not yet reached their full potential in the program, due to offers of employment, a lack of program funding, or changes in personal life. Therefore, a clear definition of a minimum level of competency as baseline performance is required in the curriculum objectives.

The need to identify and apply a minimum baseline of performance in interpreter education further supports the use of largely criterion-referenced assessment practices. If the assessment criteria are empirically established in the performance standards for a (sub)domain, in the form of operationally defined constructs, they could achieve recognition throughout the domain in question, independent of training institutes or employers.

Care must be taken in the application of criteria, however. Gipps (1994) summarizes the difficulties of strictly applying criterion-referenced instruments, which may sometimes result in a focus on very narrow, tightly defined objectives. Gipps identifies a movement away from the detailed specification of individual criteria "towards an anti-analytic, more holistic approach" (93), which includes references to domain and standards. Indeed, multiple sources of information, including in particular empirical data, can aid in developing meaningful, useful, and appropriate tests.

3.2 Humanistic approaches: Domain

With regard to the domain of interpreting, it no longer seems sufficient to say that we are simply testing 'interpreting'. Interpreting involves a complex set of skills and therefore multiple test constructs. In his definition of interpreting, for example, Hoffman states that the field "is not language translating, or even language interpreting. The domain is *language and gesture interpreting in a way that is sensitive to the audience and speaker and their relations and goals, sensitive to world knowledge and context as well as topic, and sensitive to status relations, loyalty shifting, and nuance as well as to literal meaning*" (1997a:204). In this light, a debate on whether all interpretation is the same is defeatist; that is, there is no point in debating, for the purposes of assessment, whether a day-long simultaneous conference on wood processing is equivalent to an emergency doctor-patient telephone call due to the allergic reaction of a child. An alternative approach would be to identify and meet the needs of a given setting. In this case, Hoffman's definition of interpreting, as comprehensive

as it may be, requires additional distinctions according to subdomains. These distinctions would then be reflected in the statement of educational goals of the curriculum.

The need to distinguish between domains in interpreting and the ensuing differences in assessment criteria is also reflected in the emerging literature on quality in interpreting. It is widely acknowledged that quality in interpreting can be judged from multiple perspectives, e.g., the interpreter, user, and client. Kurz (2001), for example, describes survey research that has been conducted from various perspectives on conference interpreting. For Kurz (2001), quality in conference interpreting is to be measured in terms of the fulfillment of user expectations, or the degree of user satisfaction. Survey research points to differences in quality expectations according to the domain of interpreting. For example, conference interpreters and users as well as different user groups among themselves differ in their assessment of the importance of some criteria such as correct grammar, pleasant voice, and native accent (398).

Pöhhacker describes quality as “a multidimensional socio-psychological as well as textual phenomenon within a specific institutional and situational context of interaction” (2001:420). Quality factors therefore vary by domain-driven institutional and situational factors. Pöhhacker advocates an approach to the measurement of quality that takes multiple perspectives into account. By adopting a case study approach, a combination of corpus-based observation, survey research, participant observation, and documentary analysis can be combined to gather a maximum amount of information on a specific setting (420).

In the literature on quality in interpreting, an emerging consensus highlights the importance of basing quality judgments on empirical data gathered from multiple perspectives. Similarly, validation evidence is ideally gathered in multiple ways from multiple perspectives (Sawyer, Butler, Turner, & Stone 2002b; Bailey & Butler 2002). The use of corpus-based methods in interpreter assessment ensures through the use of empirical data that constructs and criteria are relevant, i.e., are based on real needs (Lindquist 2002; Bailey & Butler 2002). The advantages are twofold. First, empirical data can be used to describe and provide evidence of quality factors that are common across or specific to given settings. Second, such data can serve as a foundation for the development of test constructs, criteria, and content that are meaningful, useful, and appropriate (valid) for the assessment of interpreters in training and in the field. Thus, a clear definition of the interpreting domain is instrumental in establishing a foundation for the gathering of content-, construct-, and criterion-related evidence of validity.

3.3 Guidelines: Standards

There are few recognized standards of interpreter education, with the National Interpreter Education Standards for signed language training programs in the United States being perhaps the most important example (Conference of Interpreter Trainers 1995). The number of standards addressing the provision of interpreting services, however, is growing. On the national level, standards exist in Australia, primarily for community interpreting (NAATI: <http://www.naati.com.au>). A set of standards covering all areas of interpreting were developed within the American Society for Testing and Materials (ASTM), a national standards organization in the United States (Sawyer 1998). National interpreting standards have also been developed in Austria. Such standards pertain to the marketplace and may be incorporated into education settings. A source for the development of standards for assessment is the *Standards for Educational and Psychological Testing* of the American Psychological Association (1999).

Standards for interpreter education, for the provision of interpretation services, and for assessment can all serve as frames of reference for the development of measurement frameworks. Bachman proposes the following steps in establishing a measurement framework: (1) identifying and defining the construct theoretically; (2) defining the construct operationally, i.e., relating the theoretical construct to observations of behavior (1990b:42), which implies isolating the construct to make it observable (43) by eliciting “language performance in a standard way, under uniform conditions” (44); and (3) establishing procedures for quantifying observations, by defining units of measurement (44).

In general, the successful identification and measurement of operationally defined constructs hinges on the development of test method facets and their role in testing procedures, the development of test specifications, and reconciliation of the tension between standardization and authenticity. Specifically, the constructs and criteria derived from empirical studies of domains of interpreting can be codified in professional standards, which then serve as guidelines for training and testing.

4. Standardization in testing

We do not ... see assessment as a scientific, objective, activity, this we now understand to be spurious. ... Assessment is not an exact science, and we must stop presenting it as such. (Gipps 1994:167)

If interpreter testing cannot be considered an objective undertaking, but rather an endeavor in which professional judgment is required, special consideration must be given to those methods that can reduce the negative, undesired consequences of individual rater subjectivity. Test standardization is a means to reduce such unwanted fluctuation in assessment. Standardization does not necessarily entail a de-coupling of assessment from the realities of the marketplace; rather, it implies that testing procedures, both within and across language programs, are uniform to the greatest extent possible. The rationale for a given degree of standardization, or uniformity, or lack thereof is related to the goals of the curriculum and can therefore be delineated in curriculum documents.

Uniformity begins with the parameters of the test, or the test method facets, as defined perhaps most thoroughly by Bachman (1990b). He identifies these facets as “potential sources of error that can be equally detrimental to the accurate measurement of language abilities” (1990b:160) and states the need to investigate test method facets (31). Bachman defines facets as “the characteristics of the methods used to elicit test performance,” and states that these characteristics “constitute the ‘how’ of language testing, and are of particular importance for designing, developing, and using language tests, since it is these over which we potentially have some control” (111). Bachman’s “use of the term ‘facet’ for specific aspects of test method is consistent with Guttman’s (1970) discussion of facet design and analysis, which he [Guttman] proposed as a basis for test design” (115). Bachman presents his framework “not as a definitive statement or exhaustive list, but rather as a guide for empirical research that I [Bachman] hope will lead to a better understanding of the extent to which these facets affect performance on language tests, and to the discovery of additional facets not included” (117). Assessment in interpretation is not immune to sources of error, as is shown in the following case study. Through underspecification – or making “certain simplifying assumptions” due to “the complexity of and the interrelationships among the factors that affect performance on language tests” – Bachman aims “to either exclude or minimize by design the effects of factors in which we are not interested, so as to maximize the effects of the ability we want to measure” (31). These “limitations

in observation and quantification” stem from “the fact that all measures of mental ability are necessarily *indirect, incomplete, imprecise, subjective, and relative*” (32).

Interpreter tests are *indirect* in that in many, but not all, testing scenarios, “we are interested in measuring the test taker’s underlying competence, or ability, rather than his performance on a particular occasion” (32). “We interpret [our measures] as indicators of a more long-standing ability or competence” (32–33), such as the interpreter’s ability to perform successfully in the field over time.

Interpreter tests are *incomplete* in that “the performance we observe and measure . . . is a sample of an individual’s total performance . . .” (33). A test-taker’s performance is one of many that he or she gives throughout a course of study or curriculum. The choice of topic and terminology is limited in scope, as the test can constitute only one sample. In this light, the need to specify constructs, content, and criteria to guide the selection of representative source material becomes even greater (34–35).

Ratings are *imprecise* in that “[i]n measuring language abilities, where we are not dealing with direct physical comparison, the units of measurement scales must be defined, and precision, or reliability, becomes, in part, a function of how we define these units” (35). This factor can be addressed though the use of criterion-referenced rating scales.

Interpreter tests, as a specific form of language testing, are *subjective* “in nearly all aspects” (37). Developers make subjective decisions when designing tests and selecting materials; test takers make subjective judgments in taking tests, and scorers make subjective decisions in scoring them (37). However, Bachman draws attention to the subjectivity of the test-taker in particular in stating that “[p]erhaps the greatest source of subjectivity is the test taker herself, who must make an uncountable number of subjective decisions, both consciously and subconsciously, in the process of taking a test” (38).

Finally, interpreter tests are *relative* in that there are “‘norms’ of performance,” for example a “kind of language use” defined by variety, dialect, and register, as well as a “standard for score interpretation . . . in terms of levels of language abilities” (38–40). It remains a matter of discussion, however, whether norms in interpreter testing have been precisely defined.

An analysis of test method facets is a comprehensive endeavor that begins on the program level within a specific institution or other highly defined assessment context. Thorough documentation of test method facets provides a resource to serve as a frame of reference for consideration of constructs, content, and criteria in the process of developing assessment instruments. Once

constructs, content, and criteria have been elaborated in a variety of contexts, interpreter educators will have a basis for the comparison of assessment procedures across schools. Coordination of developmental efforts is also possible from the top down, e.g., within the research and training committees of professional associations. Those areas that need to be addressed are detailed in Bachman's framework of test method facets. They include the testing environment, test rubric, input, expected response, and the relationship between input and response. In Table 4.6, these categories are described in the context of interpreting, with examples provided in parentheses.

5. Authenticity

If humanistic concerns play a fundamental role in curriculum design, i.e., situating cognition in the community of professional practice, and assessment is to be integrated into a program of instruction, test practices that reflect real-world conditions must be established. The degree to which real-world conditions are reflected in test practices can be described as the degree to which the tests are authentic. Authenticity has been also described in the assessment literature as the contextualized performance of engaging and worthy, real-life, representative tasks (see Wiggins 1993: 229–230) and is widely, albeit implicitly, recognized by practitioners as fundamental in ensuring that interpreter testing is valid and reliable and meets the needs of the marketplace. The “direct examination of a student’s ability to use knowledge to perform a task that is like what is encountered in real life or in the real world” (McMillan 1997: 199) is a concern that has been explored in the Translation and Interpretation Studies literature as well. Bachman states that one “of the main preoccupations in language testing for the past quarter of a century (at least) has been a sincere concern to somehow capture or recreate in language tests the essence of language use, to make our language tests ‘authentic’” (1997: 300). Bachman thus draws attention to a long theoretical discussion in the field of language testing from which interpreter education can benefit.

The need to pay greater attention to authenticity in translator and interpreter assessment has also been stated explicitly. Snell-Hornby, for example, discusses the role of examinations in the curriculum and mentions her conviction that “the present method of formal examination, while it is a time-honoured academic tradition, should at least in part give way to alternative methods that reflect the realities of future professional life” (1992: 19).

Table 4.6. Bachman's test method facets in the context of interpreting

1.	Facets of the Testing Environment	<ul style="list-style-type: none"> <li data-bbox="173 462 196 1539">Familiarity with the test venue (regular classroom, auditorium, conference room) <li data-bbox="201 462 224 1539">Familiarity with the interpretation equipment (simultaneous equipment, PA system, recording devices) <li data-bbox="229 462 252 1539">Individuals present (voting and non-voting jury members, technicians, observers, other examinees) <li data-bbox="257 462 280 1539">Time of testing (time of day, rest periods between exams) <li data-bbox="285 462 308 1539">Physical conditions (sight lines, seating, podium, lighting, room temperature)
2.	Facets of the Test Rubric	<ul style="list-style-type: none"> <li data-bbox="369 462 392 1539">Test organization <li data-bbox="397 462 420 1539"><i>Saliency of parts (topic, difficulty, passage length)</i> <li data-bbox="425 462 448 1539"><i>Sequencing of parts (passage length, language direction, mono- or unidirectional, turn-taking elements)</i> <li data-bbox="453 462 476 1539"><i>Relative importance of parts (introductory and/or concluding passages, length and relevance for scoring)</i> <li data-bbox="481 462 504 1539">Time allocation <li data-bbox="509 462 532 1539"><i>Timing of exam series (overlap, breaks, jury members, examinees)</i> <li data-bbox="537 462 560 1539"><i>Timing of individual exams (entrance, briefing, interpreting, exit, scoring, deliberations)</i>
3.	Facets of the Input	<ul style="list-style-type: none"> <li data-bbox="610 462 632 1539">Instructions <li data-bbox="638 462 660 1539"><i>Language (source, target)</i> <li data-bbox="666 462 688 1539"><i>Channel (spoken, written)</i> <li data-bbox="694 462 716 1539"><i>Specification of procedures and tasks (advance information, mock or simulated practice examinations)</i> <li data-bbox="722 462 744 1539"><i>Topic and terminology announcements (point in time, if at all)</i> <li data-bbox="750 462 772 1539"><i>Text preparation (simultaneous with text)</i>
3.	Facets of the Input	<ul style="list-style-type: none"> <li data-bbox="828 462 851 1539">Format <li data-bbox="856 462 879 1539"><i>Channel of presentation (aural, visual, both)</i> <li data-bbox="884 462 907 1539"><i>Mode of presentation (direct, in booth with headphones)</i> <li data-bbox="912 462 935 1539"><i>Form of presentation (spoken/non-verbal communication)</i> <li data-bbox="940 462 963 1539"><i>Vehicle of presentation (live, audiotaped, videotaped)</i> <li data-bbox="968 462 991 1539"><i>Language of presentation (native, non-native)</i> <li data-bbox="996 462 1019 1539"><i>Degree of speededness (flow of exam parts, turn-taking, rate of speech of original)</i>

Table 4.6. (continued)

Nature of language	
Length (exam, passage, turn-taking)	
Propositional content	
Vocabulary (degree of specialization)	
Degree of contextualization (embedded/reduced, hypertext, briefing)	
Distribution of new information (compact/diffuse, even/uneven distribution)	
Type of information (concrete/abstract, positive/negative, factual/counterfactual)	
Topic (subject matter, degree of specialization)	
Genre (text type)	
Organizational characteristics	
Grammar (characteristics of spoken/written discourse, correctness)	
Cohesion	
Rhetorical organization	
Pragmatic characteristics	
Illocutionary force (e.g., informative, persuasive)	
Sociolinguistic characteristics (register)	
Cultural specificity	
Concepts	
Vocabulary	
Rhetorical organization	
4. Facets of the Expected Response	
Format	
Channel (aural, aural and visual)	
Mode (direct, with or without microphone, in booth)	
Form of response (spoken/non-verbal communication)	
Vehicle of response (live, audiotaped, videotaped)	
Language of response (native, non-native)	
Nature of language	
Length	

Table 4.6. (continued)

Propositional content	
Vocabulary (degree of specialization)	
Degree of contextualization (embedded/reduced)	
Distribution of new information (compact/diffuse)	
Type of information (concrete/abstract, positive/negative, factual/counterfactual)	
Topic (conformity with specialist/layperson's usage)	
Genre (conformity with source text type)	
Organizational characteristics	
Grammar (characteristics of spoken/written discourse, correctness)	
Cohesion (circumlocution, ellipsis)	
Rhetorical organization (degree of conformity with original)	
Pragmatic characteristics	
Illocutionary force (e.g., informative, persuasive)	
Sociolinguistic characteristics (register, specialist/layperson's usage)	
Cultural specificity	
Concepts	
Vocabulary	
Rhetorical organization	
Restrictions on response	
Channel (role of non-verbal communication)	
Format (direct, in booth, standing, seated)	
Organizational characteristics	
Propositional and illocutionary characteristics	
Time or length of response	
Degree of speededness	
5. Relationship Between Input and Response	
Reciprocal (uni-directional)	
Nonreciprocal (mono-directional)	
Adaptive (turn-taking)	

While the aforementioned call for standardization in interpreter assessment would seem to undermine authenticity, it is precisely the analysis of test method facets that provides evaluators with the descriptive tools to distinguish between authentic and inauthentic assessment. Such a theoretical framework facilitates the comparison of language test performance with non-test language performance, which in turn could result in greater precision when characterizing the nature of interaction during test tasks (Bachman 1997:303).

A fundamental tension does lie, however, between authentic test tasks, i.e., contextualized performance, and conventional, large-scale testing (see Wiggins 1993:207), and concessions must inevitably be made when large groups of students are to be tested in either translation or interpretation. For example, the advantages and disadvantages of presenting examinees with ‘canned’ input or taping participants in groups for post situ assessment need to be explored in depth. In particular, careful consideration must be given to the issue of whether such forms of input and response lead to test tasks that may be vastly different from real-world requirements and thus result in forms of assessment that do not achieve their intended purposes. Greater awareness of the factors influencing authenticity and the adoption of a methodological framework to describe it in the area of language interpreting is a first step.

A way to reduce this fundamental tension between authentic and inauthentic forms of assessment may lie in the use of a variety of forms of assessment, each for a specific purpose. In this respect, it can also be noted that, in the interest of multiple perspectives, the plurality of approaches to testing and assessment has been considered an advantage in other contexts (Guba 1990; Lincoln & Guba 1985). In the field of language teaching and testing, for example, some researchers have adopted differing approaches for varying purposes (Allwright & Bailey 1991; Bailey 1998; Bailey & Nunan 1996). One example of an alternative approach is the use of portfolios in assessment, which is discussed in the following section.

6. Alternative assessment: Portfolios

According to McMillan, an alternative assessment “is any method that differs from conventional paper-and-pencil tests, most particularly objective tests” (1997:199) and includes “authentic assessment, performance-based assessment, portfolios, exhibitions, demonstrations, journals, and other forms of assessment that required the active construction of meaning rather than the passive regurgitation of isolated facts” (14). From this perspective, one could

well argue that interpreter assessment is by definition alternative assessment, since it is performance-based and requires subjective judgment on the part of the evaluator. The objective of this discussion, specifically, is to show how one particular form of alternative assessment, portfolio assessment, can complement traditional one-shot interpreter testing.

A portfolio has been described as “a purposeful, systematic process of collecting and evaluating student products to document progress toward the attainment of learning targets” (McMillan 1997:231). It combines ipsative, formative, and summative forms of assessment and represents both process and product. Not a simple folder or haphazard collection of student work, a portfolio’s essential characteristics include the fact that it represents a purposeful process and a systematic and well-organized collection of materials. Pre-established guidelines are established so that the contents to be selected for inclusion are clear. Students play an active role in this selection process and reflect on their work. Clear scoring criteria are used to document student progress, which is reviewed during regular conferences between instructor and student (231).

Seger (1992) draws attention to the multidisciplinary use of portfolios and their long tradition in particular in the worlds of finance and the arts. Since the 1980s, they have become an increasingly widespread form of assessment for writing programs, which makes their potential as an assessment instrument for translator education quite clear (Kiraly 2000:161). Many materials to be included in the portfolio are already produced in conventional translation and interpretation courses. They include, among others, assignments and comments on assignments, both taped and in written form. Glossaries, self-assessment statements, classroom journals, and logs complete the picture. A comprehensive list of potential materials that can be included as part of an interpretation class portfolio is given in Table 4.7.

The advantage of a portfolio is that it provides range and depth in assessment. The collection and organization of student work is a process of gathering evidence on performance quality. It documents learning processes and archives them for later reference, thus making more tangible the rationale for instructor feedback and grading. It directly addresses criticism often leveled at interpreter assessment: that one-shot testing is shallow and assessment criteria are unclear. Finally, portfolios are a useful tool that can improve reflective practice and self-assessment. Table 4.8 provides examples of ways in which a portfolio can be used to support learning. Since portfolios are process-oriented they are also suitable as a vehicle for the exploration of learning and the development of specializations.

Table 4.7. Sample materials for an interpretation class portfolio

I.	Personal statement / self-evaluation
II.	Table of contents
III.	Course syllabus and planner
IV.	Statement of personal goals for the instructional unit or course
V.	Video- and audiotapes of student work: speeches from the classroom and practicum
VI.	Instructor comments on student work
VII.	Glossaries, alphabetic and thematic by language direction
VIII.	Preparation and research materials for specific events and topics, e.g. dictionary lists, bibliographies, parallel reading
IX.	Journal or log, other reflective statements on interpretation work
X.	Samples of notes with analysis
XI.	Self-assessment statements
XII.	Peer review statements
XIII.	Action research paper

Table 4.8. Portfolios and reflective practice

Ways in which a portfolio can be used to support learning (Porter & Cleland 1995)

- reflection allows learners to examine their learning process
 - reflection allows learners to take responsibility for their own learning
 - reflection allows learners to see “gaps” in their learning
 - reflection allows learners to determine strategies that supported their learning
 - reflection allows learners to celebrate risk taking and inquiry
 - reflection allows learners to set goals for future experiences
 - reflection allows learners to see changes and development over time
-

Moreover, as the relationships between cognition and learning became clearer in the 1980s, i.e., that the human mind does not work like a computer and that we are social and adaptive, the importance of situating learning in a group context emerged, as described in the humanistic approach to curriculum. Portfolio assessment facilitates learning by leveraging situated cognition and enhancing reflective practice through a focus on process (Calfee & Freedman 1996; Yancey 1996).

Despite these advantages, challenges to the implementation of widespread portfolio assessment are not to be underestimated. Portfolio guidelines require substantial time to develop; clear criteria and evaluation standards must be established if portfolios are to be meaningful as an assessment instrument beyond the individual classroom, i.e., on the curricular level (Herman, Gerhart, & Aschbacher 1996; see Black et al. 1994). For these reasons, an incremental approach to portfolio implementation is advised. A first step would be to com-

plement traditional classroom testing with portfolio assessment as part of a comprehensive review process.

7. Steps toward valid and reliable assessment

WYTIWYG – What You Test is What You Get

The following suggestions for improving examination procedures are intended to provide initial, practical guidance to program administrators and instructors who do not have a background in testing but wish to begin reviewing the role of assessment in their curriculum. These sequential steps therefore tie assessment back into the broader framework of curriculum design elaborated in the previous chapter. As a result, these activities foster the integration of curriculum and the assessment of learning outcomes (expertise) through validation efforts. Although these steps are in a logical progression aimed at initiating an ongoing process of validation, they are intended to be general recommendations and need not necessarily be pursued in this order. Some researchers may wish to narrow their focus considerably; individual programs may be faced with challenges in one particular area as opposed to others. Collaboration with language testing specialists is highly advisable throughout this process. The steps are the following:

1. Conduct a needs analysis by relating examinations to curriculum objectives and other forms of assessment, e.g., entry-level, intermediate, and final testing, as well as summative, formative, and ipsative assessment.
2. Document exam procedures currently in place. This includes a description of the testing procedures, the collection and filing of all test materials, i.e., examination texts (videotapes of source speeches and student performances), recording of jury deliberations, and resulting scores.
3. Review test method facets (aspects of environment, test rubric, input, and response) specific to interpretation and the needs of the training program. Write test specifications.
4. Develop a representative pool of exam texts from real-world sources for faculty and student reference and conduct an analysis of text features grounded in linguistics. This process should result in descriptions of prototypical exam texts that are empirically validated.
5. Collect representative performances for faculty and student reference, as well as rater training, e.g., videotapes of exam sessions and documentation of the corresponding assessment.

6. Define constructs for assessment according to domain, criteria, and standards, as well as level of expertise.
7. Define assessment criteria for each of these constructs. Criteria should be elaborated in terms of observable performance and include a clear description of the performance characteristics on each level of assessment (score).
8. Train raters (jury members) in exam design, jury procedures, and the systematic application of assessment criteria.
9. Explore alternative methods of assessment, e.g., portfolio, and benefits of their use in the program of instruction.

8. Conclusions

The discussion in this chapter shows how traditional and alternative assessment principles can be leveraged for interpreter education. Pertinent examples include the need to gather evidence of basic types of validity and reliability, distinguish between subjective and objective testing, foster greater awareness of the nature of professional judgment and its pitfalls, use appropriate measurement scales, develop and follow test specifications, and select various types of assessment that complement one another. Furthermore, a discussion of the role of assessment types and purposes at different stages of the curriculum makes the relationship between curriculum, assessment, and learning outcomes (expertise) explicit.

Steps to improve assessment practices in interpreter education include the establishment of evidential bases of construct validity, in particular by referencing (sub-)domains, criteria, and standards, and the promotion of standardization in assessment procedures, most notably in examinations, by describing test method facets. Test specifications aid in resolving the inherent tension between the need for standardization and authenticity. The concern for authenticity and the use of portfolio assessment to enhance the range and depth of assessment are also explored. Principles and steps aimed at improving assessment practices are context specific to a considerable degree. The following case study takes the foundations of interpreter performance assessment outlined in this chapter into account and initiates a review process of the curriculum model in place at the Graduate School of Translation and Interpretation of the Monterey Institute of International Studies in Monterey, California.

CHAPTER 5

Introduction to the case study

Hence, one of the challenges inherent in carrying out investigations in the ‘real world’ lies in seeking to say something sensible about a complex, relatively poorly controlled and generally ‘messy’ situation. (Robson 2002: 4)

1. Research questions

The following three chapters present three interrelated studies examining fundamental aspects of curriculum and assessment in a local context: the Graduate School of Translation and Interpretation (GSTI) of the Monterey Institute of International Studies (MIIS). This case study explores the following general research questions:

1. Is the GSTI curriculum optimally designed? Is the role of translation instruction appropriate in the interpretation degree tracks?
2. Can curriculum theory and language testing concepts be used as a basis for the discussion of the situation in the GSTI to provide (partial) answers to the questions listed under (1)? Can curriculum theory and language testing concepts better inform decision-making in the local GSTI context?

Specific research questions, or hypotheses, underlying each part of the case study are presented in the introduction to the part in question.

2. General comments on method and scope

Interpreting is widely acknowledged to be a complex phenomenon that takes place in real-world situations. Therefore, research on interpreting is often applied research conducted in the field and, as such, faces multiple constraints. They include a variety of situational factors and variables, the availability and confidentiality of subjects and material, the ability to collect data, and the logistics of coordinating and conducting the research itself. Faced with these con-

straints, researchers may benefit from adopting a pragmatic approach (Robson 2002: 43). The decisions underlying the research methodology presented here were based upon exigency, access, usefulness, and perspective, all of which are factors related to the following questions.

- Exigency: What challenges exist with regard to the GSTI's curriculum model and methods of assessment? What information does the GSTI require to resolve these challenges?
- Access: What data are available? What additional data can be collected through practicable, unobtrusive methods that do not disrupt classes and exams?
- Usefulness: How informative are the data in making determinations about curriculum and assessment in the GSTI?
- Perspective: How can a mixed-method design be incorporated into the case study, thus shedding light on curriculum and assessment issues from multiple perspectives and better informing decision-makers?

An *exigent* concern among the GSTI's faculty members has been the need to train top-notch professionals in diverse skill sets within the short period of four semesters, or two years. In making decisions about curriculum design and the content of individual degree tracks, the GSTI faculty is faced with the curriculum design challenge of ensuring that graduates have high levels of ability in the broadest skill sets possible. Hence, there is a need to weight the role of language combinations, written and sight translation, and consecutive and simultaneous interpretation in individual degree tracks. One of the most pressing curriculum issues in the GSTI is therefore the role that instruction in translation and interpretation should play in each degree track. Considerations of *curriculum as process* center on the sequencing of instruction in translation and instruction in interpretation. Considerations of *curriculum as interaction* center on possible similarities and differences in translation and interpretation skill sets.

In exploring the role of translation and interpretation in the GSTI degree tracks, data are readily *accessible* in the form of final examination scores that can be statistically processed (Part I). In contrast to the documentation of individual exam sessions, which would entail videotaping of examinees and jury members during a current set of examinations, exam score data on past exam sessions are on file in the GSTI main office for multi-year periods. Such data can be gained without fundamentally altering the nature of the exam sessions themselves. In contrast, the presence of recording devices for the

explicit purpose of collecting research data would alter the manner in which examinations are conducted in the GSTI.

At the same time, a concern pertaining to statistical research design is the issue of the validity and reliability of exam scores, or the *usefulness* of exam score data for the purposes of curricular decision-making. In the absence of test specifications, a qualitative analysis of the test method facets needs to be conducted. Although indirect in nature, the most viable method of collecting data on test method facets for the period under review is to solicit information from those individuals who were present during these exam sessions, i.e., to survey the jury members (Part II). The exam texts are filed in the GSTI main office as well, which allows direct access to the exam material used over a multi-year period. A selection of exam texts is therefore analyzed to further explore the issue of confidence in the exam scores as data (Part III). Although the usefulness of exam scores may be called into question, it is possible that the results of the survey and text analysis may provide insight on curriculum and assessment-related concerns. These considerations are explored in the discussion of the implications of the case study.

In summary, the case study is the result of an iterative process of decision-making based upon the exigency of possible issues to address and the accessibility and usefulness of data. This approach resulted in a mixed-method design that, although selective in nature, allows for multiple *perspectives*. In the interest of readability, the data are presented in summary form in the three parts of the case study. These data and all materials used in the case study are reproduced in extenso at the website <http://archimed.uni-mainz.de/pub/2001/0097>. To better understand the dynamics of the official GSTI curriculum and the role of assessment in the progressive stages of the curriculum, a descriptive analysis of the GSTI's curriculum documents is provided in the following section. These documents describe the GSTI curriculum model that evolved gradually from the mid- to late eighties and was reformed in 2002.

3. Content analysis of GSTI curriculum documents

3.1 Aims, goals, objectives

The curriculum documents of the Graduate School of Translation and Interpretation consist of a School-wide promotional brochure and a website¹ containing the same information as the brochure. The curriculum documents contain generic job or task descriptions for translation and interpretation, as

these documents are primarily promotional material for readers who may not be familiar with these disciplines and careers. The description of the Master of Arts in Translation (MAT) contains a list of text types the translator routinely handles, types of potential employers, an explanation of the legal status of the profession, and a statement on the growing emphasis on computer tools and the software industry. The degree profile of the Master of Arts in Conference Interpretation (MACI) includes a description of the simultaneous and consecutive modes of interpretation, the use of booths and simultaneous interpretation equipment, potential employers, and a brief description of the International Association of Conference Interpreters (AIIC). The Master of Arts in Translation and Interpretation (MATI) degree is described as a dual specialization in both translation and interpretation. This section includes a description of the advantages of studying complementary skill sets and a statement on the popularity of the degree. The impression is given that the MATI degree is a combination of the MAT and MACI degree and that the instructional objectives are therefore the equivalent of the two degrees combined. The MATI degree offers “greater flexibility and an edge in an increasingly competitive job market.”² The MAT and MACI degrees are described as specializations.

Much information about studying in this modified Y-track model is left unspecified and is thus relegated to the hidden curriculum. For example, there is no clear statement on the goals of the educational program in terms of observable performance on tasks, the breadth and depth of subject matter knowledge, or the nature of interpretation or translation as skill sets. It is also questionable whether extremely detailed information of this nature is appropriate in a promotional brochure, as its function as a text type is primarily to provide initial information to potential students. It could well be argued that descriptions of aims, goals, and instructional objectives of this nature should be given in internal documents used for student and faculty reference on campus and for the exchange of information with peer institutions.

A clear statement on language requirements for individual language programs is also absent. Although language rankings and degree tracks are listed, it remains in the hidden curriculum, for example, that the MACI in two languages is the norm in the Asian-language programs. As a result, it is unclear to the student which combinations are appropriate in individual language programs for specific degree tracks. Another issue that is left unexplained is whether simultaneous interpretation into the foreign language (future B language) is an integral part of the curriculum.

Despite the rough equation of the MATI to the MACI in interpretation, a distinction is made between these degree tracks at a later point. According to the curriculum documents, an oral diagnostic evaluation is done at the end of the first semester for MACI students: “Those opting for the MACI degree are given an oral diagnostic evaluation at the end of the first semester to assess whether they have the requisite attributes to succeed as conference interpreters.” The implication from this official curriculum document is that MATI graduates are not trained as conference interpreters. The message from the hidden curriculum is however contradictory, as students in both the MATI and MACI degree tracks attend the same interpretation courses and take the same exams regardless of degree track. As a result, MATI students receive roughly the same training as MACI in the language combinations that they are studying. A major difference, however, is the fact that the vast majority of MATI students have a two-language combination and are not required to pass examinations in simultaneous interpretation into the foreign language (B). Data on the number of students in individual language combinations and degree tracks is provided in Part I of the Case Study.

3.2 Process: Knowledge and skill sequencing

The sequencing of courses in specific degree tracks is clearly described in the curriculum documents. No indication of workload in terms of credits, hours, or required commitment, however, is given. Indirect information on the sequencing of knowledge and skills is available in the curriculum documents, but it remains unclear how the skill sets required for specific tasks relate to one another or how they build upon one another. This information is provided in much greater depth in the descriptions of individual courses. Statements on skill and knowledge building have been extracted from these descriptions and are shown in a progression by semester in Table 5.1. Notably absent in the descriptions are definitions of tasks and learning objectives in second semester translation and sight translation in the second and third semesters. Target skills are generally described as process-related abilities rather than the completion of specific target tasks. As useful and necessary as procedural descriptions may be, it remains unclear to the reader what performance levels are required at specific stages in the curriculum.

The sequencing of domain knowledge in translation proceeds from general and semi-specialized texts (first semester), to commercial and economic texts (second), scientific and technical (third), and concludes with political and legal texts (fourth). Domain knowledge in interpretation follows this order,

Table 5.1. Skills-based progression of GSTI curriculum

Language Enhancement	Language Transfer			
	Written Translation	Sight Translation	Consecutive Interpretation	
Summer Course	General Language Enhancement: On Campus: English, French, Spanish, Russian Abroad: German			Simultaneous Interpretation
1st Semester	Electives: Advanced English Discourse: spoken and written English, vocabulary, critical reading, writing and speaking, summarizing and paraphrasing skills in English; diction, tone, structure, organization, form, reasoning and persuasion, levels of formality and figurative language Public Speaking: flexibility of oral expression; speaking before an audience; varying presentation of written material; paraphrasing, transmission of complete message while changing vocabulary and structure; vocabulary study and text analysis	Identification, analysis, and resolution of translation problems; rational approach to translation; structural analysis, text typology, language usage and register, comparative stylistics	Instantaneous solution of language-specific problems; vocabulary and structure	Familiarity with conference interpretation in general; foundation for developing the professional skills of consecutive interpretation; ability to understand and analyze the meaning of the SL message and convey it in the TL in a straightforward and clear manner; clearly identify, analyze, and paraphrase the meaning in the SL and establish logical relations between its components; active listening and concentration skills, notetaking techniques, memory-training exercises, and techniques of abstracting and symbolizing information for subsequent recall General Introduction to Consecutive Interpretation (English-language elective): theory of consecutive interpretation; basics of notetaking; balancing listening and notetaking; register and accuracy in expression; problem-solving strategies

Table 5.1. (*continued*)

	Language Enhancement	Written Translation	Sight Translation	Language Transfer	Simultaneous Interpretation
2nd Semester		Command of technical terminology		Identification of implicit structural organization of an extemporaneous speech; refining of notetaking techniques; reinforcement of ability to perceive essential meaning; clarity of expression, correct style and grammar, proper diction, and polished presentation; expansion of active vocabulary; development of fluency and memory	Techniques for the development of own interpretation strategies; general introduction to simultaneous interpretation; preparatory exercises to develop concentration necessary for speaking and listening at the same time; mastery of voice management and smooth delivery techniques; analysis of spoken messages for meaning and rendering of a coherent version in the native language with correct grammar, diction, and style
3rd Semester		Overview of scientific and technical translation strategies; solution to stylistic, syntactic, cultural and terminological problems; exposure to various types of technical writing Translation Proseminar: reinforcement of basic principles of translation; special emphasis on style, register, specific demands of certain text categories, theoretical discussion of translation choices		Sequential logic in notetaking and accurate terminology in delivery; diagnosis and correction of problems at all stages from listening through delivery; progression to increasingly difficult and challenging material Court interpreting (Spanish only): techniques of consecutive and simultaneous interpretation used in judicial settings; registers of speech in legal proceedings	Consolidation of techniques; polishing of delivery and language register; nuance of meaning, accuracy of interpretation; research and preparation for conferences, glossary development; maintaining of concentration while under stress; expansion of active general and technical vocabulary

Table 5.1. (*continued*)

	Language Transfer		
	Language Enhancement	Sight Translation	Simultaneous Interpretation
4th Semester	<p>Written Translation</p> <p>Exposure to different styles of writing and document structures</p> <p>Advanced Translation Seminar: texts of considerable difficulty and complexity; text types and topics according to market demand; ability to submit camera-ready copy</p> <p>Translation Thesis (MAT only): large-scale translation projects or in-depth research on a subject related to translation or interpretation</p>	<p>Sight Translation</p> <p>Rapid solution of translation problems while adhering to the style and tone of the original</p>	<p>Consecutive Interpretation</p> <p>Attention to nuance and tone; learning of vernacular of political speeches; sharpening of listening, processing and notetaking functions</p> <p>Simultaneous Interpretation</p> <p>Interpretation of more difficult speeches; ability to follow logic of complex scientific and technical discourse; fidelity to the style and tone of persuasive political discourse; continued development of research skills</p>

Table 5.2. Domain-based progression of GSTI curriculum

Semester	Written and Sight Translation	Consecutive Interpretation	Simultaneous Interpretation
1st Semester	General topics, i.e. non-specialized texts from a wide variety of domains	Speeches on wide-ranging, general topics, e.g. current events, cultural affairs, non-specialized topics from a wide variety of domains	
2nd Semester	Commercial and economic texts, e.g. real-world texts on current world economic and financial issues, international trade and business, economic forecasts, and joint venture agreements; application of basic concepts of economics and business; command of terminology	Speeches on wide-ranging, general topics, e.g. current events, cultural affairs, non-specialized topics from a wide variety of domains	Speeches on wide-ranging, general topics, e.g. current events, cultural affairs, non-specialized topics from a wide variety of domains
3rd Semester	Scientific and technical texts, e.g. medicine, biochemistry, environment, ecology, physics, computer science, journal articles, manuals, patents Wide-ranging texts in Translation Proseminar	Commercial and economic topics, e.g. from various sectors of the business world	General and economic speeches, e.g. from various sectors of the business world
4th Semester	Political and legal texts, e.g. international crises, cooperation, development, government structure, personal documents, contracts, treaties, legislation Topics specific to language combination and market demand in Advanced Translation Seminar	Political speeches, e.g. political oratory	Political and technical speeches, e.g. persuasive political discourse, complex scientific and technical discourse

Table 5.3. Progression of professional knowledge and identity in GSTI curriculum

	Translation	Interpretation
1st Semester	Professional knowledge and skills development in language-specific translation and interpretation courses Macro- and microeconomics (if entry requirement not fulfilled)	
2nd Semester	Theory of Translation: basic concepts of the theory of translation; conceptual framework for the study of translation theory; tools to identify, analyze, and resolve translation problems; develop a rational approach to translation	
Summer	Internship	
3rd Semester	Computer-Assisted Translation: principles and techniques for managing large-scale multilingual translation, publishing, and software localization projects; make-up of translation industry and community; machine translation; automation in the translation environment; terminology management; document management; typesetting; software internationalization and localization; project management; translation task breakdown and integration; translators as independent contractors	Readings in Interpretation Research: introduction to multidisciplinary research on interpretation; relevance of theoretical works to an interpreter's practice; identification of salient issues in interpreting; completion of action research project Forum I: consecutive; working in front of an audience; organizing a conference, selecting topics and delegates, preparing speeches and arguments, interpreting the proceedings Practicum in Interpretation: simulates professional conference interpreting conditions; familiarity with multilingual settings in which all modes of interpreting are called for and relay interpreting is the norm; concepts of evaluation and self-evaluation
	Project Management: [no course description in GSTI brochure] Terminology Management: [no course description in GSTI brochure]	Career information, internship and job placement services through Career Development Office; referral and placement services throughout career

Table 5.3. (continued)

	Translation	Interpretation
4th Semester	<p>Translation as a Profession; practical knowledge necessary to succeed as freelance or in-house translators; role of translator; realities of working in the profession; job market, salaries, future trends; resume and cover letter writing; finding clients or employers; marketing, advertising, negotiating; legal and tax issues; exposure to translation technology; including computers, business software, on-line services, the Internet and WWW, machine-assisted and machine translation software</p> <p>Software Localization: walk through localization of an entire Windows sample application; familiarization with technical aspects of the profession; operation of software tools and packages commonly used in the localization industry</p> <p>Masters thesis (MAT only)</p>	<p>Interpretation as a Profession: introduction to the profession; preparation for practical work; awareness of different professional environments, professional ethics, interpersonal relations, conference organization, diplomatic etiquette, parliamentary procedure, professional pride and dignity; establish identity as professional interpreter; includes Forum I and II</p> <p>Forum II: simultaneous; same as Forum I</p>

with commercial and economic texts in the third semester and political and technical speeches in the fourth. In terms of hidden curriculum, it must also be stated that many instructors focus on economic topics in second semester consecutive courses and introduce technical texts in both consecutive and simultaneous courses in the third. No precise information is extant on which programs or individual instructors follow this pattern. See Table 5.2.

In the first semester, professional knowledge is handled exclusively in language-specific courses. An introduction to the theory of translation is given in a lecture format in the second. Most professional knowledge covered in general courses is provided in the second year, with computer-assisted translation, project and terminology management (in the third semester for translation), and an overview of Interpreting Studies and an action research project (in the third semester for interpretation). The fourth semester is devoted to software localization (translation) and business-related aspects of the professions for both degree tracks. In addition, a practicum is offered throughout the second year for conference interpretation students. The practicum provides training in real-life settings to hone interpretation skills. Career information is provided throughout the course of studies through the Career Development Office. Students generally complete an internship between the second and third semesters of study. See Table 5.3.

3.3 Interaction: Educational environment

The Graduate School of Translation and Interpretation stresses in its curriculum brochure that students will join an active professional community and become part of a constructive learning environment. Professors regard themselves as mentors, and a “collegial approach to training is the basis of the educational philosophy.” In addition, “GSTI professors strive to instill a professional sense of conduct and ethics in their students. After students complete the rigorous GSTI program, they are confident in their professional abilities.” This official curriculum document stresses the constructive nature of faculty-student interaction. Reflective practice is stressed in the Interpreting Studies and practicum classes, as well as in language-specific interpretation coursework. The result is a learning-centered environment that stresses collegiality and professionalism:

Teamwork is an essential aspect of both translating and interpreting; interpersonal, intercultural, and networking skills are an integral part of a translator’s or interpreter’s training. GSTI professors regard their students as future col-

leagues with whom they share their knowledge, experience and culture. . . . At the Monterey Institute, translation and interpretation students have an unparalleled opportunity for personal growth and professional development in the unique and highly stimulating atmosphere of GSTI.

A theoretical foundation is also laid through Translation and Interpreting Studies courses with paper requirements. Students pursuing a Master of Arts in Translation must also fulfill a thesis requirement, which may be either a translation, an academic research project, or a combination of both areas. It must, however, also be stressed that little concrete information is available to faculty on the hidden humanistic curriculum, as students may not be forthcoming if they have negative feelings. Exam anxiety and a related disconnect between student and faculty perceptions of the purposes of eliminatory examinations (*Qualifying Examinations*) after the first year have however been documented (Houba 1996).

3.4 Assessment and the curriculum

For entry into the program, students must complete the *Early Diagnostic Test* (EDT) in addition to fulfilling academic requirements. The EDT is used to assess the applicant's language proficiency; follow-up is conducted through a telephone interview. According to the GSTI promotional brochure, the *Qualifying Examinations* at the end of the second semester of study serve the purpose of determining the preparedness of students for the second year of study. A set of comprehensive *Professional Examinations* must also be passed after completion of the curriculum requirements. It is stressed in the curriculum materials that students may retake any exams as often as they wish in the event that they do not pass. These examinations are "graded by professional juries composed of GSTI professors, and are reviewed or observed by prospective employers from international organizations who are also professionals working in the field." No additional information is provided in the official curriculum on the relationship between or the degree of integration of the curriculum and these three assessment instruments.

CHAPTER 6

Case study Part I

Translation and interpretation competence

1. Introduction

The Graduate School of Translation and Interpretation (GSTI), one of four professional schools within the Monterey Institute of International Studies (MIIS), California, is one of the few member institutes of the *Conférence Internationale d'Instituts Universitaires de Traducteurs et Interprètes* (CIUTI) that offers a combined degree in the applied language arts: a Master of Arts in Translation and Interpretation (MATI). The GSTI offers two other degrees as well: a Master of Arts in Translation (MAT) and a Master of Arts in Conference Interpretation (MACI). The popularity of the combined MATI degree among students and the high placement rate of graduates, who usually study translation and interpretation in one language pair, has shown that the MATI provides job skills that are highly marketable in the language industry around the world.¹ To date, no research has been conducted to determine whether there is a systematic relationship between interpretation and translation skills among graduates of this program, a modified Y-track curriculum model (see Figure 6.1).

For these reasons, this case study explores the following two null hypotheses, which are tested using a chi-square procedure (H_0^1) and a lambda procedure (H_0^2):

H_0^1 : There is no relationship between highly developed translation skills and proficiency in language interpreting as measured by scores on the final degree examinations in simultaneous and consecutive interpreting among first-time candidates in the GSTI.

H_0^2 : The degree track of a student (MATI or MACI) is not an indicator of proficiency in language interpreting as measured by scores on the final degree examinations in simultaneous and consecutive interpreting among first-time candidates in the GSTI.

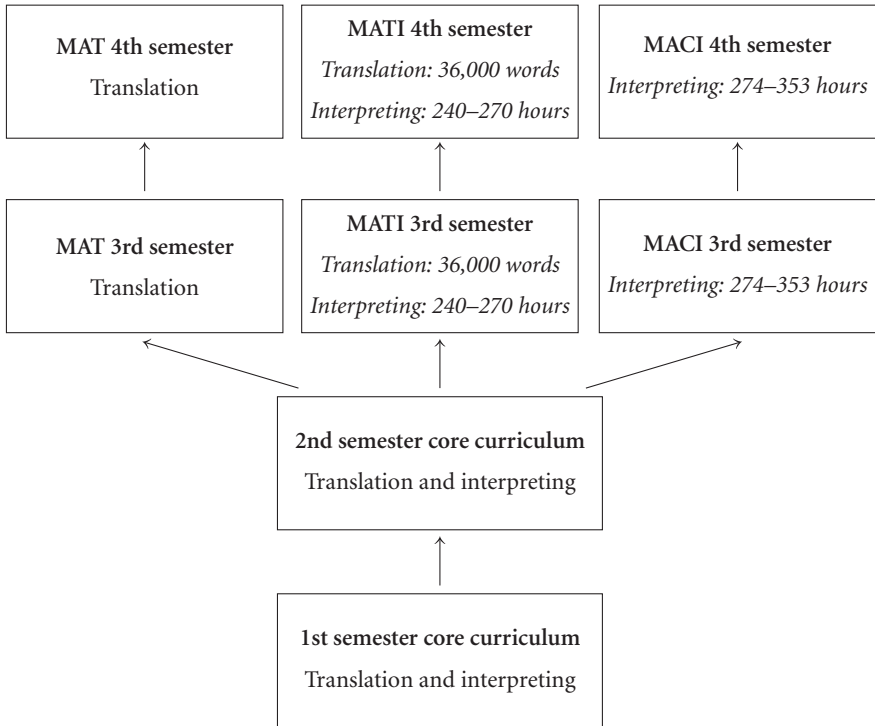


Figure 6.1. Quantitative differences in GSTI’s modified Y-track curriculum

H_0^1 addresses whether there is a significant relationship between the dependent and independent variables, i.e., whether translation skills have an influence on proficiency in interpretation. In contrast, H_0^2 addresses whether the independent variable is an indicator of the dependent variable, i.e., whether membership in a degree track can serve as a predictor of how well students will perform in the interpretation exams.

