

Current Issues in Reading, Writing and Visual Literacy

Current Issues in Reading, Writing and Visual Literacy:

Research and Practice

Edited by

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Appendix 4-A: Analyses for all the strategies.

Appendix 15-A: Tasks

LIST OF ABBREVIATIONS

ACL	Academic Collocation List
AEST	Advanced English Subject Test
AFDCE	A Frequency Dictionary of Contemporary English
ALT	Assistant Language Teacher
Am	American
AmE	American English
ANOVA	Analysis of Variance
APA	American Psychological Association
ASL	Average Sentence Length
AST	Advanced Subject Test
ASW	Average Syllables per Word
AusE	Australian English
AV	Audio-Visual
AWL	Academic Word List
BICS	Basic Interpersonal Communication Skills
CAS	Complex Adaptive Systems
CDS	Complex Dynamic Systems
CEEC	College Entrance Examination Center
CELT	Comprehensive English Language Test
CIDE	Cambridge International Dictionary of English
COBUILD	Collins Birmingham University International Language Database
COCA	Corpus of Contemporary American English
COLT	Corpus of London Teenage Language
CPT	Constant Polarity Tag
DDA	Descriptive Discriminant Analysis
DRS	Discussion Results Section
EAP	English for Academic Purposes
EFL	English as a Foreign Language
EIL	English as an International Language
ELF	English as a Lingua Franca
ELL	English Language Learners
EMI	English Medium Instruction
ERWL	English Reference Word List
ESL	English as a Second Language

ESP	English for Specific Purposes
FSs	Formulaic Sequences
G1	Group 1
G2	Group 2
G3	Group 3
GSAT	General Scholastic Ability Test
GSEAT	General Scholastic English Ability Test
GSL	General Service List
HAZ	Heat Affected Zone
HDR	Higher Degree by Research
HIOS	Higher-Order Inference-Oriented Schema
IC	Instructional Conversations
ICC	Intercultural Communicative Competence
IELTS	International English Language Testing System
K-12	Kindergarten through twelfth grade
K1	First 1000-word frequency band
K2	Second 1000-word frequency band
L1	First language
L2	Second Language
LLC	London Lund Corpus
LTC	Language Teacher Cognition
LTCI	Language Teacher Cognition Inventory
M	Mean
MA	Master of Arts
MARSI	Metacognitive Awareness of Reading Strategies Inventory
MCD	Macmillan Collocations Dictionary
MEXT	Ministry of Education, Culture, Sports, Science and Technology
N	Number of Participants
NNS	Non-Native Speaker
No.	Number
NPCR	New Practical Chinese Reader
NPCR-I	New Practical Chinese Reader I
NS	Native Speaker
OECD	Organisation for Economic Co-operation and Development
PCK	Pedagogical Content Knowledge
PhD	Doctor of Philosophy
PISA	Programme for International Student Assessment
PLS-4	Preschool Language Scale 4 th edition
QtA	Questioning the Author
RAs	Research Articles

RQM	Retrodictive Qualitative Modelling
RT	Reciprocal Teaching
RT	Relevance Theory
RTP	Reversed Polarity Tag
SD	Standard Deviation
Sig.	Significance level
SLA	Second Language Acquisition
SORS	Survey of Reading Strategies
SPIn	Student Participant Interview
TALIS	Teaching and Learning International Survey
TC	Teacher Cognition
TOEIC	Test of English for International Communication
TPAInt	Transcript of Participant A's Interview
TPBInt	Transcript of Participant B's Interview
TV	Television
UC	University of Canberra
USA	United States of America
UWL	University Word List
VST	Vocabulary Size Test
WCF	Written Corrective Feedback
XJTLU	Xi'an Jiaotong-Liverpool University
ZPD	Zone of Proximal Development

CHAPTER ONE

CURRENT ISSUES IN READING, WRITING AND VISUAL LITERACY: AN INTRODUCTION

CHRISTINA GITSAKI, MELANIE GOBERT,
AND HELENE DEMIRCI

Introduction

Ancient civilizations such as the Babylonians, Sumerians, Confucian Chinese and the ancient Greeks were all literate societies although widespread literacy was not prolific. In the past, having access to texts in written form restricted the spread of literacy. Up until the 18th century, literate individuals were mostly those promoting religion, trade, state affairs, and members of nobility. By the mid-1800s literacy spread to the masses in Europe and North America when printed material became available albeit with some discrimination related to gender and class. Since this time schools have been the most influential institutions responsible for the spread of literacy in all societies (UNESCO, 2005). As schools are instrumental in developing literacy skills, it is necessary to understand the way educators believe, interpret and model the required skills which constitute literacy competence.

