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第二语言习得的学习策略

J. Michael O'Malley Anna Uhl Chamot

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### 出版前言

1999年5月至2000年6月间,上海外语教育出版社先后出版了从牛津大学出版社引进的"牛津应用语言学丛书"19种、"牛津语言学入门丛书"6种和"牛津应用语言学丛书续编"10种,受到了外语界师生的一致好评和欢迎。为了向我国的外语教学与研究人员提供更多的有关专著,帮助读者了解近年来国外应用语言学和外语教学研究的理论,促进我国外语教学研究水平的提高,上海外语教育出版社又精心挑选了剑桥大学出版社的应用语言学丛书 10种,形成与"牛津应用语言学丛书"相辅相成的"剑桥应用语言学丛书"。相信这套丛书也同样能开阔我国学者的视野,通过借鉴国外研究成果,进一步总结我国自己的外语教学经验,形成具有中国特色的外语教学理论。

《第二语言习得的学习策略》由乔治敦大学 EACE 中心主任 J·M·奥马利(J. Michael O'Malley)和该校语言学系副教授安娜·U·查莫特(Anna Uhl Chamot)共同撰写。该书初版于 1990 年,至1999 年已重印六次。

近年来应用语言学家在对教师授课进行深入研究的同时,十分关注学习者如何在课堂内外学习语言以及如何对信息进行认知处理。本书对认知机制在第二语言习得中的作用作了回顾,并结合作者已获取的研究结果,详细、深入地阐述了学习策略的实质及其在语言学习中的重大作用。

全书共分八章。第一章介绍了第二语言习得理论的背景。第二章阐述了语言学习的认知理论。第三章探讨了认知理论与第二语言习得的关系。第四章介绍了学习策略的本质、应用以及应用效果的调查。第五章介绍了不同层次的第二语言学习者和外语学习者采用的各种学习策略,并对这些策略从认知理论的角度进行了分析。第六章介绍了学习策略的培养方法,并对不同的培养方

法进行了分析。第七章介绍了学习策略培养的几种模式及其有关的教材。最后,作者在第八章中对学习策略理论的发展和研究工作作了总结,并对进一步研究提出了建议。

学习策略研究重在揭示如何提高学习者的学习效率,对培养学习者独立自主的学习、改进学习方法、改善学习过程的自我管理、提高学习效果均发挥了积极作用。

本书内容丰富,信息量大,理论分析深入浅出,语言清晰流畅, 科学地记录了该领域的新发现,是一部不可多得的介绍学习策略 以及传授学习策略研究方法的入门书。本书常被奉为学习技巧研 究中的经典之作,对英语教学以及丰富和拓展第二语言习得理论 均有重大的指导意义。

本书的读者对象为应用语言学研究人员、外语教师、英语专业的研究生、其他有关专业的研究人员及对学习策略感兴趣的广大英语爱好者。

# Series editors' preface

Second language teaching in recent years has moved away from the quest for the perfect teaching method, focusing instead on how successful teachers and learners actually achieve their goals. In the case of teachers, this has led to classroom-centered research on the linguistic, discoursal, and interactional structure of teaching events. In the case of learners, it has led to the study of (1) how learners approach learning, both in and out of classrooms, and (2) the kinds of strategies and cognitive processing they use in second language acquisition.

This latter perspective – learning strategies – is the subject of this important book. J. Michael O'Malley and Anna Uhl Chamot survey the role of cognitive processes in second language learning, reviewing the literature on cognitive processes and language learning, and reporting on large-scale empirical investigations of their own. In the process, the authors offer a highly readable account of the nature and significance of learning strategies, and demonstrate how the research findings on learner strategies can be used as a basis for planning more effective instructional practices. This new title in the Cambridge Applied Linguistics Series hence adds another dimension to what we know about second language acquisition. It also shows how the field of second language teaching can benefit from a greater consideration of the role of cognitive strategies in both the comprehension and learning of second and foreign languages.

Michael H. Long Jack C. Richards

# Preface

In writing this book, we have had a number of goals in mind. Our primary goal is to respond to a need for information on how instruction in second language acquisition can be integrated with recent knowledge from cognitive theory and research on learning strategies. A second goal is to address the need for a synthesis of research and theory in cognition with research and current views of second language acquisition. And a third goal is to respond to the need among second language teachers for guidance on how to present instruction that capitalizes on the knowledge and skills students bring to classrooms and encourages the development of new and more effective strategies for learning.