In the context of these research questions, the independent variable “highly developed translation skills” is defined as successful completion of the second-year translation curriculum as prescribed for the MATI degree in GSTI. Participation in the translation exams at the end of the second year indicates whether students have followed the second-year curriculum in translation, as students must have taken a set of core translation courses in order to participate in the exams. In the strictest sense, this variable may also be operationalized as “translation instruction,” i.e., “participation in the second-year translation curriculum.” The variable “proficiency in language interpreting” is measured

by scores on the Professional Examinations in consecutive and simultaneous interpretation, a set of summative tests required for graduation.

2. Method

2.1 Quantitative description of curriculum in the GSTI

The Graduate School of Translation and Interpretation (GSTI) offers three Master of Arts degrees in a modified Y-track model:

- Master of Arts in Translation (MAT)
- Master of Arts in Translation and Interpretation (MATI)
- Master of Arts in Conference Interpretation (MACI)

The modification of the Y-track lies in the fact that a degree combining translation and interpretation is possible. The required period of study is normally two years, or four semesters. Students may also spend additional time abroad or apply for advanced-entry status, in which case students generally study for three years or one year, respectively. Students may pursue any of these degrees with either a two-language combination (A/A or A/B) or a three-language combination (A/A/C, A/B/C, or A/C/C). The A/B and A/B consec/C combinations are the most frequent.²

2.1.1 *First-year curriculum for MATI and MACI*

The following is a quantitative description of the first-year GSTI curriculum for the MATI and MACI degree tracks. The MAT degree track is excluded, since it is not the subject of this study. Between 1994 and 1999, several changes to the curriculum were introduced, which reflect the ongoing specialization of training for future translators and interpreters. These changes are discussed at relevant points in the following section.

During the first year of studies, students in all degree tracks follow a very similar curriculum, unless they opt to major in translation, thus excluding interpretation from their coursework. Notable differences between the two degree tracks, although minor in scope, are described below.

First Year Courses	Credits
Fall Semester	

MATI in two languages (MATI-2):

Basic Translation Exercises: B – A

4

Basic Translation Exercises: A – B	4
Introduction to Consecutive Interpretation: A – B; B – A	4
Electives	4

MATI in three languages (MATI-3)

Same as above except:

No Electives

Basic Translation Exercises: C – A	2
------------------------------------	---

Introduction to Consecutive Interpretation: C – A	2
---	---

MACI: Same as MATI-2 and MATI-3

Spring Semester

MATI-2

Translation of Economic Texts: A – B	4
--------------------------------------	---

Translation of Economic Texts: B – A	4
--------------------------------------	---

Translation Theory	2
--------------------	---

Consecutive Interpretation of Extemporaneous Speech: A – B; B – A	4
---	---

Strategies of Simultaneous Interpretation: B – A	2
--	---

MATI-3

Translation of Economic Texts: B – A	4
--------------------------------------	---

Translation of Economic Texts: C – A	4
--------------------------------------	---

Translation Theory	2
--------------------	---

Consecutive Interpretation of Extemporaneous Speech: A – B; B – A	4
---	---

Consecutive Interpretation of Extemporaneous Speech: C – A	2
--	---

Strategies of Simultaneous Interpretation: B – A; C – A	4
---	---

MACI-2

Translation of Economic Texts: A – B	4
--------------------------------------	---

Translation of Economic Texts: B – A	4
--------------------------------------	---

Consecutive Interpretation of Extemporaneous Speech: A – B; B – A	4
---	---

Strategies of Simultaneous Interpretation: A – B; B – A	4
---	---

Electives

MACI-3

Translation of Economic Texts: B – A; C – A	8
---	---

Consecutive Interpretation of Extemporaneous Speech: A – B; B – A; C – A	6
--	---

Strategies of Simultaneous Interpretation: B – A, C – A	4
---	---

The courses taken by students in the MATI and MACI degree tracks are the same with the exception of the translation theory requirement for MATI

students during the second semester. In addition, students following the MACI degree in some languages (Chinese, Japanese, Korean, Russian, and sometimes Spanish) also take a simultaneous interpretation course from their A language into their B language. During the period under review, a two-language MACI degree was not offered in the French and German programs.

In the courses Basic Translation Exercises and Translation of Economic Texts, thirty to fifty percent of class time is devoted to sight translation. Therefore, the amount of time spent on written as opposed to oral translation skills during the first year of study is roughly, albeit not strictly, equivalent.

Note-taking techniques are taught in the consecutive interpretation courses. In addition, a one-credit elective is offered across the language programs during the first semester of study. Many students do not have room for this course in their schedules, however. This elective lasts seven weeks and includes memory and active listening exercises in addition to a general introduction to note-taking skills. This course was first offered in 1997.

At the end of the first year, students are required to take Qualifying Examinations in their language combination and disciplines in order to continue their studies in the selected degree track in the second year. Although students may opt to follow the MACI curriculum during their second semester, failure to pass the Qualifying Examinations in interpretation would jeopardize the possibility to earn a degree within two more semesters of study. For this reason, students are generally advised to stay on the MATI degree track until completion of the Qualifying Examinations; it is only rarely the case that students do not follow the MATI curriculum in their second semester.

Therefore, for the majority of MATI and MACI students, substantial differences in curriculum generally do not emerge in practice until the second year of studies.

2.1.2 *Second-year curriculum for MATI and MACI*

MATI students have the following second-year curriculum, which varies according to the number of languages in their combination:

Second-Year Courses for MATI

Fall Semester	Credits
MATI-2	
Translation Proseminar: A – B; B – A	4
Translation of Scientific and Technical Texts: A – B; B – A	4
Consecutive Interpretation of Economic and Commercial Speeches: A – B; B – A	4

Simultaneous Interpretation of General and Economic Speeches: B – A	2
Readings in Interpretation Research	2
[Legal Translation: Spanish and Korean only	2]

MATI-3

Translation Proseminar: B – A; C – A	4
Translation of Scientific and Technical Texts: B – A; C – A	4
Consecutive Interpretation of Economic and Commercial Speeches: B – A; C – A	4
Simultaneous Interpretation of General and Economic Speeches: B – A; C – A	4
Readings in Interpretation Research	2

Spring Semester

MATI-2

Advanced Translation Seminar: A – B; B – A	4
Translation of Political and Legal Texts: A – B; B – A	4
Business of Translation	1
Consecutive Interpretation of Political Speeches: A – B; B – A	4
Simultaneous Interpretation of Political and Technical Speeches: B – A	2
[Court Interpretation: Spanish and Korean only	2]

MATI-3

Advanced Translation Seminar: B – A; C – A	4
Translation of Political and Legal Texts: B – A; C – A	4
Consecutive Interpretation of Political Speeches: A – B; B – A; C – A	6
Simultaneous Interpretation of Political and Technical Speeches: B – A; C – A	4

Students pursuing a Master of Arts in Conference Interpretation have the following second-year curriculum, which varies according to the number of languages in their combination:

Second-Year Courses for MACI

Fall Semester: Credits

MACI-2

Consecutive Interpretation of Economic and Commercial Speeches: A – B; B – A	4
Simultaneous Interpretation of General and Economic Speeches: A – B; B – A	4

Interpretation Practicum	4 or 2
Readings in Interpretation Research	4
MACI – 3	
Consecutive Interpretation of Economic and Commercial Speeches: A – B; B – A; C – A	6
Simultaneous Interpretation of General and Economic Speeches: B – A; C – A	4
Interpretation Practicum	4 or 2
Readings in Interpretation Research	4
Spring Semester:	
MACI-2	
Consecutive Interpretation of Political Speeches: A – B; B – A	4
Simultaneous Interpretation of Political and Technical Speeches: A – B; B – A	4
Interpretation Practicum	4 or 2
Interpretation as a Profession	2
MACI-3	
Consecutive Interpretation of Political Speeches: A – B; B – A; C – A	6
Simultaneous Interpretation of Political and Technical Speeches: B – A; C – A	4
Interpretation Practicum	4
Interpretation as a Profession	2

2.1.3 *Second-year translation coursework for MATI*

In terms of course load, second-year MATI-2 students complete 16 credits of translation courses in their language pair: 2 credits per course, 8 courses in total. One credit entails 50 minutes of classroom instruction per week. The course breakdown is as follows:

- 4 credits of scientific and technical translation
- 4 credits of political and legal translation
- 4 credits of proseminar in translation (miscellaneous specialized texts)
- 4 credits of advanced seminar in translation (miscellaneous specialized texts)

In each category, 2 credits of translation are completed in each language direction: English into the foreign language, foreign language into English. On average, these two semesters cover a period of 30 weeks (15 weeks each).

Table 6.1. Number of words translated by second-year MATI-2 students

	B into A 600 words per week for 15 weeks	A into B 600 words per week for 15 weeks	Total 600 words per week for 30 weeks
Proseminar (miscellaneous specialized texts)	9,000	9,000	18,000
Advanced Proseminar (miscellaneous specialized texts)	9,000	9,000	18,000
Scientific and Technical Texts	9,000	9,000	18,000
Political and Legal Texts	9,000	9,000	18,000
<i>Total</i>	<i>36,000</i>	<i>36,000</i>	<i>72,000</i>

Table 6.2. Number of words translated by second-year MATI-3 students

	B into A 600 words per week for 15 weeks	C into A 600 words per week for 15 weeks	Total 600 words per week for 30 weeks
Proseminar (miscellaneous specialized texts)	9,000	9,000	18,000
Advanced Proseminar (miscellaneous specialized texts)	9,000	9,000	18,000
Scientific and Technical Texts	9,000	9,000	18,000
Political and Legal Texts	9,000	9,000	18,000
<i>Total</i>	<i>36,000</i>	<i>36,000</i>	<i>72,000</i>

During this time period, students translate approx. 600 words per week per course (4 courses a week), totaling 2,400 words a week. In total, MATI-2 students translate roughly 72,000 words over the course of the year. Exact course content may vary according to instructor and language combination; for this reason, a conservative estimate that does not include sight translation is given. Individual students may also translate additional material either as interns or as freelance translators. These figures are shown in summary in Table 6.1. The corresponding figures for MATI-3 students are shown in Table 6.2.

In addition, a translation thesis was required of MATI students until Spring Semester 1996, when this requirement was dropped due to course overload. A translation thesis was typically a 20,000-word translation of a text of the student's choice, subject to approval by the thesis adviser. Group translations, requiring project management skills including terminological and editing coordination, were also possible. The total word count per student was lower in the case of group translations.

Sight translation is part of the regular translation curriculum in the GSTI. Prior to 1998, sight translation was listed under a separate course heading; the credits for all first- and second-year translation courses were split evenly between sight and written translation, with the exception of the Translation Proseminar and Advanced Translation Seminar, which were devoted solely to written translation. Sight and written translation courses were combined in 1998 with the mandate that not less than one-third of total class time be devoted to sight translation.

Since the coursework for interpretation overlaps in the MATI and MACI degree tracks, it is described for both groups in the following section.

2.1.4 Second-year interpretation coursework for MATI and MACI

MACI-3 students have the same coursework as MACI-2 students, with the exception that they interpret simultaneously from their C into their A language instead of from their A into their B language. Moreover, they interpret consecutively from their C into their A language in addition to their A-B-A combination.

In addition to the translation coursework described in Section 2.1.3, MATI students complete the same curriculum in interpretation as MACI students with the exception of the Interpretation Practicum. MACI students take Readings in Interpretation Research for 4 credits, MATI for 2 credits. Interpretation as a Profession is an elective for MATI students.

In interpretation, MATI-2, MATI-3 and MACI-2 students all complete 4 credits of consecutive interpretation of commercial/technical speeches (2 credits in each direction) and 4 credits of consecutive interpretation of political speeches (2 credits in each direction). MACI-3 candidates take an additional 4 credits of consecutive interpretation from their C into their A language. MATI-2 and MATI-3 students have 2 credits of simultaneous interpretation of general and economic speeches and 2 credits of simultaneous interpretation of political and technical speeches. MACI-2 students complete these 4 credits of simultaneous interpretation from their A into their B language as well. MATI-3 and MACI-3 students enroll for the latter 4 credits of simultaneous

interpretation from their C into their A language instead of from their A into their B language.

Furthermore, all students practice interpretation on their own or in small groups for several hours a week. Although the number of hours spent in practice sessions outside the classroom fluctuates considerably, a conservative estimate of the average total number of hours of consecutive and simultaneous interpretation practice is 10 hours per week. These sessions may be held in the interpretation labs, in other classrooms on campus, or at home. Practice material includes speeches from class, additional materials provided by instructors and texts selected independently by the students.

In contrast to MATI students, over the course of two semesters, MACI students complete 4, 6, or 8 credits of practicum in consecutive and simultaneous interpretation. In this course, students interpret outside of the interpretation classroom in conference and community interpreting settings. Events include consecutive interpretation in bilateral negotiations simulation (selected languages on a rotational basis each semester), European Union sim-

Table 6.3. Number of interpretation class hours for MATI-2 students

	B into A	A into B	C into A	Total
	Total for two semesters (hours per week \times 30 weeks)			
Class hours of consecutive interpretation	60	60	***	120
Class hours of simultaneous interpretation	60	***	***	60
Total number of hours of individual or group study for all combinations	***	***	***	300
<i>Total</i>	<i>120</i>	<i>60</i>	<i>***</i>	<i>480</i>

Table 6.4. Number of interpretation class hours for MATI-3 students

	B into A	A into B	C into A	Total
	Total for two semesters (hours per week \times 30 weeks)			
Class hours of consecutive interpretation	60	60	60	180
Class hours of simultaneous interpretation	60	***	60	120
Total number of hours of individual or group study for all combinations	***	***	***	300
<i>Total</i>	<i>120</i>	<i>60</i>	<i>120</i>	<i>600</i>

Table 6.5. Number of interpretation class hours for MACI-2 students

	B into A	A into B	C into A	Practicum	Total
	Total for two semesters (hours per week × 30 weeks)				
Class hours of consecutive interpretation	30	30	***	***	60
Class hours of simultaneous interpretation	30	30	***	***	60
Total number of hours of individual or group study for all combinations	***	***	***	***	300
Practicum: either consecutive or simultaneous	***	***	***	128, 192, or 256	128, 192, or 256
<i>Total</i>	<i>60</i>	<i>60</i>	<i>***</i>	<i>128, 192, or 256</i>	<i>548, 612, or 676</i>

Table 6.6. Number of interpretation class hours for MACI-3 students

	B into A	A into B	C into A	Practicum	Total
	Total for two semesters (hours per week × 30 weeks)				
Class hours of consecutive interpretation	30	30	30	***	90
Class hours of simultaneous interpretation	30	***	30	***	60
Total number of hours of individual or group study for all combinations	***	***	***	***	300
Practicum: either consecutive or simultaneous	***	***	***	128, 192, or 256	128, 192, or 256
<i>Total</i>	<i>60</i>	<i>30</i>	<i>60</i>	<i>128, 192, or 256</i>	<i>578, 642, or 706</i>

ulation (French, German, and Spanish on a regular basis; Chinese, Japanese, Korean, and Russian on occasion), simultaneous and consecutive interpretation of guest speakers at the Monterey Institute of International Studies (all languages), and community interpreting at social service agencies and community events in Monterey County (primarily Chinese, Korean, and Spanish).

As of Fall Semester 1998, students taking the practicum for 2 credits are required to log 64 hours of interpretation practice over the course of one semester; similarly, students enrolled in the practicum for 4 credits spend 128 hours on practicum events per semester. Therefore, over the course of

two semesters, MACI students may enroll in the practicum for either 4, 6, or 8 credits, or 128, 192, or 256 hours, respectively. This time cannot be equated with time spent interpreting, however. Organizing speakers, staffing booths, gathering documentation – all tasks required of students serving as chief interpreters for practicum events – are also part of required course work; time spent on these tasks counts toward this course requirement.

Prior to 1998, the total number of hours spent on the practicum was lower. Documentation in GSTI on the evolution of the practicum is incomplete. However, in-house documentation shows that an early form of the present practicum was in place in GSTI in the early eighties. The practicum was reinstated as part of the regular required curriculum for MACI degree students in Fall Semester 1996. Until fall 1996, students had the opportunity to interpret at events similar to the practicum in its present form, but such events were not as frequent; their impact on total interpretation practice cannot be quantified reliably. Since 1996, the practicum has evolved into its present form as outlined above (Harmer 1999).

The corresponding number of hours for each degree track – MATI-2, MATI-3, MACI-2, and MACI-3 students – is shown per mode of interpretation and language direction for the second year (two semesters) in Tables 6.3 through 6.6. A summary of the quantitative differences in the MATI and MACI degree tracks is provided in Figure 6.1.

2.1.5 *Advanced-entry course of study*

The GSTI also offers an advanced-entry Master of Arts. This course of study is completed in two semesters and is roughly equivalent to the second year of study in the corresponding degree track. Advanced-entry students must meet all general admission requirements, pass the Qualifying Examinations in their degree track, and hold a degree from a recognized school of translation and interpretation or provide evidence of significant professional experience. Significant professional experience is demonstrated through substantial experience as a conference interpreter for the MACI degree track, or a translation portfolio for the MAT degree track. Candidates seeking admission to MATI with advanced-entry status must hold a corresponding degree or document substantial experience in both translation and interpretation.

2.1.6 *The GSTI hidden curriculum*

Students adhere closely to the GSTI curriculum in their particular degree track. Fluctuations may occur when a student drops a second language during the first year of study. No consistent data are available on this variable. Some

students may also extend their program over a three-year period by spending a year abroad after completion of their second semester. Once students have begun the second year of study, they follow the course sequence until the Professional Examinations. A small number of students may drop their C language in their third semester. In addition, sight translation features heavily in the curriculum, although this fact may no longer be readily apparent to external observers reading the course titles. Approximately 50 percent of the total amount of instruction in the translation classroom is devoted to the sight translation of texts. The importance of sight translation is also stressed in the interpretation classroom. In the pedagogical philosophy of GSTI, 'translation' as a course designation encompasses both written and sight.

2.2 Subjects

The subjects of this study (N = 260) are students taking the Professional Examinations in GSTI for the first time during the period from 1994 to 1999. Professional Exams are held after the fourth semester of GSTI studies.

Table 6.7. Frequencies of MATI and MACI students who took GSTI's Professional Examinations in interpretation between 1994 and 1999

Degree Track	Frequency	Percent
MACI	66	25.4
MATI	194	74.6
<i>Total</i>	<i>260</i>	<i>100.0</i>

Table 6.8. Frequencies of students who took GSTI's Professional Examinations in interpretation between 1994 and 1999 by A, B, and C language

	A Language		B Language		C Language		Total Frequency
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Chinese	79	30.4	4	1.5			83
English	72	27.7	188	72.3			260
French	7	2.7	11	4.2	13	5	31
German	11	4.2	11	4.2	4	1.5	26
Japanese	45	17.3	12	4.6			57
Korean	15	5.8	1	0.4			16
Russian	13	5.0	9	3.5	3	1.2	25
Spanish	18	6.9	24	9.2	5	1.9	47
<i>Total</i>	<i>260</i>	<i>100.0</i>	<i>260</i>	<i>100.0</i>	<i>25</i>	<i>9.6</i>	<i>545</i>

Table 6.9. Frequencies of Students who took GSTI's Professional Examinations in interpretation between 1994 and 1999 by degree track and language combination

A Language	B Language	C Language	Degree		Total
			MACI	MATI	
Chinese	English		17	62	79
English	Chinese		1	3	4
	French		1	10	11
	German			11	11
	Japanese		2	9	11
	"	German	1		1
	Korean		1		1
	Russian			7	7
	"	French	1		1
	"	German		1	1
	Spanish			17	17
French	English		1	1	2
	"	German	1	1	2
	"	Spanish	1	2	3
	English			6	6
German	English			6	6
	"	French	2		2
	"	Russian	1		1
Japanese	English			6	6
	English		9	6	15
	English		3	9	12
Korean	English			9	9
	"	French	1		1
Russian	English		6	39	45
	English		9	6	15
Spanish	English		3	9	12
	"	French	1		1
Total	English		5	9	14
	"	French	3	1	4
<i>Total</i>			<i>66</i>	<i>194</i>	<i>260</i>

Students must pass all sections of the Professional Exams in interpretation to be eligible for graduation. Subjects are in one of two degree tracks: the Master of Arts in Translation and Interpretation (MATI) or the Master of Arts in Conference Interpretation (MACI). Subjects study in one or more of seven language programs: Chinese, French, German, Japanese, Korean,

Russian, and/or Spanish. The Korean program was established in the fall of 1996. All subjects have English as either their A or B language. All subjects were regularly enrolled second-year students who followed the regular curriculum in the GSTI for a minimum of two semesters prior to taking the Professional Examinations.

Language-specific strategies may play a role in interpretation. Therefore, exposure to strategies in C/A and A/B simultaneous language combinations may influence students' translation and interpretation abilities in their B/A combination. Although a research design controlling for third languages would have been preferable, data were insufficient to eliminate this variable. However, the number of students with three languages is low (MATI-3 = 1; MACI-3 = 18). Therefore, the probability of a pattern influencing the statistical analysis is not strong.

The following tables contain the frequencies of students by degree track (two and three language combinations are collapsed in Table 6.7), and by A, B, and C language (Table 6.8). In addition, a crosstabulation of students by language combination and degree track is given in order to document the number of students in each language combination and degree track category (Table 6.9).

2.3 Materials – Professional Examinations in the GSTI

The Professional Examinations in the Graduate School of Translation and Interpretation are a series of comprehensive, summative assessment instruments administered after the fourth semester of study. The examinations are required for graduation from the GSTI. The examinations are administered in the translation of written general and technical (specialized) texts and the consecutive and simultaneous interpretation of general and technical (specialized) speeches. The exams that are required depend on the degree track and number of languages in the degree combination. Table 6.10 provides an overview of the examination requirements for written translation in place since 1998 per language and degree track. Before 1998, sight translation examinations were also administered. They are, however, not the subject of this study and, therefore, not included below.

Table 6.10 summarizes the translation examinations. Tables 6.11 and 6.12 provide an overview of the examination requirements per language and degree track for consecutive and simultaneous interpretation, respectively.

Table 6.10. GSTI's Professional Examinations in translation by degree track and A, B, C language combination

	B into A	A into B	C into A
MAT-2	2 exams, one general and one technical text; each 600 words in two hours for F, G, S, R – or – each 600 words in three hours for C, K, J	2 exams, one general and one technical text; each 500 words in two hours for F, G, S, R – or – each 500 words in three hours for C, K, J	***
MAT-3	2 exams, one general and one technical text; each 600 words in two hours for F, G, S, R – or – each 600 words in three hours for C, K, J	2 exams, one general and one technical text; each 500 words in two hours for F, G, S, R – or – each 500 words in three hours for C, K, J	2 exams, one general and one technical text; each 600 words in two hours for F, G, S, R – or – each 600 words in three hours for C, K, J
MATI-2	2 exams, one general and one technical text; each 600 words in two hours for F, G, S, R – or – each 600 words in three hours for C, K, J	2 exams one, general and one technical text; each 500 words in two hours for F, G, S, R – or – each 500 words in three hours for C, K, J	***
MATI-3	2 exams, one general and one technical text; each 600 words in two hours for F, G, S, R – or – each 600 words in three hours for C, K, J	2 exams, one general and one technical text; each 500 words in two hours for F, G, S, R – or – each 500 words in three hours for C, K, J	2 exams, one general and one technical text; each 600 words in two hours for F, G, S, R – or – each 600 words in three hours for C, K, J
MACI-2	***	***	***
MACI-3	***	***	***

Table 6.11. GSTI's Professional Examinations in consecutive interpretation by degree track and A, B, C language combination

	B into A	A into B	A into C
MAT-2	***	***	***
MAT-3	***	***	***
MATI-2	1 general and 1 technical speech, 5 minutes each	1 general and 1 technical speech, 5 minutes each	***
MATI-3	1 general and 1 technical speech, 5 minutes each	1 general and 1 technical speech, 5 minutes each	1 general and 1 technical speech, 5 minutes each
MACI-2	1 general and 1 technical speech, 5 minutes each	1 general and 1 technical speech, 5 minutes each	1 general and 1 technical speech, 5 minutes each
MACI-3	1 general and 1 technical speech, 5 minutes each	1 general and 1 technical speech, 5 minutes each	1 general and 1 technical speech, 5 minutes each

Table 6.12. GSTI's Professional Examinations in simultaneous interpretation by degree track and A, B, C language combination

	B into A	A into B	C into A
MAT-2	***	***	***
MAT-3	***	***	***
MATI-2	1 general speech without and 1 technical speech with text, 10 minutes each	***	***
MATI-3	1 general speech without and 1 technical speech with text, 10 minutes each	***	1 general speech without and 1 technical speech with text, 10 minutes each ***
MACI-2	1 general speech without and 1 technical speech with text, 10 minutes each	1 general speech without and 1 technical speech with text, 10 minutes each	***
MACI-3	1 general speech without and 1 technical speech with text, 10 minutes each	***	1 general speech without and 1 technical speech with text, 10 minutes each

2.3.1 Text selection

For all exams out of another language into English, exam texts are selected independently by each language programs. These texts are not subject to review outside the language program. The same texts are used for students in the MATI and MACI degree tracks.

For examinations out of English into another language, however, a central committee chooses all texts for use in all language programs. The rationale for this procedure is that it guarantees a higher degree of consistency and fairness in the exams across the language programs. This issue is further explored in Part II and Part III of the case study. The exception to this centralized procedure is the selection technical texts for examinations in simultaneous interpretation with text out of English into another language; texts for these exams are selected by each language program in the same manner as the non-English language source texts. These texts are placed in the central text pool, however, so that programs can use the same text if they wish.

2.3.2 Text delivery

All speeches are delivered extemporaneously either live by a native speaker and member of the interpretation faculty or taped on an authentic audio or video soundtrack from a conference. An exception is the Spanish program, which also videotapes faculty delivering speeches and uses these tapes as source material for examination purposes. The survey of exam jury members in

Chapter 7 documents the mode in individual language programs. See also Section 1.3 of Chapter 8 on discrepancies between written text and oral delivery.

2.3.3 *Examinations in consecutive interpretation*

The examinations in consecutive interpretation consist of two parts: interpretation of a five-minute speech on a general topic and interpretation of a five-minute speech on a technical topic. Topics are not indicated in advance in either case, nor is time for advance preparation given. Students take notes. In some language programs, the five-minute speech is not delivered as one block of text. Rather, the speaker pauses intermittently to allow the candidate to interpret shorter passages. The exact length of individual segments has not been documented for each language program. This question is explored in the qualitative survey.

2.3.4 *Examinations in simultaneous interpretation*

The examinations in simultaneous interpretation consist of two parts: interpretation of a ten-minute speech on a general topic and interpretation of a ten-minute speech on a technical topic. The topics of neither the general nor the technical speeches are disclosed in advance. No preparation time is given for the general exam. The text of the technical speech, however, is given to students at the beginning of the examination. Students are allowed fifteen minutes of preparation time, during which they may consult dictionaries, glossaries, and other reference materials; students then enter the booths where they use the text for reference while they interpret the speech.

2.3.5 *Jury composition*

Juries consist of a minimum of three instructors in the relevant language combination. If additional instructors are available, juries may consist of more than three members (French, German, and Spanish). Representatives of government agencies, e.g., Language Services at the U.S. Department of State (French and Spanish), and international organizations, e.g., interpreters from the United Nations in New York (Chinese), may serve as external jury members. External jury members do not have voting rights, unless their presence is required to meet the three-member minimum (Chinese). The presence of external jury members is documented in the qualitative survey.

2.3.6 *Scoring criteria*

Prior to 1997, all interpretation examinations were scored on a numerical scale ranging from 0 to 100. From 1997 onward, all interpretation examinations have been scored on a pass-fail basis using an ordinal scale with four levels: high pass, pass, borderline fail, fail. To pass an examination, candidates must receive a corresponding score from the majority of jury members on each section. In the event of an evenly split vote, the jury reviews the recording of the interpretation and deliberates. If an impasse is reached, the chairperson casts the deciding vote. The chairperson is the head of the individual language program.

The scoring criteria for each category are laid out in a rubric (see Appendix A). However, informal discussions among faculty have shown that criteria and weighting diverge based upon individual exam philosophy. The jury member survey in Part II of the case study explores this issue.

2.3.7 *Scoring procedure*

When scoring examinations in interpretation, jury members use the prescribed GSTI forms. Prior to 1997, Form A was used; Form B was introduced in 1997 (see Appendix A). This change reflects the transition from a 100-point scale to an ordinal, pass-fail scale.

In the German, French, Korean, and Russian programs, scoring is carried out in situ in all exams. In the Chinese and Japanese Programs, and intermittently in the Spanish Program, where the number of interpretation exams administered per session may exceed 100 in each language combination, students are taped in groups in the simultaneous examinations. The Chinese and Japanese programs also tape the consecutive examinations in the booth. In this case, scoring is done post situ.

Jury conduct and the role of external examiners are explored in the jury member survey in Chapter 7. Exam guidelines and procedures are described in the GSTI Faculty Handbook.

2.4 Procedures – data collection

Data collection consisted of the following 7 steps:

Step 1: All files from the years 1994 to 1998 in the GSTI office were reviewed. In addition to students' full names, data on the following variables were entered into a comprehensive SPSS database. Only data on first-time participants were included; retakes were excluded from the database. Data on some variables not required for the present study were captured to facilitate future research:

gender	Nominal variable with two levels: male and female
examyyear	Year in which the student took the professional examinations in any degree track (MAT, MATI, MACI) for the first time Nominal variable with six levels: 1994–1998; data from 1999 were added at a later date
degdate	Year and exam session for which the student was awarded a degree. There are two exam sessions per year: May and August. The degree awarded to the student may not correspond to the variable “examyyear” or to the variable “degree” since a student who failed the interpretation examinations had the option of leaving the Institute with an MAT degree between 1994 and 1997. Nominal variable with 11 levels: May 1994 – incomplete
startyear	Year in which the student began studying in GSTI. All students began in the fall semester. Nominal variable with 8 levels: 1991–1998
status	Length of study in the program Nominal variable with 3 levels: Regular: two successive years of course work in GSTI Three-year: one year spent abroad between the first and second years in GSTI Advanced-entry: one year of course work in GSTI prior to Professional Exams
alang	Student’s A language, as defined by GSTI in accordance with the profession: “native language, or another language strictly equivalent to a native language” (Monterey Institute 1998: 8)
blang	Student’s B language, as defined by GSTI in accordance with the profession: “... first foreign language. Students are expected to have a near-perfect command of this language when entering GSTI” (8)
clang	Student’s C language, as defined by GSTI in accordance with the profession: “a passive foreign language from which a translator or interpreter will work into the A language” (8) alang, blang and clang are nominal variables with eight levels: Chinese, English, French, German, Korean, Japanese, Russian, and Spanish. English must be either the student’s A or B language.
degree	Degree track for which the student took the professional examinations. This is generally the degree track for which the student followed the curriculum during the second year as well. This variable is not always equivalent to the degree awarded to the student. Nominal variable with 6 levels:

MACI-2	Master of Arts in Conference Interpretation in two languages
MACI-3	Master of Arts in Conference Interpretation in three languages
MATI-2	Master of Arts in Translation and Interpretation in two languages
MATI-3	Master of Arts in Translation and Interpretation in three languages
MAT-2	Master of Arts in Translation in two languages
MAT-3	Master of Arts in Translation in three languages

For final analysis, the two- and three-language combinations are collapsed, resulting in 3 levels: MACI, MATI, and MAT. This step was necessary in order to meet the assumptions for chi-square and lambda.

Exam scores by exam type, each of which is a separate variable:

wgenbtoa	translation of a written general text from B into A
wtecbtoa	translation of a written technical text from B into A
wgenatob	translation of a written general text from A into B
wtecatob	translation of a written technical text from A into B
wgenctoa	translation of written general text from C into A
wtecctoa	translation of a written technical text from C into A
sgenbtoa	sight translation of a general text from B into A
stecbtoa	sight translation of a technical text from B into A
sgenatob	sight translation of a general text from A into B
stecatob	sight translation of a technical text from A into B
sgenctoa	sight translation of a general text from C into A
stecctoa	sight translation of a technical text from C into A
congbtoa	consecutive interpretation of a general speech from B into A
contbtoa	consecutive interpretation of a technical speech from B into A
congatob	consecutive interpretation of a general speech from A into B
contatob	consecutive interpretation of a technical speech from A into B
congctoa	consecutive interpretation of a general speech from C into A
contctoa	consecutive interpretation of a technical speech from C into A
simgbtoa	simultaneous interpretation of a general speech from B into A
sintbtoa	simultaneous interpretation of a technical speech from B into A
simgatob	simultaneous interpretation of a general speech from A into B
sintatob	simultaneous interpretation of a technical speech from A into B
simgctoa	simultaneous interpretation of a general speech from C into A
sintctoa	simultaneous interpretation of a technical speech from C into A

The statistical analysis in this case study looks solely at the following six exam variables, which the MATI and MACI degree tracks have in common:

congbo	consecutive interpretation of a general speech from B into A
contbto	consecutive interpretation of a technical speech from B into A
congatob	consecutive interpretation of a general speech from A into B
contatob	consecutive interpretation of a technical speech from A into B
simgbto	simultaneous interpretation of a general speech from B into A
simbtbto	simultaneous interpretation of a technical speech from B into A

All exam scores are ordinal variables with 4 levels:

- high pass (hp)
- pass (p)
- borderline fail (bf)
- fail (f)

For final analysis, these variables were collapsed to a nominal variable with 2 levels: pass (p) and fail (f). This step was necessary in order to meet the quantitative assumptions for chi-square and lambda.

Step 2: A list of exceptional cases was compiled during the data entry process. Exceptional cases include those files that were incomplete, e.g., exam score data, program entry date, and those files indicating that a student had not followed the regular curriculum for a specific degree track and/or had taken the Professional Exams under unusual circumstances, e.g., not during the regular exam session for the class in question. Subjects may have also taken additional examinations, e.g., simultaneous interpretation into the B language for MATI students.

Exceptional cases are the following. They are all included in the analysis, with the exception of the three cases with incomplete files listed below (F), for which faculty could not provide missing data.

A. MATI students (14) who took simultaneous interpretation exams into their B language:

- MATI in Russian and German in May 1994 (advanced entry)
- MATI in English and German in May 1995
- MATI in English and Japanese in May 1996
- MATI in English and Japanese in May 1996
- MATI in English and Spanish in May 1996
- MATI in Russian and English in May 1997
- MATI in Russian and English in May 1998

- MATI in English and Chinese in May 1995
- MATI in English and Chinese in May 1996
- MATI in Chinese and English in May 1995
- MATI in Chinese and English in May 1996
- MATI in Russian and English in May 1997
- MATI in Chinese and English in May 1996
- MATI in Chinese and English in May 1996

B. MACI students who took additional translation exams:

- MACI in Russian, English, and French in May 1994 (advanced entry) took translation exams into and out of A and B languages

C. Additional translation exams and/or curriculum in a non-degree language combination:

- MATI in French and English in May 1995; Spanish translation exams
- MATI in English and Spanish in May 1995; Japanese translation exams
- MACI in French and English in May 1995; degree incomplete; Japanese translation curriculum but no exams
- MATI in Russian and English in May 1997; Japanese translation curriculum but no exams

D. Irregular exam dates:

- MATI in Chinese and English; exams in August 1994 instead of May 1994
- MATI in Chinese and English in August 1994; advanced entry; no record of exams in May session; August scores entered in database

E. Ambiguous language combinations:

- MACI in English, Japanese, and German in May 1995; on file as Japanese, English, German; took simultaneous and consecutive exams from German into English, not German into Japanese; entered in database with English A, Japanese B, German C
- MACI in French and English in May 1995, double A combination; entered in database as A/B combination

F. Incomplete files – excluded from database:

- MATI in Japanese and English; passed retakes in August of 1996, but rest of file missing; no scores entered; scores for August on file

- MATI in Chinese and English in May 1996; interpretation exams into and out of A and B languages, no scores on file for translation professionals; MATI degree awarded in May 1994 according to Academic Records Office; 1992 program entry
- MATI in Chinese and English in August 1998; no scores on file

Step 3: In the case of all other incomplete files, faculty members from the respective programs supplied reliable data.

Step 4: The data were then compared against data provided by the Academic Records Office. The Records database contained the following information: name, gender, date of first enrollment, graduation date, degree awarded. Upon completion of the database, data were missing in 3 cases. They were excluded from the database and are listed under step 2F above.

Step 5: All score data were converted from numerical to nominal data. Prior to 1997, all exams were scored on a numerical scale from 1 to 100. Beginning in 1997, an ordinal scale was used: high pass, pass, borderline fail, and fail. (Translation examinations continued to be scored on the 100-point scale.) The numerical scale was collapsed to “pass”/“fail.” The categories “high pass” and “pass” were collapsed to “pass”; the categories “borderline fail” and “fail” were collapsed to “fail” for the purposes of this study.

Step 6: For statistical analysis, a final database was compiled containing the following variables: name, along, blang, clang, degree, congbttoa, contbttoa, congtatob, contatob, simgbttoa, and simtbttoa. Data spreadsheets are posted at the website <http://archimed.uni-mainz.de/pub/2001/0097>.

Step 7: In order to increase the number of cases available for analysis, exam data from the May 1999 session were added to the database. These data were copied from the GSTI's computer files. This step was taken in order to meet the assumptions for separate statistical processing of the Asian and European language combinations.

2.5 Analysis

A two-way chi-square analysis was run using SPSS to determine if there is a systematic relationship between degree track (a nominal variable with two levels: MATI and MACI) and exam scores in consecutive interpretation and simultaneous interpretation (a nominal variable with two levels: pass and fail). In cases where findings were significant, Phi was used to calculate the strength of association between the variables. All assumptions for chi-square were checked and met.

Lambda (proportional reduction in error) was run to determine if membership in a specific degree track, either MACI or MATI, is an indicator of performance on the Professional Examinations in interpretation. All assumptions for lambda were checked and met.

The six examinations that the MATI and MACI degree tracks have in common were analyzed:

- Consecutive Interpretation, General Speech, B into A (congntoa)
- Consecutive Interpretation, Technical Speech, B into A (contbtoa)
- Consecutive Interpretation, General Speech, A into B (congnatob)
- Consecutive Interpretation, Technical Speech, A into B (contatob)
- Simultaneous Interpretation, General Speech, B into A (simgntoa)
- Simultaneous Interpretation with Text, Technical Speech, B into A (simntbtoa)

Three analyses were run for chi-square and lambda each:

1. All students from 1994 to 1999
2. All Asian language students (Chinese, Japanese, Korean) from 1994 to 1999
3. All European language students (French, German, Russian, Spanish) from 1994 to 1999

Student file data were checked to see whether data are sufficient to allow a further breakdown according to language combination. Data were insufficient. Data were also checked to determine if they would allow matching across language programs to control for translator and interpreter training outside of the GSTI and language acquisition background. Data were insufficient.

The crosstabulations, chi-square, phi, and lambda analyses for all groups are posted at the website <http://archimed.uni-mainz.de/pub/2001/0097>.

3. Results

In the analyses, findings were as follows:

H₀¹: There is no relationship between highly developed translation skills and proficiency in language interpreting as measured by scores on the final degree examinations in simultaneous and consecutive interpreting among first-time candidates in the GSTI:

Significant for all students:

- Consecutive General A into B (congatob) with .027 significance at .05 alpha. Phi .135.
- Simultaneous General B into A (simgbtoa) with .03 significance at .05 alpha. Phi .135.

Therefore, in the consecutive general A into B examination and the simultaneous general B into A examination, there is a significant relationship between highly developed translation skills and proficiency in interpretation as measured by scores on the GSTI's Professional Examinations. In the remaining four cases, there is no significant relationship. Thus, in two of the six examinations, MATI students perform differently in interpretation than MACI students. This constitutes a fairly systematic relationship or pattern between degree track and performance.

Significant for Asian-language students:

- Consecutive General A into B (congatob) with .016 significance at .05 alpha. Phi .194.

Hence, in the consecutive general A into B examination, there is a significant relationship between highly developed translation skills and proficiency in interpretation for Asian-language students. In the five remaining examinations, there is no significant relationship. No significance was determined in the consecutive general A into B examination for European-language students.

Significant for European-language students:

- Simultaneous General B into A (simgbtoa) with .035 significance at .05 alpha. Phi .207.

Finally, in the simultaneous general B into A examination, there is a significant relationship between highly developed translation skills and proficiency in interpretation for European-language students. In the five remaining examinations, there is no significant relationship. No significance was determined in the simultaneous general B into A examination for Asian-language students.

While significance was determined at the .05 level in two out of six analyses for all students together, only one analysis was significant for the Asian and European languages when considered separately. Nor was the same analysis significant: Consecutive General A into B was statistically significant for the Asian-language group and Simultaneous General B into A for the European-language group.

Interestingly, phi totaled .135 for both significant findings for all students considered together. When considered separately, Phi was considerably

stronger, i.e., at .194 and .207 for the Asian group and the European group, respectively.

Therefore, the drop in the number of significant exams (one as opposed to two) is offset by the rise in the strength between the variables, or rise in ϕ (from 13 to 19 and 21 percent overlap, respectively).

H₀²: The degree track of a student (MATI or MACI) is not an indicator of proficiency in language interpreting as measured by scores on the final degree examinations in simultaneous and consecutive interpreting among first-time candidates in the GSTI:

None of the lambda analyses were significant; degree track is not an indicator of proficiency in language interpreting as measured by scores on the GSTI's Professional Examinations. Knowing the degree track (MATI or MACI) is of no assistance in predicting whether a student will pass or fail one of the Professional Examinations in interpretation under consideration in this study.

4. Discussion

The results of the statistical analysis are ambiguous and may be interpreted from different vantage points. On the one hand, significance was found in only two out of six examinations when all students are grouped together. When grouped separately as Asian-language and European-language students, findings are significant in only one in six examinations. When the total number of significant exams is considered, the results are not convincing evidence of differences in performance in interpreting by degree track. From this viewpoint, one cannot necessarily state that students who study interpretation exclusively perform better in the GSTI interpretation exams than students who study both translation and interpretation, which would be the expectation of some teachers of interpreting.

Without further research on curriculum models and assessment, one can only speculate as to the reasons for this pattern. One possible reason for the lack of significance in four out of six exams (all students grouped together) and five out of six exams (the Asian language and European language students as separate groups) may be the similarity in curriculum for the MATI and MACI degree tracks during the first two semesters. The one-year period in which all students follow the same coursework may have a leveling effect. A possible conclusion would be the need to introduce a separation of degree tracks at an earlier point in time, e.g., after one semester of study.

On the other hand, the differences in the examinations for which the results of the statistical analysis are significant are quite marked. When the results of the exams are taken individually, one could argue that there are considerable differences between the MATI and MACI degree tracks. From this perspective, one could argue that there is indeed a substantial difference in student performance in the MACI and MATI degree tracks, which some teachers of interpreting would expect.

Although the chi-square analysis does not permit a directional interpretation of the significant findings, the number of students who pass and fail each exam is revealing. In each significant exam, the percentage of MATI students who fail is approximately double that of MACI students. These figures are shown in Tables 6.13 through 6.16.

From this viewpoint, a possible conclusion would be that, when building expertise in interpretation, all students do not benefit in the same manner from the translation curriculum. The MATI curriculum is less suited for developing higher level interpretation skills in some modes and language directions. In the GSTT's curriculum model, completion of the second-year translation courses

Table 6.13. Number of students who failed consecutive general A into B

	MACI		MATI		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Pass	56	84.8	138	71.1	194	74.6
Fail	10	15.2	56	28.9	66	25.4
Total	66	100.0	194	100.0	260	100.0

Table 6.14. Number of students who failed simultaneous general B into A

	MACI		MATI		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Pass	55	83.3	135	69.6	190	73.1
Fail	11	16.7	59	30.4	70	26.9
Total	66	100.0	194	100.0	260	100.0

Table 6.15. Number of Asian-language students who failed simultaneous general B into A

	MACI		MATI		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Pass	34	91.9	86	72.9	120	77.4
Fail	3	8.1	32	27.1	35	22.6
Total	37	100.0	118	100.0	155	100.0

Table 6.16. Number of European-language students who failed simultaneous general B into A

	MACI		MATI		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Pass	25	86.2	49	65.3	74	71.2
Fail	4	13.8	26	34.7	30	28.8
Total	29	100.0	75	100.0	104	100.0

appears to detract from the ability to interpret in some modes and language directions. This interpretation of the findings is underscored by the fact that a higher percentage of students in the MATI degree track fail the significant exams than in the MACI degree track. Poorer performance of the MATI students may be due to a lack of time to practice interpretation in the MATI degree track or due to the greater intensity and range of interpretation practice in the MACI degree track.

This possible conclusion also points to the need for further research, in particular, for a more precise description of curriculum goals and objectives, course load, and course sequencing. An individualized approach to instruction and feedback (cognitive apprenticeship, career coaching) seems advisable. The need to run a more powerful statistical procedure than a chi-square test is evident. To make this possible, an ordinal scale that is used reliably for scoring would be required.

Despite the inclusive nature of the results of the statistical study, there can be little doubt that students should follow the MACI degree track, not MATI, if conference interpretation is their primary career goal. The MATI curriculum does not include interpretation skills in what most practitioners consider a viable language combination for conference interpreters. Simultaneous interpretation is practiced out of the foreign language into the mother tongue in only one language combination, which many practitioners would consider to be sufficient to earn a living through conference interpretation only in rare circumstances. The MATI degree track does not provide the same range of preparation for conference interpreting that is provided by the MACI degree track. As a result, the MATI degree should not be considered a qualification equivalent to the MACI degree.

Due to the popularity of the MATI degree, it cannot be assumed that the MACI students entered the GSTI program with stronger language skills or greater aptitude for conference interpreting than the MATI students. As cited in the GSTI's curriculum documents, many students choose the MATI degree

due to the range of skills it offers, which increases the students' marketability in the language industry. Some students may select this degree track even though they show great promise for conference interpretation.

The results of this study cannot be generalized to other training contexts. Only if the official and hidden curricula at other schools of translation and interpretation correspond very closely to the GSTI model can one extrapolate from these findings. Given the wide variety of curriculum models and the role of the hidden curriculum, however, it seems unlikely that these results can be generalized at all. This part of the case study does provide a framework for consideration and analysis in the discussion of reforms in other programs and the design of curriculum in future programs, however. Careful attention should be paid to the description of the aims and goals of the curriculum, teaching objectives and course content, and the sequencing in translation and interpretation instruction in individual degree tracks.

Fluctuation in test method facets, in particular differences in test administration, content, and scoring resulting from divergences in exam rationale and logistics pose a threat to the internal validity of this study. The survey of jury members in Part II of the case study has the objective of determining, among other things, how substantial this threat may be. Another threat to the validity of this study is the nature of the exam materials. If there is wide fluctuation in the features of the speeches and texts used in the examinations, the comparability of exam scores across language combinations could also be undermined. An analysis of English, French, and German source materials, presented in Part III of the case study, addresses this concern.

Further research is also indicated by the possibility of other confounding variables. They may include the influence of language-specific strategies from C/A language combinations on B/A combinations. More research on the exact nature of interpreting strategies is desirable. Nevertheless, it should be noted that the number of three-language examinees was relatively small (MACI-3 = 18 and MATI-3 = 1), indicating that the emergence of a pattern is unlikely. The number of two-language degree students who began their studies with a third language and then dropped this language either in their first or second year cannot be determined. Data on file in the GSTI office are insufficient in this area. Although the central computer database in the Academic Records Office of the Institute does allow the generation of course lists per student, this procedure is too cumbersome to be completed for the five-year period in this study. The need for further research, perhaps starting with a smaller time frame, is indicated.

As this discussion shows, the potential for future research on curriculum is vast, particularly for studies employing exam score data. One starting point could be the study of proficiency in translation with translation competence as the dependent variable. Studies based on score correlation may also be conducted to determine if exams may be considered redundant (e.g., written and sight translation; simultaneous with and without text; interpretation of general and technical texts). In addition, the use of a statistical procedure allowing a directional interpretation would be welcome. Ideally, such studies would explicate valid and reliable ordinal scale data, in which instance they would also require a higher number of cases, since the breakdown of the dependent variable must include more than two levels (pass, fail). A separate analysis by language combination is also desirable.

Finally, this study does not look at cognitive processing; only the broad outcomes of curriculum and instruction are analyzed. Further research is no doubt necessary to collect data on (meta-)cognitive strategies and similarities and differences in (meta-)cognitive processing among translators and interpreters. Research methodologies using structured interview formats and discourse analysis could provide intriguing data in these areas.

CHAPTER 7

Case study Part II

Survey of exam jury members

1. Introduction

In the discussion of the findings in Part I of the case study, the possibility is mentioned that fluctuation in exam procedures undermines the validity and reliability of exam scores and thus jeopardizes the validity of the statistical analysis. The following study explores this specific research question. The objective of this anonymous survey is to collect qualitative data on the exam procedures in place between May 1994 and May 1999, the period under review in the statistical analysis. In this manner, the results of the statistical analysis can be discussed in a qualitative context. As described in the introduction to this study and in the discussion of curriculum guidelines, a key factor in a program is the degree to which curriculum and assessment are in line with one another. To make this determination, evidence is required on the degree to which the Professional Exams measure what they purport to measure, i.e., that they are valid, and that the social consequences of this test use (awarding of degree and entry into the profession) are appropriate.

Interestingly, data from previous research on student and faculty perceptions of the Qualifying Exams, which students must pass at the end of the first year to enter the GSTI's second-year curriculum, indicate three main factors contributing to student anxiety: uncertainties about grading criteria, a lack of stress management skills, and uneasiness about the testing conditions (Houba 29). It stands to reason that these factors play a role in the Professional Examinations in interpretation as well. In this case, documentation of exam procedures also serves the purpose of identifying areas where improvement in administration should be considered.

Highly structured personal interviews would also have been an appropriate vehicle for gathering data. Indeed, it is likely that one-on-one interviews would have elicited more precise responses from individual participants than a questionnaire. Nevertheless, a survey instrument was chosen for several rea-

sons. This empirical research on examinations in interpretation is exploratory; therefore, a broad information base is required. Not all jury members from the period under review (1994–1999) are at the Monterey Institute, much less in California or even the United States. Greater access to the pool of jury members was therefore guaranteed through a survey instrument that could be mailed.

Bachman's test method facets serve as a framework for this study. The following facets in particular serve as theoretical principles in the survey: personnel, test rubric (organization, instructions, criteria for correctness), input and expected response (format, nature of language), and the relationship between input and response (reciprocal, nonreciprocal, adaptive). Those areas that are particularly salient for the validity of the exams, i.e., that impact exam administration most, are the areas for which data are gathered. Bachman's terminology, with which most jury members are probably unfamiliar, is not used in the instrument, however. See Section 2.2.

2. Method

2.1 Subjects

The survey was originally designed to cover the period from 1994 to 1998. In light of the extension of the quantitative study to include the May 1999 exam session, the survey was broadened to include new 1999 jury members. The survey was conducted between April and August 1999. The total number of jury members is thirty-seven. Sixteen participants were instructors at the GSTI when the survey was conducted (1999). Information on the respondents' backgrounds was gained through the survey itself. Eight participants served on juries in two language programs, bringing the total number of subjects to forty-five ($n = 45$).

2.2 Materials – survey content

A survey instrument was developed to collect qualitative data on the Professional Exams from the period 1994 to 1999. The survey gathers data indirectly on the validity and reliability of the Professional Exams in the following areas:

- background of jury members (personnel)
- exam procedures (test organization, instructions)
- purpose of the exams for MATI and MACI (test use)

-
- assessment criteria for MATI and MACI (expected response)
 - criteria for scoring (explicitness of criteria; expected response)
 - jury conduct (instructions)
 - role of external examiners (instructions)

The survey form is reproduced in Appendix B.

2.2.1 *Background of jury members*

Since little information is available on the jury members' training and experience in test theory, development, and administration, the survey begins with the collection of key data in this area. Data are collected on work experience and teaching experience as interpreters, the number of years of service on GSTI exam juries, and service on juries other than those of the GSTI. Jury members' backgrounds in testing are also likely to vary widely. The objective of this section of the survey is to determine whether there are specific patterns in the backgrounds of faculty that may have an impact on the way in which exams are administered and assessed.

2.2.2 *Exam procedures*

Specifically, the survey aims to describe exam procedures in each language program in order to determine how widely procedures fluctuate. The investigated exam procedures include the following:

- Delivery mode of the speech. Speeches may be presented live by a member of the jury or on audio- or videocassette.
- Procedure for scoring the students. In some, but not all, language programs, students are taped in groups in the booths, and the recordings are assessed after all taping has been completed. This practice varies among language programs; some programs tape both the consecutive and simultaneous examinations, while others tape only the exams in simultaneous.
- Briefing of the student on the exam speech before the beginning of the exam. The type and amount of information provided to individual students in the briefing may vary across and within language programs.
- Segmentation of the speech in consecutive interpretation. Once again, the practice of breaking down the five-minute speech in the consecutive interpretation exams varies among language programs.
- Inclusion of a warm-up phase in simultaneous interpretation. Data are necessary on whether a warm-up phase is offered to the student and the length of the warm-up phase. In addition, in some programs, the material

used for the warm-up phase may be the first part of the exam speech itself, in which case assessment begins after this section has been interpreted.

2.2.3 *Purpose of the exams*

This section of the questionnaire has the objective of determining whether faculty have implicit notions about the purpose of the exams that have an impact on assessment. Opinions may fluctuate considerably within and between programs. In particular, there may be discrepancies in the purpose of the exams for students in separate degree tracks.

2.2.4 *Assessment criteria*

Assessment criteria are closely linked to the purpose of the exam. The question as to whether jury members have highly developed norms for assessment is pursued, as well as the degree of fluctuation for these norms. In addition, if a considerable difference in the purpose of the exams for MATI and MACI candidates is documented, the assessment criteria should vary accordingly.

Assessment criteria also include scoring procedures. Between 1994 and 1999, two scales were in place. From 1994 through 1996, a 100-point scale with the following breakdown was used:

90–100	high pass
80–89	pass
75–79	borderline pass
70–74	borderline fail
0–70	fail

Due to perceived inconsistencies in scoring, an ordinal scale was introduced in 1997. This scale, based on rank categories, has the following breakdown, as stipulated in the Faculty Handbook, Guidelines for Exam Jurors (p. 26):

- High Pass: Candidate's interpretation is extremely accurate and shows superior command of syntax, grammar, and lexicon, and the presentation is outstanding. Should be awarded only occasionally to exceptionally qualified candidates.
- Pass: Candidate's interpretation is accurate, with acceptable, albeit improvable, syntax, grammar, and word choice and presentation. Should be considered the norm for passing candidates.
- Borderline Fail: Candidate's interpretation is unacceptable but not flagrantly inaccurate, owing either to misunderstanding of the original text or to serious flaws in syntax, grammar, and word choice, or to both; in the case of interpretation, the candidate's presentation may also have been un-

acceptable. The implication is that these shortcomings may be correctable with further study. Should be awarded to candidates who stand a good chance of passing a retake in August. Anyone receiving a borderline fail should be given specific details about what types of errors were made and what kind of preparation is needed for the retake.

- Fail: Candidate's interpretation is flagrantly inaccurate owing to inadequate command of the source and/or target language, insufficient analytical ability, poor presentation or a combination of all. This score means that the candidate is far from meeting the standards of the profession and is not likely to attain that level without extensive work. Any student who receives a failing grade in two or more qualifying examinations should be strongly advised not to attempt a retake in August, and should be urged either to take an additional year to work on language deficiencies or to consider another career.

Despite criteria delineated for each scale, anecdotal evidence suggests that faculty may be guided to a high degree by an internalized scoring philosophy when assessing students' performances. Therefore, scoring procedures may vary within juries and between juries depending on the following factors, among others:

- Jury expectations according to the language direction, i.e., whether students are interpreting into their A or B languages
- Jury expectations for MATI as opposed to MACI students
- Criteria applied to individual score categories

In addition, no systematic data are available on faculty opinions concerning the rationale behind the administration of separate exams for general and technical speeches. Faculty opinion on the administration of exams in simultaneous with and without text also requires clarification. In both cases, some faculty hypothesize the use of differing interpretation skills and abilities in working with varying text types (general and technical) and modes (with and without texts), and therefore believe that these skills should be subject to final testing. Other faculty state informally that, although differing skills and abilities may be in play and should be reflected in curriculum and training, comprehensive final testing is not necessary. The questions in the survey with regard to this matter have the objective of collecting data on the professional judgment of faculty only, not on the existence and use of these hypothesized cognitive skills, the latter requiring a methodology based in empirical testing rather than social science survey research. Data collected in this area are intended mainly

to inform faculty deliberations on exam procedures until more conclusive evidence is available (see Section 1).

2.2.5 *Jury conduct and role of external examiners*

In some language programs, jury members may arrive at final scores independently of other jury members through a blind rating. In other language combinations, jury members may conduct an open discussion of the examinee's interpretation before entering individual scores on their respective score sheets or change their blind ratings after such discussions. Exact information on jury conduct in this regard is therefore requested in the survey questionnaire. Furthermore, the survey documents the role of external examiners in each program, e.g., their presence and potential influence on jury deliberations.

2.2.6 *Additional comments*

Survey participants are also given the opportunity to comment on the survey itself and provide suggestions for improving procedures for the Professional Exams, if they desire.

2.3 Procedures

2.3.1 *Questionnaire design*

The questionnaire was carefully designed using a combination of open and closed questions, an approach that takes the current status of knowledge about testing procedures within the GSTI into account. Closed questions are used to provide structured feedback on exam procedures. Closed questions also provide a framework for information on the purpose, assessment criteria, and score categories for the interpretation exams. Survey participants are then given the opportunity to respond to open questions in areas where exam rationale may be influenced by personal exam philosophy or in areas where little information is available, e.g., differences in the MATI and MACI degree tracks as reflected in exam purpose and assessment criteria, as well as criteria used for score categories. The structure of the questionnaire and selection of individual items was guided by insider knowledge of the GSTI's examination procedures – emphasis was placed on those areas where considerable impact on the chi-square analysis was to be expected. Each item was carefully constructed so as to avoid bias through leading questions.

The survey was reviewed with the Dean of the GSTI and an expert in language testing. The questionnaire was piloted with five individuals at the Monterey Institute: the Dean of the GSTI, a linguistics professor with a

specialization in test theory, and three instructors who teach English language courses to GSTI students. The instructors all have in-depth exposure to the practice of translation and interpretation through course observation, dialogue with faculty, briefings, and extensive reading. All participants in the pilot have background knowledge of questionnaire design methodology acquired through graduate-level training and research.

2.3.2 *Questionnaire administration*

The survey was administered to jury members as a group during two faculty meetings. In order to reduce non-response, jury members who were absent or no longer employed by the GSTI received the questionnaire via regular mail. During group administration and administration via mail, however, participants were given the opportunity to request clarification of questions, either in person, via telephone, or e-mail. Additional information was provided in a neutral, unbiased manner.

2.3.3 *Return rate*

Thirty-seven interpreters served as jury members in the GSTI during the period 1994 and 1999. Eight individuals served on juries in two language programs, bringing the total number of subjects to forty-five ($n = 45$). Twenty-eight questionnaires were returned, a response rate of 62.22%. All language programs were represented. The major reason for non-response was discontinuation of jury activities at MIIS. Current mailing addresses may not have been forwarded to the GSTI office. There were sixteen GSTI instructors who served on juries in 1999; three of them served on juries in two language programs ($n = 19$). Fifteen completed the questionnaire, resulting in a return rate of 78.94% for active faculty.

2.4 Analysis

2.4.1 *Data preparation*

The questionnaire data were entered into an electronic file and coded for reporting purposes. Due to the limited scope of the survey in terms of number of participants, responses to open questions were not coded as numerical data. This approach also reflects the qualitative nature of this study and its objectives; statistical processing is not intended.

2.4.2 *Data analysis*

Responses to all questions, including responses to open questions and unsolicited comments written in margins, are reported in full by question, category of response, and language combination at the website <http://archimed.unimainz.de/pub/2001/0097>.

3. Results

The section providing information on the *background of jury members* reveals that the jury members are a heterogeneous group in terms of professional experience as well as experience in teaching and testing. Jury members' professional experience ranges fairly evenly between 6 and 30 years; jury members' teaching experience ranges between 1 and 20 years. All language programs are represented in the survey. In addition, the vast majority of participants have served on juries at other training institutions in North America, Europe and/or Asia. Finally, jury members are evenly split with regard to background in testing: half of those surveyed indicate that they have received some form of training in testing, while half indicate that they have not.

In the administration of *exam procedures*, there is considerable fluctuation across the language programs. There are, however, strong patterns which separate the European and Asian languages into distinct groups. Survey participants indicate that they use live speeches almost exclusively as source materials for both consecutive and simultaneous examinations. Of those members who do use tapes, a slightly higher number state that they use tapes more frequently for simultaneous than for consecutive. Those juries who do use tapes rely almost always on audiotapes rather than videotapes.

Jury members are roughly split in their responses to whether students are taped in groups in booths for consecutive and simultaneous exams for scoring purposes. There is a clear divide among language programs, however, with Chinese, Russian (split response), Japanese, Korean, and Spanish taping some, but not all, consecutive exams; German and French, however, do not tape in consecutive exams. The pattern for simultaneous exams is similar.

The vast majority of jury members indicate that students are briefed before exams. Briefings include the name of the speaker, background of the speaker, and the venue and date of the speech. Proper names are sometimes stated; however, numbers that occur in the speech are almost never provided. Terminology and context information are included in the briefing when jury members feel that it is appropriate to do so. Although the majority of jury members give

these answers, a number of survey participants respond differently. In these cases, there is no discernable pattern by language program. These results point to the need for the definition of constructs in testing and identification of those areas lending themselves to test standardization (test method facets).

While the majority of survey participants state that the source language speech in consecutive interpreters is not divided into segments, these data also provide evidence of systematic differences between the European language and Asian language programs. The German, French and Spanish juries do not pause for interpretation during the five-minute consecutive exams. While the Chinese, Japanese, Korean, and Russian juries all pause, the length of segments fluctuates considerably. Furthermore, most students are given the opportunity to warm-up in the presence of the jury immediately prior to the delivery of the exam speech for simultaneous, but the Chinese and Korean juries do not provide their students with an opportunity to warm up before these examinations. (The Japanese jury does.) The French and Spanish responses to the question on warming up are split. The type of material interpreted during the warm-up is generally the first part of the speech, sometimes with additional information, and the length of the warm-up is usually not longer than three minutes. These data support the separate statistical analysis by European and Asian languages in the first part of the case study. The role of Russian in this pattern is ambiguous.

The overwhelming response regarding the *purpose of the exams* is “readiness to enter the market.” Although individual participants do not volunteer information on which particular market segment (conference, court, medical, telephone, private market, government, international organizations, etc.) they are referring to, a possible conclusion would be that “the market” is widely understood to be conference interpretation in its multifaceted forms. Jury members also make numerous references to various criteria for assessment. When compared across and within language juries, however, the criteria remain fuzzy.

Only three respondents indicate that there is a difference between the purpose of exams for the MATI and MACI degree tracks in their professional judgment. The vast majority of survey participants indicate that they also have the same *assessment criteria* in mind for the MATI and MACI degree tracks. On the whole, the jury members’ answers concerning the purpose of the exams and assessment criteria support the research design in the statistical study, i.e., that the interpretation examinations are intended to be equivalent in the MATI and MACI degree tracks and can thus be compared with one another. They indicate that the curriculum outcomes for interpretation in the MACI

and MATI degree tracks are intended to be the same, as are the criteria for measuring these outcomes.

With regard to the skills and abilities tested in various exams, the responses are clear. All jury members feel that both general and technical exams, as well as the simultaneous exams with and without text, test the same skills and abilities to some or a great extent. When asked whether these differences are important enough to merit separate exams, however, the respondents react differently to different questions. In the case of general and technical exams, jury members are roughly split. For simultaneous with and without text, the vast majority feel that there should be separate exams. This information provides evidence that, in designing the statistical study, it was correct not to group the general and technical examinations (in one language direction) together for statistical purposes. Additional research on the correlation between exam scores is indicated.

The vast majority of jury members state that the *scoring criteria* they apply to MATI and MACI language examinees are the same. These data also support the comparability of scoring criteria across the MATI and MACI degree tracks for the purpose of statistical analysis. Jury members' expectations of A and B language candidates range from great similarity of expectations to little to no similarity, and these responses are not consistent across or within language programs. This fluctuation raises the question of how consistently scoring criteria are applied and supports the collapsing of the statistical variable 'exam score' into a nominal variable with two levels.

Criteria for assessment and scoring do not appear to be highly explicit or highly consistent among or between language programs. These factors compromise the reliability of scores across the language programs. With regard to criteria for individual score categories, there are only two explicit references to criteria in the Faculty Handbook. Evidently, internalized norms prevail over criteria laid out in GSTI materials, although the criteria given by jury members in many cases overlap in part or whole with Faculty Handbook criteria. Extreme fluctuation in responses and detail of criteria can also be noted, ranging from non-responses and use of points, albeit without reference to what point scales mean, to a detailed table. Many jury members make reference to professional standards in the field, i.e., professional practice, usually without describing those standards.

The extent of personal agreement with the pass-fail scale and agreement within the language juries on both the pass-fail and 100-point scales is very strong. Jury members indicate, however, that they have little idea as to whether their jury's criteria are in line with language juries of which they are not

members. Knowledge of similarity of criteria between juries is in fact split according to jury membership, i.e., whether the respondent serves on a jury in more than one language combination. If respondents serve on only one jury, they generally respond that they do not know whether the same criteria are applied by juries for other languages. Dual jury membership is, however, more frequent among the European languages than the Asian languages and Russian.

Furthermore, there is a lack of conformity with regard to *jury conduct*. In the case of blind ratings, where responses vary widely and unsystematically, members of some juries apparently do a blind rating before any discussion takes place, whereas other members on the same jury in the same exam refrain from establishing a blind rating. Discrepancy in jury conduct indicates a need for stricter exam procedures across the language programs.

There is also considerable fluctuation with regard to presence of *external examiners*. When they are present, they seem to play an active role in shaping opinion and most likely influence the final score, both as jury members with voting rights and as observers. The degree of influence most likely varies from jury to jury.

The last two aspects do not necessarily compromise the reliability of final score data. They do, however, give rise to questions about how final scores are reached in individual juries and the extent of differences across language programs.

4. Discussion

The results of the jury member survey may be discussed in light of the degree of standardization of exams, i.e., the comparability of exams within and across language programs, and the validity and reliability of the exams, i.e., the appropriateness of the test purpose and use. These areas have a direct impact on the validity of the statistical analysis in Part I of the case study.

With regard to exam standardization and comparability, it seems that exam procedures are not clearly defined in the minds of jury members, in particular as a collective group of language program juries. Despite clear patterns distinguishing European- and Asian-language juries from one another, considerable fluctuation within these groups also indicates that exam procedures are not consistently applied within individual language programs. Examples include briefing, segmentation in consecutive, warm-up, application of scoring criteria, and the use of blind ratings.

As a result, the numerical exam scores cannot be considered to be a valid and reliable measure on a School-wide basis. There is also doubt as to whether they are used validly and reliably within individual language programs. The decision to employ a pass/fail system of grading, which was made in 1997, was therefore a sound one, as was the decision to collapse these data to nominal categories in Part I of the case study. The breakdown into two categories based upon the most widely used criteria (“readiness for the market”) seems general enough to have been meaningful.

Inconsistency in responses to the same questions within and across juries indicates the need for additional measures to increase the degree of standardization of exam procedures within and across language programs. Alternatively, documentation of the need for authenticity, or an explicit agreement to disagree on specific aspects of exam administration, would be required. Greater awareness among jury members that undesired fluctuations in exam administration undermine validity and reliability is also necessary (rater training). Extreme fluctuation in professional judgment is evident. Given this fluctuation, professional judgment cannot be relied upon solely as a foundation for decision-making in an effort to ensure the equity of the examinations. Despite the vast experience and impressive qualifications of faculty and external jury members, this expertise does not necessarily lead to a high degree of similarity in the exercise of professional judgment. Indeed, as often stated in the literature on expertise, experts often disagree. An awareness of the fundamental principles of assessment is thus required among jury members, if assessment is to move beyond arbitrary standards and scientific evidence of the validity and reliability of scores is to be demonstrated. In the additional comments made by jury members, a clear awareness of problematic aspects of the exams emerges. The strong interest of faculty in improving exam procedures is evident, as are their openness, willingness, and dedication.

Although there is no substantial evidence of a uniform testing paradigm across all language programs, the Asian and European languages do form distinct groups. Hence, the results provide evidence supporting the premise that fluctuation in exam rationale and procedure is greater between language combinations (Asian vs. European) than within language combinations (individual juries). Interestingly, there is no strong evidence as to where Russian fits into this Asian- vs. European-language pattern. Nevertheless, these results support the separate analysis of Asian- and European-language programs in the statistical study.

The results of this survey cannot be generalized to other examination contexts. Given the ongoing discussion of the nature of quality in the Interpreting

Studies literature and the neglect of the traditional assessment literature in the spoken language interpreting community, however, further research on assessment procedures would seem to be a high priority. Such studies could be conducted in the form of surveys similar to this one. In-depth, structured interviews would be a further possibility. Attention to various domains of interpreting, e.g., conference interpreting at international organizations and governmental ministries, legal interpreting and related certification testing, and health-care interpreting in hospitals and other medical settings, would also be warranted.

CHAPTER 8

Case study Part III

Analysis of exam texts

1. Introduction

While Part I of the case study examined the results of the Professional Examinations and their relationship to the curriculum and Part II dealt with the procedures in place for exam administration and scoring, Part III of the case study provides an analysis of selected examination materials. As in Part II, the objective of the analysis in Part III is to place the results of the statistical analysis in a qualitative context.

In a research project aimed at improving curriculum and assessment, several factors must be taken into consideration: firstly, the pedagogical usefulness of the analysis and the suitability of the methodological tools in conducting the analysis. Secondly, the extent to which the exam texts are representative of all exams and the curriculum in general, and the extent to which an exam text provides accurate documentation of the speech delivered in a given exam. In this sense, the following study also explores the question of whether fluctuation in exam procedures as reflected in exam materials undermines the validity and reliability of exam scores and thus jeopardizes the validity of the statistical analysis.

1.1 Analytical tools

There are multiple approaches to text analysis, including methodologies grounded in discourse analysis, Translation Studies,¹ and language testing. Here, Bachman's test method facets are used to maintain consistency in approach with Part II of the case study. In this regard, test method facets also prove to be extremely flexible as an analytical tool that is not limited to the study of texts but can be employed in the analysis of all parameters of an examination. In his cumulative discussion, Bachman reviews the extensive literature on various aspects of test method facets and the theoretical development of this framework since the late 1960s (1997: 112–159). Bachman describes the

facets as a list, or compilation, that is by no means exhaustive. Rather, it is intended to serve as a guide for empirical research aimed at improving the understanding of factors that affect performance on language tests; thus, the list is to be expanded and enhanced as additional exam facets are discovered and described (117). As this discussion is focused on written texts as examination documents, the salient facets of input, in particular those categorizing the nature of language, serve as an analytical framework. The scope and applicability of these text-internal factors are explored below.

1.2 Exam texts and the curriculum

In the GSTI, criteria and rationale for text selection are not spelled out in curriculum or examination documents for the period under review. The pedagogical criteria used to select texts is therefore not explicit; instructors presumably select speeches for work in class and examinations based primarily upon their intuitive assessment of the appropriateness of the material. Nor is it clear to what extent manuscripts from the field, e.g., conferences, are employed, or the role that audio- and videotapes, as well as presentations by students and guest speakers, have in the curriculum, even though all of these types of materials and sources are employed in all language programs. Nevertheless, it is assumed in the context of this analysis that the texts selected for examination purposes reflect to some degree the pedagogical choices instructors make when selecting texts for the interpretation classroom, in particular for the third and fourth semesters of study. Descriptive documentation of text features thus serves the purpose of promoting the integration of curriculum and assessment.

Hence, those factors that presumably play a role in the mind of the interpretation instructor when selecting texts for examinations are the focus of the discussion. In this regard, it would seem possible that the suitability of the text for the purposes of a specific examination, e.g., consecutive interpretation as opposed to simultaneous interpretation with text, or technical subject material as opposed to general subject material, manifests itself in variations in the features of the respective texts. In other words, a suitable pedagogical text for consecutive interpretation could differ from an ideal text for instruction in simultaneous interpretation with text, and these variations could exist not only between modes of interpretation but also longitudinally within a single mode. The latter issue can only be pursued in a comprehensive analysis of classroom materials employed throughout the curriculum. In summary, the question of the degree of similarity, or rather dissimilarity, in salient features of exam texts is at the forefront of this analysis.

1.3 Exam texts as documents

At the same time, the issue of whether exam texts accurately document the speech as it is delivered in the exam must be addressed. It is a widespread practice in interpretation examinations to present examination participants with impromptu speeches, which are those delivered supposedly off-the-cuff with little prior preparation, in an effort to ensure that the text is defined by features characteristic of spoken language, rather than written language. According to this pedagogical approach, spoken language texts, i.e., texts that are not fixed in written form, are seen as more suitable for interpreting. For this reason, some educators advocate their use. The discussion on use of classroom materials, however, has not fully taken into account the role of background knowledge and ritualized language use in this line of reasoning. The consideration of whether interpreting fairy tales, for example, which is often done in introductory courses to simultaneous interpretation, constitutes working with a “fixed text” is not pursued here. Nevertheless, it seems reasonable that the role of background knowledge, information density, and syntax, to mention but a few factors, have just as great an impact on text difficulty. Indeed, it would seem premature at best to assume that texts that are not fixed in written form inevitably display characteristics of spoken language.

In the GSTI, the pedagogical approach described above has led to the practice of ‘oralization,’ a term that is widely used but whose meaning is not precisely defined. According to this practice, a text that exhibits characteristics of written text, e.g., high information density, complex sentence structures, among other things, may be used as material for the delivery of a speech. The information is restructured, paraphrased, and streamlined or otherwise simplified to give it the characteristics of spoken language and thus make it easier to grasp and more suitable for interpretation.

As a result, the texts presented for analysis in the section are, for the most part, not a verbatim rendering of the speech delivered in the interpretation examination. For this reason, they should generally be regarded as source language materials rather than a precise record of the speech delivered. Possible exceptions to this rule are the texts used for simultaneous interpretation with text. However, it must be assumed in this case as well that the texts were altered during the examination, even though this particular exam type reflects the need to prepare students for cases when presenters read from manuscripts at international conferences.

The lack of recordings also makes it unfeasible to explore additional test method facets, for example ‘speededness,’ i.e., the rate of presentation mea-

sured in words per minute (a facet of input under format). Complete documentation of exam sessions and the description of the typicality of interpretation exam texts of written or spoken language are therefore promising areas of further study.² In summary, the exam texts presented for analysis in this discussion are only a partial record of the speech delivered in the corresponding examinations. Since source language materials presented in exams were not recorded during the period under review, these partial records are the only materials available for analysis.

2. Method

As stated above, the salient facets of input (Bachman), more specifically the nature of the language, serve as a framework for the following text analysis. In view of the lack of precise documentation, the following facets of input have been excluded from the text analysis: the degree of contextualization (embedded/reduced), the distribution of new information (compact/diffuse), organizational characteristics (standardness of grammar, cohesion, and rhetorical organization), and sociolinguistic characteristics (dialect or variety, register, naturalness). Two additional facets were identified as relevant to the examination procedure and thus included in the analysis: speaker and venue. These facets have an impact on the exam situation, as either the speaker or the venue may or may not be identical to the speaker or venue in the examination itself. For example, a speech may have been originally delivered, hypothetically speaking, by the German Federal Minister of Defense to the members of the *Bundestag* in Berlin and be presented to the examinee as such. An opposite example would be an exam text that may not have originally been a speech, in which case the material may have been adapted from another source and presented to the examinee as an oral text. In this case, there would be no speaker or venue external to the examination situation, i.e., the jury member presenting the text is concurrently the speaker and the exam itself is the sole venue.

Therefore, a rubric for text analysis was developed that includes the following facets. Questions to be answered through the analysis are listed. Items in italics appear as category headings in Tables 8.1–8.4.

<i>Length of text</i>	Is the end clearly <i>marked</i> ? If yes, how many words?
Propositional content:	
<i>Speaker</i>	Is the speaker the presenter?

<i>Venue</i>	Was the speech originally delivered at a different venue? If yes, where?
<i>Genre</i>	Is the text a speech from the field, an original speech from another source, or adapted material?
<i>Topic</i>	What is the speech about? What is the primary subject matter?
<i>Type of information</i>	Is the information in the speech primarily concrete or abstract?
<i>Vocabulary</i>	What is the highest level of lexical difficulty: general, semi-technical, or technical vocabulary?
Sociolinguistic characteristics:	
Illocutionary force	What <i>language functions</i> does the speech perform in addition to being a test?

While it could be argued that the pragmatic (sociolinguistic) characteristics of the texts under review could change through the practice of ‘oralization,’ it seems probable that the fundamental language function would remain unaltered. Similarly, although it is impossible to know which technical terms were given to examinees during the briefing or which terms were edited out of the speech, it would seem reasonable to assume that texts were chosen due in part to the nature of the vocabulary (general, semi-technical, technical) and that these features were mostly preserved in the oral presentation.

2.1 The corpus

Although exam texts from this six-year period are on file in the GSTI’s central office, some texts are missing. This is due to the fact that these files are maintained to give students access to representative exam text material; no procedure is in place to ensure that the files remain complete. Therefore, a comprehensive analysis of all examination texts used during the five-year period under review is not possible, although highly desirable. In addition, such an endeavor would require the researcher to have a good working knowledge of all eight languages offered in the GSTI, including Chinese, Korean, Japanese, Russian, and Spanish. As a result, this analysis is limited to the English, French, and German texts used in the May 1999 session. These texts are reproduced in full at the website <http://archimed.unimainz.de/pub/2001/0097>.

The six interpretation examinations under study in the statistical analysis (Part I) are reviewed, which leads to a total of four texts each for the French and German programs. All language programs use the same English source texts for the interpretation examinations in consecutive and simultaneous without text.

The English-language materials for the simultaneous with text examinations present a special category, however, in that text selection is left to the discretion of individual language programs. Only one English text was on file in the GSTI main office. All other texts were provided by faculty in individual language programs. There are three texts in this category. The Chinese, French, Japanese, and Korean programs used the same text (plasma cholesterol), while the Russian and Spanish programs selected their own (arms control and aircraft lavatories, respectively). The German program did not have a degree candidate for simultaneous interpretation into German in this examination session.

The following list provides a breakdown of exam texts by source language:

English SL consecutive general and technical	2
English SL simultaneous without text	1
English SL simultaneous with text	3
French SL consecutive general and technical	2
French SL simultaneous with and without text	2
German SL consecutive general and technical	2
German SL simultaneous with and without text	2
Total number of texts:	14

2.2 Procedures

The following steps were taken in this text analysis.

1. A methodology was developed on the basis of Bachman's test method facets. The representative nature of the texts and the nature of the texts as accurate exam documents were considered from a theoretical standpoint. This discussion includes the determination of factors in text selection, which may be factors distinguishing the nature of the texts that most likely remain unchanged through 'oralization.'
2. Categories were elaborated for the analysis, based upon salient facets of input. In accordance with the discussion under 1), descriptive criteria were established for analysis of the data. The ensuing rubric used for analysis is presented in Section 2.
3. Texts were retrieved from GSTI files. No texts were on file for the simultaneous with text examinations with English as the source language. Therefore, faculty were requested to provide these texts.
4. The texts were analyzed in the following order, which is also based upon individual modes of interpretation:

- a. English: consecutive general, consecutive technical, simultaneous, simultaneous with text
 - b. French: consecutive general, consecutive technical, simultaneous, simultaneous with text
 - c. German: consecutive general, consecutive technical, simultaneous, simultaneous with text
5. The results of the analysis were compared by mode of interpretation, i.e., consecutive general and technical, followed by simultaneous and simultaneous with text.

2.3 Analysis

2.3.1 *English source language materials*

These data are presented in Tables 8.1 and 8.2.

The *length* of English source texts varies from 581 words (consecutive technical) to 4280 words (materials for the simultaneous with text examination used by the Russian program). The consecutive general text (2239 words, five-minute exam) is longer than the material used for simultaneous without text (1836 words, ten-minutes) and longer than the material for simultaneous with text used by the Chinese, French, Korean, and Japanese programs (1208 words, ten minutes).

The *end of the text material* to be used for the examination is marked in only one instance: the consecutive technical text (entire text of 581 words). In all other cases, the text material exceeds the amount required for the length of the examination, if one assumes that the presentation rate was between 100 and 120 words per minute. The text material was therefore cut or adapted in some way.

A *speaker* other than the presenter in the examination is indicated in the text material in four out of six examinations. In the two instances where no external speaker is indicated (simultaneous with text for Chinese, French, Japanese, Korean, and simultaneous with text for Spanish), the *genre* of the text is not clearly marked as a speech or other form of spoken language material. No source is indicated for the former example, while the latter text is an article taken from an airline magazine. The text types for the other examinations also vary widely, ranging from an interview for consecutive general to a conference paper for simultaneous with text (Russian).

Similarly, the *venue* for consecutive general and technical is specified as Paris or Chicago, respectively. Monterey is listed as a venue for the simulta-

Table 8.1. Facets of input in English exam texts

	Text 1 Consecutive general	Text 2 Consecutive technical	Text 3 Simultaneous general
<i>Length</i>	2239 words	581 words	1836 words
<i>End marked/unmarked</i>	Unmarked	Marked	Unmarked
<i>Speaker</i>	Jacques Cousteau, NPQ Editor Nathan Gardels	Chicago city official	Executive Director of UNEP
<i>Venue</i>	Paris	Chicago	*****
<i>Genre</i>	Interview	Press statement	Political speech
<i>Topic/subject matter</i>	Population growth, environmental degradation, global economy	Environmental protection, urban planning	Trade and the environment
<i>Concrete/abstract information</i>	Primarily abstract	Abstract and concrete	Primarily abstract
<i>General/semi- technical/technical vocabulary</i>	General, e.g., financial derivatives, polar ice shelf, nuclear proliferation, flood plains	General, e.g., green rooftops, federal air quality standards, pavements, computer modeling, heat-reduction, reflective roofing, smokestack emissions, prairie grass	General, e.g., United Nations Environment Programme, WTO ministerial, economic liberalization, desertification, soil degradation, Biosafety Protocol, Biodiversity Convention, government procurement
<i>Language functions</i>	Informative, persuasive	Informative	Informative

neous with text examination for the Russian program. In all other exams, no specific venue is given.

The *subject matter* ranges widely and includes the environment, population growth, urban planning, the global economy, trade, plasma cholesterol and coronary heart disease, arms control and nonproliferation, and the design

Table 8.2. Facets of input in English exam texts – simultaneous with text

Program	Text 4 Chinese/French/ Japanese/Korean	Text 5 Russian	Text 6 Spanish
<i>Length</i>	1208 words	4280 words + graphic	2989 words + graphic
<i>End marked/unmarked</i>	Unmarked	Unmarked	Unmarked
<i>Speaker</i>	*****	Michael Newlin, Lawyers Alliance for World Security	*****
<i>Venue</i>	*****	Monterey, CA, USA	*****
<i>Genre</i>	*****	Conference paper	Article from Airways magazine
<i>Topic/subject matter</i>	Plasma cholesterol, coronary heart disease	Nunn-Lugar Cooperative Threat Reduction Program and Export Controls, arms control and nonproliferation	Design of aircraft lavatories
<i>Concrete/abstract information</i>	Abstract and concrete	Primarily abstract	Primarily concrete
<i>General/semi- technical/technical vocabulary</i>	Technical, e.g., atherosclerotic vascular disease, coronary heart disease, low-density lipoprotein cholesterol, reference levels, LDL-binding receptors, human arterial wall, Multiple Risk Factor Intervention Trial, polyunsaturated fats	(Semi-) technical, e.g., Freedom Support Act, dismantlement of strategic nuclear weapons, economic dislocation, ballistic missiles, accounting and disbursing authority, umbrella and export control agreements, dual-use items, industry outreach	Technical, e.g., Ford Tri-Motor, Environmental Protection Agency, propliners, access panel, powdered crystals, drain port, lav servicing, narrow-body aircraft, mid-cabin, hydraulic lifting device, triturator, release valve, fuselage, Airworthiness Directive, vacuum blower
<i>Language functions</i>	Informative	Informative	Informative

of aircraft lavatories. The *type of information* is primarily abstract for consecutive general and simultaneous without text, both concrete and abstract for consecutive technical. The texts used for the simultaneous with text examinations contain both abstract and concrete information. The text used by the Chinese, French, Japanese, and Korean programs is both abstract and concrete. The text used by the Russian program is primarily abstract, and the text used by the Spanish program is primarily concrete.

The *vocabulary* is primarily general for both consecutive speeches. The material used for simultaneous without text also has several specialized terms, e.g., the names of conventions and protocols. All three texts used for the simultaneous with text examinations contain technical vocabulary; the specialized terminology in the Russian program text is mainly political in nature. In terms of *language function*, all texts are informative in nature. The consecutive general text also has some characteristics of a persuasive text advocating environmental protection.

2.3.2 French source language materials

The *length* of the French source language materials ranges between 475 words (consecutive general) and 3500 words (simultaneous with text). The end of the text material to be used in the examination is marked for both consecutive examinations; for simultaneous, it is not specified.

The original *speaker* is concurrently the presenter for both consecutive exams. For the simultaneous interpretation examinations, the authors (and original presenters) of the speeches are Lionel Jospin (with text) and Corinne Bensimon (without text). The *venue* is specified as the French National Assembly for the exam in simultaneous interpretation without text. No other venue is given for any of the other examinations.

The *genre* differs widely: magazine articles are used as source language material for both consecutive speeches. A political speech serves as material for the simultaneous without text examination; a parliamentary report is used for simultaneous with text. Similarly, the *subject matter* varies considerably; it includes the Euro and cash cards, El Niño, the war in Kosovo, and cloning and embryo research. All texts generally contain features of both *abstract* and *concrete information*, except for simultaneous general, which is primarily abstract. The *vocabulary* is general for consecutive general and semi-technical for all other examinations.

Finally, the *language function* of the texts is primarily informative in all cases. In addition, the text material for both examinations is persuasive in nature. See Table 8.3.

Table 8.3. Facets of input in French exam texts

	Text 7 Consecutive general	Text 8 Consecutive technical	Text 9 Simultaneous general	Text 10 Simultaneous with text
<i>Length</i>	475 words	646 words	2063 words	3500 words
<i>End marked/unmarked</i>	Marked	Marked	Unmarked	Unmarked
<i>Speaker</i>	*****	*****	Lionel Jospin, French Prime Minister	Corinne Bensimon
<i>Venue</i>	*****	*****	French National Assembly	*****
<i>Genre</i>	Magazine article	Magazine article	Political speech	Parliamentary report
<i>Topic/subject matter</i>	Euro, cash card	El Niño	War in Kosovo	Bioethics, embryo research, cloning
<i>Concrete/abstract information</i>	Abstract and concrete	Abstract and concrete	Primarily abstract	Abstract and concrete
<i>General/semi- technical/technical vocabulary</i>	General, e.g., cartes à puces, buraliste, réseaux monétique,	Semi- technical, e.g., anomalie climatique, océanographes, simulation numérique, alizés, sécheresses, oscillation australe	Semi-technical, e.g., aléas météorologiques, engagements hélicoptés, justice pénale internationale, hémicycle, Haut- commissariat aux réfugiés	Semi-technical, e.g., spermatozoïde, fécondation in vitro, tissu testiculaire, in utero, procréation assistée, dépistage génétique, stimulation ovarienne
<i>Language functions</i>	Informative	Informative	Informative, persuasive	Informative, persuasive

2.3.3 German source language materials

The German-language examination texts range from 508 words (consecutive technical) to 2180 words in *length* (simultaneous with text). The *end of the material* intended for use in the examinations is marked only in the case of the consecutive technical text (entire text of 508 words).

The original *speakers* are indicated for all exam texts with the exception of consecutive technical (breast cancer), which is the only text that is not political in nature. The *genre* of the source material for this examination is unclear,

Table 8.4. Facets of input in German exam texts

	Text 11 Consecutive general	Text 12 Consecutive technical	Text 13 Simultaneous general	Text 14 Simultaneous with text
<i>Length</i>	1220 words	508 words	1845 words	2180 words
<i>End marked/unmarked</i>	Unmarked	Marked	Unmarked	Unmarked
<i>Speaker</i>	Dr. Christine Bergmann, German Federal Minister for Family, Seniors, Women, and Youth	*****	Dr. Werner Müller, German Federal Minister of Economics	Jürgen Trittin, German Federal Minister for the Environment, Nature Conservation, and Reactor Safety
<i>Venue</i>	Committee on Women's Rights of the European Parliament	*****	Frankfurt Trade Fair Convention Center	Leipzig Trade Fair Convention Center
<i>Genre</i>	Political speech	No source given	Political speech	Political speech
<i>Topic/subject matter</i>	Women's rights	Breast cancer	German economy, international trade, trade fair sector, consumer goods	Environmental protection, energy policy
<i>Concrete/abstract information</i>	Primarily abstract	Abstract and concrete	Primarily abstract	Primarily abstract
<i>General/semi- technical/technical vocabulary</i>	Semi-technical, e.g., deutsche Rats-präsidentenschaft, Gleichstellungspolitik, Forschungs- und Erhebungsdesign, zivilrechtlicher Schutz, Rechtssetzung, Daphne-Initiative, STOP-Program	Semi-technical, e.g., bösartiger Tumor, Früherkennungsuntersuchung, Problem-Mastopathie, Brustdrüsenveränderung, Mikroverkalkungen, Entartungsrisiko, röntgenologische Brustuntersuchung, Strahlendosis	General, e.g., Aushängeschild, Schneidewaren- und Besteckindustrie, Werkstoffe, Niedriglohnländer, Unternehmensbesteuerung	Semi-technical, e.g. Energieversorgungssicherheit, Braun- und Steinkohle, fossile Energieträger, Erdwärme, Biomasse, Stickoxid, Schwefeldioxid, Energiewende
<i>Language functions</i>	Informative	Informative	Informative, performative	Informative, performative

as no source is provided. Similarly, the *venues* of the original speeches are indicated for all exam texts except for consecutive technical. The venues include the Committee on Women's Rights of the European Parliament (consecutive general), the Frankfurt Trade Fair Convention Center (simultaneous without text), and the Leipzig Trade Fair Convention Center (simultaneous with text).

The *subject matter* includes women's rights and breast cancer for the speeches to be interpreted consecutively. The material covered in the simultaneous interpretation examinations includes the German economy, international trade, and consumer goods (simultaneous without text) and environmental protection and energy policy (simultaneous with text). The type of *information* is primarily abstract, with the exception of consecutive technical, which deals with breast cancer and also contains some concrete information. The highest level of *vocabulary* is semi-technical for all speeches except for simultaneous general, which is primarily general in nature.

With regard to *language function*, all speeches are primarily informative; the speeches used for simultaneous interpretation examinations are delivered on the occasion of the opening of trade fairs and are thus also performative in nature. See Table 8.4.

3. Results

3.1 Exam texts for consecutive interpretation

The *length* of the consecutive texts varies between 475 and 2239 words; the end of the material to be used for the exam is clearly marked in four out of six cases. In three out of six cases, there is an original *speaker* designated in the exam material. Similarly, the *venue* where the speech was originally given is indicated in three out of six cases.

The *genre* of the consecutive exam texts varies. One political speech, one press statement, one interview, and two magazine articles are used in these particular sessions. No source is indicated in one instance, and it is impossible to determine the origin of the source language material. In terms of *subject matter*, there is no clear distinction between general and technical topics. The general topics deal with the Euro and cash cards, population growth and the environment, and women's rights. The technical topics are El Niño, environmental protection and urban planning, and breast cancer. Although there are no clear tendencies in terms of *type of information*, the technical texts are more likely to contain abstract information. There are no

clear differences between general and technical *vocabulary* used consistently throughout the exam categories. In terms of *language function*, all texts are primarily informative in nature.

3.2 Exam texts for simultaneous interpretation

The *length* of the simultaneous texts varies between 1208 and 4280 words. The end of the exam text material is not marked in any text. The speech was originally delivered by a different *speaker* in six out of eight cases. Similarly, the *venue* was originally a different one from the exam venue in four out of eight cases.

The *genre* of the exam material is the text type “speech” in five out of eight cases. For one exam, the manuscript of a conference paper was used. An article from a magazine and a parliamentary report were used in two other cases. In terms of *subject matter*, there is a clearer distinction between general and technical material than in the consecutive examinations, with the material for simultaneous without text commonly on a political topic and the material for simultaneous with text on a scientific or technical topic. There is, however, no clear distinction between abstract and concrete *information* according to the general, i.e., technical, nature of the texts. Nevertheless, the materials for simultaneous with text are more likely to contain technical, or semi-technical, vocabulary. In all cases, the *language function* of the text is primarily informative; the French text is also persuasive in nature. The German text is performative, but in this case as well, the informative function dominates.

4. Discussion

4.1 Length

In most texts, the amount of material selected for the examination vastly exceeds the amount required. In one case, approximately 40 minutes of material, assuming a presentation rate of 100 to 120 words per minute, was selected for a 10-minute examination. Since the end of the text material is not clearly marked in many cases, it remains unspecified exactly where the presenter stopped in individual exam sessions within and across language programs. As a result, the information content may have varied considerably from one exam to the next, making the examinations difficult to compare. A salient example of how exam text length can impact student performance is the case of the simultaneous

with text examination. In the case mentioned above (Russian program source text), students had 15 minutes to review 4280 words of material. In the Chinese, French, Japanese, and Korean programs, however, students had 15 minutes to review approximately one fourth of this amount, or 1208 words.

Even in cases where the same source material is used, evidence suggests that the exams are fundamentally different in various language programs. Influential factors include how often the speaker pauses, where the speaker pauses, and the presentation rate. A particularly pernicious example is the English language interview used for consecutive general. It is impossible to know how individual language programs adapted the text, i.e., whether the question-and-answer format was maintained, whether the questions were transformed into indicative text, or whether the questions were simply skipped altogether and the responses from Jacques Cousteau were adapted and presented as a “speech.”

In addressing the issue of whether English-language exam texts should be selected centrally for use in all language programs, the main factor for consideration is not whether the same source text material leads to greater similarity between exams, but rather whether the facets of input are consistently controlled so that the examination material to be presented in the session exhibits approximately the same level of difficulty (regardless of source language).

Currently, the centralized selection process does not guarantee a greater degree of equity and comparability among exams. It seems doubtful, for example, whether all programs covered plasma cholesterol as a topic in the same amount of detail in classes across the language programs. In this case, some students would have been at a disadvantage. All of these factors taken together point to the need for the definition and application of a comprehensive framework of test facets for interpretation.

4.2 Propositional content

The discrepancy between speaker and venue in some examinations leads to fundamental differences in situational factors. In one case, the examinee must project the speech and its content to a different venue and time, in which case inconsistencies in timeline and persona may arise. In the opposite case, the timeline and voice of the speaker are congruent with the examination situation. It is also worth noting that this type of discrepancy in particular would not normally occur in the interpreter’s workplace, where timeline and persona of the speaker are congruent. This discrepancy is an example of factors that play a role in situating cognition. Problematic text passages can be edited out of the examination texts; however, when one considers the extensive length of

some of the exam texts, it seems unlikely that all texts are consistently edited or otherwise prepared to eliminate possible discrepancies.