We have sensed a strong division between linguistic theory and cognitive psychology that originates in part in differing aims and methods but is also related to the rejection of behaviorism by linguists. Whereas cognitive psychology also rejected behaviorism, it has been influenced heavily by linguistics. However, the communication has not occurred in both directions. Very few ideas from cognitive psychology appear to have been adopted in second language acquisition research and theory. As much as the original schism between behaviorism and linguistics may have been necessary, we would like to contribute toward bridging the gap and show how recent thinking in cognitive psychology can be useful for applications in second language acquisition.

We have also sensed that deliberate cognitive processing is ignored, if not disparaged, under prevailing views in second language instruction. The rationale seems to be that true "acquisition" of a second language is said to occur without awareness, that conscious mediation is thought to slow processes that otherwise might occur automatically, and that acquisition in classrooms occurs most effectively when teachers concentrate on making input comprehensible. We wish to show that this notion is only partially accurate, tends to be misleading as stated, and leads to inappropriate consequences for instruction, such as the limited view that a teacher's primary role is to provide comprehensible input. We would prefer to replace it with the view that language learning involves many conscious decisions at

both the cognitive and metacognitive levels, which parallel cognitive processes in learning other complex cognitive skills. We would like to see more individuals adopt the view that teachers can encourage and assist students in using effective strategies for learning and can extend and challenge the student's mastery of the language by introducing academic language embedded in substantive content.

Finally, we have sensed that instructional approaches in second language acquisition are rarely based on sound theory and research on how individuals learn. We wish to encourage stronger linkages between theory and practice by illustrating how an instructional model can originate in theory and research and move toward classroom practices that are useful, understandable, and effective for teachers and for students.

This book builds on our previous work on an instructional approach for students with limited English proficiency. The approach is based on cognitive theory and integrates academic language development, content area instruction, and instruction in the application of learning strategies to facilitate the acquisition of both content and language. The approach is referred to as the Cognitive Academic Language Learning Approach (CALLA) and is introduced here in Chapter 6. This book examines the linkages among theory, research, and practice underlying CALLA more closely than in our previous work, which tended to isolate theory, research, or practice in separate publications. The instructional materials we have already published in social studies and mathematics use contentbased ESL in a communication-based approach that incorporates learning strategies, academic language development, cooperative learning, and other principles that are characteristic of CALLA. The present book has helped us clarify the thinking underlying both the CALLA model and the development of materials; we believe it will lead to further refinements in our attempts to develop future research and to expand upon and implement the instructional approach.

The intended audience for this book includes applied linguists, educational researchers, teacher trainers, course designers, and language teachers who wish to apply research findings on learning strategies in second language acquisition to their classrooms and help students become more effective and independent learners. These individuals may have interests in English as a second language, bilingual education, or foreign language instruction. Those with interests in second language acquisition in general may include academic researchers or professors, current teachers, teachers-in-training, and curriculum designers. The book may find use in undergraduate and graduate programs, in in-service training programs, or as a text or reference in courses on research and theory. We would be particularly pleased if the book were used by

graduate students interested in selecting a topic for dissertation research in any of these areas.

We have had the opportunity to describe many of the ideas presented in this book at teacher training workshops, in university in-service training courses, and at professional conferences. We wish to acknowledge all of the teachers, teacher trainers, researchers, and other individuals who participated in those activities for challenging us to refine our thinking and to express the concepts with greater clarity. We have also had the opportunity to publish some of the research, theory, and instructional applications in professional journals and have profited greatly from comments by anonymous reviewers. We wish to acknowledge the contributions of Carol Walker of the Catholic University of America, who was co-author on one of these publications, is responsible for introducing us to John Anderson's work, and wrote portions of a government report from which we extrapolated pieces contained in Chapter 2. We are also thankful for the contributions of our other co-authors and fellow researchers on some of those studies, including Maria Impink-Hernandez, Lisa Küpper, Rocco Russo, and Gloria Stewner-Manzanares. We especially wish to express our gratitude for the support of Jack Richards and Michael Long, the editors of the Cambridge Applied Linguistic Series, for comments by Barry McLaughlin of the University of California at Santa Cruz, and for the continuing support and encouragement offered by Ellen Shaw, ESL editor at Cambridge University Press. The book is a finer product for all that they have contributed.

The learning strategies research with ESL students and some of the theoretical work reported in this book was supported by the U.S. Army Research Institute for the Behavioral and Social Sciences in Alexandria, Virginia, under Contracts MDA 903–82-C–0169 and MDA 803–85–0200. We benefitted greatly from the contributions of project officers and other individuals at ARI, including Richard Kern, Harry O'Neil, Mark Sabol, Zita Simutis, and Rick Yekovich. The research with foreign language students reported in this book was supported under grant number 017BH60005 from the U.S. Department of Education. The project officers for this work were Robert Dennis and José Martinez. Naturally, the views and opinions expressed in this book are those of the authors and should not be construed to represent official positions or policy of either the Department of the Army or the Department of Education, unless so stated.