Should only text materials that are developed specifically for training purposes be used in the curriculum and examinations in order to avoid such discrepancies? The answer to this question is most likely 'no,' since students need to become familiar with the type of material, the subject matter, terminology, and rhetorical patterns prevalent in the wide range of environments in which the student could later be employed.

Even on the basis of this initial, exploratory analysis, it becomes apparent that differences between general and technical subject matter, abstract and concrete information, and difficulty of terminology are not pronounced when the consecutive general and technical examination materials are compared. Distinctions do emerge in the materials used for simultaneous with and without text, however. In these latter categories, the analysis indicates a greater degree of concrete information content and technical terminology in the text material used for simultaneous with text.

Interestingly, these results seem to be in line with those of the jury member survey concerning differences between the consecutive and simultaneous examinations. Fewer than half of the survey participants (13 out of 28 respondents) think that separate examinations in consecutive interpretation covering general and technical subject material are necessary. In contrast, 21 of the 28 respondents believe that separate examinations in simultaneous interpretation without text and with text are merited.

4.3 Illocutionary force

In terms of language function, the examination materials are all very similar. Although the text types range widely, the primary function of the material is to convey information. Even in those cases where additional language functions, i.e., performative or persuasive aspects, can be identified, they do not play a compelling role in determining the nature of the text. It seems that this group of examiners sees informative texts as the most suitable type of material for use in examinations. A review of additional exam materials and texts used in classes could shed light on whether this language function can be regarded as the standard selection in the GSTI course of studies.

4.4 Conclusions

Similar to the results of the jury member survey, the results of this analysis of text materials do not support the validity and reliability of the numerical scores in the Professional Examinations. This section of the case study provides additional evidence that collapsing these data to nominal categories was a wise decision for the statistical analysis. Indeed, these results draw attention to the number and range of confounding variables that can make statistical analyses of language interpreting problematic. Improvement of assessment methods is no doubt required before the hypotheses stated in Part I can be explored with greater conclusiveness. This study also shows how reliance on one methodology to study language interpreting may lead to inconclusive results.

It must also be stressed that very few texts were analyzed in this exploratory section. The analysis does show, however, a range of additional factors – the facets of input – that have an impact on the “exam situation” and that may serve as a frame of reference for future studies of exam materials.

An analysis of recordings or transcriptions of actual speeches delivered in exams would have been preferable to the analysis of these exam materials. Indeed, more thorough documentation of all facets of examinations is desirable. This was not possible in this study for a variety of reasons, some of which are mentioned above (see Section 2.1). Additional reasons include the fact that there were multiple concurrent exam sessions and that it would have been necessary to make substantial changes to the examination environment to tape or otherwise record the sessions. It is highly probable that such documentation procedures would have been regarded as intrusive, in which case they may not have been welcomed by faculty and students. Such changes in the examination environment would also entail substantial alterations in exam format and thus the perceptions of participants for only one session of the five-year period under review. In turn, such factors have an impact on scoring procedures, which leads to a greater probability of introducing unintended changes in statistical patterns.

CHAPTER 9

Implications of the case study

The following discussion returns to the individual parts of the case study and draws conclusions to the primary research questions presented in Section 1 of Chapter 5.

1. Part I: Translation and interpretation in the GSTI curriculum

In the introduction to this book, the demand for more highly specialized language professionals was identified as a challenge facing translator and interpreter education programs. At the same time, the 1999 statistical study of the International Association of Conference Interpreters (AIIC) indicates that roughly half (48%) of all members not only interpret but also translate professionally. On the basis of these data alone, there can be little doubt that a degree offering a dual specialization is indeed appropriate in the global marketplace of the language industry.

Nevertheless, the statistical analysis in the case study provides some evidence that the MATI degree track is not optimally designed to achieve the highest level of competence and a comprehensive skill set in interpretation. Despite reservations concerning the nature of assessment, it seems that the MATI track does not prepare students for the Professional Examinations in conference interpreting as well as the MACI track does.

Some evidence was found suggesting that a more distinct separation of training in translation and interpretation is warranted in the GSTI model. Should the GSTI curriculum be adjusted? Consultations between internal and external stakeholders (see Figure 3.2) would be useful in answering this question, as decisions to change the design of the curriculum will necessarily reflect additional factors, such as employment trends in the language industry. The career development of alumni with the pertinent degrees should also be taken into account through career tracking. A further question to address is whether there is a statistically significant difference between MATI and MAT students in terms of performance in the translation exams. Despite the need for additional

information, it stands to reason that, as a bare minimum, more time is required to consolidate high-level interpretation skills in the MATI degree track.

Nevertheless, based upon the discussion of curriculum and assessment in Chapters 3 and 4, and the tentative results of the statistical study, a hypothetical curriculum model is presented in the following chapter. An official curriculum, it is intended to be a detailed proposal that can serve as a basis for internal and external discussions and serve as an example of a more efficient, streamlined and flexible model. No doubt, not all aspects of the model can or will be implemented.

The Y-track structure is maintained to reflect the fundamental convictions expressed in the literature on the foundations of language transfer skills (see Section 4 in Chapter 2). In addition, with the demand for specializations rising in the language industry, it would seem self-evident that a future interpreter does not need to complete a full course of study in translation before beginning to study interpretation. Knowledge of software localization, project management, computer-aided translation tools, and media translation is most likely not the *sine qua non* for a majority of conference interpreters who also translate. A basic knowledge of these skills, however, has become an essential component of any full-fledged Master of Arts degree in translation. From this viewpoint, the sequential curriculum model, in which a translation degree must precede interpretation instruction, would appear to have become outdated due to technological innovation.

An additional difference between degree tracks in translation and in interpretation is the extent of specialization necessary in domain-related content. Increasingly, top-notch translators seem to be specializing in narrower subject matter areas. This option places them on a better foundation professionally; it enables them to command higher rates and translate greater volumes of text. Interpreters, however, do not have this luxury; particularly in the freelance market, they must often remain generalists who are capable of handling a wide variety of topics. This enhanced Y-track model is intended to enable students to attain higher skill levels in their specialization, either translation or interpretation, but also to ensure skill integration by including a minimum number of translation and interpretation courses in the opposite degree track.

2. Part II: Standardization, authenticity, and professional judgement

In the introduction to this study, the centrality of assessment in educational programs was a key topic of discussion (see Section 2 in Chapter 1). The issue

at hand is not whether assessment is or has been particularly poor in interpreter education programs, but rather the fact that approximately five decades of theoretical discussion and reflection on the nature of assessment in education and language learning has received little notice among interpreter educators to date. The potential for improvement is thus correspondingly vast.

Indeed, the fact that assessment practices in the Graduate School of Translation and Interpretation were not sufficiently valid and reliable and the fact that curriculum and assessment were not highly integrated are perhaps the most compelling reasons why the results of the statistical analysis are not as conclusive as some readers may have hoped. The lack of reliable ordinal data dictated the choice of non-directional statistical procedures.

The curriculum literature states explicitly that the foundations of curriculum are rarely grounded in a single approach, whether scientific, humanistic, managerial, systems, or academic in nature. In the case study of curriculum, it becomes apparent that the choice of a single narrow methodology would fail to do justice to the complex nature of human learning. Indeed, the jury member survey (and analysis of exam materials) brings to the surface of the discussion some of the factors that drive the hidden curriculum. Examples include faculty viewpoints concerning the role, purpose, and importance of exams; attitudes towards fellow faculty, students, and assessment; as well as expectations of students in separate degree tracks and the influence of external examiners. The range of variables dictates a multifaceted, integrated view of assessment and curriculum within a broad educational context, if the resolution of curriculum and assessment challenges is to be persuasive and conclusive. This multiplicity points to the need for both traditional assessment, which attempts to eliminate subjective factors to the greatest extent possible through standardization (test method facets), and alternative assessment instruments, which provide greater range, depth, and authenticity (portfolios).

What conclusions can be drawn from the survey concerning this community of professional interpreters and educators, particularly in view of the many years of vast experience and the extraordinary qualifications of the survey participants, which is documented through their background information? Perhaps that in a community of educators who hail from all parts of the globe, considerable effort is required to arrive at a self-concept as a group that is more united by similarities than separated by differences. An effort to look closely at the meaning of “the market” and establish true commonalities and differences is no doubt required. Otherwise, extreme variations in professional judgment, educational philosophy, and perceived purposes of assessment and examinations, whether well founded or not, will continue to perpetuate them-

selves. Such random fluctuations cannot serve the purpose of achieving greater exam validity and authenticity. If differences exist, they should be documented, explained, and, if necessary, justified.

In light of the current state of affairs in interpreter assessment, a more holistic approach to assessment would seem advisable. A combination of more highly standardized examinations with clearly elaborated purposes, test facets and assessment criteria would be a starting point. The inclusion of alternative forms of assessment (portfolios) can add depth and range to assessment regimes and foster the more appropriate use of assessment outcomes. Such suggestions are not made lightly; the improvement of existing assessment regimes is labor- and time-intensive, although it is mandated by the results of the case study. The integration of alternative forms of assessment into the curriculum requires substantial revisions of existing courses and syllabi and would undoubtedly require several years to successfully implement. Professional development among interpreter educators (rater training) would be a prerequisite. These suggestions are made despite these challenges; the potential to accelerate learning and multiply outcomes is too great. The ramifications of failing to move forward in this area are discussed in the final chapter of this book.

3. Part III: Exam materials and test method facets

Given the need to pay greater attention to test method facets in test development and administration, the sheer number of examinations conducted in the GSTI is intimidating. The number of texts that must be selected for an individual exam session totals 12 for the Professional Examinations alone, which must then be doubled to provide for an additional exam session in August, and is in turn complemented by 12 texts for the Qualifying Examinations. The total number of texts required for Professional and Qualifying Examinations in translation and interpretation before the elimination of sight translation examinations in 1997 totaled 44 per language program. In view of these numbers, the fundamental question is whether this volume of exams is feasible, especially in larger programs, in which hundreds of exams must be scored in the May session alone.

A reduction in the number of examinations would allow more effort to be focused on establishing valid and reliable examination procedures. This preliminary text analysis, coupled with the results of the jury member survey, indicate that the consecutive general and consecutive technical examinations, for example, could well be redundant. Similar analyses could be conducted for

the translation examinations. Without a reduction in the number of exams, it is also highly unlikely that alternative forms of assessment (portfolios) can be successfully implemented, as faculty are already working at peak capacity.

A number of measures could also be suggested to streamline the examination process and at the same time control test method facets. They can be derived from the application of test method facets to interpretation examinations. Greater uniformity of the test environment, the test rubric, and the facets of input would make examinations more comparable. Possibilities include clear procedures and texts for briefings; the use of 'canned' input, or videotapes, to standardize the channel of input in some examinations; the elaboration and application of consistent criteria for text selection; and rater training in jury deliberation procedures and scoring. At the same time, inclusion of portfolio assessment, in which students gather evidence of their performance in campus conferences and at community events, would serve to heighten the authenticity of assessment and ensure a comprehensive, holistic approach.

4. Addressing the research questions

In reference to the research questions outlined in the introduction to the case study (Chapter 5), the results of the case study show that the GSTI curriculum is not optimally designed. At the same time, additional research is required to determine whether the role of translation instruction is appropriate in the interpretation degree tracks. Suggestions for further research have been made above. The case study also successfully illustrates that curriculum theory and language testing concepts can be used as a foundation for the discussion of the situation in the GSTI to provide (partial) answers to the research questions. Curriculum theory and language testing concepts help inform decision-making in the local GSTI context, as they serve as useful tools to better understand and describe the strengths and weaknesses of curriculum and assessment. They also serve as a framework for the suggestions for curriculum improvement in the following chapter.

There are multiple reasons to continue and intensify the discussion of curriculum theory and language testing concepts in interpreter education. As a basis for a principled discussion, curriculum theory and language testing create a foundation, a set of commonalities, shared by all language combinations and degree tracks. Therefore, they help develop a distinct profile for translator and interpreter education as a distinct discipline in an academic setting. They serve to strengthen the case that a curriculum model is effective and,

where weaknesses may lie, provide a basis for developing suggestions for its improvement. Similarly, the appropriateness, meaningfulness, and usefulness of testing can be demonstrated.

Finally, it stands to reason that, if curriculum theory and language testing concepts can serve this purpose in the GSTI, they will serve this purpose in other local contexts as well. The potential for productive research at the interface of Interpreting Studies and more traditional areas of scholarly inquiry into the nature of teaching and learning is promising. Many of the obstacles to this type of interdisciplinary research (Gile 2000; see also Pöchhacker & Shlesinger 2002:5) are surmountable. Authentic data can be collected with relative ease and, at least in the United States, a growing number of language testing specialists are showing an interest in what is for them a new area of study, making teamwork feasible. Moreover, this area of research addresses interests that these disciplines share: the nature of learning and teaching, the ability to identify successful candidates for educational programs, and the improvement of student and instructor performance in academic settings and, albeit to a lesser extent, performance in the field (Gile 2000:95).

CHAPTER 10

Curriculum enhancement

An integrated Y-track model

The following Y-track model is presented as a suggestion for improving GSTI's curriculum. These proposals are based upon the ideas developed in the theoretical discussion of curriculum and assessment and also address concerns arising in the case study. It is an official curriculum for discussion purposes and can be refined and implemented only in accordance with the process described in Figure 3.2 in Chapter 3. Aspects of this model may be adapted to other curriculum models or used for the implementation of new programs as needed. The theoretical discussion of curriculum and assessment, as well as the results of the case study, point to the need to develop a clearer statement of the aims and purposes of the curriculum, objectives of degree tracks, and descriptions of competence levels. Assessment practices need to be more consistent and comprehensive, i.e., provide greater range and depth. They are related more directly to the curriculum, which reflects the principles of *curriculum as process* through effective skill sequencing and *curriculum as interaction* through an environment as conducive to learning as possible. Flexibility and streamlining in the curriculum model depend critically upon the specification of content in Curriculum Components and study concentrations so that a specific degree track and areas of specialization can be selected appropriately and as early as possible.

The Curriculum Components of the integrated Y-track model are presented as a flow chart in Figures 10.1–10.4. The tables in Appendix C provide an overview of courses on a semester basis and degree requirements. The figures in Appendix C show the sequencing of the core curriculum and assessment, i.e., proficiency testing in specific courses and portfolio review. Expertise levels are described for each Curriculum Component in Figure 3.3 in Chapter 3.

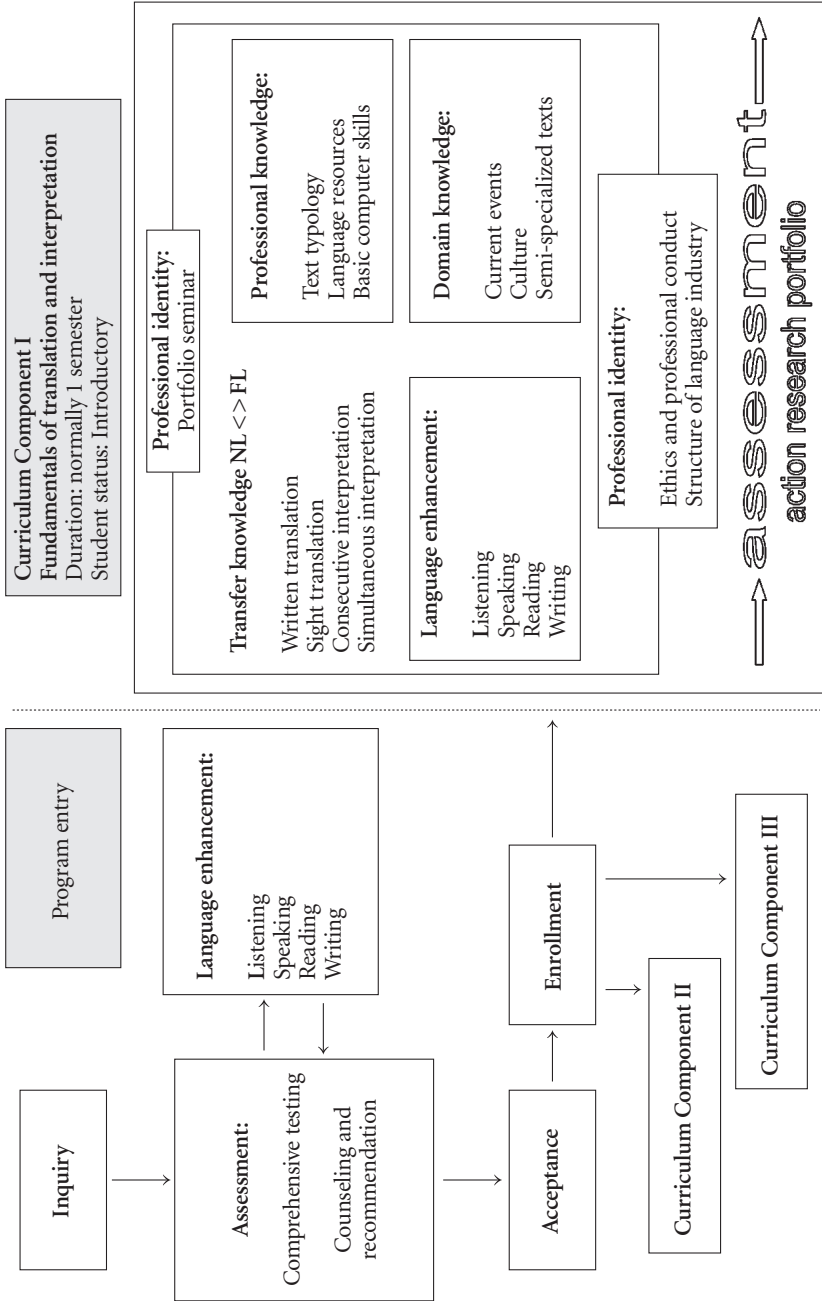


Figure 10.1. Program entry and Curriculum Component I

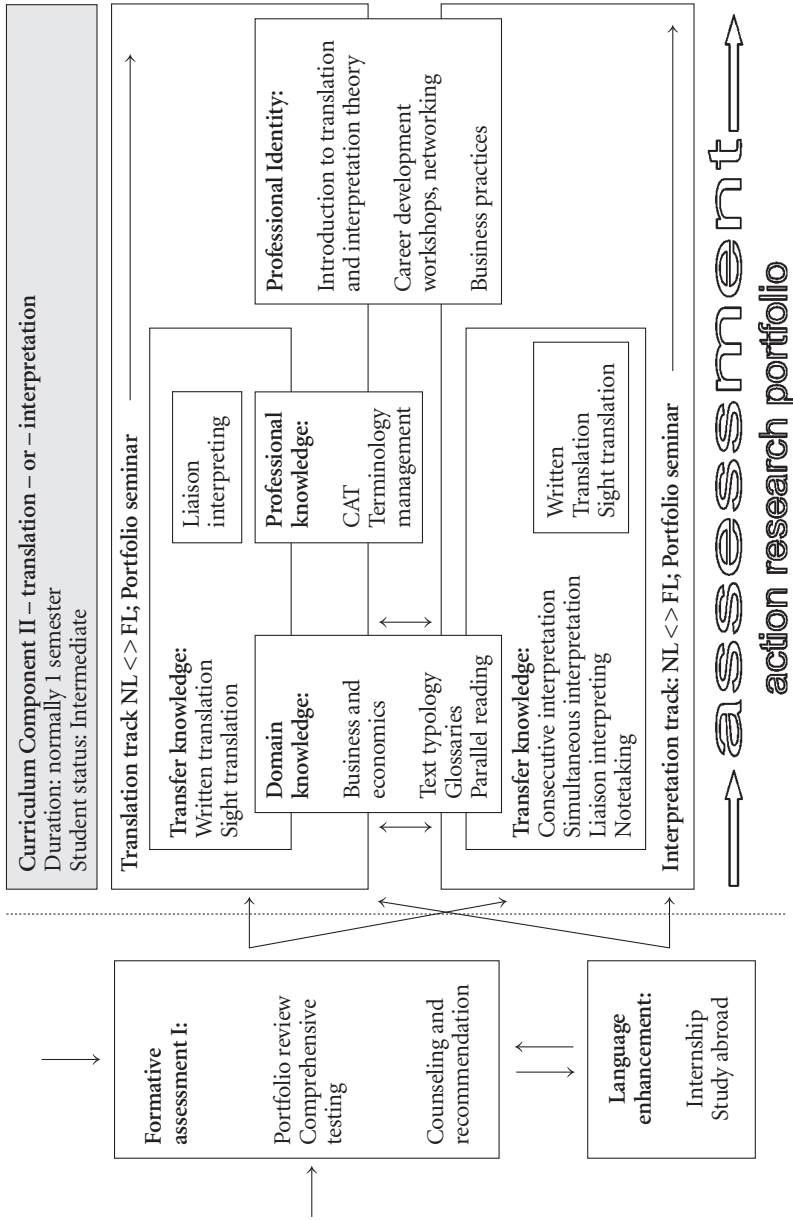


Figure 10.2. Curriculum Component II

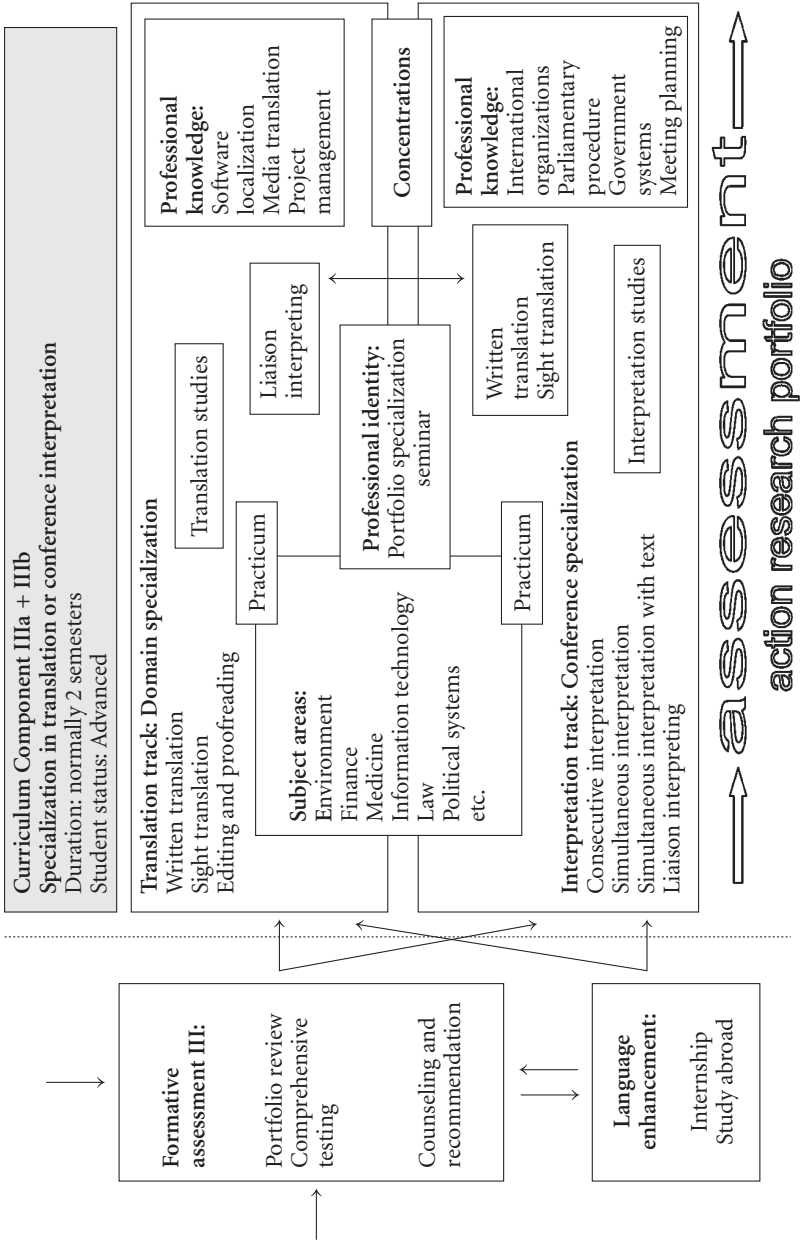


Figure 10.3. Curriculum Component III

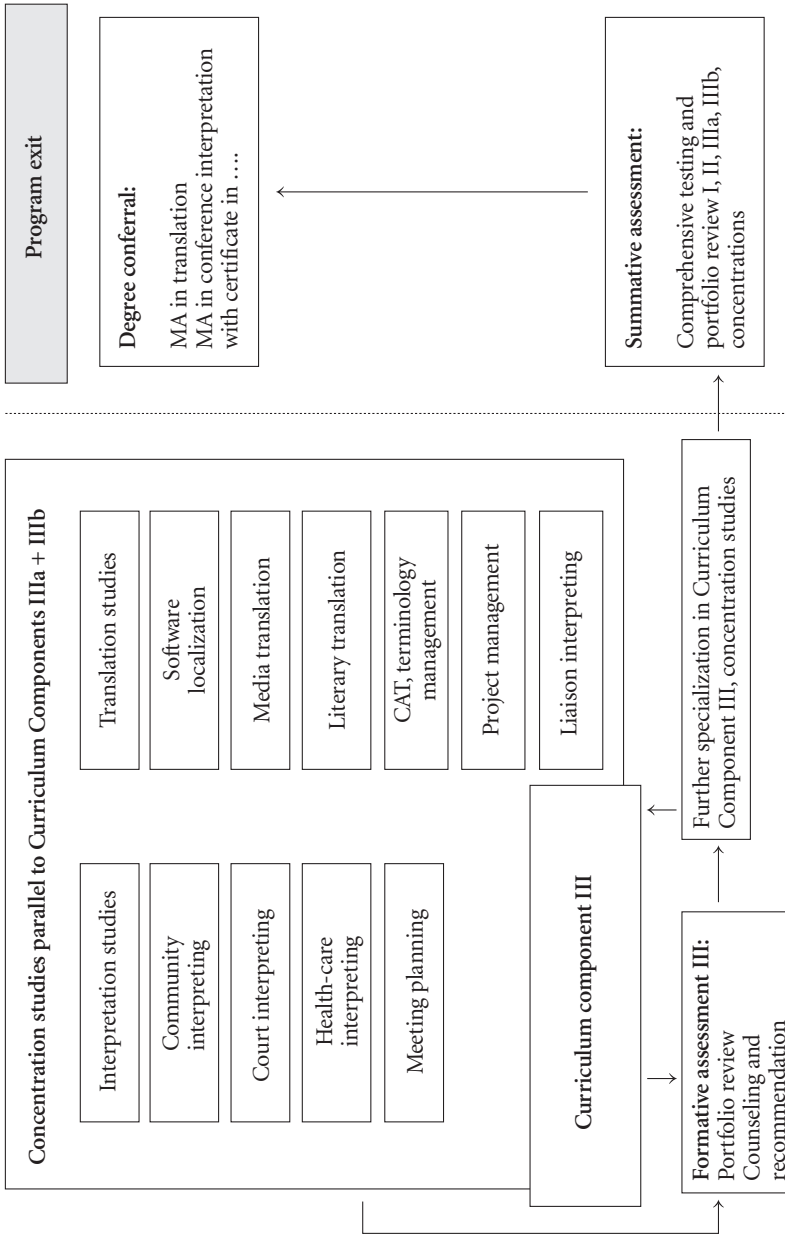


Figure 10.4. Concentration studies and program exit

1. Aims and goals of the curriculum

The central aim of this curriculum is to impart the professional knowledge students require to enter the language industry and succeed as multilingual, multicultural communication specialists. To succeed in the marketplace, practitioners require specialization(s) in translation and/or interpretation in selected areas of subject matter and domain concentration and in a marketable language combination. This model is grounded in an educational philosophy based upon the concepts of *curriculum as process* and *curriculum as interaction*. In other words, the core course of study is carefully sequenced to streamline skill and knowledge acquisition, and the educational environment is designed to promote incorporation of the student into the professional community through collegial mentoring and reflective practice. This philosophy therefore integrates the scientific and humanistic approaches to curriculum based upon the foundations of educational philosophy (Dewey, constructivism, reflective practice) and psychology (instructional design, skill sequencing, principles of expertise).

The aims of this Y-track model reflect the need for greater competence in both interpretation and translation. Two primary degree tracks, one in translation and the other in interpretation, are offered so that it is possible to specialize in one area of study. At the same time, some translation and some interpretation requirements are maintained in the opposite degree track throughout the curriculum, ensuring that graduates have a skill foundation in both areas. This model also provides opportunities to focus on specializations in selected areas of concentration, for example legal interpreting, software localization, project management, and research in Translation and Interpreting Studies. Greater flexibility is introduced in the sequencing of curriculum components and language combinations without sacrificing strict sequencing in skill and knowledge acquisition in the core curriculum. Details in this area are discussed in Section 5. Finally, the heightened role of technology in the language industry is reflected in the incorporation of computer skills, terminology management, CAT tools, media translation, and software localization into the curriculum. Domain concentrations in interpretation are possible in meeting planning and legal, health-care, and community interpreting. The aims and goals of the curriculum for the Master of Arts in Conference Interpretation are outlined below.

Aims of the Master of Arts in Conference Interpretation

Summative assessment through portfolio review:

- Ability to conduct oneself as a well-educated professional in the field, despite limited professional experience, e.g., interaction with colleagues and clients, contract negotiations, job interviews, awareness of ethical business practices
- Ability to perform successfully as a team member under the guidance of senior interpreters at conferences on the freelance market
- Ability to pass relevant tests in organizations hiring freelance or staff interpreters in the relevant language combination, e.g., European Union, United Nations, government ministries, and other public-sector institutions and agencies
- Ability to work in selected areas of domain concentration, e.g., legal interpreting, meeting planning, media translation, software localization, etc.; ability to pursue scholarly research, if desired

Proficiency testing, open to the public, including potential employers and members of professional associations:

- Consecutive interpretation of a ten-minute text on a topic of moderate difficulty, i.e., representative material from the private market, an international organization, government agency or institution
- Simultaneous interpretation of a 15-minute text on a topic of moderate difficulty
- Simultaneous interpretation of a 15-minute specialized text, with 15 minutes of preparation time and access to relevant resources (dictionaries, parallel reading, glossaries)
- Establishment of professional language ranking, in consultation with results of summative portfolio assessment

Goals for Curriculum Component III (CCIII) in interpretation

Preparation for summative portfolio and proficiency testing; entry into the profession

Portfolio review by program faculty:

- Demonstrate ability to perform as an interpreter in professional settings, e.g., effective use of time and resources for conference preparation, logis-

tics and workload management, coordination and cooperation with colleagues, effective and constructive self-assessment of performance, ability to provide constructive peer feedback when required or solicited

- Demonstrate exposure to a wide range of topics covered in the private and institutional markets in the respective language combination(s)
- Demonstrate professional knowledge of international organizations and parliamentary procedure (rules of order), government systems, meeting planning
- Demonstrate knowledge and skills in selected areas of concentration, e.g., courts, meeting planning, community interpreting
- Demonstrate knowledge in a selected area of Interpreting Studies through fulfillment of a paper requirement

Proficiency testing in courses:

- Consecutive interpretation of a ten-minute text on a topic of moderate difficulty, i.e., representative material from the private market, an international organization, government agency or institution
- Simultaneous interpretation of a 15-minute text on a topic of moderate difficulty
- Simultaneous interpretation of a 15-minute specialized text, with 15-minutes of preparation time and access to relevant resources (dictionaries, parallel reading, glossaries)
- Written translation of a 500-word text in a specialized subject area
- Sight translation of a 200-word text in a specialized subject area

Goals for CCII in interpretation

Finalization or revision of degree track decision and language combination; consideration of target market and corresponding concentrations of study

Portfolio review by program faculty:

- Demonstrate ability to interpret material of moderate difficulty on business-related or otherwise general topics in all three modes of interpretation (consecutive, simultaneous, liaison)
- Demonstrate proficiency in written and sight translation of business and economic topics
- Demonstrate fundamentals of notetaking for consecutive interpretation

- Demonstrate basic understanding of business and economics, and related text types and terminology
- Demonstrate basic knowledge of terminology management
- Demonstrate basic familiarity with Translation and Interpretation Studies, including research topics, methodology, and relationship to professional practice, through fulfillment of a paper requirement
- Demonstrate basic knowledge of business practices relevant to interpretation, e.g., resumé writing, exposure to the interpreter's workplace

Proficiency testing in courses:

- Consecutive interpretation of a five-minute text on a business-related or general topic
- Simultaneous interpretation of a ten-minute text on a business-related or general topic
- Liaison interpreting for a period of ten minutes on a business-related or general topic
- Written translation of a 300-word text on a topic from business or economics
- Sight translation of a 150-word text on a topic from business or economics

Goals for CCI

Decision on Curriculum Component to pursue the following semester: translation or interpretation

Portfolio review by program faculty:

- Demonstrate aptitude to produce both spoken and written semi-specialized texts proficiently in the native and foreign language(s), e.g., media and press materials; texts on culture, history, political systems; general texts in future specialization areas, e.g., business and finance, law, information technology, medicine, environment, etc.
- Demonstrate aptitude in interpretation
- Demonstrate aptitude in translation
- Demonstrate knowledge of text types
- Demonstrate knowledge and use of language resources, e.g., dictionaries, parallel reading, reference works, world wide web, basic computer skills

- Demonstrate basic professional knowledge of the language industry, e.g., ethics and professional conduct, structure of the language industry and related job opportunities

Proficiency testing in courses:

- Pass proficiency tests in written and sight translation, consecutive and simultaneous interpretation
- Consecutive interpretation of a three-minute speech on a general topic, e.g., a current events topic
- Simultaneous interpretation of a five-minute speech on a general topic
- Written translation of a semi-specialized 250-word text
- Sight translation of a 100-word text on a general topic

Entry level requirements

In addition to administrative and other general educational requirements, e.g., Bachelor of Arts, TOEFL scores, etc.:

- Language proficiency equivalent to Native Educated Proficiency in listening, speaking, reading, and writing for study in native language (NL); Full Functional Proficiency in listening, speaking, reading, and writing for first foreign languages (FL1, future “B” language); Full Functional Proficiency in listening and reading and General Functional Proficiency in speaking and writing for second foreign language (FL2, future “C” language). Admittance is possible with General Functional Proficiency in FL1 and FL2 with mandatory language enhancement and review in areas requiring Full Functional Proficiency during CCI and CCII. See *F 2089 – 01 Standard Guide for Interpretation Services* (American Society for Testing and Materials).
- Demonstration of a general awareness of career options in the language industry
- Demonstration of interest and motivation to pursue and reach the aims and goals laid out in the curriculum

2. Integrated assessment

The Y-track model is designed to integrate formative and ipsative assessment into each Curriculum Component and concludes the course of study with a

series of summative examinations. Through a combination of traditional and alternative methodologies, i.e., portfolios coupled with proficiency testing, assessment is both comprehensive and holistic. Portfolio seminars are adopted as a vehicle for both the delivery of instruction and the implementation of an instrument for summative, formative, and ipsative assessment. Proficiency testing is conducted in relevant translation and interpretation courses at the end of each Curriculum Component. The results of proficiency testing in courses are discussed in the portfolio seminars and integrated into the portfolios. During the formative assessment sessions at the end of each Curriculum Component (Formative Assessment I, II, and III), the student's work is reviewed to determine whether the student has met the goals of the relevant Curriculum Component. He/she is then given a faculty recommendation to aid in making a decision on how to proceed in his/her course of studies. In addition, proficiency testing is conducted as part of the summative assessment regime at the end of the curriculum. In this session, the results of the proficiency tests and portfolio review are used to ascertain fulfillment of degree requirements, a language ranking, and the completion of concentrations. The summative portfolio in CCIII incorporates a thesis requirement. Four areas are reviewed in all assessment stages: language skills, translation and interpretation skills, the integration of domain or subject matter knowledge, and knowledge of the profession. See Table 10.1 for a criterion-based assessment rubric for pass-fail proficiency testing in all Curriculum Components. This scale may also be expanded to include additional levels.

3. Curriculum as process

The integrated Y-track model implements the concept of *curriculum as process*, i.e., the careful sequencing of knowledge and skill building, through the progressive completion of individual Curriculum Components. The goals of each component are described in the previous section. Individual learning objectives are then to be defined in syllabi on the course level. Courses devoted to the development of translation and interpretation skills, professional knowledge and identity, and domain specializations are offered within the core curriculum. Components are complemented by an expanded curriculum, which provides a vehicle for language enhancement, area studies, additional courses in translation, and content courses in individual concentrations. A breakdown of courses for each Curriculum Component is given in Tables 1–6 in Appendix C. Course sequencing is shown in Figures 1–7 in Appendix C.

Table 10.1. A criterion-based assessment rubric for proficiency testing

Assessment constructs

The examinee should demonstrate his/her ability to:

- Interpret with faithfulness to the meaning and intent of the original
- Interpret in a manner linguistically appropriate to a given communicative situation
- Apply world knowledge and knowledge of subject matter
- Perform with resilience under stress and demonstrate acceptable platform skills

Assessment criteria

Criteria fall into three main categories:

- Meaning, e.g. accuracy, omissions, overall coherence
- Language use, e.g. grammar, expression, word choice, terminology, accent, and diction
- Presentation, e.g. pace, voice, non-verbal communication such as posture, eye contact, and appropriate gestures

Scoring criteria**High pass**

Outstanding work: extreme accuracy in meaning, superior command of language, and highly polished presentation

Pass

Acceptable work: the interpretation is accurate; language use is appropriate; presentation is convincing; subtle shifts in nuance, minor slips in language use, slightly flawed presentation, or inconsequential combinations thereof possible

Fail

Unacceptable work: the interpretation does not render the original accurately and convincingly due to any of the following:

- Meaning has been altered, e.g., failure to convey information or distortion of information
 - Language use is incorrect, e.g., faulty grammar, incorrect word choice or terminology, thick accent
 - Presentation is poor and undermines credibility, e.g., long pauses, slow pace, lack of eye contact, inappropriate non-verbal communication, or extremely shaky or inaudible voice
-

Curriculum Component I is devoted to developing skills and abilities in both spoken and written language mediation before the decision is made to pursue either the translation or interpretation degree track. Even though a clear distinction between translation and interpretation is made in Curriculum Component II, students continue to fulfill translation (or interpretation) requirements in the interpretation (or translation) degree track. Due to the flexibility and concurrent streamlining of the curriculum model, students have the option of switching degree tracks after the second semester and still

completing the requirements for a Master of Arts degree within four semesters. Examples of the flexibility of the curriculum are given in Section 5.

In terms of subject matter, Curriculum Component I provides broad exposure to a variety of domains and text types in both translation and interpretation on a semi-technical level. Curriculum Component II introduces students to translation or interpretation in a specific subject matter area: business and economics. This is an appropriate domain through which students can be introduced to approaches and strategies for acquiring a subject matter specialization, as a solid foundation in business and economics is required in almost all areas of the language industry, i.e., both the institutional and private markets for interpretation.

Curriculum Component III gives students the opportunity to select an individual area of specialization, which is to be developed in a portfolio seminar. Examples include finance, the environment, telecommunications, medicine, and law, but no restrictions on areas of specialization apply. Rather, through the portfolio seminar, students have the possibility of defining their own areas of specialization based upon demonstrable needs in the language industry. In translation and interpretation courses for specialized texts, areas that faculty consider mandatory in a given language combination are covered.

In Curriculum Component III, students also have sufficient time and credits to build study concentrations and develop complementary skill sets. Through careful planning in career development and portfolio review, complementary areas can be selected that add both range and depth to a student's professional qualifications. Examples are cited in Section 5. In addition, concentrations and specializations allow students to prepare themselves more thoroughly for specific sectors of the language industry and demonstrate to employers that they have initial exposure in desired fields.

4. Curriculum as interaction

The integrated Y-track model implements the concept of *curriculum as interaction* by providing an educational environment that fosters mentoring relationships and integration into the professional community. At the same time, instruction is delivered in formats that situate cognition and learning and foster reflective practice, in particular through a process-oriented portfolio approach based upon principles of action research. Instructional formats include portfolio seminars, practicum, translation and interpretation classes (introductory,

intermediate and advanced), and seminars, workshops, and lectures devoted to developing professional knowledge and identity.

Instructional content and assessment are integrated across all courses within each Curriculum Component through a portfolio seminar. The compilation and review of a comprehensive portfolio are based upon a constructivist approach to learning in which students pursue self-defined goals through reflective practice. The portfolio seminar also fosters a collaborative relationship between faculty and students in the form of a cognitive apprenticeship. Learning experiences gained in the interpretation classroom and the practicum are thus coordinated, focused, and leveraged in pursuit of the curriculum goals.

5. Flexibility and streamlining

The integrated Y-track model is designed to provide both flexibility and streamlining in the curriculum. A rolling curriculum model allows students to enter in either the fall or spring semester. If appropriate competence levels are demonstrated in the entry-level assessment, they may also begin their studies with Curriculum Component II or Curriculum Component III. Students with this type of advanced entry status can complete a minimum of 30 credits and the corresponding degree requirements and graduate within two to three semesters.

Greater flexibility is introduced in language combinations, specialization in translation or interpretation, and domain concentrations. Possible combinations include, for example:

- A Master of Arts in Translation in Spanish (A) and English (B) with concentrations in legal and health-care interpreting
- A Master of Arts in Translation in English (A), French (C), and Spanish (C) with concentrations in project management and media translation
- A Master of Arts in Translation with English (A) and Chinese (C) with concentrations in translation studies, CAT tools, and software localization
- A Master of Arts in Conference Interpretation in German (A) and English (B) with a concentration in software localization
- A Master of Arts in Conference Interpretation with English (A), Russian (C), and French (C) with a concentration in meeting planning
- A Master of Arts in Conference Interpretation with Japanese (A) and English (B) with a concentration in Interpreting Studies

- A Master of Arts in Conference Interpretation with English (A) and Korean (B) with concentrations in health-care interpreting and media translation

Component sequencing is also designed to be flexible. Examples include the following:

- CCI + CCII (Translation) + CCIII (Translation) + CCIII (Translation) → MAT in three languages with one concentration
- CCI + CCII (Translation) + CCIII (Translation) + CCIII (Translation) → MAT in two languages with two concentrations
- CCI + CCII (Translation) + CCII (Interpretation) + CCIII (Interpretation) → MACI in two languages
- CCI + CCII (Interpretation) + CCIII (Interpretation) + CCIII (Interpretation) → MACI in three languages with one concentration
- Advanced entry: CCII (Translation) + CCIII (Translation) → MAT in two languages with one concentration
- Advanced entry: CCIII (Translation) + CCIII (Translation) + CCIII (Translation) → MAT in three languages with three concentrations
- Advanced entry: CCII (Translation) + CCII (Interpretation) + CCIII (Interpretation) → MACI in three languages

Students and graduates also have the option of adding languages and concentrations at any time. Both Master of Arts degrees can also be earned within five to six semesters of study. Through academic advising, guidance is provided on the feasibility of goals in such cases.

Special features of this integrated Y-track model include the fact that instruction in both translation and interpretation is provided to some extent in each degree track throughout the curriculum. Curriculum Component I is designed to focus specifically on language transfer processes without favoring either translation or interpretation. Simultaneous is introduced early in the curriculum in order to facilitate decision-making when choosing specific language combinations and degree tracks. Notetaking is taught in a separate course in the second semester. The role of sight translation is enhanced throughout the curriculum. Liaison interpreting is clearly defined and distinguished from consecutive interpretation. Finally, there is greater focus on the development of professional knowledge and a professional identity as a translator and/or interpreter.

Outlook

On the political and ethical consequences of test validation

But if measurement is science and the use of measurements is applied (political) science, the justification and defense of measurement and its validity is and may always be a rhetorical art. (Messick 1988:43)

Why test validation in interpreting? Why should administrators, instructors, students, alumni, and employers be interested in gathering validity and reliability evidence in their programs? As shown in the case study, gathering evidence of the validity of interpreting tests is a process of documentation that provides insight on how programs can be optimized and streamlined. Achieving greater efficiency in interpreter education programs was described as one of the challenges facing interpreter educators in the introduction to this volume. In addition to providing a framework for a review of logistics – the issues surrounding the organization and allocation of personnel, financial, and material resources – validation provides insight in other areas that are related to the consequences of testing. I discuss three areas pertaining to (a lack of) validity in the following, proceeding from the specific to the general.¹ The first concerns individuals wishing to become interpreters – the *personal consequences* of test validation. The second concerns institutions offering educational programs and degrees – *institutional consequences*. The third concerns the stature of the profession – *professional consequences*. These areas are interrelated, overlapping categories. From here I discuss reasons why this research on validity and reliability issues is a useful and necessary contribution to the process of professionalization in the field of interpreting.

In the area of *personal consequences*, the ramifications of false outcomes are complex. We know from test theory that there are not two, but rather four possible outcomes in any testing scenario: identification of the true master² and the true non-master, as well as the false master and the false non-master (Gipps 1994; Nitko 1980; Shepard 1980). Similarly, in predictor tests, the American Psychological Association distinguishes between a “false positive –

selecting someone who will subsequently fail” and a “false negative – not selecting people who would have succeeded” (Standards 1985: 11). As a matter-of-course, the goal of interpreter testing is to distinguish the individuals who are truly proficient at a specified level from those individuals who are not proficient, thereby eliminating false positives and false negatives. In the cases of true non-mastery and in particular true mastery, the individual generally benefits from these outcomes. Even in the case of true non-mastery, the correct identification of individuals who should not or are not yet ready to practice a profession is in the interest of the individuals in question.

In contrast, the ramifications of false (non-)mastery are detrimental to the individual. In the case of false mastery, the individual is given formal approval to practice a profession for which he or she is not (yet) qualified, which can have a negative impact on the individual’s efforts to build a career. In the case of false non-mastery, the individual must unfairly repeat an examination or, in a worst-case scenario, is unfairly refused a professional credential in which the student has made considerable financial and emotional investments. A better understanding of interpreter testing therefore promotes fairness to students, who should feel that examinations are ultimately a rite of passage through which they gain admittance to a fascinating, rewarding profession, rather than an intimidating, arbitrary, academic exercise that subjects them to the whims of evaluators. Indeed, final testing is a key step in the process of enculturation into the community of professional interpreters.

The *institutional consequences* of a lack of valid and reliable testing are just as serious and complex as possible personal consequences. Simply stated, false outcomes reflect poorly on the credibility of an educational institution. At the most fundamental level, the ability of an institution or school to argue its case, to defend and promote its programs both internally and externally, has a direct impact on its ability to survive and prosper. Examples are the ability of an institution to achieve and maintain accreditation by pertinent bodies and to secure funding from public and private sources. It stands to reason that schools of translation and interpretation wish to emerge from their existence in the shadows of academe, a situation to which I allude in the introduction to this book. The emergence of a pedagogical foundation grounded in educational theory would serve interpreter education (and the profession) well in the quest not only for greater respect and understanding but also academic leverage and clout.

Regarding matters that are primarily internal to schools, Gipps (1994: 174) describes benefits that arise from sound assessment practices, which include, among others, equity, dependability, curriculum fidelity, context description,

and credibility. (1) *Equity* pertains to the fairness of assessment methods in the broadest sense. For example, the requirement that a range of indicators be used in an assessment program ensures that students are offered multiple opportunities to excel (174). In this case, equity precludes one-shot testing. Equity also implies consultation with the student in the decision-making process, but also rigor in decision-making, including the ability to make decisions that may be against the immediate wishes of the student but in his or her long-term interest.

The (2) *dependability* of examinations – in other words, trust in their resilience as useful and meaningful decision-making tools – is a result of curriculum fidelity, consistency, and comparability (Gipps 1994:174). To assure (3) *curriculum fidelity*, the construct, domain, or curriculum must be well specified, and there must be broad coverage of the curriculum (if not of each domain) in the assessment (174). Linn (1983) refers to this concept as curricular or instructional validity. The notion implies that the curriculum offering must enable the learner to reach the curriculum objectives and that the assessment procedures must be useful in determining whether these objectives have been met.

A means of contributing to curriculum fidelity is through (4) *context description*, or by providing detailed information about the educational context so that informed judgments about transferability can be made (Gipps 1994:174). This information can be delineated in statements of exam philosophy, policies, and procedure, in test specifications, and other curriculum documents. Recommendations for the use of test results provide guidance on using assessment outcomes for decision-making purposes in other settings. Issues to be addressed include the possibility of a language rating and domain specification on diplomas and certificates.

(5) *Comparability* is achieved through consistency of approach to the development and use of a range of assessment instruments; instructors require a common understanding of assessment criteria and must apply the same scoring procedures (Gipps 1994:174). It seems reasonable to argue that examinations should be comparable within language programs and across language programs, although divergence is justifiable through documentation. Despite the range of curriculum offerings – language combinations, domain specializations, and length of degree tracks – that is desirable in the community of schools offering degrees in interpreter education, applicants, students, practitioners, and employers need to be able to compare curriculum outcomes across schools (see Forstner 1995:XV). There should be transparency for all.

To achieve a high level of transparency, procedures for developing, administering, and scoring tests must be agreed upon and documented in test specifications, and test takers (students) must understand ahead of time what will be expected of them in test situations. This task, which cannot be meaningfully accomplished by one researcher or within one program of instruction alone (Cokely 1984: 146), falls squarely on educational institutions. As Arjona remarked over twenty years ago,

[I]f professional education is the vehicle for such a better way, then it behooves educators in our field to identify the criteria that differentiate it as a mode of entry and as a standard-setting mechanism in the profession. Educational programs must prove both worthwhile and meaningful. In addition, testing of student performance must, of necessity, be more comprehensive within the educational framework than testing of performance within the job market.

(1984b: 116–117)

For all of these reasons, it is imperative that members of our profession find the time to delve into the fundamental question of how curriculum and assessment can be enhanced, despite the pull of professional practice. Arjona adds:

Colleges and universities that offer professional programs must ensure that the training they offer does, in fact, distinguish the academically trained practitioner by a level of performance and professionalism that attests to the existence of a body of knowledge, a basic set of techniques, and deontological principles that ensure appropriate professional standards for the field.

(1984b: 117)

It is therefore my hope that research efforts in numerous schools of translation and interpretation will lead to the development of extensive sets of documents on curriculum and assessment that create a scientific basis for the exchange of information among programs and their comparison. This goal lies in the interest of all stakeholders involved in interpreter education. Indeed, (6) *public credibility* is a benefit of the dependability of curriculum and assessment outcomes (Gipps 1994: 174). As I hope to have convincingly demonstrated, without efforts to improve curricula and gather evidence of test validation on an ongoing basis, the usefulness of any training program is open to question. Indeed, its successes and failures are not measurable. Therefore, its costs may not be justifiable. And it may even be indefensible from both an ethical and legal standpoint.

Finally, the *professional consequences* of (a lack of) validity and reliability in interpreter testing arise from the personal and institutional consequences, in particular from those related to public credibility. Evidence-gathering allows

interpreter educators to interface with all entities who have a stake in the implementation of the curriculum, including users of interpretation services. Users of interpretation services are members of the general public; interaction affords members of the interpreting profession an opportunity to reiterate fundamental principles of the field of translation and interpretation, including the merits and strengths of the profession. In sum, evidence-gathering results in client education and contributes to the professionalization of the language industry through exchange, collaboration, and documentation.

It is of interest to interpreter educators to note that innovation in education and research is also driven by areas outside of educational settings, namely those governed by legislation, standards, and business interests. It is conceivable that those sectors where the public interest is more directly at stake will push research programs forward more rapidly than schools and programs within educational institutions (see Sawyer, Butler, Turner, & Stone 2002a, 2002b; Stansfield & Turner 2001). However, administrators of interpreter tests in the job market inevitably turn to educational institutions, i.e., centers of research and teaching, for guidance in assessment. For this reason, schools of translation and interpretation, which set implicit standards in the language industry, need to devote considerable time, energy, and resources to the development of explicit standards and thus emerge as genuine leaders in this arena. Research and training committees in professional associations also have a role to play, particularly in the fostering of national and international collaboration and the development of educational standards.

The personal, institutional, and professional consequences of test validation therefore have a direct impact on processes of professionalization in the field of language interpreting. Professionalism implies the ability to articulate to students and clients what constitutes a good or bad interpreting performance, and in a broader sense, why professional, high-caliber translation and interpretation services are mandated in specific situations. Sound education is based upon sound assessment practices, which in turn entails an ongoing process of validation. And if validation is a rhetorical art, it is one at which the community of interpreter educators should excel.

Over the last forty years, the education of interpreters and the scholarly study of language interpreting have become academic endeavors, whether in the research university, professional school, or technical college. It seems unlikely that educational programs will be relegated to the realm of vocational training any time in the near future. If this does occur, a reason could be a burgeoning demand for T&I professionals that outstrips graduate school training capacity. Indeed, even flexible, agile programs will have difficulty keeping

up with the quickening pace of the language industry. Other causes could include an inability to implement reforms due to institutional straightjacketing or administrators and faculty who have lost touch with the professional world. Or, more closely related to the exigencies of test validation: a lack of clarity in expressing the nature and demands of this complex form of professional education and training.

We should bear in mind that only through the concerted effort of dedicated, motivated and, without doubt, somewhat idealistic interpreter educators will it be possible to substantially improve the quality of interpreter education through the processes of test validation. The Graduation School of Translation and Interpretation at the Monterey Institute of International Studies is certainly not alone in working towards this goal. The number of CIUTI members who indicate that curriculum reform is under way is considerable, which is a healthy sign, as by definition curriculum must evolve continuously.

One final thought in this regard. To return to the words of Bobbit (1971: iii) that are cited in the introduction to this volume, improving only the details of educational systems is sometimes insufficient. The evidence presented here suggests that a review of assessment practices in some interpreter education programs and, by extension, the curricula of which interpreter examinations are a part, is in the interest of all curriculum stakeholders. It may well be that some instructional systems require fundamental changes in plan and/or purpose. Questions will inevitably surface as to the applicability of Bobbit's comment to specific schools and programs. This study shows that the fields of curriculum theory and language testing can inform such discussions.

Notes

Chapter 1

1. *Conférence Internationale permanente d'Instituts Universitaires de Traducteurs et Interprètes*. <http://www-gewi.kfunigraz.ac.at/ciuti/de/index.html>.
2. For example, the ISO standards on quality assurance, the German translation standard DIN 2345 (*Deutsches Institut für Normung e.V.*), the Austrian standards ÖNORM D 1200 and D 1201 for translation and ÖNORM D 1202 and D 1203 for interpretation (*Österreichisches Normungsinstitut*), the Australian NAATI standards (National Accreditation Authority for Translators and Interpreters), and the ASTM *F 2089 – 01 Standard Guide for Language Interpretation Services* and a similar guide for translation services in the United States (American Society for Testing and Materials; see Sawyer 1998).
3. A result of this movement has also been a schism between conference interpretation and other forms of interpretation, such as legal and health-care interpreting, although the increasing interest in and professionalization of legal, health-care, and community interpreting are reversing this trend (see Mikkelsen 1996; Garzone and Viezzi 2002).
4. Gile (1998b). See also Gile (1989, 1990, 1994a, 1994b, 1995b, 1997b, 1998a); d'Arcais (1989); Gentile (1991); Kurz (1995); Shlesinger (1995); Massaro and Shlesinger (1997).
5. See García-Landa (1995) on the definition of Interpreting Studies as a discipline within the natural sciences.

Chapter 2

1. Bowen (1994d, 1995, 1998); Gehman (1914); Karttunen (1994); Kurz (1985, 1986); Thieme (1956).
2. D'Arcais (1989); Gentile (1991); Gile (1989, 1990, 1994a, 1994b, 1995b, 1995c, 1997b, 1998b); Glaser and Chi (1988); Kurz (1995, 1996); Shlesinger (1995); Tommola (1997).
3. Kelletat (2001); Chernov (1992); Delisle (1977, 1981b); Gaddis Rose (1996); Gentile (1989); Gran and Viezzi (1995); Kucerová (1990); Kurz (1996:27–34); Niang (1990); Obst (1990, 1997a, 1997b); Weber (1990b).
4. For a review of the development of research in Interpreting Studies from the Second World War through the end of the 1980's, see Gile's *Regards sur la recherche en interprétation de conférence* (1995d:31–79).

5. For example, Delisle (1981c); Dollerup and Appel (1995); Dollerup and Loddegaard (1992); Dollerup (1994); Fleischmann, Kutz, and Schmitt (1997); Gran and Dodds (1989); Wilss and Thome (1984).
6. Kalina (1998:262–267); Kurz (1992, 1996:102–103); Lambert (1992).
7. A discussion of the work of Seleskovitch, Lederer, and the Paris School can be found in Pöchhacker (1994a:19–24) and Setton (1999).
8. Other salient examples of this genre of writing include Weber (1989a) and van Dam (1989).
9. Arjona (1978); Keiser (1978); Longley (1978); Paneth (1958).
10. Barik (1973b); Fabbro, Gran, and Gran (1991); Kurz (1996:73); McDonald and Carpenter (1981); Moser-Mercer et al. (2000); Moser-Mercer (2000); Andres (2000, 2001); for additional relevant studies see Moser-Mercer (1997b:256); see also Shreve and Diamond (1997:245–246) and Liu (2001:22–26).
11. Cooke and McDonald (1986); Hoffman, Shadbolt, Burton, and Klein (1995); Klein, Calderwood, and MacGregor (1989).
12. Arjona-Tseng (1994); Bossé-Andrieu (1981); Bowen and Bowen (1985a, 1989); Gerver, Longley, Long, and Lambert (1989); Gringiani (1990); Hyang-Ok (n.d.); Lambert and Meyer (1988); Longley (1989); Moser-Mercer (1984, 1985, 1994a, 2000); Moser-Mercer et al. (2000); Pippa and Russo (2002).
13. For example, Pöchhacker (2001, 2002); Garzone (2002); Kurz (2001); Cenková (1998); Shlesinger (1997); Kutz (1997); Kopczynski (1994); Bühler (1989); Gold (1976).
14. Applied Linguistics Research papers are studies completed as part of the required coursework in the Master of Arts in TESOL / TFL program of the Graduate School of Languages and Educational Linguistics of the Monterey Institute of International Studies.

Chapter 3

1. According to Jackson, “[t]he variety of intellectual pursuits available to those who wish to contribute to an understanding of educational matters in general or curricular matters in particular is truly vast in number and therefore a bit daunting, if not downright unsettling, in its multiplicity. The boundaries of the field are diffuse, so much so that one may wonder sometimes whether it has any boundaries at all” (1992a:37).
2. Other descriptive frameworks have been developed. Greeno, Collins, and Resnick, for example, categorize curriculum design principles according to behaviorist/empiricist, cognitive rationalist, and situative/pragmatic-sociohistoric views of cognition and learning (1996:16–26).
3. See Prawat (1995) on the versatility of Dewey.
4. *Journal Officiel*, qtd. in Stoll (1996:11).
5. Bereiter and Scardamalia (1992:517); see also Darling-Hammond and Snyder (1992:54–56).

6. Darling-Hammond and Snyder (1992:46).
7. The four other approaches to curriculum defined by Ornstein and Hunkins are the managerial, systems, academic, and humanistic approaches (1998:3–8).
8. For an overview, see Gardner (1987:89–95).
9. For a review, see Setton (1999).
10. Risku describes mental models that may apply to translation (1998:139).
11. The elaboration of proficiency categories has received more attention in translation (Stansfield, Scott, and Kenyon 1992).
12. See Berry (1997); Buchner and Wippich (1997); Ellis (1994); Paradis (1994); Reber (1993); Stadler and Frensch (1997).
13. For a discussion of situated cognition in translation, see Kiraly (1997a, 2000).
14. For a discussion of authenticity in translation assessment, see Kiraly (2000).
15. See also Pöchhacker (1990, 1994).

Chapter 4

1. (1937:324; 1947: 394); qtd. in Angoff (1988:19).
2. For a plethora of validity terms, see Messick (1980:1015).
3. (1989:18); see also Gipps (1994:59–61).
4. Arjona-Tseng (1994); Bossé-Andrieu (1981); Bowen and Bowen (1985a; 1989); Gerver, Longley, Long, and Lambert (1989); Gringiani (1990); Hyang-Ok (n.d.); Lambert and Meyer (1988); Longley (1989); Moser-Mercer (1984, 1985, 1994a).
5. Additional examples include the descriptors for language competence set forth in the *ASTM Standard Guide for Use-Oriented Language Instruction* (American Society for Testing and Materials) and Stansfield, Scott, and Kenyon's skill level descriptors for the measurement of translation ability (1992). An example of a band or scale (Bachman 1990b:44) for foreign language proficiency is the ACTFL Proficiency Guidelines (The American Council on the Teaching of Foreign Languages 1986). See Butler and Stevens (1998) on the validation of language proficiency descriptors.

Chapter 5

1. The website of the Monterey Institute of International Studies is continuously updated. The information referred to here is available online at <http://archimed.uni-mainz.de/pub/2001/0097>.
2. See curriculum documents posted at <http://archimed.uni-mainz.de/pub/2001/0097>.

Chapter 6

1. Monterey Institute of International Studies (1998:7); Wood (1998:12–15, 47).
2. A, B, and C language categories are used in this study, because this is the terminology in place at the Graduate School of Translation and Interpretation of the Monterey Institute of International Studies. It may be argued, however, that the terms “mother tongue,” “first foreign language,” and “second foreign language” are more accurate in this and most, if not all, training contexts, for the simple reason that A, B, and C refer to working languages among professional interpreters, a status that students are working towards but have not yet attained.

Chapter 8

1. For a comprehensive discussion, see Nord (1995); see also Reiß (1971).
2. Shlesinger (1989, 1990) explores the positioning of texts along an oral-literate continuum and the leveling effect of interpretation.

APPENDICES

Appendix A

Scoring categories

- High Pass:** Candidate's interpretation is extremely accurate and shows superior command of syntax, grammar, and lexicon, and the presentation is outstanding. Should be awarded only occasionally to exceptionally qualified candidates.
- Pass:** Candidate's interpretation is accurate, with acceptable, albeit improvable, syntax, grammar, and word choice and presentation. Should be considered the norm for passing candidates.
- Borderline Fail:** Candidate's interpretation is unacceptable but not flagrantly inaccurate, owing either to misunderstanding of the original text or to serious flaws in syntax, grammar, and word choice, or to both; in the case of interpretation, the candidate's presentation may also have been unacceptable. The implication is that these shortcomings may be correctable with further study. Should be awarded to candidates who stand a good chance of passing a retake in August. Anyone receiving a borderline fail should be given specific details about what types of errors were made and what kind of preparation is needed for the retake.
- Fail:** Candidate's interpretation is flagrantly inaccurate owing to inadequate command of the source and/or target language, insufficient analytical ability, poor presentation or a combination of all. This score means that the candidate is far from meeting the standards of the profession and is not likely to attain that level without extensive work. Any student who receives a failing grade in two or more qualifying examinations should be strongly advised not to attempt a retake in August, and should be urged either to take an additional year to work on language deficiencies or to consider another career.

Source: GSTI Faculty Handbook, p. 26

Form A

MONTEREY INSTITUTE OF INTERNATIONAL STUDIES
 GRADUATE SCHOOL OF TRANSLATION AND INTERPRETATION
ORAL SIGHT AND INTERPRETATION EXAM EVALUATION FORM

Date: _____ Student Name: _____

Grader: _____

TYPE OF EXAM: ___ Qualifying ___ Sight ___ Consecutive ___ Simultaneous
 ___ Professional ___ Sight ___ Consecutive ___ Simultaneous
 ___ General ___ Technical

LANGUAGE: _____ INTO _____

DIRECTION: A – B _____ B – A _____ C – A _____

	Excellent		Good		Fair		Unacceptable		COEF	TOTAL
Meaning & Clarity	(10-9)		(8.9-8.2)		(8.1-7.5)		(7.4-0)		X 5 =	
Style	(10-9)		(8.9-8.2)		(8.1-7.5)		(7.4-0)		X 5 =	
Presentation	(10-9)		(8.9-8.2)		(8.1-7.5)		(7.4-0)		X 5 =	
Grand Total										
Was the text so difficult that adjustment should be made? ___ Yes ___ No										
If so, add 5 points as difficulty adjustment points. +5										

High Pass = 100-90 points
 Pass = 89-75 points
 Borderline Fail = 74-70 points
 Fail = 70-0 points

Signature of Grader

Form B

GSTI ORAL EXAMINATION EVALUATION FORM

Date: _____ Student Name or No.: _____

Grader: _____

Type of Exam:

Qualifying _____

Professional _____ Consecutive _____ General _____
Simultaneous _____ Technical _____

Language: _____ – _____ A – B _____ B – C _____ C – A _____

	High Pass	Pass	Borderline Fail	Fail	Grade
Meaning & Clarity					
Style					
Presentation					
				Final Grade	

Was the text so difficult that adjustment should be made? Yes _____ No _____

If so, difficulty adjustments points: 5 points

For reference:

High Pass = 100–90

Pass = 89–75

Borderline Fail = 74–70

Fail = 70–0

Remarks:

Signature

Appendix B

Survey on MIIS's Profession Examinations in Interpretation

Background:

This survey is part of a research project on the professional examinations in interpretation at MIIS. The purpose of the survey is to gather data on exam procedures, assessment objectives, and scoring procedures.

The survey covers the period from May 1994 to August 1999 only. It does not cover exams after 1999.

The information you provide will make it possible to substantially improve the examination process at MIIS.

The accuracy and completeness of your answers are crucial to the quality of this project.

Exam procedures may have varied between programs due to differences in exam philosophy. Please keep in mind that here are no correct or incorrect answers; the purpose of the survey is simply to describe the exam procedures that were in place during this period, not to make value judgments.

Please take a few minutes to complete this questionnaire if you served on a jury for the professional examinations in interpretation at MIIS at any time from May 1994 to August 1999. You do not need to have been a jury member for the entire time period.

Procedure:

If you served as a jury member for more than one language program, please complete a separate questionnaire for each language.

Please write your name and language program on the envelope I have provided so that I can track faculty participation. The list of names will be kept in a file separate from the surveys. After I have determined the return rate and have made sure that I have no more questions about your responses, the list of names will be destroyed. No one else will have access to your questionnaire(s).

I guarantee full anonymity when I report the results. Please do not write your name on this form.

Your time and effort are much appreciated!

Your Background

- A. Please circle the number of years you have worked as an interpreter:
1 – 5 6 – 10 11 – 15 16 – 20 21 – 25 26 – 30 more than 30
- B. Please circle the number of years you have taught interpretation:
1 – 5 6 – 10 11 – 15 16 – 20 21 – 25 26 – 30 more than 30
- C. Please circle the language program for which you were an exam jury member between May 1994 and August 1999. If you were a jury member for more than one language program, please complete a separate questionnaire for each language:
Chinese French German Korean Japanese Russian Spanish
- D. Please indicate when you served on MIIS interpretation exam juries:
- E. Have you served on juries for interpretation exams at places other than MIIS?
Yes no
- F. If you answered *Yes*, where were these exams held? Please write the answer below:
- G. If you answered *Yes*, please indicate the total number of years of your service outside MIIS:
- H. Have you received any training in testing, for example by taking courses, participating in workshops, or reading relevant literature?
Yes no
- I. If you answered *Yes* to question H, please briefly summarize your training:

MIIS Interpretation Exam Procedures from 1994 to 1999

Please reflect briefly on how exams were administered in your language program while you were a jury member and answer the following questions. Please circle the appropriate response.

- 1) Did you or another jury member deliver the examination speeches live or did you use audio- and/or videotapes? Please circle all responses that apply:
 - a) For consecutive: live audiotapes videotapes
 - b) For simultaneous: live audiotapes videotapesHow often did you use audiotapes?
 - c) For consecutive: almost always sometimes hardly ever never
 - d) For simultaneous: almost always sometimes hardly ever neverHow often did you use videotapes?
 - e) For consecutive: almost always sometimes hardly ever never
 - f) For simultaneous: almost always sometimes hardly ever never
- 2) In the *consecutive* interpretation examinations, how often did your jury tape your students in groups in the booths and grade students using these tapes later?
Almost always sometimes hardly ever never
- 3) In the *simultaneous* interpretation examinations, how often did your jury tape your students in groups in the booths and grade students using these tapes later?
Almost always sometimes hardly ever never
- 4) Were students briefed on the topic before each exam?
Yes no sometimes

If you answered "No" to question 4), please go directly to question 7).

- 5) If you answered *Yes* or *Sometimes*, did your jury provide any of the following information?
 - a) Name of speaker almost always sometimes hardly ever never N/A
 - b) Background of speaker almost always sometimes hardly ever never N/A
 - c) Venue of speech almost always sometimes hardly ever never N/A
 - d) Date of speech almost always sometimes hardly ever never N/A
 - e) Proper names in the speech almost always sometimes hardly ever never N/A
 - f) Numbers in the speech almost always sometimes hardly ever never N/A
 - g) Terminology almost always sometimes hardly ever never N/A
 - h) Context information almost always sometimes hardly ever never N/A
- 6) If procedures fluctuated so widely that you feel you cannot give a good answer to any of questions 5a) through 5h), please indicate the letter of the question(s) about which you have doubts in the following space.

- 7) In the consecutive interpretation exams, did your jury subdivide the five-minute speech into smaller segments?
Yes no

If you answered “No” to question 7), please go directly to question 9).

- 8) If your jury subdivided the consecutive speech, approximately how many times did the presenter pause to allow the student to interpret during the five-minute exam?

Once twice three times four times five times more

- 9) In the simultaneous exams, did your jury give the student the opportunity to warm up in the presence of the jury?

Almost always sometimes never N/A

If you answered “Never” or “N/A” to question 9), please go directly to question 12).

- 10) If your jury allowed the student to warm up, was the warm-up material the first part of the exam speech or different material?

First part of speech different material both

- 11) If your jury allowed the student to warm up, approximately how many minutes was the warm-up altogether?

One minute three minutes five minutes seven minutes longer

Purpose of the Exams

- 12) Please think for a moment about the *purpose* of the interpretation examinations for students following both the MATI and MACI degree tracks. The purpose may be related to the course of study, skills levels, and/or later employment. Using a few key words, please describe the *purpose* of the interpretation examinations in the following space:

- 13) The *purpose* of the interpretation exams may or may not be the same for the MATI and MACI degree tracks. In your opinion, is the *purpose* of the exams for these two degree tracks primarily the

Same or different? (Please circle one response.)

If you answered the “same” to question 13), please go directly to question 15).

- 14) If you circled *different* in question 13), please describe those differences in *purpose* briefly in the following space.

Assessment Criteria

- 15) Please think for a moment about the *assessment criteria* for the interpretation examinations for students following both the MATI and MACI degree tracks. The *assessment criteria* for the interpretation exams may or may not be the same for MATI and MACI students. In your opinion, are the *assessment criteria* for these two degree tracks primarily the Same or different? (Please circle one response.)

If you answered “the same” to question 15), please go directly to question 18).

- 16) If you circled *different* in question 15), please describe those differences in *assessment criteria* briefly in the following space.
- 17) If you circled *different* in question 15), do those differences influence how you score students?
Yes no

General and Technical Speeches, Simultaneous with Text

- 18) Between 1994 and 1999, MIIS administered interpretation exams for both *general* and *technical speeches*. General and technical exams may or may not assess the same skills and abilities. Using the following scale, please indicate the degree to which you believe general and technical exams assess the same skills and abilities:
A great deal some only a little not at all
- 19) Do you think that these skills and abilities are different enough to merit separate exams for general and technical speeches?
Yes, separate exams no, one exam I’m not sure.
- 20) Between 1994 and 1999, MIIS administered interpretation exams for both *simultaneous with text* and *simultaneous without text*. Exams in *simultaneous with* and *simultaneous without text* may or may not assess the same skills and abilities. Using the following scale, please indicate the degree to which you believe *simultaneous exams with* and *without text*

assess the same skills and abilities:

A great deal some only a little not at all

- 21) Do you think that the skills and abilities assessed by exams in *simultaneous without* and *simultaneous with text* are different enough to merit separate exams?

Yes, separate exams no, one exam I'm not sure.

Criteria for Scoring: A and B Languages, Score Categories

- 22) When scoring **consecutive** interpretation exams, jury members may or may not have the same expectations of students working into their *A languages* as students working into their *B languages*. To what extent do you personally have the same expectations of A and B language students in **consecutive**?

To a great extent some only a little not at all

- 23) When scoring **simultaneous** interpretation exams, jury members may or may not have the same expectations of students working into their *A languages* as students working into their *B languages*. To what extent do you personally have the same expectations of A and B language students in **simultaneous**?

To a great extent some only a little not at all

- 24) In 1997, MIIS adopted the following *score categories* for interpretation exams: *high pass, pass, borderline fail, fail*. To what extent is this scale in line with your personal approach to scoring?

To a great extent some only a little not at all

- 25) If you answered *some, only a little* or *not at all* to the preceding question, please describe briefly how your personal approach differs from this scale:

- 26) Using a few short phrases, please describe briefly the scoring criteria you apply to each category:

a) High pass

b) Pass:

c) Borderline fail:

d) Fail:

- 27) The criteria you applied to this scale may or may not have been the same as the criteria applied by other jury members. In your opinion, to what extent did jury members **in your language combination** have the same criteria?

To a great extent some only a little not at all I don't know.

- 28) From 1994 to 1999, to what extent did jury members **in other language combinations** have the same criteria?

To a great extent some only a little not at all I don't know.

- 29) From 1994 to 1997, MIIS used a 100-point scale for scoring the interpretation exams. In this case as well, the criteria applied to this scale may or may not have been the same for individual jury members. In your opinion, to what extent did jury members **in your language combination** have the same criteria for the 100-point scale?

To a great extent some only a little not at all I don't know.

- 30) From 1994 to 1997, to what extent did jury members **in other language combinations** have the same criteria for the 100-point scale?

To a great extent some only a little not at all I don't know.

Jury Conduct

- 31) When scoring students in the exams, did your jury usually have an open discussion before you decided on your final score?

Almost always usually sometimes hardly ever

If you answered "hardly ever" to question 31), please proceed directly to question 34).

- 32) In the cases where open discussions took place, did you do a blind rating *before* the discussion?

Almost always usually sometimes hardly ever

If you answered "hardly ever" to question 32), please proceed directly to question 34).

33) If you did a blind rating, how often did you change your score *after* the discussion?

Almost always usually sometimes hardly ever

34) Do you have external examiners on your jury?

Almost always usually sometimes hardly ever

35) If you answered *almost always*, *usually*, or *sometimes* to question 34), does the presence of external examiners influence jury discussions?

Almost always usually sometimes hardly ever

Any Comments?

36) Would you like to make any additional comments about this survey or about MIIS's examination procedures for interpretation, including suggestions for improvement? If you do, please use the space below.

Thanks for your participation!

Appendix C

Table 1. Course overview for Curriculum Component I

Curriculum Component I – Fundamentals of translation and interpretation			
Duration: normally 1 semester			
Prerequisites: Entry Assessment			
Student status: Introductory			
Two languages		Three languages	
NL + FL1		NL + FL1 + FL2 or NL + FL2 + FL2	
Core curriculum			
Portfolio seminar	1	Portfolio seminar	1
Written translation NL<>FL1	4	Written translation NL<>FL1, FL2> NL	6
Sight translation NL<>FL1	2	Sight translation NL<>FL1, FL2> NL	3
Consecutive NL<>FL1	2	Consecutive NL<>FL1, FL2> NL	3
Simultaneous FL>NL1	1	Simultaneous NL<>FL1, FL2>NL	2
T&I Professions	1	T&I Professions	1
Total	11	Total	16
Expanded curriculum			
Electives	5		
E.g., written and oral language enhancement, area studies (culture, history, politics)			
Total	16	Total	16

NL = Native language

FL1 = Foreign language; active language into which student works in all language transfer modes; future B language

FL2 = Foreign language; passive language out of which student works in all language transfer modes; future C language

Table 2. Course overview for Curriculum Component II in translation

Curriculum Component II – Translation			
Duration: normally 1 semester			
Prerequisites: CCI + Formative Assessment I			
Student status: Intermediate			
Two languages		Three languages	
NL + FL1		NL + FL1 + FL2 or NL + FL2 + FL2	
Core curriculum – Economics and business			
T&I theory portfolio seminar	1	T&I theory portfolio seminar	1
Written translation	4	Written translation	6
Sight translation	2	Sight translation	3
Liaison interpreting	1	Liaison interpreting	2
Computer-assisted translation	1	Computer-assisted translation	1
Terminology management	1	Terminology management	1
Total	10	Total	14
Expanded curriculum			
Electives	6	Electives	2
E.g., language enhancement, concentration studies, area studies			
Total	16	Total	16

Table 3. Course overview for Curriculum Component II in interpretation

Curriculum Component II – Interpretation			
Duration: normally 1 semester			
Prerequisites: CCI + Formative Assessment I			
Student status: Intermediate			
Two languages		Three languages	
NL + FL1		NL + FL1 + FL2 or NL + FL2 + FL2	
Core curriculum – Economics and business			
T&I theory portfolio seminar	1	T&I theory portfolio seminar	1
Consecutive interpretation	4	Consecutive interpretation	6
Simultaneous interpretation	4	Simultaneous interpretation	4 / 6
Liaison interpreting	1	Liaison interpreting	1 / 2
Translation	2	Translation	3
Notetaking	1	Notetaking	1
Total	14	Total	16 / 19
Expanded curriculum			
Electives	2		
E.g., language enhancement, concentration studies, terminology management, area studies			
Total	16	Total	16

Table 4. Course overview for Curriculum Component III in translation specialization**Curriculum Component III – Translation specialization**

Duration: normally 2 semesters

Prerequisites: CCII (T -or- I) + Formative Assessment II

Student status: Advanced

MAT-2

NL + FL1 or

NL + FL2

MAT-3

NL + FL1 + FL2 or

NL + FL2 + FL2

Core curriculum

Specialization portfolio seminar	2	Specialization portfolio seminar	4
Translation of specialized texts	4	Translation of specialized texts	6
Sight translation	2	Sight translation	3
Principles of editing and proofreading	1	Principles of editing and proofreading	2
Translation practicum	2	Translation practicum	2
Software localization	1	Software localization	1
Project management	1	Project management	1
Translation studies seminar	2	Translation studies seminar	2
Total	15	Total	21

Expanded curriculum

Electives 17 Electives 11
 E.g., concentration studies, additional specialization seminars, additional translation of specialized texts, additional practicum, media translation, liaison interpreting, area studies

Total	32	Total	32
--------------	-----------	--------------	-----------

Four-semester combinations: MAT-2 + 2 concentrations A+A; A+B; A+C
 MAT-3 + 1 concentrations A+A+B; A+B+B;
 A+B+C; A+C+C

Students may petition for additional language combinations.

Concentrations: 8 units each (some core curriculum courses count toward concentrations):

Translation Studies, software localization, media translation, literary translation, CAT and terminology management, project management, etc.

Table 5. Course overview for Curriculum Component III in conference interpretation

Curriculum Component III – Conference interpretation			
Duration: normally 2 semesters			
Prerequisites: CCII (T -or- I) + Formative Assessment II			
Student status: Advanced			
Degree candidate status			
MACI-2		MACI-3	
NL + NL or		NL + FL1 + FL2 or	
NL + FL1		NL + FL2 + FL2	
Core curriculum			
Specialization portfolio seminar	2	Specialization portfolio seminar	4
Consecutive interpretation	4	Consecutive interpretation	4 / 6
Simultaneous interpretation	4	Simultaneous interpretation	4 / 6
Simultaneous with texts	2	Simultaneous with texts	2 / 3
Interpretation practicum	4	Interpretation practicum	4
Professional knowledge seminar	2	Professional knowledge seminar	2
Interpretation studies seminar	2	Interpretation studies seminar	2
Total	20	Total	22 / 27
Expanded curriculum			
Electives	12	Electives	10 / 5
E.g., concentration studies, liaison interpreting, court interpreting, written translation, sight translation, notetaking, additional specialization seminars, practicum, area studies			
Total	32	Total	32
Four-semester combinations: MACI-2 + 2 concentrations A+A; A+B MACI-3 + 2 concentrations A+B+C; A+C+C			
Students may petition for language combinations not listed above.			
Concentrations: 8 units each (some core curriculum courses count toward concentrations): Interpreting Studies, community interpreting, court interpreting, health-care interpreting, meeting planning, etc.			

Table 6. Degree requirements for the integrated Y-track model

Summative Assessment requirements**Comprehensive Portfolio Review and Professional Exams**

Completion of CCI, CCII, CCIII for relevant degree track (see below)

Completion of portfolio seminar III for each language combination

Completion of all translation and/or interpretation courses in CCIII into the language of study for A and B exams, out of the language of study for C exams

Student is awarded degree candidate status upon admittance to Summative Assessment.

Concentration requirements

Completion of required courses (8 units total), to be determined for individual concentrations

Comprehensive Portfolio Review

Completion of MAT or MACI degree

Degree requirements

Completion of 60 credits

Core curriculum courses may be completed in three semesters for MAT-2.

Core curriculum courses may be completed in four semesters in MAT-3, MACI-2, and MACI-3 degrees.

Core curriculum courses may be completed in five semesters for MAT-2 + MACI-2.

MAT: Curriculum Component I
Curriculum Component II (Translation)
Curriculum Component III (Translation Specialization)
Summative Assessment

MACI: Curriculum Component I
Curriculum Component II (Interpretation)
Curriculum Component III (Conference Interpretation)
Summative Assessment
External applicants may petition for intermediate and advanced candidate status.
Status granted upon successful completion of Formative Assessment I or II, respectively.

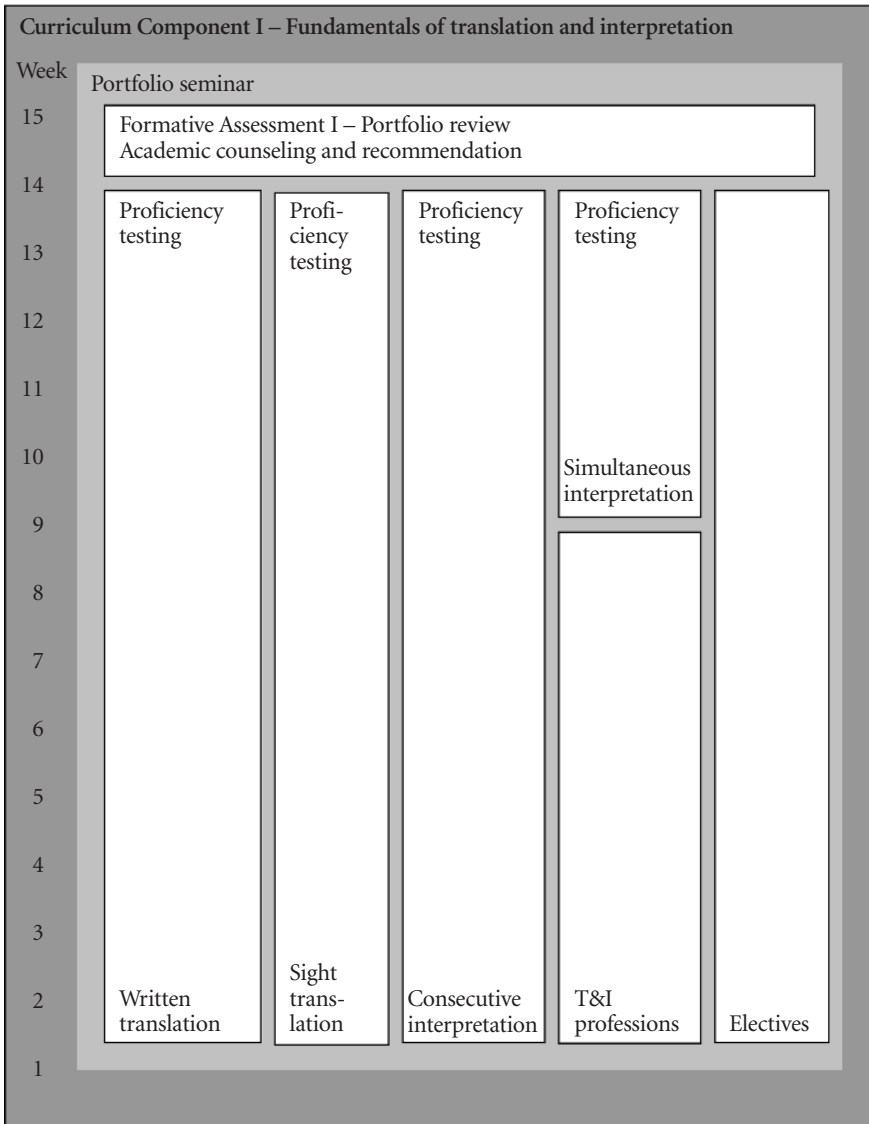


Figure 1. Curriculum sequence for Curriculum Component I

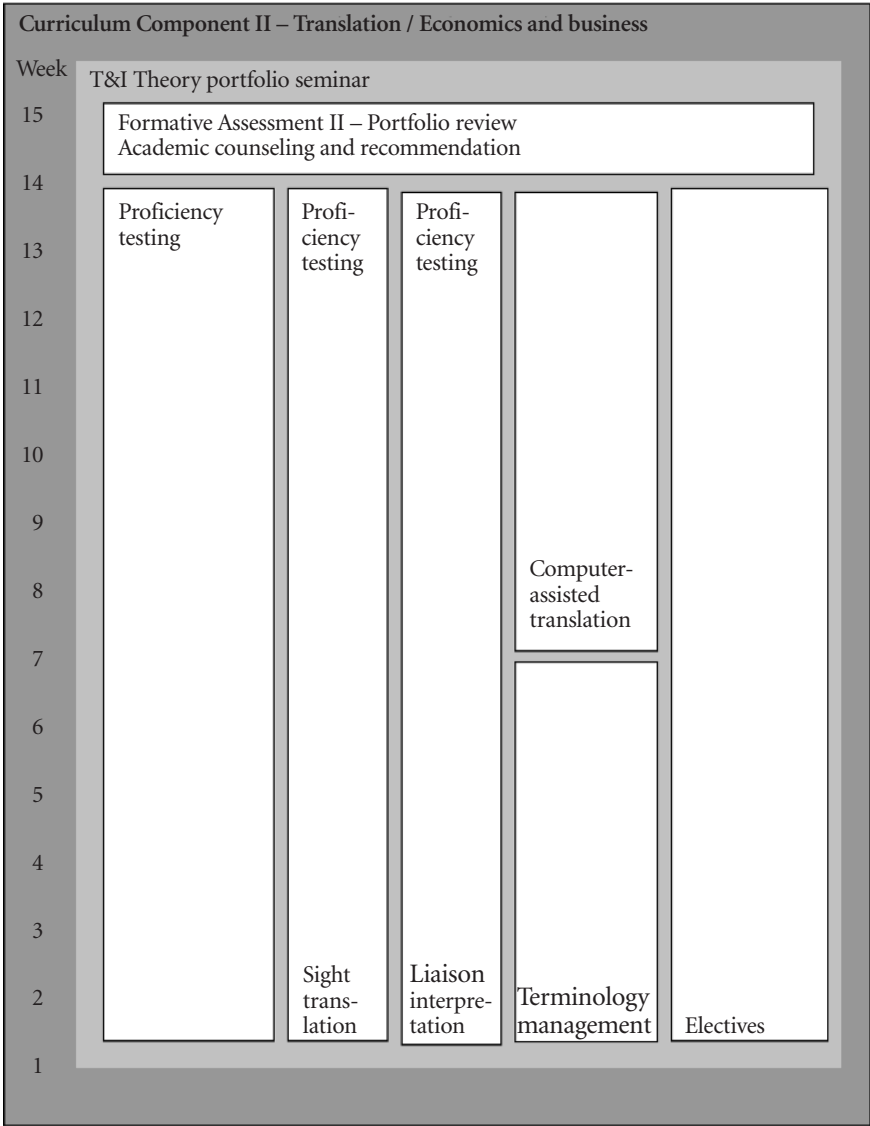


Figure 2. Curriculum sequence for Curriculum Component II in translation

Curriculum Component II – Interpretation / Economics and business						
Week	T&I Theory portfolio seminar					
15	Formative Assessment II – Portfolio review Academic counseling and recommendation					
14	Proficiency testing	Proficiency testing			Proficiency testing	
13						
12						
11						
10						
9						
8						
7						
6						
5						
4						
3						
2						
1						
	Consecutive interpretation	Simultaneous interpretation	Liaison interpreting	Note-taking	Translation	Electives

Figure 3. Curriculum sequence for Curriculum Component II in interpretation

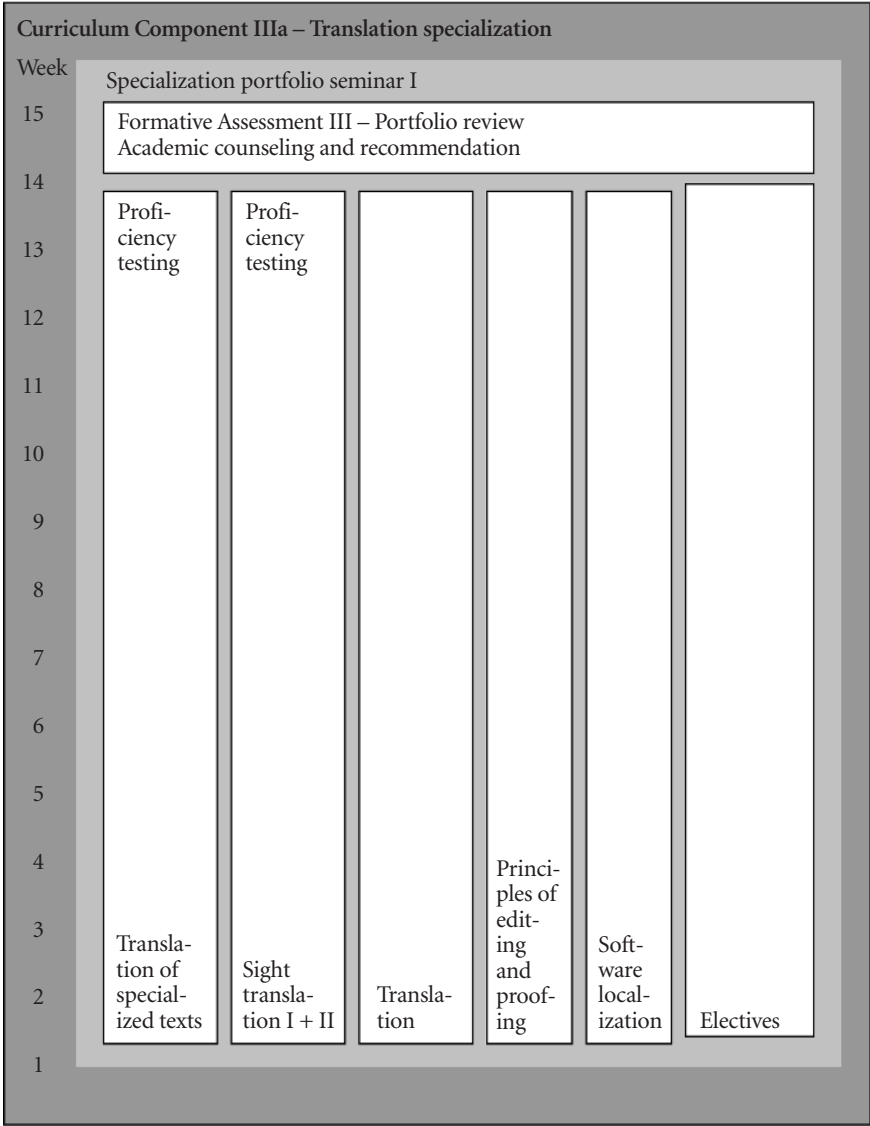


Figure 4. Curriculum sequence for Curriculum Component IIIa in translation specialization

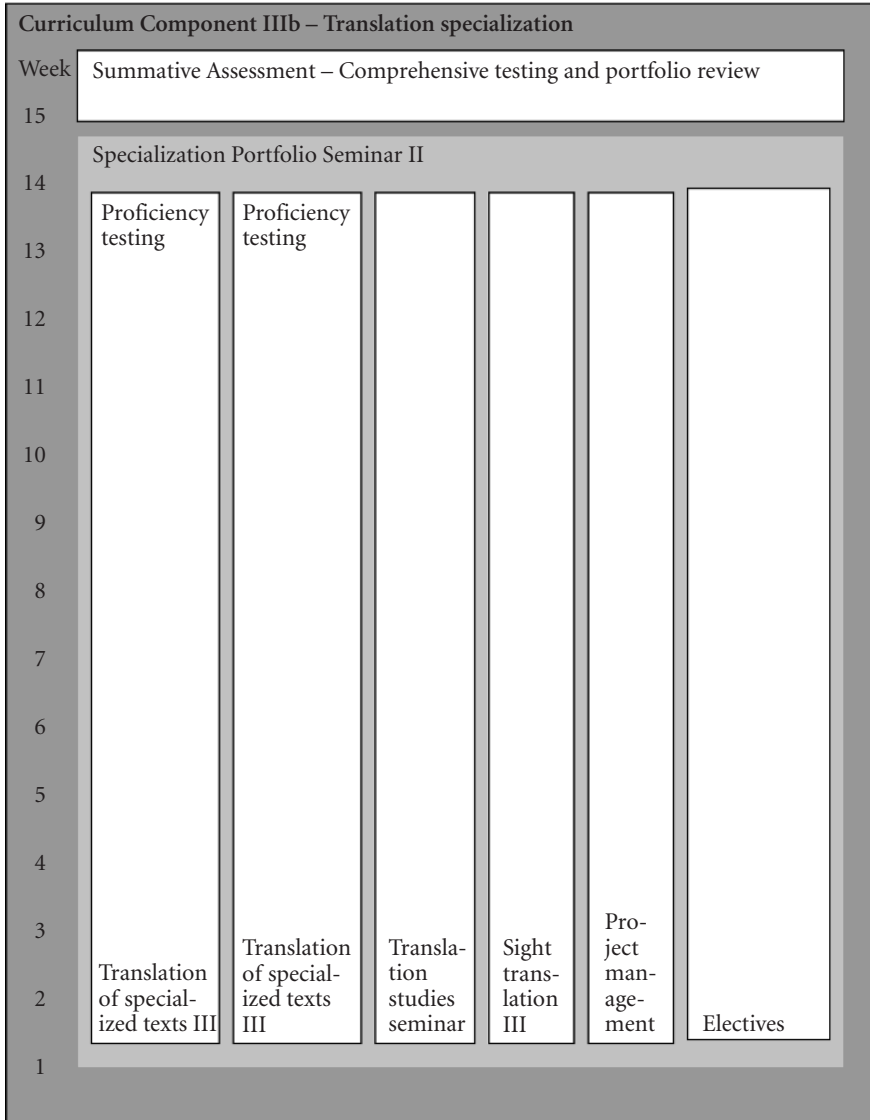


Figure 5. Curriculum sequence for Curriculum Component IIIb in translation specialization