Last, but most important, we each wish to express our appreciation for the support provided by our respective families throughout the writing of this book. That support is the key to maintaining a balance between professional and family involvement, which enabled this work to be completed.

## Contents

	eries editors' preface viii reface ix		
1	Introduction 1 Background 3 Research on learning strategies 3 Theoretical background in second language acquisition Overview of the book 13	8	
2	A cognitive theory of learning 16  Background 16  Language as a cognitive skill 19 Representation in memory 20 Stages of skill acquisition 25 Complements to the stage-related theory of learning Language comprehension 33 Language production 37  Learning strategies as cognitive skills 42 Definition and classification 43 Strategies as cognitive processes 47  Conclusions 54	27	
3	How cognitive theory applies to second language acquisiting Background 57 Relationship of cognitive theory to specific constructs Declarative knowledge 68 Procedural knowledge 73 Stages of skill acquisition 77 Conclusions 83	<b>on</b> 68	56
4	Learning strategies: methods and research 85 A framework for data collection on learning strategies Objective of data collection 86 Language task 88	86	

Temporal relationship 90

	Informant training 91 Elicitation procedures 92 Individual versus group data collection 95 Multiple data collection procedures 95 Issues in the use of self-report data 96 Review of research on applications of learning strategies 98 Definition and classification 99 Descriptions of strategy applications 104 Validation of strategy effectiveness 107 Conclusions 112
5	Strategies used by second language learners 114 Study 1: learning strategies used by beginning and intermediate ESL students 114 Study 2: learning strategies used by foreign language students 123 Study 3: listening comprehension strategies used by ESL
	students 128 Study 4: longitudinal study of learning strategies used by foreign
	language students for different language tasks 133
	Summary 143  Metacognitive and cognitive strategies 144  Declarative versus procedural knowledge 145  Stages of skill acquisition 147  Experts versus novices 149  Conclusions 150
6	Instruction in learning strategies 151 Issues in instruction 152 Separate versus integrated instruction 152 Direct versus embedded instruction 153 Instructional implementation 154 Student characteristics 160
	Review of representative studies 165 Instruction in learning strategies for second language acquisition 165
	Learning strategy instruction in first language contexts 167 Study 1: learning strategy instruction with students of English as a second language 170
	Study 2: learning strategies taught by foreign language instructors 175 Conclusions 184

7 Learning strategies: models and materials Instructional models in first language contexts: strategic teaching 187 Instructional models in second language contexts: the Cognitive Academic Language Learning Approach 190 Theoretical framework of CALLA The components of CALLA 193 CALLA lesson plan model 201 Second language learning strategy training materials 204 Learning strategy materials for adult language learners 204 Learning strategy materials for content-based ESL 210 Conclusions 212

8 Summary and conclusions 214
Theoretical developments 214
Research 220
Definitional/classification studies 220
Strategy description 222
Validation studies 224

Glossary 229
References 235
Author index 249
Subject index 253

# 1 Introduction

This book is concerned with "learning strategies," the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information. It focuses on the application of learning strategies to second language acquisition by students learning English as a second language as well as by students learning foreign languages. The book addresses the need for an integrated treatment of learning strategies in second language acquisition that is based on theory and research. The theory used here describes how second languages are learned and what role learning strategies play in the language acquisition process. The theory is also used to organize the presentation of research results, examine the findings, and integrate the results with other studies.

The research and theory described in this book are based on a cognitive information processing view of human thought and action. Two fundamental principles underlying this theory are: (a) that behavior can best be explained by reference to how individuals perceive and interpret their experiences, and (b) that the way in which individuals think and reason has parallels with the manner in which computers process information (Shuell 1986). In cognitive theory, individuals are said to "process" information, and the thoughts involved in this cognitive activity are referred to as "mental processes." Learning strategies are special ways of processing information that enhance comprehension, learning, or retention of the information.

This volume presents the view that language is a complex cognitive skill that can be described within the context of cognitive theory. A theory of second language acquisition, to be successful, must be able to describe how knowledge about language is stored in memory and how the process of second language acquisition ultimately results in automatic language comprehension and production. In addition, to be credible, the theory must explain a wide variety of language constructs that have been discussed in the first and second language acquisition literature. For our purposes, we add the further constraint that the theory be able to describe what learning strategies are, how information about learning strategies is stored in memory, how strat-

2

egies are learned and may become automatic, and why they influence learning in a positive manner.