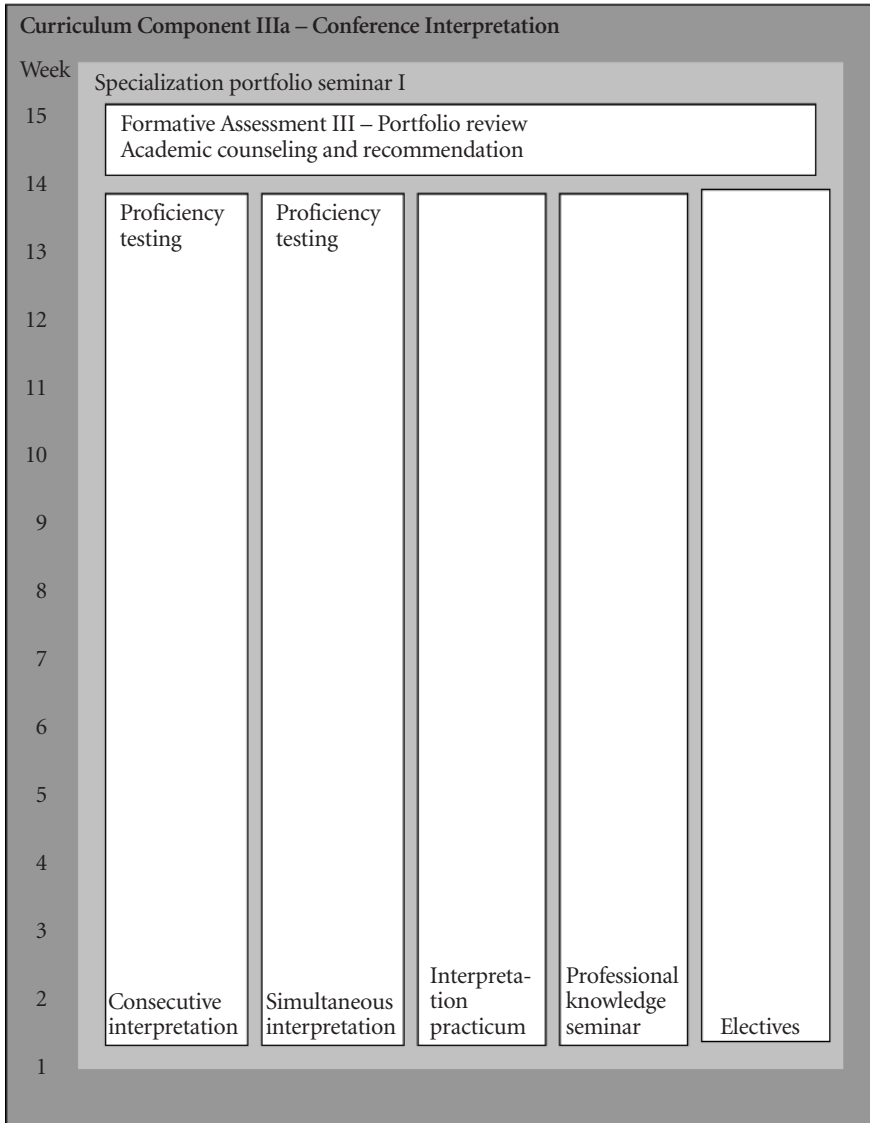


Figure 6. Curriculum sequence for Curriculum Component IIIa in conference interpretation

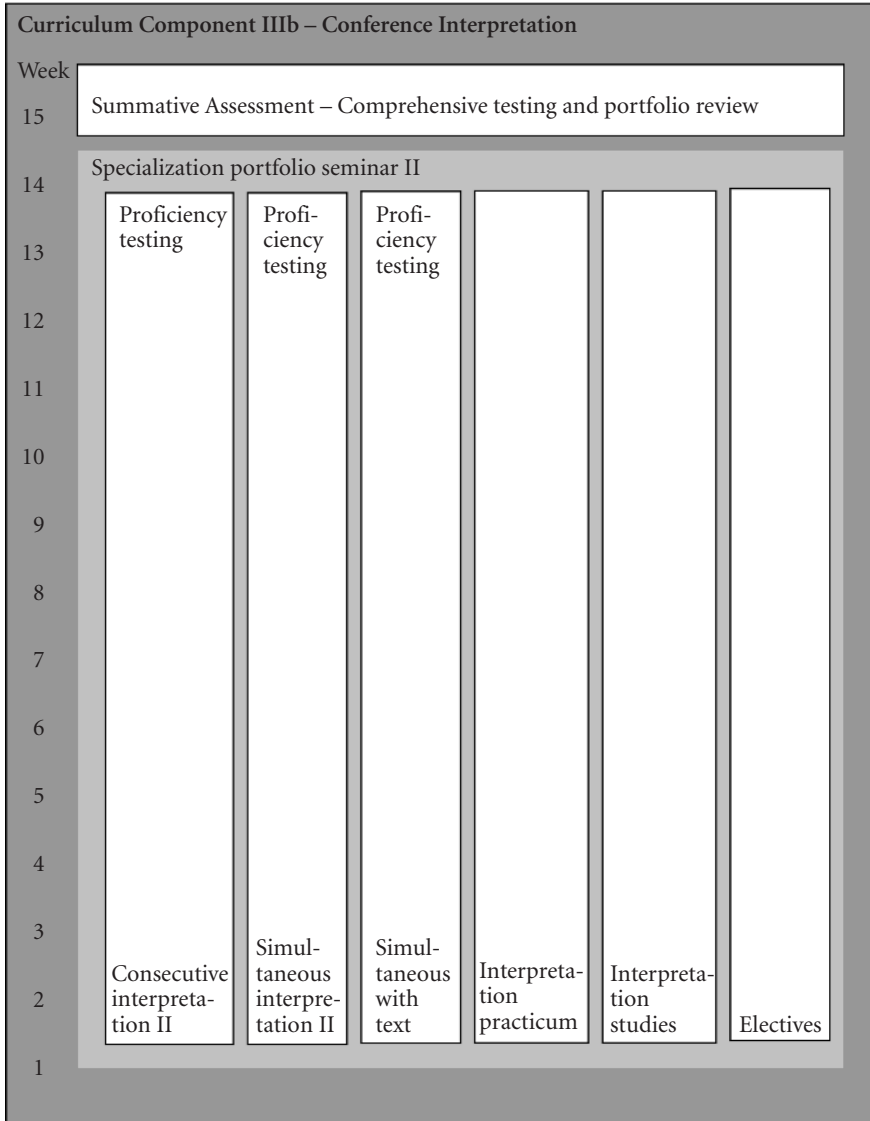


Figure 7. Curriculum sequence for Curriculum Component IIIb in conference interpretation

References

- Ackermann, Dorothea, Lenk, Hannelore, & Redmond, Mary (1997). Between three stools: Performance assessment in interpreter training. In E. Fleischmann, W. Kutz, & P. A. Schmitt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 262–267). Tübingen: Gunter Narr.
- Adelson, Beth (1984). When novices surpass experts: The difficulty of a task may increase with expertise. *Journal of Experimental Psychology*, 10(3), 483–495.
- AIIC. (1980). *Enseignement de l'interprétation – 10 ans de colloques 1969–1979*. Geneva: AIIC.
- AIIC. (1996). *Bibliography*. Geneva: AIIC.
- AIIC. (2000). AIIC statistics for 1999. *AIIC Bulletin*, 28(2), 10–19.
- Alderson, J. Charles, Clapham, Caroline, & Wall, Dianne (1995). *Language Test Construction and Evaluation*. Cambridge: Cambridge University Press.
- Alexieva, Bistra (1990). Creativity in simultaneous interpretation. *Babel*, 36(1), 1–6.
- Alexieva, Bistra (1994). Types of texts and intertextuality in interpreting. In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 179–187). Amsterdam and Philadelphia: John Benjamins.
- Alexieva, Bistra (1997). A typology of interpreter-mediated events. *The Translator*, 3(2), 153–174.
- Alexieva, Bistra (1998). Consecutive interpreting as a decision process. In A. Beylard-Ozeroff, J. Králová, & B. Moser-Mercer (Eds.), *Translators' Strategies and Creativity: Selected Papers from the 9th International Conference on Translation and Interpreting, Prague, September 1995* (pp. 181–188). Amsterdam and Philadelphia: John Benjamins.
- Allwright, Dick & Bailey, Kathleen M. (1991). *Focus on the Language Classroom: An Introduction to Classroom Research for Language Teachers*. Cambridge: Cambridge University Press.
- Altman, Janet (1987). *Teaching Interpreting: Study and Practice*. London: Center for Information on Language Teaching and Research. (ERIC Document Reproduction Service No. ED 346 730).
- Altman, Janet (1989a). Overcoming Babel: The role of the conference interpreter in the communication process. In R. Kömel & J. Payne (Eds.), *Babel: The Cultural and Linguistic Barriers Between Nations* (pp. 73–86). Aberdeen: Aberdeen University Press.
- Altman, Janet (1989b). The role of the tutor demonstration in teaching interpreting. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 237–240). Udine: Campanotto Editore.

- Altman, Janet (1994). Error analysis in the teaching of simultaneous interpreting: A pilot study. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 25–38). Amsterdam and Philadelphia: John Benjamins.
- American Society for Testing and Materials. (2001). *F 2089–01 Standard Guide for Language Interpretation Services*. West Conshohocken: ASTM.
- Ammann, Margret & Vermeer, Hans J. (1990). *Entwurf eines Curriculums für einen Studiengang Translatologie und Translatiorik*. Heidelberg: IKO – Verlag für interkulturelle Kommunikation.
- Anderson, John R. (Ed.). (1981). *Cognitive Skills and Their Acquisition*. Hillsdale: Lawrence Erlbaum.
- Anderson, John R. (1982). Acquisition of cognitive skill. *Psychological Review*, 89(4), 369–406.
- Anderson, John R. (1995). *Cognitive Psychology and its Implications*. New York: W. H. Freeman.
- Anderson, Linda (1994). Simultaneous interpretation: Contextual and translation aspects. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 101–120). Amsterdam and Philadelphia: John Benjamins.
- Angoff, William H. (1988). Validity: An evolving concept. In H. Wainer & H. I. Braun (Eds.), *Test Validity* (pp. 19–32). Hillsdale: Lawrence Erlbaum.
- Andres, Dörte (2000). Konsektivdolmetschen und Notation – Empirische Untersuchung mentaler Prozesse bei Anfängern in der Dolmetscherausbildung und professionellen Dolmetschern. Unpublished dissertation. University of Vienna.
- Andres, Dörte (2001). Notation: gute Zeichen – schlechte Zeichen: Empirische Untersuchung zur (Un-) Möglichkeit von Notizen, dargestellt am Sprachenpaar Französisch-Deutsch. In A. Kellertat (Ed.), *Dolmetschen: Beiträge aus Forschung, Lehre und Praxis* (pp. 243–265). Frankfurt am Main: Lang.
- Apfelbaum, Birgit (1997). Zur Rolle der Diskursanalyse in der Ausbildung von Gesprächsdolmetschern. In E. Fleischmann, W. Kutz, & P. A. Schmidt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 268–275). Tübingen: Gunter Narr.
- Apfelbaum, Birgit (1998). Aspekte der Sprecherwechselorganisation in Dolmetschinteraktionen. In H. Gerzymisch-Arbogast, D. Gile, J. House, & A. Rothkegel (Eds.), *Wege der Übersetzungs- und Dolmetschforschung* (pp. 209–239). Tübingen: Gunter Narr.
- Arjona, Etilvia (1978). Intercultural communication and the training of interpreters at the Monterey Institute of Foreign Studies. In D. Gerver & H. W. Sinaiko (Eds.), *Language Interpretation and Communication* (pp. 35–44). New York and London: Plenum.
- Arjona, Etilvia (1984a). Issues in the design of curricula for the professional education of translators and interpreters. In M. L. McIntire (Ed.), *New Dialogues in Interpreter Education. Proceedings of the Fourth National Conference of Interpreter Trainers Convention* (pp. 1–35). Silver Spring: RID.
- Arjona, Etilvia (1984b). Testing and evaluation. In M. L. McIntire (Ed.), *New Dialogues in Interpreter Education. Proceedings of the Fourth National Conference of Interpreter Trainers Convention* (pp. 111–138). Silver Spring: RID.

- Arjona-Tseng, Etilvia (1980). *Simultaneous Interpretation and the Psychology of Language*. n.p.: Stanford University. ERIC Clearinghouse for Languages.
- Arjona-Tseng, Etilvia (1989). *Preparing for the XXI century*. Paper presented at the Twentieth Anniversary Symposium on the Training of Teachers of Translation and Interpretation, Monterey Institute of International Studies, Monterey, December 1–3, 1989.
- Arjona-Tseng, Etilvia (1990). *Curriculum Policy-Making for an Emerging Profession: The Structure, Process, and Outcome of Creating a Graduate Institute for Translation and Interpretation Studies in the Republic of China on Taiwan*. Unpublished dissertation. Stanford University.
- Arjona-Tseng, Etilvia (1993). *A Bibliography of Pedagogy and Research in Interpretation and Translation*. Honolulu: Second Language Teaching and Curriculum Center, University of Hawaii at Manoa.
- Arjona-Tseng, Etilvia (1994). A psychometric approach to the selection of translation and interpreting students in Taiwan. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 69–86). Amsterdam and Philadelphia: John Benjamins.
- Arntz, Reiner (1989). Neuere Entwicklungen in der Übersetzer- und Dolmetscher-ausbildung in der Bundesrepublik Deutschland. Das Beispiel Hildesheim. *Interface. Journal of Applied Linguistics*, 1, 3–13.
- Arntz, Reiner (1999). Ausbildung in 'Drittssprachen' – ein neuer Ansatz. *Lebende Sprachen*, 44(2), 49–53.
- Bachman, Lyle F. (1990a). Assessment and evaluation. *Annual Review of Applied Linguistics*, 10, 210–226.
- Bachman, Lyle F. (1990b). *Fundamental Considerations in Language Testing*. Oxford: Oxford University Press.
- Bachman, Lyle F. & Palmer, Adrian S. (1996). *Language Testing in Practice*. Oxford: Oxford University Press.
- Bailey, Alison L. & Butler, Frances A. (2002). *An Evidentiary Framework for Operationalizing Academic Language for Broad Application to K-12 Education: A Design Document. Project 4.1 Developing Measures of Academic English Language Proficiency*. Los Angeles: National Center for Research on Evaluation, Standards, and Student Testing (CRESST), University of California.
- Bailey, Kathleen M. (1998). *Learning About Language Assessment: Dilemmas, Decisions, and Directions*. Pacific Grove: Heinle and Heinle.
- Bailey, Kathleen M. & Nunan, David (Eds.). (1996). *Voices From the Language Classroom*. Cambridge: Cambridge University Press.
- Baker, Mona (1998a). Norms. In M. Baker (Ed.), *Routledge Encyclopedia of Translation Studies* (pp. 163–165). London and New York: Routledge.
- Baker, Mona (1998b). *Routledge Encyclopedia of Translation Studies*. London and New York: Routledge.
- Balzani, Maurizio (1990). Le contact visuel en interprétation simultanée: résultats d'une expérience (français-italien). In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 93–100). Udine: Campanotto Editore.
- Barik, Henri C. (1972a). Interpreters talk a lot, among other things. *Babel*, 18(1), 3–10.

- Barik, Henri C. (1972b). Summery [sic] of a study on simultaneous interpretation. *L'Interprète*, 4, 8–10.
- Barik, Henri C. (1973a). Simultaneous interpretation: Qualitative and linguistic data. *Language and Speech*, 18, 272–297.
- Barik, Henri C. (1973b). Simultaneous interpretation: Temporal and quantitative data. *Language and Speech*, 16(3), 237–270.
- Barik, Henri C. (1994). A description of various types of omissions, additions and errors of translation encountered in simultaneous interpretation. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 121–137). Amsterdam and Philadelphia: John Benjamins.
- Bava, Antonio (1989). Neurophysiological bases of language use and speech. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 39–70). Udine: Campanotto Editore.
- Beauchamp, George A. (1975). *Curriculum Theory*. Wilmette: Kagg.
- Bednar, Anne K., Cunningham, Donald, Duffy, Thomas M., & Perry, J. David (1992). Theory into practice: How do we link? In T. M. Duffy & D. H. Jonassen (Eds.), *Constructivism and the Technology of Instruction: A Conversation* (pp. 17–34). Hillsdale: Lawrence Erlbaum.
- Belisle, Estelle & Bowen, Margareta (1983). *Final Testing of Interpretation Students*. Washington, DC: Georgetown University, National Resource Center for Translation and Interpretation.
- Bell, Roger T. (1991). *Translation and Translating: Theory and Practice*. Essex: Longman Group UK Limited.
- Bellezza, Francis S. (1992). Mnemonics and expert knowledge: Mental cuing. In R. R. Hoffman (Ed.), *The Psychology of Expertise: Cognitive Research and Empirical AI* (pp. 204–217). New York: Springer-Verlag.
- Bereiter, Carl & Scardamalia, Marlene (1992). Cognition and curriculum. In P. W. Jackson (Ed.), *Handbook of Research on Curriculum: A Project of the American Educational Research Association* (pp. 517–542). New York: Macmillan.
- Bereiter, Carl & Scardamalia, Marlene (1993). *Surpassing Ourselves: An Inquiry into the Nature and Implications of Expertise*. Chicago: Open Court.
- Berk, Richard A. (Ed.). (1980). *A Guide to Criterion-Referenced Test Construction*. Baltimore and London: John Hopkins University Press.
- Berliner, David C. (1993). The 100-year journey of educational psychology: From interest, to disdain, to respect for practice. In A. Anastasi, D. C. Berliner, F. J. Landy, K. Salzinger, & H. H. Strupp (Eds.), *Exploring Applied Psychology: Origins and Critical Analyses* (pp. 41–78). Washington: American Psychological Association.
- Berliner, David C. & Calfee, Robert C. (Eds.). (1996). *Handbook of Educational Psychology*. New York: Simon and Schuster Macmillan.
- Berry, Dianne C. (Ed.). (1997). *How Implicit Is Implicit Learning*. Oxford: Oxford University Press.
- Berry, Dianne C. & Broadbent, Donald E. (1984). On the relationship between task performance and associated verbalizable knowledge. *The Quarterly Journal of Experimental Psychology*, 36(A), 209–231.
- Bertone, Laura (1989a). *Estrategias de la interpretación simultanea*. Buenos Aires: Hachette.

- Bertone, Laura (1989b). *Teaching and learning as global experiences*. Paper presented at the Twentieth Anniversary Symposium on the Training of Teachers of Translation and Interpretation, Monterey Institute of International Studies, Monterey, December 1–3, 1989.
- Black, Laurel, Daiker, Donald A., Somers, Jeffrey, & Stygall, Gail (Eds.). (1994). *New Directions in Portfolio Assessment: Reflective Practice, Critical Theory, and Large-Scale Scoring*. Portsmouth: Heinemann.
- Bloom, Benjamin S., et al. (Eds.). (1956). *Taxonomy of Educational Objectives*. New York: David McKay.
- Bobbit, Franklin (1971). *The Curriculum*. Boston: Houghton Mifflin.
- Bossé-Andrieu, Jacqueline (1981). L'admission des candidats aux écoles de traduction. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: de la théorie à la pédagogie* (pp. 163–171). Ottawa: University of Ottawa Press.
- Bowen, David (1993). Building up speed (simultaneous interpreting of extemporaneous speech). In E. F. Losa (Ed.), *Keystones of Communication. Proceedings of the 34th Annual Conference of the American Translators Association* (pp. 51–61). Medford: Learned Information, Inc.
- Bowen, David (1994a). Non-discriminatory approaches in translation studies. In D. L. Hammond (Ed.), *Professional Issues for Translators and Interpreters* (pp. 193–200). Amsterdam and Philadelphia: John Benjamins.
- Bowen, David (1994b). Teaching and learning styles. In C. Dollerup & A. Lindegaard (Eds.), *Teaching Translation and Interpreting 2: Insights, Aims, Visions* (pp. 175–181). Amsterdam and Philadelphia: John Benjamins.
- Bowen, David & Bowen, Margareta (1980). *Steps to Consecutive Interpretation*. Washington, DC: Penn and Booth.
- Bowen, David & Bowen, Margareta (1984). The results to be expected from a stay abroad. In W. Wilss & G. Thome (Eds.), *Die Theorie des Übersetzens und ihr Aufschlußwert für die Übersetzungs- und Dolmetschdidaktik* (pp. 279–288). Tübingen: Gunter Narr.
- Bowen, David & Bowen, Margareta (1985a). Entrance examinations for translation and interpretation students. *ADFL Bulletin*, 17(1), 31–34.
- Bowen, David & Bowen, Margareta (1985b). The Nuremberg trials (communication through translation). *Meta*, 30(1), 74–77.
- Bowen, David & Bowen, Margareta (1986). Relay in interpreter training. In K. Kummer (Ed.), *American Translators Association Conference – 1986* (pp. 409–414). Medford: Learned Information.
- Bowen, David & Bowen, Margareta (1987a). Formal translation and interpretation training for a member of an international congregation of religious [sic]. *Meta*, 32(1), 85–89.
- Bowen, David & Bowen, Margareta (1987b). The interpreter as a consultant for international communication. In K. Kummer (Ed.), *Proceedings of the 28th Annual Conference of the American Translators Association* (pp. 287–291). Medford: Learned Information, Inc.
- Bowen, David & Bowen, Margareta (1989). Aptitude for interpreting. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 109–125). Udine: Campanotto Editore.
- Bowen, David & Bowen, Margareta (Eds.). (1990). *Interpreting – Yesterday, Today, and Tomorrow*. Binghamton: State University of New York at Binghamton.

- Bowen, David, Bowen, Margareta, & Dobosz, I. (1990). The life of a diplomatic interpreter: An interview with Irena Dobosz. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 23–33). Binghamton: State University of New York at Binghamton.
- Bowen, Margareta (1989). Language learning before translator/interpreter training. In P. W. Krawitschke (Ed.), *Translator and Interpreter Training and Foreign Language Pedagogy* (pp. 51–64). Binghamton: State University of New York at Binghamton.
- Bowen, Margareta (1994a). Ingredients to success as a language specialist. In D. L. Hammond (Ed.), *Professional Issues for Translators and Interpreters* (pp. 182–192). Amsterdam and Philadelphia: John Benjamins.
- Bowen, Margareta (1994b). Interpreting studies and the history of the profession. In C. Dollerup & A. Lindegaard (Eds.), *Teaching Translation and Interpreting 2: Insights, Aims, Visions* (pp. 167–173). Amsterdam and Philadelphia: John Benjamins.
- Bowen, Margareta (1995). Interpreters and the making of history. In J. Delisle & J. Woodsworth (Eds.), *Translators through History* (pp. 245–277). Amsterdam and Philadelphia: John Benjamins.
- Bowen, Margareta (1998). Geschichte des Dolmetschens. In M. Snell-Hornby, H. G. Hönl, P. Kußmaul, & P. A. Schmitt (Eds.), *Handbuch Translation* (pp. 43–46). Tübingen: Stauffenburg.
- Bowker, Lynne (2000). A corpus-based approach to evaluating student translations. *The Translator*, 6(2), 183–210.
- Bowker, Lynne (2002). Towards a methodology for a corpus-based approach to translation evaluation. *Meta*, 46(2), 345–364.
- Boyer, Ernest L. (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. Princeton: Carnegie Foundation for the Advancement of Teaching.
- Bransford, John D., Franks, Jeffery J., Vye, Nancy J., & Sherwood, Robert D. (1989). New approaches to instruction: Because wisdom can't be told. In S. Vosniadou & A. Ortony (Eds.), *Similarity and Analogical Reasoning* (pp. 470–497). Cambridge: Cambridge University Press.
- Braun, Sabine, Kohn, Kurt, & Mikasa, Hans (1998). Kommunikation in der mehrsprachigen Videokonferenz: Implikationen für das Dolmetschen. In H. Gerzymisch-Arbogast, D. Gile, J. House, & A. Rothkegel (Eds.), *Wege der Übersetzungs- und Dolmetschforschung* (pp. 267–305). Tübingen: Gunter Narr.
- Brislin, Richard W. (Ed.). (1976). *Translation: Applications and Research*. New York: Gardner.
- Brown, James D. & Hudson, Thom (2002). *Criterion-referenced Language Testing*. Cambridge: Cambridge University Press.
- Brown, James S., Collins, Allan, & Duguid, Paul (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32–42.
- Bruner, Jerome (1996). *The Culture of Education*. Cambridge: Harvard University Press.
- Bruner, Jerome S. (1973). *The Relevance of Education*. New York: W. W. Norton.
- Bruner, Jerome S., Goodnow, Jacqueline J., & Austin, George A. (1956). *A Study of Thinking*. New York: John Wiley and Sons.
- Buchner, Axel & Wippich, Werner (1997). Differences and commonalities between implicit learning and implicit memory. In M. A. Stadler & P. A. Frensch (Eds.), *Handbook of Implicit Learning* (pp. 3–46). Thousand Oaks: Sage.

- Bühler, Hildegund (1986). Linguistic (semantic) and extralinguistic (pragmatic) criteria for the evaluation of conference interpretation and interpreters. *Multilingua*, 5(4), 231–235.
- Bühler, Hildegund (1989). Discourse analysis and the spoken test – A critical analysis of the performance of advanced interpretation students. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 131–136). Udine: Campanotto Editore.
- Bührig, Kristin (1998). Konsekutives Übersetzen Englisch-Deutsch. In H. Gerzymisch-Arbogast, D. Gile, J. House, & A. Rothkegel (Eds.), *Wege der Übersetzungs- und Dolmetschforschung* (pp. 241–266). Tübingen: Gunter Narr.
- Butler, Frances A. & Stevens, Robin (1998). *Initial Steps in the Validation of the Second Language Proficiency Descriptors for Public High Schools, Colleges, and Universities in California: Writing*. CSE Technical Report 497. Los Angeles: Center for the Study of Evaluation, University of California.
- Calfee, Robert C. & Freedman, Sarah W. (1996). Classroom writing portfolios: Old, new, borrowed, blue. In R. Calfee & P. Perfumo (Eds.), *Writing Portfolios in the Classroom: Policy and Practice, Promise and Peril* (pp. 3–26). Mahwah: Lawrence Erlbaum.
- Calfee, Robert & Perfumo, Pamela (1996). *Writing Portfolios in the Classroom: Policy and Practice, Promise and Peril*. Mahwah: Lawrence Erlbaum.
- Campbell, Stuart (1998). *Translation into the Second Language*. Harlow: Addison Wesley Longman Limited.
- Caminade, Monique & Pym, Anthony (1998). Translator-training institutions. In M. Baker (Ed.), *Routledge Encyclopedia of Translation Studies* (pp. 163–165). London and New York: Routledge.
- Cartier, Francis A. (1968). Criterion-referenced testing of language skills. *TESOL Quarterly*, 2(1), 27–32.
- Čenková, Ivana (1994). Le rôle de l'audiovisuel dans la formation des interprètes de conférence. In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 227–232). Amsterdam and Philadelphia: John Benjamins.
- Čenková, Ivana (1998). Quality of interpreting – A binding or liberating factor? In A. Beylard-Ozeroff, J. Králová, & B. Moser-Mercer (Eds.), *Translators' Strategies and Creativity: Selected Papers from the 9th International Conference on Translation and Interpreting, Prague, September 1995* (pp. 163–170). Amsterdam and Philadelphia: John Benjamins.
- Chase, William G. & Simon, Herbert A. (1973). Perception in chess. *Cognitive Psychology*, 4, 55–81.
- Chernov, Ghelly V. (1987). *Osnovi sinhronogo perevoda [The Foundations of Simultaneous Translation]*. Moscow: Vissia skola.
- Chernov, Ghelly V. (1992). Conference interpretation in the USSR: History, theory, new frontiers. *Meta*, 37(1), 149–162.
- Chernov, Ghelly V. (1994). Message redundancy and message anticipation in simultaneous interpretation. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 139–153). Amsterdam and Philadelphia: John Benjamins.

- Chi, Michelene T. H., Glaser, Robert, & Farr, M. J. (Eds.). (1988). *The Nature of Expertise*. Hillsdale: Lawrence Erlbaum.
- CIUTI. *CIUTI*. <http://www-gewi.kfunigraz.ac.at/ciuti/de/index.html>, May 23, 1999.
- Clifford, Andrew (2001). Discourse theory and performance-based assessment: Two tools for professional interpreting. *Meta*, 46(2), 365–378.
- Cokely, Dennis (1984). Response to Etilvia Arjona on evaluation. In M. L. McIntire (Ed.), *New Dialogues in Interpreter Education. Proceedings of the Fourth National Conference of Interpreter Trainers Convention* (pp. 139–150). Silver Spring: RID.
- Conference of Interpreter Trainers. (1995). *National Interpreter Education Standards*. n.p.: n.p.
- Connelly, F. Michael & Clandinin, D. Jean (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(4), 2–14.
- Cooke, Nancy M. & McDonald, James E. (1986). A formal methodology for acquiring and representing expert knowledge. *Proceedings of the IEEE*, 74(10), 1422–1430.
- Corina, David P. & Vaid, Jyotsna (1994). Lateralization for shadowing words versus signs: A study of ASL-English interpreters. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 237–248). Amsterdam and Philadelphia: John Benjamins.
- Coughlin, Josette (1984). Should court interpreters and conference interpreters be trained in separate academic programs? *Meta*, 29(4), 420–421.
- Coveney, James (1976). Training linguists for international organizations. *Babel*, 22(3), 121–122.
- Cronbach, Lee J. (1971). Test validation. In R. L. Thorndike (Ed.), *Educational Measurement* (pp. 443–507). Washington: American Council on Education.
- Cronbach, Lee J. (1988). Five perspectives on validity argument. In H. Wainer & H. I. Braun (Eds.), *Test Validity* (pp. 3–17). Hillsdale: Lawrence Erlbaum.
- Cronbach, Lee J. & Meehl, Paul E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281–302.
- Cronin, Michael (2002). The empire talks back: Orality, heteronomy and the cultural turn in interpretation studies. In M. Tymoczko & E. Gentzler (Eds.), *Translation and Power* (pp. 45–62). Amherst and Boston: University of Massachusetts Press.
- Danks, Joseph H., Shreve, Gregory M., Fountain, Stephen B., & McBeath, Michael K. (Eds.). (1997). *Cognitive Processes in Translation and Interpreting*. Thousand Oaks: Sage.
- d'Arcais, Giovanni B. F. (1989). The contribution of cognitive psychology to the study of interpretation. In D. Gerver & H. Sinaiko (Eds.), *Language, Interpretation and Communication* (pp. 385–402). New York: Plenum Press.
- Darling-Hammond, Linda & Snyder, Jon (1992). Curriculum studies and the traditions of inquiry: The scientific tradition. In P. W. Jackson (Ed.), *Handbook of Research on Curriculum: A Project of the American Educational Research Association* (pp. 41–78). New York: Macmillan.
- Darò, Valeria (1990). Speaking speed during simultaneous interpretation: A discussion of its neuropsychological aspects and possible contributions to teaching. In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 83–92). Udine: Campanotto Editore.

- Darò, Valeria (1992). Neuropsychologische und neurolinguistische Aspekte des Simultandolmetschprozesses. *Babel*, 38(1), 1–9.
- Darò, Valeria (1994). Non-linguistic factors influencing simultaneous interpretation. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 249–271). Amsterdam and Philadelphia: John Benjamins.
- Darò, Valeria (1997). Experimental studies on memory in conference interpretation. *Meta*, 42(4), 622–628.
- Davidson, Fred & Lynch, Brian K. (2002). *Testcraft: A Teacher's Guide to Writing and Using Language Test Specifications*. New Haven and London: Yale University Press.
- Davidson, Peter & Wakabayashi, Judy (1997). Course profile: MA in Japanese interpreting and translation (MAJIT). *The Translator*, 3(1), 109–124.
- de Groot, Adrianus D. (1965). *Thought and Choice in Chess*. The Hague: Mouton.
- de Groot, Annette M. B. (1997). The cognitive study of translation and interpretation: Three approaches. In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. 25–56). Thousand Oaks: Sage.
- Déjean Le Féal, Karla (1981). L'enseignement des méthodes d'interprétation. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: de la théorie à la pédagogie* (pp. 75–98). Ottawa: University of Ottawa Press.
- Déjean Le Féal, Karla (1990). Some thoughts on the evaluation of simultaneous interpretation. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 154–160). Binghamton: State University of New York at Binghamton.
- Déjean Le Féal, Karla (1997). Simultaneous interpretation with training wheels. *Meta*, 42(4), 616–621.
- Déjean Le Féal, Karla (1998). Didaktik des Dolmetschens. In M. Snell-Hornby, H. G. Höning, P. Kußmaul, & P. A. Schmitt (Eds.), *Handbuch Translation* (pp. 361–367). Tübingen: Stauffenburg.
- de Terra, Diane & Sawyer, David B. (1998). Educating interpreters: The role of reflection in training. *ATA Chronicle*, 27(3), 22–24.
- De Vaney, Ann & Butler, Rebecca P. (1996). Voices of the founders: Early discourses in educational technology. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 3–45). New York: Simon and Schuster Macmillan.
- Delisle, Jean (1977). Les pionniers de l'interprétation au Canada. *Meta*, 22(1), 5–14.
- Delisle, Jean (1981a). De la théorie à la pédagogie: Réflexions méthodologiques. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: De la théorie à la pédagogie* (pp. 135–151). Ottawa: University of Ottawa Press.
- Delisle, Jean (1981b). Historique de l'enseignement de la traduction à l'Université d'Ottawa. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: De la théorie à la pédagogie* (pp. 7–19). Ottawa: University of Ottawa Press.
- Delisle, Jean (Ed.). (1981c). *L'enseignement de l'interprétation et de la traduction: De la théorie à la pédagogie*. Ottawa: University of Ottawa Press.
- Delisle, Jean & Woodsworth, Judith (Eds.). (1995). *Translators through History*. Amsterdam and Philadelphia: John Benjamins.

- Deninger, Carol (1987). Issues in interpreter education. In K. Kummer (Ed.), *Proceedings of the 28th Annual Conference of the American Translators Association* (pp. 307–314). Medford: Learned Information, Inc.
- Derry, Sharon & Lesgold, Alan (1996). Toward a situated social practice model for instructional design. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 787–806). New York: Simon and Schuster Macmillan.
- Dewey, John (1900). *The School and Society; Being Three Lectures by John Dewey. Supplemented by a Statement of the University Elementary School*. Chicago: The University of Chicago Press; New York: McClure, Phillips & Company.
- Dewey, John (1902). *The Child and the Curriculum*. Chicago: University of Chicago Press.
- Dewey, John (1916). *Democracy and Education*. New York: MacMillan.
- Dewey, John (1929). *My Pedagogical Creed*. Washington, DC: Progressive Education Association.
- Dewey, John (1938). *Experience and Education*. New York: MacMillan.
- Dewey, John (1997). *Experience and Education*. New York: Simon and Schuster.
- Diamond, Robert M. (1998). *Designing and Assessing Courses and Curricula: A Practical Guide*. San Francisco: Jossey-Bass.
- Diehl, Erika (1984). Psycholinguistik und Dolmetscherpraxis – ein Versuch der Vermittlung. In W. Wilss & G. Thome (Eds.), *Die Theorie des Übersetzens und ihr Aufschlußwert für die Übersetzungs- und Dolmetschdidaktik* (pp. 289–297). Tübingen: Gunter Narr.
- Dillinger, Michael (1989). *Component Processes of Simultaneous Interpretation*. Ann Arbor: UMI Dissertation Services.
- Dillinger, Michael (1994). Comprehension during interpreting: What do interpreters know that bilinguals don't? In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 155–189). Amsterdam and Philadelphia: John Benjamins.
- Dillon, Ronna F. (1986). Issues in cognitive psychology and instruction. In R. F. Dillon & R. J. Sternberg (Eds.), *Cognition and Instruction* (pp. 1–12). San Diego: Academic Press.
- Dillon, Ronna F. & Sternberg, Robert J. (Eds.). (1986). *Cognition and Instruction*. San Diego: Academic Press.
- Dodds, John (1989). Linguistic theory construction as a premise to a methodology of teaching interpretation. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 17–20). Udine: Campanotto Editore.
- Dodds, John M. & Katan, David (1997). The interaction between research and training. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 89–107). Amsterdam and Philadelphia: John Benjamins.
- Dollerup, Cay & Appel, Vibeke (Eds.). (1995). *Teaching Translation and Interpreting 3: New Horizons*. Amsterdam and Philadelphia: John Benjamins.
- Dollerup, Cay & Loddegaard, Anne (Eds.). (1992). *Teaching Translation and Interpreting: Training, Talent and Experience*. Amsterdam and Philadelphia: John Benjamins.
- Dollerup, Cay L. (1994). *Teaching Translation and Interpreting 2: Insights, Aims, Visions*. Amsterdam and Philadelphia: John Benjamins.

- Doyle, Walter (1992). Curriculum and pedagogy. In P. W. Jackson (Ed.), *Handbook of Research on Curriculum: A Project of the American Educational Research Association* (pp. 486–516). New York: Macmillan.
- Drescher, Horst W. (1997). *Transfer: Übersetzen – Dolmetschen – Interkulturalität. 50 Jahre Fachbereich Angewandte Sprach- und Kulturwissenschaft der Johannes Gutenberg-Universität Mainz in Gernersheim*. Frankfurt am Main: Peter Lang.
- Dubrovsy, Raquel & Weller, Georganne (1990). Curriculum review at the ISIT (Mexico City). In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 61–69). Binghamton: State University of New York at Binghamton.
- Dubslaff, Friedel (1997). Simultandolmetschen aus dem Deutschen: Warten auf das Verb? Ein altes Thema aus neuer Sicht. In H. W. Drescher (Ed.), *Transfer: Übersetzen – Dolmetschen – Interkulturalität. 50 Jahre Fachbereich Angewandte Sprach- und Kulturwissenschaft der Johannes Gutenberg-Universität Mainz in Gernersheim* (pp. 181–192). Frankfurt am Main: Peter Lang.
- Duffy, Thomas M. & Cunningham, Diane J. (1996). Constructivism: Implications for the design and delivery of instruction. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 170–198). New York: Simon and Schuster Macmillan.
- Duffy, Thomas M. & Jonassen, David H. (Eds.). (1992). *Constructivism and the Technology of Instruction: A Conversation*. Hillsdale: Lawrence Erlbaum.
- Ecole de traduction et d'interprétation, Université de Genève. (1999). *Règlement d'études*.
- Ecole de traduction et d'interprétation, Université de Genève, Unité d'Interprétation. (1998). *Diplôme d'interprète de conférence: Plan d'études, Liste des cours*.
- Einhorn, Hillel J. (1974). Expert judgment: Some necessary conditions and an example. *Journal of Applied Psychology*, 59(5), 565–571.
- Ellis, Nick C. (Ed.). (1994). *Implicit and Explicit Learning of Languages*. London: Academic Press.
- Ellis, Rod (1997). Explicit knowledge and second language pedagogy. In L. van Lier & D. Corson (Eds.), *Encyclopedia of Language and Education: Knowledge about Language* (pp. 109–118). Dordrecht: Kluwer Academic Publishers.
- Ericsson, K. Anders & Smith, Jacqui (1991a). Prospects and limits of the empirical study of expertise: An introduction. In K. A. Ericsson & J. Smith (Eds.), *Toward a General Theory of Expertise: Prospects and Limits* (pp. 1–38). Cambridge: Cambridge University Press.
- Ericsson, K. Anders & Smith, Jacqui (Eds.). (1991b). *Toward a General Theory of Expertise: Prospects and Limits*. Cambridge: Cambridge University Press.
- European masters in conference interpreting. <http://www-gewi.kfunigraz.ac.at/emci/>, November 15, 2000.
- Fabbro, Franco (1989). Neurobiological aspects of bilingualism and polyglossia. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 71–82). Udine: Campanotto Editore.
- Fabbro, Franco, Gran, Bruno, & Gran, Laura (1991). Hemispheric specialization for semantic and syntactic components of language in simultaneous interpreters. *Brain and Language*, 41, 1–42.

- Fabbro, Franco & Gran, Laura (1994). Neurological and neuropsychological aspects of polyglossia and simultaneous interpretation. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 273–317). Amsterdam and Philadelphia: John Benjamins.
- Fabbro, Franco & Gran, Laura (1997). Neurolinguistic research in simultaneous interpretation. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 9–27). Amsterdam and Philadelphia: John Benjamins.
- Fabbro, Franco, Gran, Laura, Basso, Gianpaolo, & Bava, Antonio (1990). Cerebral lateralization in simultaneous interpretation. *Brain and Language*, 39, 69–89.
- Feldweg, Erich (1990). Should conference interpreters specialize? In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 161–167). Binghamton: State University of New York at Binghamton.
- Feldweg, Erich (1996). *Der Konferenzdolmetscher im internationalen Kommunikationsprozeß*. Heidelberg: Julius Groos.
- Fleischmann, Eberhard, Kutz, Wladimir, & Schmitt, Peter A. (Eds.). (1997). *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft*. Tübingen: Gunter Narr.
- Ford, Kenneth M. & Adams-Webber, Jack R. (1992). Knowledge acquisition and constructivist epistemology. In R. R. Hoffman (Ed.), *The Psychology of Expertise: Cognitive Research and Empirical AI* (pp. 121–136). New York: Springer-Verlag.
- Forstner, Martin (Ed.). (1995). *C.I.U.T.I. Translation and Interpreting Studies*. <http://www-gewi.kfunigraz.ac.at/ciuti/de/index.html>. November 15, 2000.
- Fosnot, Catherine T. (Ed.). (1996). *Constructivism: Theory, Perspectives, and Practice*. New York and London: Teachers College.
- Fowler, Floyd J. (1993). *Survey Research Methods*. Thousand Oaks: Sage.
- Fowler, Floyd J. (1995). *Improving Survey Questions: Design and Evaluation*. Thousand Oaks: Sage.
- Frederiksen, Norman, et al. (Eds.). (1990). *Diagnostic Monitoring of Skill and Knowledge Acquisition*. Hillsdale: Lawrence Erlbaum.
- Freihoff, Roland (1993). Überlegungen zur Curriculumplanung und -entwicklung im Bereich der Translation. *TextconText*, 8, 197–224.
- Freihoff, Roland (1995). Das Curriculum als Orientierungsrahmen. *TextconText*, 10, 149–178.
- Freihoff, Roland (1998). Curriculare Modelle. In M. Snell-Hornby, H. G. Hönic, P. Kußmaul, & P. A. Schmitt (Eds.), *Handbuch Translation* (pp. 26–31). Tübingen: Stauffenburg.
- Gabr, Moustafa (2001). Program evaluation: A missing critical link in translator training. *Translation Journal*. <http://accurapid.com/journal/15training.htm>, March 1, 2001.
- Gaddis Rose, Marilyn (1996). The dilemma of professionalism in American Translation Studies. In M. Gaddis Rose (Ed.), *Translation Horizons: Beyond the Boundaries of Translation Spectrum: A Collection of Essays Situating and Proposing New Directions and Major Issues in Translation Studies* (pp. 293–295). Binghamton: Center for Research in Translation, State University of New York.

- Gagné, Robert M., Briggs, Leslie J., & Wager, Walter W. (1992). *Principles of Instructional Design*. Fort Worth: Harcourt Brace Jovanovich College Publishers.
- Galli, Christina (1990). Simultaneous interpretation in medical conferences: A case-study. In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 61–82). Udine: Campanotto Editore.
- Gambier, Yves, Gile, Daniel, & Taylor, Christopher (Eds.). (1997). *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* Amsterdam and Philadelphia: John Benjamins.
- García-Landa, Marciano (1981). La 'théorie du sens', théorie de la traduction et base de son enseignement. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: de la théorie à la pédagogie* (pp. 113–132). Ottawa: University of Ottawa Press.
- García-Landa, Marciano (1985). L'oralité de la traduction orale. *Meta*, 30(1), 30–36.
- García-Landa, Marciano (1995). Notes on the epistemology of translation theory. *Meta*, 40(3), 388–405.
- Gardner, Howard (1987). *The Mind's New Science: A History of the Cognitive Revolution*. n.p.: HarperCollins.
- Gardner, Howard (1993). *Multiple Intelligences: The Theory in Practice*. New York: BasicBooks.
- Garzone, Giuliana & Viezzi, Maurizio (Eds.). (2002). *Interpreting in the 21st Century: Challenges and Opportunities. Selected papers from the 1st Forlì Conference on Interpreting Studies, 9–11 November 2000*. Amsterdam and Philadelphia: John Benjamins.
- Garzone, Giuliana (2002). Quality and norms in interpretation. In G. Garzone & M. Viezzi (Eds.), *Interpreting in the 21st Century: Challenges and Opportunities. Selected papers from the 1st Forlì Conference on Interpreting Studies, 9–11 November 2000* (pp. 107–119). Amsterdam and Philadelphia: John Benjamins.
- Gehman, Henry S. (1914). *The Interpreters of Foreign Languages Among the Ancients: A Study Based on Greek and Latin Sources*. Lancaster: Intelligencer Printing Co.
- Gentile, Adolfo (1989). The genesis and development of interpreting in Australia – Salient features and implications for teaching. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 257–260). Udine: Campanotto Editore.
- Gentile, Adolfo (1991). The application of theoretical constructs from a number of disciplines for the development of methodology of teaching in interpreting and translating. *Meta*, 36(2/3), 344–351.
- Gerver, David (1976). Empirical studies of simultaneous interpretation: A review and a model. In R. W. Brislin (Ed.), *Translation: Applications and Research* (pp. 165–207). New York: Gardner.
- Gerver, David, Longley, Patricia E., Long, John, & Lambert, Sylvie (1989). Selection tests for trainee conference interpreters. *Meta*, 34(4), 724–734.
- Gerzymisch-Arbogast, Heidrun (1997). Wissenschaftliche Grundlagen für die Evaluierung von Übersetzungsleistungen. In E. Fleischmann, W. Kutz, & P. A. Schmitt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 573–579). Tübingen: Gunter Narr.

- Gerzymisch-Arbogast, Heidrun, Gile, Daniel, House, Juliane, & Rothkegel, Annely (Eds.). (1998). *Wege der Übersetzungs- und Dolmetschforschung*. Tübingen: Gunter Narr.
- Gerzymisch-Arbogast, Heidrun & Pfeil, Jessica (1996). Das neue Saarbrücker Curriculum. In A. Lauer, H. Gerzymisch-Arbogast, J. Haller, & E. Steiner (Eds.), *Übersetzungswissenschaft im Umbruch. Festschrift für Wolfram Wilss zum 70. Geburtstag* (pp. 307–312). Tübingen: Gunter Narr.
- Gile, Daniel (1989). Perspectives de la recherche dans l'enseignement de l'interprétation. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 27–34). Udine: Campanotto Editore.
- Gile, Daniel (1990). Scientific research vs. personal theories in the investigation of interpretation. In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 28–41). Udine: Campanotto Editore.
- Gile, Daniel (1994a). Methodological aspects of interpretation and translation research. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 39–56). Amsterdam and Philadelphia: John Benjamins.
- Gile, Daniel (1994b). Opening up in Interpretation Studies. In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 149–158). Amsterdam and Philadelphia: John Benjamins.
- Gile, Daniel (1995a). *Basic Concepts and Models for Interpreter and Translator Training*. Amsterdam and Philadelphia: John Benjamins.
- Gile, Daniel (1995b). *Interpreting Research*. *Target*, 7(1).
- Gile, Daniel (1995c). Mirror mirror on the wall: An introduction. *Target*, 7(1), 1–6.
- Gile, Daniel (1995d). *Regards sur la recherche en interprétation de conférence*. Lille: Presses Universitaires de Lille.
- Gile, Daniel (1997a). Conference interpreting as a cognitive management problem. In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. 196–214). Thousand Oaks: Sage.
- Gile, Daniel (1997b). Methodology. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 109–122). Amsterdam and Philadelphia: John Benjamins.
- Gile, Daniel (1998a). Internationalization and institutionalization as promoters of interpretation research. In H. Gerzymisch-Arbogast, D. Gile, J. House, & A. Rothkegel (Eds.), *Wege der Übersetzungs- und Dolmetschforschung* (pp. 167–178). Tübingen: Gunter Narr.
- Gile, Daniel (1998b). Observational studies and experimental studies in the investigation of conference interpreting. *Target*, 10(1), 69–93.
- Gile, Daniel (2000). Interdisciplinary research in conference interpreting. In B. E. Dimitrova & K. Hyltenstam (Eds.), *Language Processing and Simultaneous Interpreting* (pp. 89–106). Amsterdam and Philadelphia: John Benjamins.
- Gile, Daniel (2001). L'évaluation de la qualité de l'interprétation en cours de formation. *Meta*, 46(2), 379–393.

- Gipps, Caroline V. (1994). *Beyond Testing: Towards a Theory of Educational Assessment*. London and Washington, DC: Falmer.
- Glaser, Robert (1963). Instructional technology and the measurement of learning outcomes. *American Psychologist*, 18, 519–521.
- Glaser, Robert (1984). Education and thinking. *American Psychologist*, 39(2), 93–104.
- Glaser, Robert (1987). Thoughts on expertise. In C. Schooler & K. W. Schaie (Eds.), *Cognitive Functioning and Social Structure Over the Life Course* (pp. 81–94). Norwood: Ablex.
- Glaser, Robert & Chi, Michelene T. H. (1988). Overview. In M. T. H. Chi, R. Glaser, & M. J. Farr (Eds.), *The Nature of Expertise* (pp. xv–xxviii). Hillsdale: Lawrence Erlbaum.
- Glaser, Robert & Nitko, Anthony J. (1971). Measurement in learning and instruction. In R. L. Thorndike (Ed.), *Educational Measurement* (pp. 625–670). Washington: American Council on Education.
- Glässer, Edgar (1956). Dolmetschen im Mittelalter: Ein Beitrag zur Entwicklung des Völkergedankens. In K. Thieme, A. Hermann, & E. Glässer (Eds.), *Beiträge zur Geschichte des Dolmetschens* (pp. 61–79). München: Isar.
- Glassick, Charles E., Huber, Mary T., & Maeroff, Gene I. (1997). *Scholarship Assessed: Evaluation of the Professoriate*. San Francisco: Jossey-Bass.
- Gold, David L. (1975). Planning a school for translators and interpreters. *Babel*, 21(3), 107–108.
- Gold, David L. (1976). On quality in interpretation: II. *Babel*, 22(3), 117–119.
- Gonzalez, Roseann D. (1982). Court interpreters certification: Oral proficiency rater training manual. n.p.: n.p.
- Gordon, Sallie E. (1992). Implications of cognitive theory for knowledge acquisition. In R. R. Hoffman (Ed.), *The Psychology of Expertise: Cognitive Research and Empirical AI* (pp. 99–120). New York: Springer-Verlag.
- Grabinger, R. Scott (1996). Rich environments for active learning. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 665–692). New York: Simon and Schuster Macmillan.
- Grabowski, Barbara L. (1996). Generative learning: Past, present, and future. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 897–918). New York: Simon and Schuster Macmillan.
- Gran, Laura (1989a). Interdisciplinary research on cerebral asymmetries: Significance and prospects for the teaching of interpretation. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 93–100). Udine: Campanotto Editore.
- Gran, Laura (1989b). *The Role of Experimental Research in the Training of Teachers of Interpretation*. Paper presented at the Twentieth Anniversary Symposium on the Training of Teachers of Translation and Interpretation, Monterey Institute of International Studies, Monterey, December 1–3, 1989.

- Gran, Laura (1990). A review of research work on interpretation conducted at the SSLM of the University of Trieste and of recent similar studies conducted in Canada and the USA. In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 4–20). Udine: Campanotto Editore.
- Gran, Laura (1998). In-training development of interpreting strategies and creativity. In A. Beylard-Ozeroff, J. Králová, & B. Moser-Mercer (Eds.), *Translators' Strategies and Creativity: Selected Papers from the 9th International Conference on Translation and Interpreting, Prague, September 1995* (pp. 145–162). Amsterdam and Philadelphia: John Benjamins.
- Gran, Laura & Dodds, John (Eds.). (1989). *The Theoretical and Practical Aspects of Teaching Conference Interpretation*. Udine: Campanotto Editore.
- Gran, Laura & Taylor, Christopher (Eds.). (1990). *Aspects of Applied and Experimental Research on Conference Interpretation*. Udine: Campanotto Editore.
- Gran, Laura & Viezzi, Maurizio (1995). Development of research work at SSLM, Trieste. *Target*, 7(1), 107–118.
- Graves, Donald H. (1995). Portfolios: Keep a good idea growing. In D. H. Graves & B. S. Sunstein (Eds.), *Portfolio Portraits* (pp. 1–12). Portsmouth: Heinemann.
- Graves, Donald H. & Sunstein, Bonnie S. (1992). *Portfolio Portraits*. Portsmouth: Heinemann.
- Greeno, James G., Collins, Alan M., & Resnick, Lauren B. (1996). Cognition and learning. In D. C. Berliner, & R. C. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 15–46). New York: Simon and Schuster Macmillan.
- Gringiani, Angela (1990). Reliability of aptitude testing: A preliminary study. In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 42–53). Udine: Campanotto Editore.
- Gronlund, Norman E. (1998). *Assessment of Student Achievement*. Boston: Allyn and Bacon.
- Guba, Egon G. (Ed.). (1990). *The Paradigm Dialog*. Newbury Park: Sage.
- Guba, Egon G. & Lincoln, Yvonna S. (1989). *Fourth General Evaluation*. Newbury Park: Sage.
- Harris, Brian (1981). Prolegomenon to a study of the differences between teaching translation and teaching interpreting. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: de la théorie à la pédagogie* (pp. 153–162). Ottawa: University of Ottawa Press.
- Harris, Brian (1990). Norms in interpretation. *Target*, 2(1), 115–119.
- Harris, Brian (1997). *Translation and Interpreting Schools*. Amsterdam and Philadelphia: Benjamins.
- Hatim, Basil (1984). Discourse / text linguistics and the training of interpreters. In W. Wilss & G. Thome (Eds.), *Die Theorie des Übersetzens und ihr Aufschlußwert für die Übersetzungs- und Dolmetschdidaktik* (pp. 298–307). Tübingen: Gunter Narr.
- Hatim, Basil & Mason, Ian (1997). *The Translator as Communicator*. London and New York: Routledge.
- Heine, Manfred J. (1997). Tradition und Innovation in der Dolmetscherausbildung. In E. Fleischman, W. Kutz, & P. A. Schmidt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 285–290). Tübingen: Gunter Narr.
- Hendricks, Paul V. (1971). *Simultaneous Interpreting: A Practice Book*. London: Longman.

- Henry, Ronald & Henry, Diane (1987). *International Bibliography of Interpretation*. Sudbury: Laurentian University.
- Herbert, Jean (1952). *The Interpreter's Handbook: How to Become a Conference Interpreter*. Geneva: Georg and Cie.
- Herbert, Jean (1978). How conference interpretation grew. In D. Gerver & H. W. Sinaiko (Eds.), *Language Interpretation and Communication* (pp. 5–9). New York: Plenum Press.
- Herman, Joan L., Gearhart, Maryl, & Aschbacher, Pamela R. (1996). Portfolios for classroom assessment: Design and implementation issues. In R. Calfee & P. Perfumo (Eds.), *Writing Portfolios in the Classroom: Policy and Practice, Promise and Peril* (pp. 27–59). Mahwah: Lawrence Erlbaum.
- Herman, Joan L., Morris, Lynn L., & Fitz-Gibbon, Carol T. (1987). *Evaluator's Handbook*. Newbury Park: Sage Publications.
- Hermann, Alfred (1956). Dolmetschen im Altertum. Ein Beitrag zur antiken Kulturgeschichte. In K. Thieme, A. Hermann, & E. Glässer (Eds.), *Beiträge zur Geschichte des Dolmetschens* (pp. 25–59). München: Isar.
- Hilgard, Ernest R. (1996). History of educational psychology. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of Educational Psychology* (pp. 990–1004). New York: Simon and Schuster Macmillan.
- Hoffman, Robert R. (1992a). Doing psychology in an AI context: A personal perspective and introduction to this volume. In R. R. Hoffman (Ed.), *The Psychology of Expertise: Cognitive Research and Empirical AI* (pp. 3–11). New York: Springer-Verlag.
- Hoffman, Robert R. (Ed.). (1992b). *The Psychology of Expertise: Cognitive Research and Empirical AI*. New York: Springer-Verlag.
- Hoffman, Robert R. (1993). An analysis of the relations between basic and applied psychology. *Ecological Psychology*, 5(4), 315–352.
- Hoffman, Robert R. (1997a). The cognitive psychology of expertise and the domain of interpreting. *Interpreting*, 2(1/2), 189–230.
- Hoffman, Robert R. (1997b). *Some Questions About Methodology in the Study of Interpretation Skill. Position Paper*. Paper presented at the Ascona Workshop on Methodologies in Interpretation Research, Ascona.
- Hoffman, Robert R. & Deffenbacher, Kenneth A. (1992). A brief history of applied cognitive psychology. *Applied Cognitive Psychology*, 6(1), 1–48.
- Hoffman, Robert R., Shadbolt, Nigel R., Burton, A. Mike, & Klein, Gary (1995). Eliciting knowledge from experts: A methodological analysis. *Organizational Behavior and Human Decision Processes*, 62(2), 129–158.
- Holmes, James S. ([1972]/1988). The name and nature of Translation Studies. In J. S. Holmes (Ed.), *Translated! Papers on Literary Translation and Translation Studies* (pp. 67–80). Amsterdam: Rodopi.
- Holyoak, Keith J. (1991). Symbolic connectionism: Toward third-generation theories of expertise. In K. A. Ericsson & J. Smith (Eds.), *Toward a General Theory of Expertise: Prospects and Limits* (pp. 301–335). Cambridge: Cambridge University Press.
- Hönig, Hans G. (1995a). *Konstruktives Übersetzen*. Tübingen: Stauffenburg Verlag.
- Hönig, Hans G. (1995b). Wieviel Linguistik braucht ein (Konsektiv-) Dolmetscher? In N. Salnikow (Ed.), *Text, Kontext und Translation* (pp. 49–61). Frankfurt am Main: Peter Lang.

- Hönig, Hans G. (1997a). Using text mappings in teaching consecutive interpreting. In C. Hauenschild & S. Heizmann (Eds.), *Machine Translation and Translation Theory* (pp. 19–34). Berlin and New York: Mouton de Gruyter.
- Hönig, Hans G. (1997b). Zur Evaluation von Dolmetsch- und Übersetzungsleistungen. In H. W. Drescher (Ed.), *Transfer: Übersetzen – Dolmetschen – Interkulturalität. 50 Jahre Fachbereich Angewandte Sprach- und Kulturwissenschaft der Johannes Gutenberg-Universität Mainz in Gernersheim*. Frankfurt am Main: Peter Lang.
- Hönig, Hans G. (1998). Sind Dolmetscher bessere Übersetzer? *Jahrbuch Deutsch als Fremdsprache*, 24, 323–343.
- Houba, Christine (1996). *The T&I Qualifying Exams: An Investigation on Perceptions and Anxiety*. Unpublished Applied Linguistics Research Paper, Monterey Institute of International Studies, Monterey.
- Hoyer, William J. (1987). Acquisition of knowledge and the decentralization of *g* in adult intellectual development. In C. Schooler & K. W. Schaie (Eds.), *Cognitive Functioning and Social Structure Over the Life Course* (pp. 120–141). Norwood: Ablex.
- Hughes, A. (1989). *Testing for Language Teachers*. Cambridge: Cambridge University Press.
- Hung, Eva (Ed.). (2002). *Teaching Translation and Interpreting 4: Building Bridges*. Amsterdam and Philadelphia: John Benjamins.
- Hyang-Ok, L. (n.d.). A study of entrance exams for schools of interpretation. *Thesis papers from Hankuk University*, 15–31.
- Ilg, Gérard & Lambert, Sylvie (1996). Teaching consecutive interpreting. *Interpreting*, 1(1), 69–99.
- Ilic, Ivo (1990). Cerebral lateralization for linguistic functions in professional interpreters. In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 101–110). Udine: Campanotto Editore.
- Isham, William P. (1994). Memory for sentence form after simultaneous interpretation: Evidence both for and against deverbilization. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 191–211). Amsterdam and Philadelphia: John Benjamins.
- Jackson, Philip W. (1992a). Conceptions of curriculum and curriculum specialists. In P. W. Jackson (Ed.), *Handbook of Research on Curriculum: A Project of the American Educational Research Association* (pp. 3–40). New York: Macmillan.
- Jackson, Philip W. (Ed.). (1992b). *Handbook of Research on Curriculum: A Project of the American Educational Research Association*. New York: Macmillan.
- Johnson, David & Johnson, Roger T. (1999). *Learning Together and Alone: Cooperative, Competitive, and Individualistic Learning*. Needham Heights: Allyn and Bacon.
- Johnson, Paul E., Zualkernan, Imran, & Garber, Sharon (1997). Specification of expertise. *International Journal of Man-Machine Studies*, 26(2), 161–181.
- Johnson, Paul E., Zualkernan, Imran A., & Tukey, David (1993). Types of expertise: An invariant of problem solving. *International Journal of Man-Machine Studies*, 39(5), 641–665.
- Johnson-Laird, P. N. (1989). Mental models. In M. I. Posner (Ed.), *Foundations of Cognitive Science* (pp. 469–499). Cambridge and London: MIT Press.

- Jonassen, David H. (Ed.). (1996). *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology*. New York: Simon and Schuster Macmillan.
- Jones, Sabine (1997). Language awareness and learning styles. In L. van Lier & D. Corson (Eds.), *Encyclopedia of Language and Education: Knowledge about Language* (pp. 73–84). Dordrecht: Kluwer Academic Publishers.
- Kade, Otto (1963). Aufgaben der Übersetzungswissenschaft. Zur Frage der Gesetzmäßigkeit im Übersetzungsprozeß. *Fremdsprachen*, 7(2), 83–92.
- Kade, Otto (1968). *Zufall und Gesetzmäßigkeit in der Übersetzung*. Leipzig: VEB Verlag Enzyklopädie.
- Kade, Otto (Ed.). (1977). *Vermittelte Kommunikation, Sprachmittlung, Translation*. Leipzig: VEB Verlag Enzyklopädie Leipzig.
- Kalina, Sylvia (1991). Zur Rolle der Theorie in der Dolmetscherausbildung. *TextconText*, 6, 101–113.
- Kalina, Sylvia (1994). Some views on the theory of interpreter training and some practical suggestions. In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 219–225). Amsterdam and Philadelphia: John Benjamins.
- Kalina, Sylvia (1998). *Strategische Prozesse beim Dolmetschen: Theoretische Grundlagen, empirische Fallstudien, didaktische Konsequenzen*. Tübingen: Günther Narr.
- Kapp, Volker (1984a). Neuere Tendenzen in der Übersetzungs- und Dolmetschwissenschaft 1974–1982. In V. Kapp (Ed.), *Übersetzer und Dolmetscher: Theoretische Grundlagen, Ausbildung, Berufspraxis* (pp. 7–13). München: Francke Verlag.
- Kapp, Volker (1984b). Probleme von Theorie und Praxis in der Ausbildung zum Übersetzer und Dolmetscher. In V. Kapp (Ed.), *Übersetzer und Dolmetscher: Theoretische Grundlagen, Ausbildung, Berufspraxis* (pp. 7–13). München: Francke Verlag.
- Kapp, Volker (Ed.). (1984c). *Übersetzer und Dolmetscher: Theoretische Grundlagen, Ausbildung, Berufspraxis*. München: Francke Verlag.
- Karttunen, Frances E. (1994). *Between Worlds: Interpreters, Guides and Survivors*. New Brunswick: Rutgers University Press.
- Keiser, Walter (1978). Selection and training of conference interpreters. In D. Gerver & H. W. Sinaiko (Eds.), *Language Interpretation and Communication* (pp. 11–24). New York and London: Plenum.
- Keiser, Walter (1984). Der Beruf des Konferenzdolmetschers. In V. Kapp (Ed.), *Übersetzer und Dolmetscher: Theoretische Grundlagen, Ausbildung, Berufspraxis* (pp. 196–209). München: Francke Verlag.
- Keith, Hugh A. (1984). Liaison interpreting – An exercise in linguistic interaction. In W. Wilss & G. Thome (Eds.), *Die Theorie des Übersetzens und ihr Aufschlußwert für die Übersetzungs- und Dolmetschdidaktik* (pp. 308–317). Tübingen: Gunter Narr.
- Kelletat, Andreas (Ed.). (2001). *Dolmetschen: Beiträge aus Forschung, Lehre und Praxis*. Frankfurt am Main: Lang.
- Kember, David, et al. (1996). Developing curricula to encourage students to write reflective journals. *Educational Action Research*, 4(3), 329–348.

- King, Alison (1993). From sage on the stage to guide on the side. *College Teaching*, 41(1), 30–35.
- King, Patricia M. & Kitchener, Karen S. (1994). *Developing Reflective Judgment*. San Francisco: Jossey-Bass.
- Kiraly, Donald (n.d.). *Why Learning is Not Enough: Second Language Acquisition and Translator Education*. Unpublished Manuscript.
- Kiraly, Donald C. (1995). *Pathways to Translation*. Kent and London: Kent State University Press.
- Kiraly, Donald C. (1997a). In search of new pathways for translator education. In H. W. Drescher (Ed.), *Transfer: Übersetzen – Dolmetschen – Interkulturalität. 50 Jahre Fachbereich Angewandte Sprach- und Kulturwissenschaft der Johannes Gutenberg-Universität Mainz in Gernersheim* (pp. 135–152). Frankfurt am Main: Peter Lang.
- Kiraly, Donald C. (1997b). Think-aloud protocols and the construction of a professional translator self-concept. In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. 137–160). Thousand Oaks: Sage.
- Kiraly, Donald (2000). *A Social Constructivist Approach to Translator Education: Empowerment from Theory to Practice*. London: St. Jerome.
- Klein, Gary A., Calderwood, Roberta, & MacGregor, Donald (1989). Critical decision method for eliciting knowledge. *IEEE Transactions on Systems, Man and Cybernetics*, 19(3), 462–472.
- Klein, Gary A. & Hoffman, Robert R. (1993). Seeing the invisible: Perceptual-cognitive aspects of expertise. In M. Rabinowitz (Ed.), *Cognitive Science Foundations of Instruction* (pp. 203–226). Hillsdale: Lawrence Erlbaum.
- Kliegl, Reinhold & Baltes, Paul B. (1987). Theory-guided analysis of mechanisms of development and aging through testing-the-limits and research on expertise. In C. Schooler & K. W. Schaie (Eds.), *Cognitive Functioning and Social Structure Over the Life Course* (pp. 95–119). Norwood: Ablex.
- Klonowicz, Tatiana (1994). Putting one's heart into simultaneous interpretation: Stress during simultaneous interpretation. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 213–224). Amsterdam and Philadelphia: John Benjamins.
- Koch, Andreas (1992). Übersetzen und Dolmetschen im ersten Nürnberger Kriegsverbrecherprozeß. *Lebende Sprachen*, 37(1), 1–6.
- Kohn, Kurt & Kalina, Sylvia (1996). The strategic dimension of interpreting. *Meta*, 41(1), 118–138.
- Kondo, Masaomi & Mizuno, Akira (1995). Interpretation research in Japan. *Target*, 7(1), 91–106.
- Kondo, Masaomi & Tebble, Helen (1997). Intercultural communication, negotiation, and interpreting. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 149–166). Amsterdam and Philadelphia: John Benjamins.

- Kopczynski, Andrzej (1994). Quality in conference interpreting: Some pragmatic problems. In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 189–198). Amsterdam and Philadelphia: John Benjamins.
- Kopczynski, Andrzej & Markiewicz, Anna (1997). Conference text types in Poland and the teaching of interpretation. In E. Fleischmann, W. Kutz, & P. A. Schmidt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 291–297). Tübingen: Gunter Narr.
- Krings, Hans P. (1987). The use of introspective data in translation. In C. Faerch & G. Kaspar (Eds.), *Introspection in Second Language Research* (pp. 159–175). Clevedon and Philadelphia: Multilingual Matters.
- Krüger, Elke (1997). Aspekte sprachlicher Höflichkeit aus dolmetschdidaktischer Sicht, dargestellt am Beispiel des Sprachenpaares Deutsch und Spanisch. In E. Fleischmann, W. Kutz, & P. A. Schmidt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 298–303). Tübingen: Gunter Narr.
- Kucerová, Hana (1990). Diplomatic interpreting in Czechoslovakia. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 37–39). Binghamton: State University of New York at Binghamton.
- Kuhn, Thomas S. (1996). *The Structure of Scientific Revolutions*. Chicago and London: University of Chicago Press.
- Künzli, Alexander (2001). Experts vs. novices: l'utilisation de source d'information pendant le processus de traduction. *Meta*, 46(3), 507–523.
- Kurz, Ingrid (1985). The rock tombs of the princes of Elephantine: Earliest references to interpretation in pharaonic Egypt. *Babel*, 31(4), 213–218.
- Kurz, Ingrid (1986). Dolmetschen im alten Rom. *Babel*, 32(4), 215–220.
- Kurz, Ingrid (1989). The use of videotapes in consecutive and simultaneous training. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 213–215). Udine: Campanotto Editore.
- Kurz, Ingrid (1990). Overcoming language barriers in European television. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 168–175). Binghamton: State University of New York at Binghamton.
- Kurz, Ingrid (1992). 'Shadowing' exercises in interpreter training. In C. Dollerup & A. Loddegaard (Eds.), *Teaching Translation and Interpreting: Training, Talent and Experience* (pp. 245–249). Amsterdam and Philadelphia: John Benjamins.
- Kurz, Ingrid (1994). A look into the Black Box – EEG probability mapping during mental simultaneous interpreting. In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 199–207). Amsterdam and Philadelphia: John Benjamins.
- Kurz, Ingrid (1995). Interdisciplinary research – difficulties and benefits. *Target*, 7(1), 165–179.
- Kurz, Ingrid (1996). *Simultandolmetschen als Gegenstand der interdisziplinären Forschung*. Vienna: WUV-Universitätsverlag.

- Kurz, Ingrid (1998). Evaluierung von Dolmetschleistungen. In M. Snell-Hornby, H. G. Höning, P. Kußmaul, & P. A. Schmitt (Eds.), *Handbuch Translation* (pp. 391–394). Tübingen: Stauffenburg.
- Kurz, Ingrid (2001). Conference interpreting: Quality in the ears of the user. *Meta*, 46(2), 394–409.
- Kurz, Ingrid & Moisl, Angelika (1997). *Berufsbilder für Übersetzer und Dolmetscher: Perspektiven nach dem Studium*. Vienna: WUV-Universitätsverlag.
- Kutz, Wladimir (1997). Gut für wen? Zur Bewertung von Konsekutivdolmetschleistungen. In E. Fleischmann, W. Kutz, & P. A. Schmitt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 243–254). Tübingen: Gunter Narr.
- Kvale, Steinar (1996). *Interviews: An Introduction to Qualitative Research Interviewing*. Thousand Oaks: Sage.
- Lamberger-Felber, Heike (1997). Zur Subjektivität der Evaluierung von Ausgangstexten beim Simultandolmetschen. In N. Grbic & M. Wolf (Eds.), *Text – Kultur Kommunikation: Translation als Forschungsaufgabe* (pp. 231–246). Tübingen: Stauffenburg.
- Lamberger-Felber, Heike (1998). Lexikalische Variabilität beim Simultandolmetschen: Ein textstatistisches Experiment. In H. Gerzymisch-Arbogast, D. Gile, J. House, & A. Rothkegel (Eds.), *Wege der Übersetzungs- und Dolmetschforschung* (pp. 179–194). Tübingen: Gunter Narr.
- Lambert, Sylvie (1989). Information processing among conference interpreters: A test of the depth-of-processing hypothesis. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 83–91). Udine: Campanotto Editore.
- Lambert, Sylvie (1992). Shadowing. *Meta*, 37(2), 263–273.
- Lambert, Sylvie (1994). Simultaneous interpreters: One ear may be better than two. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 319–329). Amsterdam and Philadelphia: John Benjamins.
- Lambert, Sylvie & Meyer, Ingrid (1988). Selection examinations for student interpreters at the University of Ottawa. *Canadian Modern Language Review*, 44(2), 274–284.
- Lambert, Sylvie & Moser-Mercer, Barbara (Eds.). (1994). *Bridging the Gap: Empirical Research in Simultaneous Interpretation*. Amsterdam and Philadelphia: John Benjamins.
- Lederer, Marianne (1981a). La pédagogie de la traduction simultanée. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: de la théorie à la pédagogie* (pp. 47–74). Ottawa: University of Ottawa Press.
- Lederer, Marianne (1981b). *La traduction simultanée*. Paris: Lettres modernes.
- Lederer, Marianne (1985). L'interprétation, manifestation élémentaire de la traduction. *Meta*, 30(1), 25–29.
- Lederer, Marianne (1990). The role of cognitive complements in interpreting. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 53–60). Binghamton: State University of New York at Binghamton.
- Lederer, Marianne (1994). *La traduction aujourd'hui: le modèle interprétatif*. Paris: Hachette-Livre.
- Lee, Tae-Hyung (1999). Speech production and accuracy in simultaneous interpretation from English into Korean. *Meta*, 44(2), 260–267.

- Lee-Jahnke, Hannalore (2001a). Aspects pédagogiques de l'évaluation en traduction. *Meta*, 46(2), 258–271.
- Lee-Jahnke, Hannalore (Ed.). (2001b). Evaluation: Parameters, methods, pedagogical aspects. *Meta*, 46(2).
- Lesgold, Alan, Lajoie, Susanne, Logan, Debra, & Eggen, Gary (1990). Applying cognitive task analysis and research methods to assessment. In N. Frederiksen, R. Glaser, A. Lesgold, & M. G. Shafto (Eds.), *Diagnostic Monitoring of Skill and Knowledge Acquisition* (pp. 325–350). Hillsdale: Lawrence Erlbaum.
- Lincoln, Yvonna & Guba, Egon G. (1985). *Naturalistic Inquiry*. Beverly Hills: Sage.
- Lincoln, Yvonna S. (1992). Curriculum studies and the traditions of inquiry: The humanistic tradition. In P. W. Jackson (Ed.), *Handbook of Research on Curriculum: A Project of the American Educational Research Association* (pp. 79–97). New York: Macmillan.
- Lindquist, Peter (2002). Interpreter training and evaluation: Building a theoretical base using descriptivist and corpus-based techniques. *Proceedings of the 43rd Annual Conference of the American Translators Association, November 6 – 9, 2002*, 431–440. Alexandria: American Translators Association.
- Linell, Per (1997). Interpreting as communication. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 49–67). Amsterdam and Philadelphia: John Benjamins.
- Linn, Robert L. (1980). Issues of validity for criterion-referenced measures. *Applied Psychological Measurement*, 4(4), 547–561.
- Linn, Robert L. (1983). Curricular validity. In G. F. Madaus (Ed.), *The Courts, Validity, and Minimum Competency Testing* (pp. 115–132). Boston: Kluwer-Nijhoff.
- Linn, Robert L. (1989a). Current perspectives and future directions. In R. L. Linn (Ed.), *Educational Measurement* (pp. 1–10). New York: Macmillan.
- Linn, Robert L. (Ed.). (1989b). *Educational Measurement*. New York: Macmillan.
- Liu, Minua (2001). *Expertise in Simultaneous Interpreting: A Working Memory Analysis*. Unpublished dissertation. University of Texas at Austin.
- Longley, Patricia (1978). An integrated programme for training interpreters. In D. Gerver & H. W. Sinaiko (Eds.), *Language Interpretation and Communication* (pp. 45–56). New York and London: Plenum.
- Longley, Patricia (1989). The use of aptitude testing in the selection of students for conference interpretation training. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 105–108). Udine: Campanotto Editore.
- Lotzmann, Geert (1984). Die Rolle der Sprechwissenschaft und Sprecherziehung in der Dolmetscherausbildung. In V. Kapp (Ed.), *Übersetzer und Dolmetscher: Theoretische Grundlagen, Ausbildung, Berufspraxis* (pp. 146–160). München: Francke Verlag.
- Lynch, Brian K. (1996). *Language Program Evaluation: Theory and Practice*. Cambridge and New York: Cambridge University Press.
- Mackintosh, Jennifer (1989). *AIIC Training Committee Review Paper on Training Interpreter Trainers*. Paper presented at the Symposium on the Training of Teachers of Translation and Interpretation Conference, December 1–3, 1989. Monterey Institute of International Studies, Monterey, California.

- Mackintosh, Jennifer (1995). A review of conference interpretation: Practice and training. *Target*, 7(1), 119–133.
- Macnamee, T rence (1999). Le rapporteur et l'interpr te de conf rence. *Meta*, 44(2), 280–294.
- MacWhinney, Brian (1997). Simultaneous interpretation and the competition model. In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. 215–232). Thousand Oaks: Sage.
- Mager, Robert F. (1975). *Preparing Instructional Objectives*. Belmont: Fearon.
- Martin, Peter (1994). NAATI: Role and functions. In R. K. Seymour & C. C. Liu (Eds.), *Translation and Interpreting: Bridging East and West* (pp. 23–32). Honolulu: University of Hawaii Press.
- Massaro, Dominic W. (1978). An information-processing model of understanding speech. In D. Gerver & H. W. Sinaiko (Eds.), *Language Interpretation and Communication* (pp. 299–314). New York and London: Plenum.
- Massaro, Dominic W. & Moser-Mercer, Barbara (1996). Editorial. *Interpreting*, 1(1), 1–6.
- Massaro, Dominic W. & Shlesinger, Miriam (1997). Information processing and a computational approach to the study of simultaneous interpretation. *Interpreting*, 2(1/2), 13–53.
- Matyssek, Heinz (1989). *Handbuch der Notizentechnik f r Dolmetscher*. Heidelberg: Julius Groos.
- McDonald, Janet L. & Carpenter, Patricia A. (1981). Simultaneous translation: Idiomatic interpretation and parsing heuristics. *Journal of Verbal Learning and Verbal Behavior*, 20, 231–247.
- McMillan, James H. (1997). *Classroom Assessment: Principles and Practice for Effective Instruction*. Boston: Allyn and Bacon.
- Melis, Nicole M. & Albir, Amparo H. (2001). Assessment in Translation Studies: Research needs. *Meta*, 46(2), 272–287.
- Mercer, Neil (1993). Culture, context and the construction of knowledge in the classroom. In P. Light & G. Butterworth (Eds.), *Context and Cognition* (pp. 28–46). Hillsdale: Lawrence Erlbaum Associates.
- Merrill, M. David (1992). Constructivism and instructional design. In T. M. Duffy & D. H. Jonassen (Eds.), *Constructivism and the Technology of Instruction: A Conversation* (pp. 99–114). Hillsdale: Lawrence Erlbaum.
- Messick, Samuel (1975). The standard problem: Meaning and values in measurement and evaluation. *American Psychologist*, 30(10), 955–966.
- Messick, Samuel (1980). Test validity and the ethics of assessment. *American Psychologist*, 35(11), 1012–1027.
- Messick, Samuel (1981). Constructs and their vicissitudes in educational and psychological measurement. *Psychological Bulletin*, 89(3), 575–588.
- Messick, Samuel (1988). The once and future issues of validity: Assessing the meaning and consequences of measurement. In H. Wainer & H. I. Braun (Eds.), *Test Validity* (pp. 33–45). Hillsdale: Lawrence Erlbaum.
- Messick, Samuel (1989). Validity. In R. L. Linn (Ed.), *Educational Measurement* (pp. 13–104). New York: Macmillan.

- Messina, Alessandro (1998). The reading aloud of English language texts in simultaneously interpreted conferences. *Interpreting*, 3(2), 147–161.
- Mikkelsen, Holly (1996). The professionalization of community interpreting. In J. O’Keeffe (Ed.), *Global Vision. Proceedings of the 37th Annual Conference of the American Translators Association*. n.p.: American Translators Association.
- Miles, Matthew B. & Huberman, A. Michael (1984). *Qualitative Data Analysis*. Beverly Hills: Sage.
- Monterey Institute of International Studies. (1998). *Graduate School of Translation and Interpretation. Brochure*. Monterey: Monterey Institute of International Studies.
- Monty, Marissa (1998). *T&I Program Evaluation: Diagnostic Tests, Qualifying Exams, and Student Feedback*. Unpublished Applied Linguistics Research Paper, Monterey Institute of International Studies, Monterey.
- Mory, Edna Holland (1996). Feedback research. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 919–956). New York: Simon and Schuster Macmillan.
- Moser, Barbara (1976). *Simultaneous Translation: Linguistic, Psycholinguistic and Human Information Processing Aspects*. Unpublished Ph.D. Thesis, University of Innsbruck.
- Moser, Barbara (1978). Simultaneous interpretation: A hypothetical model and its practical application. In D. Gerver & H. W. Sinaiko (Eds.), *Language Interpretation and Communication* (pp. 353–368). New York and London: Plenum.
- Moser, Peter (1995). *Survey on Expectations of Users of Conference Interpretation: Final Report*. Geneva: AIIC.
- Moser-Mercer, Barbara (1984). Testing interpreting aptitude. In W. Wilss & G. Thome (Eds.), *Die Theorie des Übersetzens und ihr Aufschlußwert für die Übersetzungs- und Dolmetschdidaktik* (pp. 318–325). Tübingen: Gunter Narr.
- Moser-Mercer, Barbara (1985). Screening potential interpreters. *Meta*, 30(1), 97–100.
- Moser-Mercer, Barbara (1994a). Aptitude testing for conference interpreting: Why, when and how. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 57–68). Amsterdam and Philadelphia: John Benjamins.
- Moser-Mercer, Barbara (1994b). Introduction: Paradigms gained or the art of productive disagreement. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 17–21). Amsterdam and Philadelphia: John Benjamins.
- Moser-Mercer, Barbara (1994c). Training and research: The foundation for conference interpretation. *ATA Chronicle*, 39(6), 14–15.
- Moser-Mercer, Barbara (1997a). Beyond curiosity: Can interpreting research meet the challenge? In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. 176–195). Thousand Oaks: Sage.
- Moser-Mercer, Barbara (1997b). The expert-novice paradigm in interpreting research. In E. Fleischmann, W. Kutz, & P. A. Schmitt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 255–261). Tübingen: Gunter Narr.

- Moser-Mercer, Barbara (1997c). Process models in simultaneous interpretation. In C. Hauenschild & S. Heizmann (Eds.), *Machine Translation and Translation Theory* (pp. 3–17). Berlin and New York: Mouton de Gruyter.
- Moser-Mercer, Barbara (1997d). Skill components in simultaneous interpreting. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 133–148). Amsterdam and Philadelphia: John Benjamins.
- Moser-Mercer, Barbara (2000). The rocky road to expertise in interpreting: Eliciting knowledge from learners. In M. Kadric, K. Kaindl, & F. Pöchhacker (Eds.), *Translationswissenschaft. Festschrift für Mary Snell-Hornby zum 60. Geburtstag* (pp. 239–352). Tübingen: Stauffenburg.
- Moser-Mercer, Barbara, Frauenfelder, Uli H., Casado, Beatriz, & Künzli, Alexander (2000). Searching to define expertise in interpreting. In B. E. Dimitrova & K. Hyldenstam (Eds.), *Language Processing and Simultaneous Interpreting* (pp. 107–131). Amsterdam and Philadelphia: John Benjamins.
- NAATI: National Accreditation Authority for Translators and Interpreters. <http://www.naati.com.au>, September 23, 1999.
- Neff, Jacquy (1989). Pour une méthodologie dans l'enseignement de l'interprétation consécutive. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 229–235). Udine: Campanotto Editore.
- Neubert, Albrecht (Ed.). (1968). *Grundfragen der Übersetzungswissenschaft*. Leipzig: VEB Verlag Enzyklopädie Leipzig.
- Neubert, Albrecht (1997). Postulates for a theory of *Translatio*. In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. 1–24). Thousand Oaks: Sage.
- Newell, Allen & Simon, Herbert A. (1972). *Human Problem Solving*. Englewood Cliffs: Prentice-Hall.
- Niang, Anna (1990). History and role of interpreting in Africa. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 34–36). Binghamton: State University of New York at Binghamton.
- Nitko, Anthony J. (1980). Defining criterion-referenced test. In R. A. Berk (Ed.), *A Guide to Criterion-Referenced Test Construction* (pp. 8–28). Baltimore and London: John Hopkins University Press.
- Nord, Christiane (1995). *Textanalyse und Übersetzen*. Heidelberg: Julius Groos.
- Nord, Christiane (1997). *Translating as a Purposeful Activity*. Manchester: St. Jerome.
- Obst, Harry (1990). Summary history of language services in the U.S. Department of State. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 8–13). Binghamton: State University of New York at Binghamton.
- Obst, Harry (1997a). Die Bedeutung des Konsekutivdolmetschens für die Diplomatie. In E. Fleischmann, W. Kutz, & P. A. Schmitt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 304–308). Tübingen: Narr.
- Obst, Harry (1997b). Interpreting for the White House: Historical origins and contemporary practice. In H. W. Drescher (Ed.), *Transfer: Übersetzen – Dolmetschen – Interkulturalität. 50 Jahre Fachbereich Angewandte Sprach- und Kulturwissenschaft* (pp. 63–74). Frankfurt am Main: Peter Lang.

- Olson, Judith R. & Biolsi, Kevin J. (1991). Techniques for representing expert knowledge. In K. A. Ericson & J. Smith (Eds.), *Toward a General Theory of Expertise: Prospects and Limits* (pp. 240–285). Cambridge: Cambridge University Press.
- Ordnung für die Diplomprüfung im Studiengang Dolmetschen des Fachbereichs Angewandte Sprach- und Kulturwissenschaft an der Johannes Gutenberg-Universität Mainz.* (1998). School of Applied Linguistics and Cultural Studies. University of Mainz in Germersheim.
- Ornstein, Allan C. & Hunkins, Francis (1998). *Curriculum: Foundations, Principles, and Issues*. Boston: Allyn and Bacon.
- Paneth, Eva (1958). Training for interpreting. *Modern Languages*, 39(1), 23–29.
- Paneth, Eva (1984). Training in note-taking (for interpreting). In W. Wilss & G. Thome (Eds.), *Die Theorie des Übersetzens und ihr Aufschlußwert für die Übersetzungs- und Dolmetschdidaktik* (pp. 326–331). Tübingen: Gunter Narr.
- Paradis, Michel (1994). Neurolinguistic aspects of implicit and explicit memory: Implications for bilingualism and SLA. In N. C. Ellis (Ed.), *Implicit and Explicit Learning of Languages* (pp. 393–419). London: Academic Press.
- Park, William M. (1994). The current status of U.S. translator and interpreter training. In D. L. Hammond (Ed.), *Professional Issues for Translators and Interpreters* (pp. 201–205). Amsterdam and Philadelphia: John Benjamins.
- Park, William M. (1998). *Translating and Interpreting Programs in North America: A Survey*. Alexandria: American Translators Association.
- Patrie, Carol (1993). Learning theory and teaching strategies for interpreter educators. In E. F. Losa (Ed.), *Keystones in Communication. Proceedings of the 34th Annual Conference of the American Translators Association* (pp. 205–213). Medford: Learned Information, Inc.
- Patrie, Carol & Mertz, Julie (1997). *An Annotated Bibliography on Interpretation*. Washington, DC: Gallaudet University.
- Pfeiffer-Rupp, Rüdiger (1997). Variable Geschwindigkeitspräsentation im Dolmetschunterricht – Eine Vorschau auf ihre Realisierungsmöglichkeiten mit dem Sampler. In E. Fleischmann, W. Kutz, & P. A. Schmidt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 309–319). Tübingen: Gunter Narr.
- Phillips, D. C. (1995). The good, the bad, and the ugly: The many faces of constructivism. *Educational Researcher*, 24(7), 5–12.
- Pilliner, A. E. G. (1968). Subjective and objective testing. In A. Davies (Ed.), *Language Testing Symposium* (pp. 19–35). London: Oxford University Press.
- Pinker, Steven (1994). *The Language Instinct*. New York: HarperPerennial.
- Pinker, Steven (1997). *How the Mind Works*. New York: W. W. Norton.
- Pippa, Salvador & Russo, Mariachiara (2002). Aptitude for conference interpreting: A proposal for a testing methodology based on paraphrase. In G. Garzone & M. Viezzi (Eds.), *Interpreting in the 21st Century: Challenges and Opportunities. Selected Papers from the 1st Forlì Conference on interpreting studies, 9–11 November 2000* (pp. 245–256). Amsterdam and Philadelphia: John Benjamins.
- Pöschhacker, Franz (1992). The role of theory in simultaneous interpreting. In C. Dollerup & A. Loddegaard (Eds.), *Teaching Translation and Interpreting: Training, Talent and Experience* (pp. 211–220). Amsterdam and Philadelphia: John Benjamins.

- Pöchhacker, Franz (1993). From knowledge to text: Coherence in simultaneous interpreting. In Y. Gambier & J. Tammola (Eds.), *Translation and Knowledge* (pp. 87–100). Turku: University of Turku. Centre for Translation and Interpreting.
- Pöchhacker, Franz (1994a). *Simultandolmetschen als komplexes Handeln*. Tübingen: Gunter Narr.
- Pöchhacker, Franz (1994b). Simultaneous interpretation: ‘Cultural transfer’ or ‘voice-over text’? In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 169–178). Amsterdam and Philadelphia: John Benjamins.
- Pöchhacker, Franz (1995). Slips and shifts in simultaneous interpreting. In J. Tammola (Ed.), *Topics in Interpreting Research* (pp. 73–90). Turku: University of Turku. Centre for Translation and Interpreting.
- Pöchhacker, Franz (1998). Unity in diversity: The case of Interpreting Studies. In L. Bowker et al. (Ed.), *Unity in Diversity? Current Trends in Translation Studies* (pp. 169–186). Manchester: St. Jerome.
- Pöchhacker, Franz (1999). Teaching practices in simultaneous interpreting. *The Interpreters’ Newsletter*, 9, 157–175.
- Pöchhacker, Franz (2000). *Dolmetschen: Konzeptuelle Grundlagen und deskriptive Untersuchungen*. Tübingen: Stauffenburg.
- Pöchhacker, Franz (2001). Quality assessment in conference and community interpreting. *Meta*, 46(2), 410–425.
- Pöchhacker, Franz (2002). Researching interpreting quality: Models and methods. In G. Garzone & M. Viezzi (Eds.), *Interpreting in the 21st Century: Challenges and Opportunities. Selected papers from the 1st Forlì Conference on Interpreting Studies, 9–11 November 2000* (pp. 95–106). Amsterdam and Philadelphia: John Benjamins.
- Pöchhacker, Franz & Shlesinger, Miriam (2002). *The Interpreting Studies Reader*. London and New York: Routledge.
- Polanyi, Michael (1966). *The Tacit Dimension*. Garden City: Doubleday.
- Popham, W. James (1978). *Criterion-referenced Measurement*. Englewood Cliffs: Prentice-Hall.
- Popham, W. James (1981). *Modern Educational Measurement*. Englewood Cliffs: Prentice-Hall.
- Porter, Carol & Cleland, Janell (1995). *The Portfolio as a Learning Strategy*. Portsmouth: Heinemann.
- Posner, Michael I. (1988). Introduction: What is it to be an expert? In M. T. H. Chi, R. Glaser, & M. J. Farr (Eds.), *The Nature of Expertise* (pp. xxix–xxxvi). Hillsdale: Lawrence Erlbaum.
- Prawat, Richard S. (1995). Misreading Dewey: Reform, projects, and the language game. *Educational Researcher*, 24(7), 13–22.
- Prideaux, Gary D. & Baker, William J. (1984). An integrated perspective on cognitive strategies in language processing. *Meta*, 29(1), 81–90.
- Pym, Anthony (1998). Ausbildungssituation in aller Welt (Überblick). In M. Snell-Hornby, H. G. Hönl, P. Kußmaul, & P. A. Schmitt (Eds.), *Handbuch Translation* (pp. 33–36). Tübingen: Stauffenburg.

- Qian, Hu (1994). Looking at interpretation from a communicative perspective. *Babel*, 40(4), 214–221.
- Rabinowitz, Mitchell (Ed.). (1993). *Cognitive Science Foundations of Instruction*. Hillsdale: Lawrence Erlbaum.
- Ragan, Tillman J. & Smith, Patricia L. (1996). Conditions-based models for designing instruction. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 541–569). New York: Simon and Schuster Macmillan.
- Reber, Arthur S. (1993). *Implicit Learning and Tacit Knowledge: An Essay on the Cognitive Unconscious*. New York and Oxford: Oxford University Press.
- Regian, J. Wesley & Schneider, Walter (1990). Assessment procedures for predicting and optimizing skill acquisition after extensive practice. In N. Frederiksen, R. Glaser, A. Lesgold, & M. G. Shafto (Eds.), *Diagnostic Monitoring of Skill and Knowledge Acquisition* (pp. 297–323). Hillsdale: Lawrence Erlbaum.
- Renfer, Christoph (1992). Translator and interpreter training: A case for a two-tier system. In C. Dollerup & Anne Loddegaard (Eds.), *Teaching Translation and Interpreting: Training, Talent and Experience* (pp. 173–184). Amsterdam and Philadelphia: John Benjamins.
- Reiß, Katharina (1971). *Möglichkeiten und Grenzen der übersetzungsrelevanten Übersetzungskritik. Kategorien und Kriterien für eine sachgerechte Beurteilung von Übersetzungen*. München: Huber.
- Resnick, Lauren B. (1987). Learning in school and out. *Educational Researcher*, 16, 13–20.
- Riccardi, Alessandra (1995). Language-specific strategies in simultaneous interpreting. In C. Dollerup & V. Appel (Eds.), *Teaching Translation and Interpreting 3: New Horizons* (pp. 213–222). Amsterdam and Philadelphia: John Benjamins.
- Riccardi, Alessandra (1998). Interpreting strategies and creativity. In A. Beylard-Ozeroff, J. Králová, & B. Moser-Mercer (Eds.), *Translators' Strategies and Creativity: Selected Papers from the 9th International Conference on Translation and Interpreting, Prague, September 1995* (pp. 171–179). Amsterdam and Philadelphia: John Benjamins.
- Riccardi, Alessandra (2001). Die Bewertung von Dolmetschleistungen während der Ausbildung und in der Berufspraxis. In Andreas F. Kelletat (Ed.), *Dolmetschen: Beiträge aus Forschung, Lehre und Praxis* (pp. 267–278). Frankfurt am Main: Lang.
- Risku, Hanna (1998). *Translatorische Kompetenz: Kognitive Grundlagen des Übersetzens als Expertentätigkeit*. Tübingen: Stauffenberg Verlag.
- Roberts, Roda P. (1981). The role of the practicum in translator training programmes. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: de la théorie à la pédagogie* (pp. 193–203). Ottawa: University of Ottawa Press.
- Roberts, Roda P. & Blais, Johanne (1981). The didactics of translation and interpretation: An annotated bibliography. In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: de la théorie à la pédagogie* (pp. 265–294). Ottawa: University of Ottawa Press.
- Robson, Colin (2002). *Real World Research*. Malden: Blackwell.
- Roditi, Edouard (1982). *Interpreting: Its History in a Nutshell*. Washington, DC: Georgetown University, National Resource Center for Translation and Interpretation.