At the onset of our research on learning strategies in 1981, there was no theory to guide our studies and few empirical investigations into the nature of learning strategies and their influence on second language acquisition. What did exist were a few descriptive studies of strategies used by effective second language learners and, quite significantly, over ten years of extensive research in psychology on the influence of learning strategies on reading comprehension and problem solving. The two bodies of research, one in second language acquisition and the other in cognitive psychology, had proceeded fully independent of each other with little cross-referencing of concepts and approaches across topic areas. Furthermore, the methodologies in the studies were different, the ones in second language acquisition being descriptive, and the ones in psychology being experimental and oriented toward training learners to acquire strategies. What these bodies of research had in common was an interest in the mental processes of experts compared with novices, and an undeniable paucity of theory to describe what strategies were or how they influenced learning. The lack of theory to explain learning strategies was compounded in second language acquisition studies by the lack of a comprehensive theory to explain how individuals learn the structures and functions associated with second language use. Only recently have papers appeared in which learning strategies are integrated within cognitive theory (e.g., Rabinowitz and Chi 1987; Garner 1986; Mayer 1988), but when we began our research there was a vacuum with respect to the integration of strategic processing in theories of second language acquisition. We hope to address and at least partially resolve this issue in the later chapters.

The notion that special learner techniques or strategies might assist second language acquisition is actually quite new, having emerged in the research literature just over ten years ago. The suggestion that the "good language learner" might be doing something special or different that we could all learn from was introduced at about the same time in work by Rubin (1975) and by Stern (1975). This notion contrasts sharply with the idea that some people just have an "ear," for language or that some individuals have an inherent ability for language learning. This early work anticipated what cognitive psychologists were realizing independently, that competent individuals are effective because of special ways of processing information. There was also the suggestion that these strategies are not the preserve of highly capable individuals, but could be learned by others who had not discovered them on their own.

#### Background

In this section we introduce some of the early studies on learning strategies in second language acquisition and cognitive psychology in order to establish a framework for describing the research presented in later chapters. These studies provided the empirical background for the initial investigations we developed. In later chapters we expand upon this selective review to present a more detailed examination of research and to analyze some of the more recent findings concerning learning strategies, leading up to a detailed description of our own work. This section continues with an introduction to relevant theoretical positions on language competence and second language acquisition that were current when we began our studies. We expand upon this description in far greater detail in subsequent chapters, and indicate implications for instructional practice.

#### Research on learning strategies

The literature on learning strategies in second language acquisition emerged from a concern for identifying the characteristics of effective learners. Research efforts concentrating on the "good language learner" (Naiman et al. 1978; Rubin 1975) had identified strategies reported by students or observed in language learning situations that appear to contribute to learning. These efforts demonstrated that students do apply learning strategies while learning a second language and that these strategies can be described and classified. For example, Rubin (1981) proposed a classification scheme that subsumes learning strategies under two primary groupings and a number of subgroups, as illustrated in Table 1.1.

Rubin's first primary category, consisting of strategies that directly affect learning, includes clarification/verification, monitoring, memorization, guessing/inductive reasoning, deductive reasoning, and practice. The second primary category, consisting of strategies that contribute indirectly to learning, includes creating practice opportunities and using production tricks such as communication strategies. Rubin based her strategies on fairly extensive data collection in varied settings, which included about fifty hours of classroom observation, observation of a small group of students working on a strip story, analysis of self-reports from "a few students" instructed to write down what they did to learn a second language, and analysis of daily journal entries of two students who were directed to report on strategies after having been given strategy examples. The classroom observations proved to be the least useful of these methods for identifying strategies.

TABLE 1.1. CLASSIFICATIONS OF LEARNING STRATEGIES IN SECOND LANGUAGE ACQUISITION

Author	Primary strategy classification	Representative secondary strategies	Representative examples
Rubin (1981)	Strategies that directly affect learning	Clarification/verification	Asks for an example of how to use a word or expression, repeats words to confirm understanding
		Monitoring	Corrects errors in own/other's pronunciation, vocabulary, spelling, grammar, style
		Memorization	Takes note of new items, pronounces out loud, finds a mnemonic, writes items repeatedly
		Guessing/inductive inferencing	Guesses meaning from key words, structures, pictures, context, etc.
		Deductive reasoning	Compares native/other language to target language
			Groups words
			Looks for rules of co-occurrence
		Practice	Experiments with new sounds
			Repeats sentences until pronounced easily
			Listens carefully and tries to imitate
	Processes that contribute	Creates opportunities for practice	Creates situation with native speaker
	indirectly to learning		Initiates conversation with fellow students
			Spends time in language lab, listening t TV, etc.
		Production tricks	Uses circumlocutions, synonyms, or cognates
			Uses formulaic interaction
			Contextualizes to clarify meaning