- Ross, Brian H. (1989). Reminders in learning and instruction. In S. Vosniadou & A. Ortony (Eds.), *Similarity and Analogical Reasoning* (pp. 438–469). Cambridge: Cambridge University Press.
- Rothkopf, Ernst Z. (1996). Control of mathemagenic activities. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 879–896). New York: Simon and Schuster Macmillan.
- Roy, Cynthia B. (1984). Response to Etilveria Arjona on curriculum design. In M. L. McIntire (Ed.), *New Dialogues in Interpreter Education. Proceedings of the Fourth National Conference of Interpreter Trainers Convention* (pp. 36–42). Silver Spring: RID.
- Rozan, Jean-François (1956). *La prise de notes en interprétation consécutive*. Geneva: Georg and Cie.
- Rubin, Herbert J. & Rubin, Irene S. (1995). *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks: Sage.
- Ryle, Gilbert (1949). *The Concept of Mind*. London: Hutchinson.
- Salevsky, Heidemarie (1986). *Probleme des Simultandolmetschens: Eine Studie zur Handlungsspezifität*. Berlin: Akademie der Wissenschaften der DDR – Zentralinstitut für Sprachwissenschaft.
- Salevsky, Heidemarie (Ed.). (1990). *Übersetzungswissenschaft und Sprachmittlerausbildung*. Berlin: Humboldt Universität.
- Salevsky, Heidemarie (1993). The distinctive nature of Interpreting Studies. *Target*, 5(2), 149–167.
- Salevsky, Heidemarie (1994). Möglichkeiten und Grenzen eines Interaktionsmodells des Dolmetschens. In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 159–168). Amsterdam and Philadelphia: John Benjamins.
- Salevsky, Heidemarie (1998). *Über die Sprache hinaus: Beiträge zur Translationswissenschaft*. Heidelberg: TEXTconTEXT.
- Salnikow, Nikolai (Ed.). (1995). *Text, Kontext und Translation*. Frankfurt am Main: Peter Lang.
- Salthouse, Timothy A. (1991). Expertise as the circumvention of human processing limitations. In K. A. Ericsson & J. Smith (Eds.), *Toward a General Theory of Expertise: Prospects and Limits* (pp. 286–300). Cambridge: Cambridge University Press.
- Sami, Fadia (1998). Die Rolle der institutionalisierten Kommunikationssituation im Dolmetschprozeß. In H. Gerzymisch-Arbogast, D. Gile, J. House, & A. Rothkegel (Eds.), *Wege der Übersetzungs- und Dolmetschforschung* (pp. 195–207). Tübingen: Gunter Narr.
- Sawyer, David, Butler, Frances, Turner, Jean, & Stone, Irene (2002a). Empirically-based test design and development for telephone interpreting. *Language Testing Update*, 31(3), 18–19.
- Sawyer, David, Butler, Frances, Turner, Jean, & Stone, Irene N. (2002b). A quality assurance model for remote language mediation. *The ATA Chronicle*, 31(8), 36–39.
- Sawyer, David B. (1998). Standards for language interpretation: Establishing national guidelines in the United States. *LISA Newsletter*, 7(3), n.p.

- Sawyer, David B. (2000). Towards meaningful, appropriate, and useful assessment: How the false dichotomy between theory and practice undermines interpreter education. *The ATA Chronicle*, 29(2), 32–41.
- Schjoldager, Anne (1995). Interpreting research and the ‘manipulation school’ of Translation Studies. *Target*, 7(1), 29–45.
- Schjoldager, Anne (1996). Assessment of simultaneous interpreting. In C. Dollerup & V. Appel (Eds.), *Teaching Translation and Interpreting 3: New Horizons* (pp. 187–195). Amsterdam and Philadelphia: John Benjamins.
- Schneider, Walter (1985). Training high-performance skills: Fallacies and guidelines. *Human Factors*, 27(3), 285–300.
- Schön, Donald A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. San Francisco: Jossey-Bass.
- Schön, Donald A. (1987). *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass.
- Schooler, Carmi & Schaie, K. Warner (Eds.). (1987). *Cognitive Functioning and Social Structure Over the Life Course*. Norwood: Ablex.
- Schrag, Francis (1992). Conceptions of knowledge. In P. W. Jackson (Ed.), *Handbook of Research on Curriculum: A Project of the American Educational Research Association* (pp. 268–301). New York: Macmillan.
- Schumacher, Robert M. & Czerwinski, Mary P. (1992). Mental models and the acquisition of expert knowledge. In R. R. Hoffman (Ed.), *The Psychology of Expertise: Cognitive Research and Empirical AI* (pp. 61–79). New York: Springer-Verlag.
- Seger, F. Dan (1992). Portfolio definitions: Toward a shared notion. In D. H. Graves & B. S. Sunstein (Eds.), *Portfolio Portraits* (pp. 114–124). Portsmouth: Heinemann.
- Seleskovitch, Danica (1981). L’enseignement de l’interprétation. In J. Delisle (Ed.), *L’enseignement de l’interprétation et de la traduction: de la théorie à la pédagogie* (pp. 23–46). Ottawa: University of Ottawa Press.
- Seleskovitch, Danica & Lederer, Marianne (1986). *Interpréter pour traduire*. Paris: Didier Erudition.
- Seleskovitch, Danica & Lederer, Marianne (1989). *Pédagogie raisonnée de l’interprétation*. Brussels: Office of Official Publications of the European Communities and Didier Erudition.
- Seleskovitch, Danica & Lederer, Marianne (1995). *A Systematic Approach to Teaching Interpretation* (Jacolyn Harmer, Trans.). n.p.: The Registry of Interpreters for the Deaf.
- Setton, Robin (1998). Meaning assembly in simultaneous interpretation. *Interpreting*, 3(2), 163–199.
- Setton, Robin (1999). *Simultaneous Interpretation: A Cognitive-Pragmatic Analysis*. Amsterdam and Philadelphia: John Benjamins.
- Seymour, Richard K. & Liu, Ching-chih (Eds.). (1994). *Translation and Interpreting: Bridging East and West*. Honolulu: University of Hawaii Press.
- Shakir, Abdullah & Farghal, Mohammed (1997). When the focus of the text is blurred: A textlinguistic approach for analyzing student interpreters’ errors. *Meta*, 42(4), 629–640.
- Shanteau, James (1992). The psychology of experts: An alternative view. In G. Wright & F. Bolger (Eds.), *Expertise and Decision Support* (pp. 11–23). New York and London: Plenum.

- Shepard, Lorrie A. (1980). Setting performance standards. In R. A. Berk (Ed.), *A Guide to Criterion-referenced Test Construction* (pp. 169–198). Baltimore and London: John Hopkins University Press.
- Shlesinger, Miriam (1989a). Extending the theory of translation to interpretation: Norms as a case in point. *Target*, 1(1), 111–115.
- Shlesinger, Miriam (1989b). *Simultaneous Interpretation as a Factor in Effecting Shifts in the Position of Texts on the Oral-literate Continuum*. Unpublished master's thesis, Faculty of Humanities, Tel Aviv University.
- Shlesinger, Miriam (1990). Factors affecting the applicability of the oral-literate continuum to interpretation research. *Hebrew Linguistics*, 28–30, 49–56.
- Shlesinger, Miriam (1994). Intonation in the production and perception of simultaneous interpretation. In S. Lambert & B. Moser-Mercer (Eds.), *Bridging the Gap: Empirical Research in Simultaneous Interpretation* (pp. 225–236). Amsterdam and Philadelphia: John Benjamins.
- Shlesinger, Miriam (1995). Stranger in paradigms: What lies ahead for simultaneous interpreting research? *Target*, 7(1), 7–28.
- Shlesinger, Miriam (1998). Corpus-based Interpreting Studies as an offshoot of corpus-based Translation Studies. *Meta*, 43(4), 486–493.
- Shlesinger, Miriam, et al. (1997). Quality in simultaneous interpreting. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 123–131). Amsterdam and Philadelphia: John Benjamins.
- Shreve, Gregory M. (1997). Cognition and the evolution of translation competence. In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. 120–136). Thousand Oaks: Sage.
- Shreve, Gregory M. & Diamond, Bruce J. (1997). Cognitive processes in translation and interpreting: Critical issues. In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. 233–251). Thousand Oaks: Sage.
- Shreve, Gregory M. & Koby, Geoffrey S. (1997). Introduction: What's in the 'black box'? Cognitive science and Translation Studies. In J. H. Danks, G. M. Shreve, S. B. Fountain, & M. K. McBeath (Eds.), *Cognitive Processes in Translation and Interpreting* (pp. xi–xviii). Thousand Oaks: Sage.
- Simmons, Jay (1992). Portfolios for large-scale assessment. In D. H. Graves & B. S. Sunstein (Eds.), *Portfolio Portraits* (pp. 96–113). Portsmouth: Heinemann.
- Simon, Herbert A. & Kaplan, Craig A. (1989). Foundations of cognitive science. In M. I. Posner (Ed.), *Foundations of Cognitive Science* (pp. 1–47). Cambridge and London: MIT Press.
- Simonson, Michael & Maushak, Nancy (1996). Instructional technology and attitude change. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 984–1016). New York: Simon and Schuster Macmillan.
- Sin-wai, Chan (1995). *A Topical Bibliography of Translation and Interpretation: Chinese-English, English-Chinese*. Hong Kong: Chinese University Press.

- Skinner, William & Carson, Thomas F. (1990). Working conditions at the Nuremberg trials. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 14–33). Binghamton: State University of New York at Binghamton.
- Snell-Hornby, Mary (Ed.). (1992). The professional translator of tomorrow: Language specialist or all-round expert? In C. Dollerup & A. Loddegaard (Eds.), *Teaching Translation and Interpreting: Training, Talent and Experience* (pp. 9–22). Amsterdam and Philadelphia: John Benjamins.
- Snell-Hornby, Mary (1998a). Ausbildungssituation in Europa. In M. Snell-Hornby, H. G. Hönic, P. Kußmaul, & P. A. Schmitt (Eds.), *Handbuch Translation* (pp. 31–33). Tübingen: Stauffenburg.
- Snell-Hornby, Mary (1998b). Translation (Übersetzen / Dolmetschen / Translationswissenschaft / Translatologie). In M. Snell-Hornby, H. G. Hönic, P. Kußmaul, & P. A. Schmitt (Eds.), *Handbuch Translation* (pp. 37–38). Tübingen: Stauffenburg.
- Snell-Hornby, Mary, Pöchhacker, Franz, & Kaindl, Klaus (Eds.). (1992). *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992*. Amsterdam and Philadelphia: John Benjamins.
- Snelling, David (1992). *Strategies for Simultaneous Interpreting from Romance Languages into English*. Udine: Campanotto Editore.
- Snelling, David (1997). On media and court interpreting. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 187–206). Amsterdam and Philadelphia: John Benjamins.
- Stadler, Michael A. & Frensch, Peter A. (Eds.). (1997). *Handbook of Implicit Learning*. Thousand Oaks: Sage.
- Standards for Educational and Psychological Testing*. (1985). Washington, DC: American Psychological Association.
- Standards for Educational and Psychological Testing*. (1999). Washington, DC: American Psychological Association.
- Stansfield, Charles & Turner, Jean (2001). U.S. federal court interpreter certification examination program. *Language Testing Update*, 29, 34–35.
- Stansfield, Charles W., Scott, Mary L., & Kenyon, Dorry M. (1992). The measurement of translation ability. *The Modern Language Journal*, 76(4), 455–467.
- Steffe, Leslie P. & Gale, Jerry (Eds.). (1995). *Constructivism in Education*. Hillsdale: Lawrence Erlbaum.
- Steffen, Hans-Eberhard (1984). Die Landeskunde in der Ausbildung der Übersetzer und Dolmetscher. In V. Kapp (Ed.), *Übersetzer und Dolmetscher: Theoretische Grundlagen, Ausbildung, Berufspraxis* (pp. 122–134). München: Francke Verlag.
- Sternberg, Robert (1986). Cognition and instruction: Why the marriage sometimes ends in divorce. In R. F. Dillon & R. J. Sternberg (Eds.), *Cognition and Instruction* (pp. 375–382). San Diego: Academic Press.
- Sternberg, Robert J. & Frensch, Peter A. (1992). On being an expert: A cost-benefit analysis. In R. R. Hoffman (Ed.), *The Psychology of Expertise: Cognitive Research and Empirical AI* (pp. 191–203). New York: Springer-Verlag.

- Stoll, Karl-Heinz (Ed.). (1996). *50 Jahre FASK – Geschichte und Geschichten. Festschrift zum 50. Jahrestag der Gründung des Fachbereichs Angewandte Sprach- und Kulturwissenschaft der Johannes Gutenberg-Universität Mainz in Gernersheim*. Karlsruhe: Druckco-operative Karlsruhe.
- Stolz, Birgit (1994). Simultankapazität und Übungseffekt. In M. Snell-Hornby, F. Pöchhacker, & K. Kaindl (Eds.), *Translation Studies – An Interdiscipline: Selected Papers from the Translation Studies Congress, Vienna, 9–12 September 1992* (pp. 209–218). Amsterdam and Philadelphia: John Benjamins.
- Studienordnung für die Diplom-Studiengänge Übersetzen und Dolmetschen am Fachbereich Angewandte Sprach- und Kulturwissenschaft der Johannes Gutenberg-Universität Mainz in Gernersheim* (1998). School of Applied Linguistics and Cultural Studies. University of Mainz in Gernersheim.
- Sturdy, Andrew, Newman, Innes, & Nicholls, Peter (1992). Sociological perspectives on the nature of expertise. In G. Wright & F. Bolger (Eds.), *Expertise and Decision Support* (pp. 129–151). New York and London: Plenum.
- Sunnari, Marianna (1995). Processing strategies in simultaneous interpreting: Saying it all vs. synthesis. In J. Tommola (Ed.), *Topics in Interpreting Research* (pp. 109–119). Turku: University of Turku. Centre for Translation and Interpreting.
- Sussman, Lyle & Johnson, Denise (1996). Dynamics of the interpreter's role. *The Journal of Language for International Business*, 7(2), 1–14.
- Tapalova, Gulnaz (1998). *Assessment in the Graduate School of Translation and Interpretation of MIIS*. Unpublished Applied Linguistics Research Paper, Monterey Institute of International Studies, Monterey.
- Taylor, Christopher (1990). Coherence and world knowledge. In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 21–27). Udine: Campanotto Editore.
- The American Council on the Teaching of Foreign Languages. (1986). *ACTFL Proficiency Guidelines*. <http://www.actfl.org/public/articles/guidelines.pdf>, March 1, 2001.
- Thieme, Karl (1956). Die Bedeutung des Dolmetschens für die 'Weltgeschichte Europas'. In K. Thieme, A. Hermann, & E. Glässer (Eds.), *Beiträge zur Geschichte des Dolmetschens* (pp. 9–24). München: Isar.
- Thieme, Karl, Hermann, Alfred, & Glässer, Edgar (1956). *Beträge zur Geschichte des Dolmetschens*. München: Isar.
- Thiéry, Christopher (1981). L'enseignement de la prise de notes en interprétation consécutive: Un faux problème? In J. Delisle (Ed.), *L'enseignement de l'interprétation et de la traduction: de la théorie à la pédagogie* (pp. 99–112). Ottawa: University of Ottawa Press.
- Thiéry, Christopher (1989). Pédagogie de l'exemple dans l'enseignement de l'interprétation simultanée et consécutive. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 207–208). Udine: Campanotto Editore.
- Thiéry, Christopher (1990). The sense of situation in conference interpreting. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 40–43). Binghamton: State University of New York at Binghamton.

- Thorndike, Robert L. (Ed.). (1971). *Educational Measurement*. Washington: American Council on Education.
- Tijus, Charles A. (1997). Understanding for interpreting, interpreting for understanding. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 29–48). Amsterdam and Philadelphia: John Benjamins.
- Tommola, Jorma (Ed.). (1996). *Topics in Interpreting Research*. Turku: University of Turku, Centre for Translation and Interpreting.
- Tommola, Jorma (1997). Interpretation research policy. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 69–88). Amsterdam and Philadelphia: John Benjamins.
- Tommola, Jorma & Lindholm, Johan (1995). Experimental research on interpreting: Which dependent variable? In J. Tommola (Ed.), *Topics in Interpreting Research* (pp. 121–133). Turku: University of Turku. Centre for Translation and Interpreting.
- Torsello, Carol T. (1997). Linguistics, discourse analysis and interpretation. In Y. Gambier, D. Gile, & C. Taylor (Eds.), *Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What Do We Know and How?* (pp. 167–186). Amsterdam and Philadelphia: John Benjamins.
- Toury, Gideon (1978). The nature and role of norms in literary translation. In J. S. Holmes, J. Lambert, & R. van den Broeck (Eds.), *Literature and Translation: New Perspectives in Literary Studies* (pp. 83–100). Leuven: ACCO.
- Toury, Gideon (1980). *In Search of a Theory of Translation*. Tel Aviv: The Porter Institute of Poetics and Semiotics, Tel Aviv University.
- Toury, Gideon (1995). *Descriptive Translation Studies and Beyond*. Amsterdam and Philadelphia: John Benjamins.
- Treisman, Anne M. (1965). The effects of redundancy and familiarity on translating and repeating back a foreign and a native language. *British Journal of Psychology*, 56(4), 369–379.
- Tyler, Ralph W. (1949). *Basic Principles of Curriculum and Instruction*. Chicago and London: University of Chicago Press.
- Tyler, Ralph W. (1951). The functions of measurement in improving instruction. In E. F. Lindquist (Ed.), *Educational Measurement*. Washington, DC: American Council on Education.
- van Dam, Helle (1998). Lexical similarity vs. lexical dissimilarity in consecutive interpreting. *The Translator*, 4(1), 49–68.
- van Dam, Ina Marie (1989). Strategies of simultaneous interpretation: A methodology of training simultaneous interpreters. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 167–176). Udine: Campanotto Editore.
- van Hoof, Henri (1962). *Théorie et pratique de l'interprétation; avec application particulière à l'anglais et au français*. München: M. Hueber.
- van Lier, Leo & Corson, David (Eds.). (1997). *Encyclopedia of Language and Education: Knowledge about Language*. Vol. 6. Dordrecht: Kluwer Academic Publishers.

- Vicente, Kim J. & Wang, JoAnne H. (1998). An ecological theory of expertise effects in memory recall. *Psychological Review*, 105(1), 33–57.
- Video translators high on wanted list. *The Daily Yomiuri*, 9 February 1998.
- Viezzi, Maurizio (1990). Sight translation, simultaneous interpretation and information retention. In L. Gran & C. Taylor (Eds.), *Aspects of Applied and Experimental Research on Conference Interpretation* (pp. 54–60). Udine: Campanotto Editore.
- Viezzi, Maurizio (1996). *Aspetti della qualità in interpretazione*. SERT 2, Trieste: SSLMIT.
- von Glasersfeld, Ernst (1996). Introduction: Aspects of constructivism. In C. T. Fosnot (Ed.), *Constructivism: Theory, Perspectives and Practice* (pp. 3–33). New York and London: Teachers College.
- Vosniadou, Stella & Ortony, Andrew (Eds.). (1989). *Similarity and Analogical Reasoning*. Cambridge: Cambridge University Press.
- Waddington, Christopher (2001). Different methods of evaluating student translations: The question of validity. *Meta*, 46(2), 311–325.
- Wadsworth, Yoland (1998). What is participatory action research? *Action Research International*. <http://www.scu.edu.au/schools/sawd/ari/ari-wadsworth.html>, January 5, 1999.
- Wainer, Howard & Braun, Henry I. (Eds.). (1988). *Test Validity*. Hillsdale: Lawrence Erlbaum.
- Weber, Wilhelm (1984). *Training Translators and Conference Interpreters*. Orlando: Harcourt Brace Jovanovich.
- Weber, Wilhelm (1989a). Improved ways of teaching consecutive interpretation. In L. Gran & J. Dodds (Eds.), *The Theoretical and Practical Aspects of Teaching Conference Interpretation* (pp. 161–166). Udine: Campanotto Editore.
- Weber, Wilhelm (1990a). The importance of sight translation in an interpreter training program. In D. Bowen & M. Bowen (Eds.), *Interpreting – Yesterday, Today, and Tomorrow* (pp. 44–52). Binghamton: State University of New York at Binghamton.
- Weber, Wilhelm K. (1989b). Politics of interpreter education in academia. In P. W. Krawutschke (Ed.), *Translator and Interpreter Training and Foreign Language Pedagogy* (pp. 6–17). Binghamton: State University of New York at Binghamton.
- Weber, Wilhelm K. (1990b). Interpretation in the United States. *Annals of the American Academy of Political Social Sciences*, 511, 145–158.
- Wiggins, Grant P. (1993). *Assessing Student Performance: Exploring the Purpose and Limits of Testing*. San Francisco: Jossey-Bass.
- Willett, Ruth (1984). Die Ausbildung zum Konferenzdolmetscher. In V. Kapp (Ed.), *Übersetzer und Dolmetscher: Theoretische Grundlagen, Ausbildung, Berufspraxis* (pp. 87–109). München: Francke Verlag.
- Williams, Michael D. (1996). Learner-control and instructional technologies. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 957–983). New York: Simon and Schuster Macmillan.
- Wilson, Brent G. & Cole, Peggy (1996). Cognitive teaching models. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 601–621). New York: Simon and Schuster Macmillan.

- Wilss, Wolfram (1984). Die Bedeutung des Übersetzens und Dolmetschens in der Gegenwart. In V. Kapp (Ed.), *Übersetzer und Dolmetscher: Theoretische Grundlagen, Ausbildung, Berufspraxis* (pp. 13–25). München: Francke Verlag.
- Wilss, Wolfram (1999). *Translating and Interpreting in the 20th Century: Focus on German*. Amsterdam and Philadelphia: John Benjamins.
- Wilss, Wolfram & Thome, Gisela (Eds.). (1984). *Die Theorie des Übersetzens und ihr Aufschlußwert für die Übersetzungs- und Dolmetschdidaktik*. Tübingen: Gunter Narr.
- Winn, William & Snyder, Daniel (1996). Cognitive perspectives in psychology. In D. H. Jonassen (Ed.), *Handbook of Research for Educational Communications and Technology: A Project of the Association for Educational Communications and Technology* (pp. 112–142). New York: Simon and Schuster Macmillan.
- Wood, Jeff (1998). Career building: An insider's perspective as the market heats up for language professionals. *Language International*, 10(4), 12–15, 47.
- Wood, Terry (1995). From alternative epistemologies to practice in education: Rethinking what it means to teach and learn. In L. P. Steffe & J. Gale (Eds.), *Constructivism in Education* (pp. 331–339). Hillsdale: Lawrence Erlbaum.
- Wright, George & Bolger, Fergus (Eds.). (1992). *Expertise and Decision Support*. New York and London: Plenum.
- Yancey, Kathleen Blane (1996). Dialogue, interplay, and discovery: Mapping the role and the rhetoric of reflection in portfolio assessment. In R. Calfee & P. Perfumo, *Writing Portfolios in the Classroom: Policy and Practice, Promise and Peril* (pp. 83–102). Mahweh: Lawrence Erlbaum, 1996.
- Zeier, Hans (1997). Psychophysiological stress research. *Interpreting*, 2(1/2), 231–249.
- Zwilling, Michail (1997). Zusammenwirken von Berufskunde und Translationswissenschaft bei der Ausbildung von Konferenzdolmetschern. In E. Fleischmann, W. Kutz, & P. A. Schmidt (Eds.), *Translationsdidaktik: Grundfragen der Übersetzungswissenschaft* (pp. 320–323). Tübingen: Gunter Narr.

Name index

A

Ackermann, D. 96
Albir, A. H. 34
Alderson, J. C. 14, 107, 108
Allwright, D. 125
Altman, J. 21, 78, 96
Ammann, M. 27, 28, 35
Anderson, J. R. 66, 69
Andres, D. 238
Angoff, W. H. 239
Appel, V. 238
Arjona, E. 3, 11, 26, 27, 32, 34, 53, 55,
57, 85–89, 92, 93, 108, 111, 113–115,
234
Arjona-Tseng, E. 21
Arntz, R. 27, 68
Aschbacher, P. R. 127
Austin, G. A. 59

B

Bachman, L. F. 12, 14, 34, 35, 94, 96, 98,
100–103, 105, 115, 118–122, 125,
178, 191, 194, 196
Bailey, A. L. 117
Bailey, K. M. 125
Baker, M. 53
Beauchamp, G. A. 39
Bednar, A. K. 82
Belisle, E. 33
Bereiter, C. 30, 63, 65, 67–70, 76, 80
Black, L. 127
Blais, J. 21
Bloom, B. S. 58
Bobbitt, F. 1, 15, 236
Bowen, D. 4, 25
Bowen, M. 1, 4, 20, 25, 33

Bowker, L. 12, 20, 33
Briggs, L. J. 49, 51, 59, 64
Broadbent, D. E. 61
Brown, J. S. 14, 77, 94, 102, 107, 108
Bruner, J. S. 59, 61, 63, 75, 79
Bühler, H. 99
Butler, F. A. 16, 96, 117

C

Calfee, R. C. 127
Caminade, M. 1, 76
Chase, C. K. K. 65
Cherry, E. C. 61
Chi, M. T. H. 65, 68
Clandinin, D. J. 84
Clapham, C. 14, 107, 108
Cleland, J. 127
Clifford, A. 32
Cokely, D. 234
Collins, A. M. 41, 63, 77
Connelly, F. M. 84
Coughlin, J. 27
Coveney, J. 27
Cronbach, L. J. 93, 95, 96
Cronin, M. 37
Cunningham, D. J. 45, 77, 78
Czerwinski, M. P. 69

D

Déjean Le Féal, K. 22, 23, 56, 64, 65, 96
Darling-Hammond, L. 48, 61, 62
Davidson, P. 28, 107, 108
de Groot, A. D. 65
de Terra, D. 16, 63, 84
Delisle, J. 20

Derry, S. 64, 65, 75, 81, 83
Dewey, J. 26, 42, 44, 45, 61, 79, 220
Diamond, R. M. 90
Dillinger, M. 21, 22, 30
Doyle, W. 39, 40
Duffy, T. M. 45, 77, 78
Duguid, P. 77

E

Ellis, N. C. 81
Ellis, R. 81

F

Forstner, M. 53, 57, 233
Freedman, S. W. 127
Freihoff, R. 1, 2, 26–28, 41–43, 50, 51,
53, 56, 57, 59, 81, 85
Freud, S. 81

G

Gabr, M. 26
Gagné, R. M. 49, 51, 59, 64
García-Landa, M. 12, 36, 37
Gardner, H. 24, 63, 76
Garret, H. E. 95
Garzone, G. 12
Gerhart, M. 127
Gerver, D. 21, 61
Gerzymisch-Arbogast, H. 27, 28
Gile, D. 4, 12, 16, 21–24, 32, 63, 69, 94,
214
Gipps, C. V. 6, 8, 34, 95, 96, 99–102,
106, 114, 116, 119
Glaser, R. 6–8, 13, 65, 68, 114, 115
Gold, D. L. 27
Goodnow, J. J. 59
Greeno, J. G. 41, 63
Gronlund, N. E. 94, 109, 112, 113
Guba, E. G. 125
Guttman, L. 119

H

Harris, B. 28

Hatim, B. 3, 8, 27, 33, 34, 93
Henry, D. 21
Henry, R. 21
Herbert, J. 19, 21, 24
Herman, J. L. 14, 127
Hilgard, E. R. 49
Hobson, C. 13
Hoffman, R. R. 29, 30, 65–73, 80, 83, 84,
116
Holmes, J. S. 9
Holyoak, K. J. 67
Holz-Mänttari, J. 31
Hönig, H. G. 3, 27, 35, 47, 68, 88–90, 96
Houba, C. 35, 143, 177
Hudson, T. 14, 94, 102, 107, 108
Hunkins, F. 39–48, 50, 52, 55, 58, 60, 61,
74, 93
Hyang-Ok, L. 111

I

Ilg, G. 21

J

Jackson, P. W. 41, 44
Johnson, P. E. 67
Johnson-Laird, P. N. 69

K

Kalina, S. 22, 23, 25, 26, 35, 36, 83
Kenny, D. 20
King, A. 78
Kiraly, D. 3, 16, 27, 45, 71, 78, 82, 114,
126
Klein, G. A. 67–72, 80, 83, 84
Kurz, I. 34, 46, 69, 82, 89, 99, 117
Kutz, W. 34, 96, 98, 114

L

Lambert, S. 21
Lederer, M. 11, 23, 24, 36
Lee-Jahnke, H. 8, 34
Lenk, H. 96, 99
Lesgold, A. 64, 65, 75, 81, 83
Lincoln, Y. S. 125

- Lindholm, J. 12
 Lindquist, P. 33, 117
 Linn, R. L. 6
 Liu, M. 29, 30
- M**
 Mackintosh, J. 22, 23
 Mager, R. F. 51
 Mason, I. 3, 8, 27, 33, 34, 93
 Massaro, D. W. 12, 61, 62, 80
 Matyssek, H. 21, 24
 McMillan, J. H. 114, 121, 125, 126
 Meehl, P. E. 96
 Melis, N. M. 34
 Merrill, M. D. 64
 Mertz, J. 21
 Messick, S. 14, 95, 96, 99, 100, 104, 231
 Mikkelson, H. 16, 27
 Minyar-Belorutchev, R. K. 21
 Moisl, A. 89
 Monty, M. 35
 Moser, B. 61, 99
 Moser-Mercer, B. 11, 12, 21, 29, 30, 32,
 62, 63, 65, 71
- N**
 Neff, J. 32, 111
 Newell, A. 65
 Nitko, A. J. 6–8, 13, 231
 Nord, C. 35
 Nunan, D. 125
- O**
 Ornstein, A. C. 39–48, 50, 52, 55, 58, 60,
 61, 74, 93
- P**
 Palmer, A. 14
 Park, W. M. 28
 Patrie, C. 21
 Pearson, J. 20
 Pfeil, J. 27, 28
 Phillips, D. C. 45
- Pilliner, A. E. G. 103
 Plato 80
 Pöchhacker, F. 9, 12, 16, 21, 22, 34, 37,
 117, 214
 Polanyi, M. 79, 80
 Popham, W. J. 107, 108
 Porter, C. 127
 Posner, M. I. 66, 68
 Pym, A. 1, 2, 76
- R**
 Reber, A. S. 80, 81
 Redmond, M. 96, 99
 Renfer, C. 28, 86
 Resnick, L. B. 41, 63, 77
 Riccardi, A. 96, 98, 99
 Risku, H. 31, 68
 Roberts, R. P. 21
 Robson, C. 131, 132
 Roy, C. B. 7
 Rozan, J. F. 19, 21, 24
 Russo, M. 32
 Ryle, G. 79, 80
- S**
 Salthouse, T. A. 66, 67
 Sawyer, D. B. 17, 33, 63, 84, 96, 117, 118,
 235
 Scardamalia, M. 30, 63, 65, 67, 69, 70,
 76, 80
 Schön, D. A. 44, 76, 78–80, 106
 Schjoldager, A. 33
 Schneider, W. 31, 79, 83
 Schrag, F. 77, 78, 85
 Schumacher, R. M. 69
 Seger, F. D. 126
 Seleskovitch, D. 11, 21–24, 36
 Setton, R. 4, 11, 12, 63
 Shepard, L. A. 231
 Shlesinger, M. 9, 12, 16, 22, 33, 34, 62,
 80, 99, 214
 Shreve, G. M. 81, 82
 Simon, H. A. 65
 Snell-Hornby, M. 1–4, 28, 88, 90, 121

Snyder, J. 48, 61, 62
Stansfield, C. W. 16, 96, 235
Sternberg, R. J. 49
Stoll, K. H. 16
Stone, I. 96, 117, 235

T

Tapalova, G. 35, 111
Thiéry, C. 78, 82
Thorndike, R. L. 61
Tommola, J. 12
Tukey, D. 67
Turner, J. 16, 34, 96, 117, 235
Tyler, R. W. 5, 50, 51, 60, 61

V

van Dam, I. M. 64
van Hoof, H. 19, 21

Velleman, A. 85
Vermeer, H. J. 27, 28, 35, 56
Viezzi, M. 12, 98

W

Waddington, C. 34
Wager, W. W. 49, 51, 59, 64
Wakabayashi, J. 28
Wall, D. 14, 107, 108
Weber, W. K. 24–26, 64
Wiggins, G. P. 121, 125
Willet, R. 56

Y

Yancey, K. B. 127

Z

Zualkernan, I. A. 67

Subject index

A

- action research 127, 140, 142, 227
- AIIC
 - see* International Association of Conference Interpreters
- aims of instruction 8, 40, 51–52, 55, 58, 86, 91
 - see also* curriculum goals, teaching objectives
- American Society for Testing and Materials (ASTM) 118, 224
- apprentice 71, 100, 109–110, 112
- assessment
 - alternative 16, 125–126, 129, 211–213
 - corpus-based 117
 - formative 32–33, 106–107, 109–113, 128, 224–225
 - ipsative 33, 91, 99, 106–107, 110, 126–128, 224–225
 - self-assessment 31, 112, 127, 222
 - see also* assessment, ipsative
 - portfolio 16, 94, 125–129, 213, 221
 - summative 32, 91, 98–99, 106–107, 109–110, 113, 126, 128
 - traditional 211
- ASTM 74
 - see also* American Society for Testing and Materials
- attitudes 57, 59, 83, 211
- authenticity 16–17, 82, 94, 99, 108, 118, 121, 125, 129, 188, 210–213

B

- behaviorism 60–61

C

- chuchotage *see* shadowing
- cognitive
 - apprenticeship 75–78, 81, 84–85, 173, 228
 - development 68, 70, 91
 - processing 21, 35, 63, 175
 - psychology 3, 12, 16, 23, 29, 30, 48–49, 61, 63, 65, 69
 - skills 75, 84, 181
 - strategies 59, 175
- community interpreting 19, 34, 71, 118, 154–155, 220, 222, 237, 255
- constructivism 27, 45, 220
- constructivist 3, 62, 64, 228
- corpus linguistics 33–34
 - see also* assessment, corpus-based
- court interpretation 42, 150
 - see also* court interpreting 19, 137
- curriculum
 - component 39, 42, 86–90, 215–229
 - closed 85
 - documents 2, 26, 28–29, 41–43, 53, 90, 119, 133, 135, 173, 233
 - goals 5, 27, 40, 51–52, 56, 73, 84, 91, 173–174, 228
 - see also* aims of instruction, teaching objectives

hidden 2, 8, 28, 42–43, 50, 55,
59, 85, 134–135, 142–143,
156–157, 174, 211

models

linear 86

modified linear 86

parallel track 86

Y-track 17, 47, 86–87, 89,
114, 145–147, 215

official 1, 8, 28, 41–42, 50, 85,
135, 142–143, 174, 210, 215

open 85, 88, 90

D

declarative knowledge 59, 69, 80, 84
see also procedural knowledge

deverbalization 22

directed experiences 83, 84

see also instructional format

domain 4, 30, 39, 52, 58–60, 65–67,
76, 99–100, 116–117, 135,
220–221, 227

see also subdomain

E

educational philosophy 8, 13, 40,
44–45, 50–52, 54–55, 58, 211, 220

Efforts Model 63, 69

expert 29–31, 56, 65–71, 73, 76, 78

judgment 100

learner 30, 67, 68

I

ID *see* Instructional Design

information processing (IP) 3, 48,
61–65

Instructional Design (ID) 29, 48–49,
51, 63–65, 73, 75, 220

instructional format 75, 82–84,
227–228

International Association of

Conference Interpreters (AIIC)
2, 21, 77, 99, 112, 134, 209

interpretation competence 10, 15,
16, 19, 29, 35, 73, 92

interpreting strategies 174
see also cognitive strategies

interval scale 105

see also measurement scales

IP *see* information processing

ISD *see* Instructional Design

J

journeyman 71, 73, 100–101,
109–110, 113

K

knowing-in-action 79

knowledge

declarative *see* declarative
knowledge

formal 69–70

hidden 69

impressionistic 69

informal 69, 70

procedural *see* procedural
knowledge

structure 68–70

tacit 79–80

L

learning

explicit 80–81

implicit 80–81

situated cognition and 29, 44,
81–84, 127

strategies 62

see also expert learner

M

manufactured experiences 83–84
see also instructional format

master 66, 71, 78, 231–232

measurement scales 105–106, 120,
129

mentoring 16, 56, 58, 75, 85, 220,
227

motivation 30, 49, 83

N

National Accreditation Authority for
Translators and Interpreters
(NAATI) 70–71, 118

nominal scale 105

see also measurement scales

norms 30, 50, 120, 180, 186

notetaking 21, 24–25, 136–138, 149,
222, 229

novice 29–30, 63, 67, 69–73, 82, 100,
109–110

O

oral translation 35–37, 149

oralization 193, 195–196

ordinal scale 105

see also measurement scales

P

personal experiences 83

see also instructional format

practicum 77, 79, 82, 85, 142,
154–156, 227–228

predictive validity 14, 35, 97, 101,
111–112

procedural knowledge 59, 64, 68, 69,
80, 84

see also declarative knowledge

proceduralization 68, 79

process model 21, 62–63

professional judgment 93, 99, 100,
103–104, 119, 129, 181, 188,
211–212

program evaluation 10, 13–14, 26,
90

Q

quality 33–34, 81, 93–94, 98–99,
113–114, 117, 126

R

reasoning processes 65, 70

reflection-in-action 78–80

reflective practice 16, 24, 42, 44, 63,
75, 77–81, 84–85, 91, 106–107,
126–127, 142, 220, 227–228

S

shadowing 22–23, 30, 111

sight translation 23, 64, 132,
135–139, 149, 152, 153, 157, 159,
175, 212, 222–224, 229

situation 71, 80, 82, 84, 108, 110,
205, 207, 226

skills

component 15, 25, 63, 73, 97,
114

see also subskills

composite 73

subdomain 67, 73

see also domain

subskills 30, 69

see also skills, component

T

TAALS

see The American Association of
Language Specialists

teaching objectives 40, 51–52,
58–59, 91, 174

see also aims of instruction,
curriculum goals

test construct 99, 113–114, 116–118,
129

test method facets 35, 103, 118–125,
128–129, 133, 174, 178, 185, 191,
193, 196, 211–213

testing

aptitude 30, 32, 111

criterion-referenced 34,
114–116

- diagnostic 8, 26, 32, 35, 36, 111, 112
- norm-referenced 114–115
- objective 103–105, 119–120, 129
- subjective 103–104, 119–120
- The American Association of Language Specialists (TAALS) 2
- translation competence 10, 15, 35, 57, 73, 82, 86, 92, 175
- V
- validity
 - concurrent 101
 - construct 14, 96–99, 114, 129
 - content 14, 33, 90, 96, 99, 100
 - criterion-related 96, 100–101
- vicarious experiences 83–84
 - see also* instructional format
- W
- working memory 30

In the series *Benjamins Translation Library* the following titles have been published thus far or are scheduled for publication:

- 1 **SAGER, Juan C.:** Language Engineering and Translation. Consequences of automation. 1994. xx, 345 pp.
- 2 **SNELL-HORNBY, Mary, Franz PÖCHHACKER and Klaus KAINDL (eds.):** Translation Studies: An Interdiscipline. Selected papers from the Translation Studies Congress, Vienna, 1992. 1994. xii, 438 pp.
- 3 **LAMBERT, Sylvie and Barbara MOSER-MERCER (eds.):** Bridging the Gap. Empirical research in simultaneous interpretation. 1994. 362 pp.
- 4 **TOURY, Gideon:** Descriptive Translation Studies – and beyond. 1995. viii, 312 pp.
- 5 **DOLLERUP, Cay and Annette LINDEGAARD (eds.):** Teaching Translation and Interpreting 2. Insights, aims and visions. Papers from the Second Language International Conference Elsinore, 1993. 1994. viii, 358 pp.
- 6 **EDWARDS, Alicia B.:** The Practice of Court Interpreting. 1995. xiii, 192 pp.
- 7 **BEAUGRANDE, Robert de, Abdullah SHUNNAQ and Mohamed Helmy HELIEL (eds.):** Language, Discourse and Translation in the West and Middle East. 1994. xii, 256 pp.
- 8 **GILE, Daniel:** Basic Concepts and Models for Interpreter and Translator Training. 1995. xvi, 278 pp.
- 9 **REY, Alain:** Essays on Terminology. Translated by Juan C. Sager. With an introduction by Bruno de Bessé. 1995. xiv, 223 pp.
- 10 **KUSSMAUL, Paul:** Training the Translator. 1995. x, 178 pp.
- 11 **VINAY, Jean-Paul and Jean DARBELNET:** Comparative Stylistics of French and English. A methodology for translation. Translated and edited by Juan C. Sager, M.-J. Hamel. 1995. xx, 359 pp.
- 12 **BERGENHOLTZ, Henning and Sven TARP (eds.):** Manual of Specialised Lexicography. The preparation of specialised dictionaries. 1995. 256 pp.
- 13 **DELISLE, Jean and Judith WOODSWORTH (eds.):** Translators through History. 1995. xvi, 346 pp.
- 14 **MELBY, Alan K. and Terry WARNER:** The Possibility of Language. A discussion of the nature of language, with implications for human and machine translation. 1995. xxvi, 276 pp.
- 15 **WILSS, Wolfram:** Knowledge and Skills in Translator Behavior. 1996. xiii, 259 pp.
- 16 **DOLLERUP, Cay and Vibeke APPEL (eds.):** Teaching Translation and Interpreting 3. New Horizons. Papers from the Third Language International Conference, Elsinore, Denmark, 1995. 1996. viii, 338 pp.
- 17 **POYATOS, Fernando (ed.):** Nonverbal Communication and Translation. New perspectives and challenges in literature, interpretation and the media. 1997. xii, 361 pp.
- 18 **SOMERS, Harold (ed.):** Terminology, LSP and Translation. Studies in language engineering in honour of Juan C. Sager. 1996. xii, 250 pp.
- 19 **CARR, Silvana E., Roda P. ROBERTS, Aideen DUFOUR and Dini STEYN (eds.):** The Critical Link: Interpreters in the Community. Papers from the 1st international conference on interpreting in legal, health and social service settings, Geneva Park, Canada, 1–4 June 1995. 1997. viii, 322 pp.
- 20 **SNELL-HORNBY, Mary, Zuzana JETMAROVÁ and Klaus KAINDL (eds.):** Translation as Intercultural Communication. Selected papers from the EST Congress, Prague 1995. 1997. x, 354 pp.
- 21 **BUSH, Peter and Kirsten MALMKJÆR (eds.):** Rimbaud's Rainbow. Literary translation in higher education. 1998. x, 200 pp.
- 22 **CHESTERMAN, Andrew:** Memes of Translation. The spread of ideas in translation theory. 1997. vii, 219 pp.
- 23 **GAMBIER, Yves, Daniel GILE and Christopher J. TAYLOR (eds.):** Conference Interpreting: Current Trends in Research. Proceedings of the International Conference on Interpreting: What do we know and how? 1997. iv, 246 pp.
- 24 **ORERO, Pilar and Juan C. SAGER (eds.):** The Translator's Dialogue. Giovanni Pontiero. 1997. xiv, 252 pp.
- 25 **POLLARD, David E. (ed.):** Translation and Creation. Readings of Western Literature in Early Modern China, 1840–1918. 1998. vi, 336 pp.
- 26 **TROSBORG, Anna (ed.):** Text Typology and Translation. 1997. xvi, 342 pp.
- 27 **BEYLARD-OZEROFF, Ann, Jana KRÁLOVÁ and Barbara MOSER-MERCER (eds.):** Translators' Strategies and Creativity. Selected Papers from the 9th International Conference on Translation and Interpreting, Prague, September 1995. In honor of Jiří Levý and Anton Popovič. 1998. xiv, 230 pp.

- 28 **SETTON, Robin:** Simultaneous Interpretation. A cognitive-pragmatic analysis. 1999. xvi, 397 pp.
- 29 **WILSS, Wolfram:** Translation and Interpreting in the 20th Century. Focus on German. 1999. xiii, 256 pp.
- 30 **DOLLERUP, Cay:** Tales and Translation. The Grimm Tales from Pan-Germanic narratives to shared international fairytales. 1999. xiv, 384 pp.
- 31 **ROBERTS, Roda P., Silvana E. CARR, Diana ABRAHAM and Aideen DUFOUR (eds.):** The Critical Link 2: Interpreters in the Community. Selected papers from the Second International Conference on Interpreting in legal, health and social service settings, Vancouver, BC, Canada, 19–23 May 1998. 2000. vii, 316 pp.
- 32 **BEEBY, Allison, Doris ENSINGER and Marisa PRESAS (eds.):** Investigating Translation. Selected papers from the 4th International Congress on Translation, Barcelona, 1998. 2000. xiv, 296 pp.
- 33 **GILE, Daniel, Helle V. DAM, Friedel DUBSLAFF, Bodil Ringe MARTINSEN and Anne SCHJOLDAGER (eds.):** Getting Started in Interpreting Research. Methodological reflections, personal accounts and advice for beginners. 2001. xiv, 255 pp.
- 34 **GAMBIER, Yves and Henrik GOTTLIEB (eds.):** (Multi) Media Translation. Concepts, practices, and research. 2001. xx, 300 pp.
- 35 **SOMERS, Harold (ed.):** Computers and Translation. A translator's guide. 2003. xvi, 351 pp.
- 36 **SCHMID, Monika S.:** Translating the Elusive. Marked word order and subjectivity in English-German translation. 1999. xii, 174 pp.
- 37 **TIRKKONEN-CONDIT, Sonja and Riitta JÄÄSKELÄINEN (eds.):** Tapping and Mapping the Processes of Translation and Interpreting. Outlooks on empirical research. 2000. x, 176 pp.
- 38 **SCHÄFFNER, Christina and Beverly ADAB (eds.):** Developing Translation Competence. 2000. xvi, 244 pp.
- 39 **CHESTERMAN, Andrew, Natividad GALLARDO SAN SALVADOR and Yves GAMBIER (eds.):** Translation in Context. Selected papers from the EST Congress, Granada 1998. 2000. x, 393 pp.
- 40 **ENGLUND DIMITROVA, Birgitta and Kenneth HYLTENSTAM (eds.):** Language Processing and Simultaneous Interpreting. Interdisciplinary perspectives. 2000. xvi, 164 pp.
- 41 **NIDA, Eugene A.:** Contexts in Translating. 2002. x, 127 pp.
- 42 **HUNG, Eva (ed.):** Teaching Translation and Interpreting 4. Building bridges. 2002. xii, 243 pp.
- 43 **GARZONE, Giuliana and Maurizio VIEZZI (eds.):** Interpreting in the 21st Century. Challenges and opportunities. 2002. x, 337 pp.
- 44 **SINGERMAN, Robert:** Jewish Translation History. A bibliography of bibliographies and studies. With an introductory essay by Gideon Toury. 2002. xxxvi, 420 pp.
- 45 **ALVES, Fabio (ed.):** Triangulating Translation. Perspectives in process oriented research. 2003. x, 165 pp.
- 46 **BRUNETTE, Louise, Georges BASTIN, Isabelle HEMLIN and Heather CLARKE (eds.):** The Critical Link 3. Interpreters in the Community. Selected papers from the Third International Conference on Interpreting in Legal, Health and Social Service Settings, Montréal, Quebec, Canada 22–26 May 2001. 2003. xii, 359 pp.
- 47 **SAWYER, David B.:** Fundamental Aspects of Interpreter Education. Curriculum and Assessment. 2004. xiv, 301 pp. + index.
- 48 **MAURANEN, Anna and Pekka KUJAMÄKI (eds.):** Translation Universals. Do they exist? 2004. vi, 224 pp.
- 49 **PYM, Anthony:** The Moving Text. Localization, translation, and distribution. 2004. xviii, 223 pp.
- 50 **HANSEN, Gyde, Kirsten MALMKJÆR and Daniel GILE (eds.):** Claims, Changes and Challenges in Translation Studies. Selected contributions from the EST Congress, Copenhagen 2001. xii, 306 pp. + index. *Expected Summer 2004*
- 51 **CHAN, Leo Tak-hung:** Twentieth-Century Chinese Translation Theory. Modes, issues and debates. xviii, 268 pp. + index. *Expected Spring 2004*
- 52 **HALE, Sandra Beatriz:** The Discourse of Court Interpreting. Discourse practices of the law, the witness and the interpreter. xvi, 261 pp. + index. *Expected Summer 2004*
- 53 **DIRIKER, Ebru:** De-/Re-Contextualizing Conference Interpreting. Interpreters in the Ivory Tower? vii, 209 pp. + index. *Expected Summer 2004*
- 54 **GONZÁLEZ DAVIES, Maria:** Multiple Voices in the Translation Classroom. Activities, tasks and projects. xii, 259 pp + index. *Expected Summer 2004*