The development of literacy competencies has been significant and they were recognized as a necessary right for every citizen because possessing literacy competencies is a prerequisite to playing a participatory role in society. Since the industrialization of education, reading, writing, and numeracy have been considered essential literacy skills. However, with the advent of the Internet and wireless technology, information, media, and technology skills have become essential components of literacy.

Given the advances in the availability of information and the moves towards enhancing 21st century skills and digital literacies, it is even more essential for educators to adopt effective methodologies which promote learner engagement in literacy competence development (Mirra, 2014). Lacking skills in these areas can impede an individual's potential to participate in higher education and thus restrict their ability to find gainful employment upon graduation, which will prevent the individual from making a viable economical contribution to society. Developing literacy competencies can also contribute towards promoting life-long learners who have a thirst for knowledge (Mirra, 2014), which in turn will benefit society as a whole.

As individuals engage in seeking knowledge in a digital age, developing information literacy skills becomes necessary. "Meta-competencies" (Lloyd, 2003, p. 87) are prerequisite skills required to enable individuals to access the information widely available. Information literacy is viewed as a key skill towards becoming a competent knowledge worker who cannot only access information, but is also skilled at integrating the information accessed into daily interactions in the workplace (Lloyd, 2003). Globalisation has also caused a trend towards second language (often English) literacy for those who want to have the best education and employment options. The development of literacy skills cannot be left to chance. With the onset of the digital age and the evolving nature of digital literacy, educators need to pay more attention by thinking critically about how this translates into the classroom (Brown, 2001).

The classroom has also changed with the expansion of societies through immigration and refuge offered to those fleeing poor economic conditions and war. In some countries, over 15% of the public school population may be second language learners (Fast Facts, 2015). Many second language learners experience a myriad of problems mastering literacy in the second language. For some learners, these problems include coming from a different alphabetic writing system or having a language that does not traditionally have a written form, such as Hmong. Young learners especially must follow the same route to becoming literate in the second language as native speakers of the language. There are also no shortcuts to literacy in the second language for adolescent or young adult learners if the goal is higher educational studies through the medium of the second language. Yet, much second language teaching methodology assumes that second language learners are literate in their own language and must simply transfer this knowledge by meta-cognition to the second language. The reality in the classroom tells a different story with children

who speak a second language at home often being mandated as a special accommodation group in educational testing to set a fairer playing field. Bilingual children tend to lag up to two years behind their monolingual peers in literacy development. It has even been said that no one can be equally fluent in two languages, that one language will always be favored over another, and that mixing up the two languages in the developmental stage is proof of that. However, the literacy gap in the two languages spoken by bilingual children tends to disappear by mid-adolescence and certainly in the university years. Bi-literacy is poorly understood and studies have shown that learners tend to ‘think’ in the language in which they were taught a subject matter. Teaching new information literacy skills on top of the core literacy skills of reading, writing, and arithmetic poses new challenges for teaching. These students’ needs must be met by teachers in the classroom, if economic justice is to prevail.

The contents of this book emphasize the need for educators to carefully consider the context within which they interact with learners, to carefully review the materials used and to be fully aware of the needs of the students. Given the literacy skills required in the 21st century and the proliferation of availability of information, learners at all levels need specialized skills which will enable them to participate to a required level from where they will be able to compete within the knowledge economy.

There are three main parts in this volume. Part One comprises eight research papers addressing a range of issues in the development of reading literacy from a first language and a second language perspective. Part Two is a collection of five chapters investigating issues related to the development of writing literacy. Finally Part Three addresses issues in visual literacy.

Current Issues in Reading Literacy

In Part One there are eight chapters describing research studies on issues related to the development of reading literacy. In Chapter Two, based on the proposition that strategic reading is important for comprehension, Nancy Allen examines teachers’ self-reported use of literacy strategies and compares the findings to data from classroom observations. The study was conducted in the Qatari educational context and findings indicated that teachers extensively over-reported their use of reading activity structures and strategies. This comparative study highlights the strengths, weaknesses, and areas of potential misconceptions regarding reading instruction.

In Chapter Three, Dudley Reynolds extends Allen's study by looking at the use of reading strategies from the perspective of the student. Comparisons between the groupings of reading strategies selected by low and high performing students following a reading in their mother tongue (L1-Arabic) and a reading in their second language (L2-English) showed that the high and low performing students identified similar strategy groupings after completing a reading in their mother tongue, while the high performing students grouped strategies into smaller and more distinctive groupings after the English reading. The low performing students reported using fewer strategies. The findings not only indicate the importance of clear strategy constructs for L2 reading, but they also suggest that existing constructs for L1 reading may not be specific enough to be of use in the L2.

In the following Chapter, Zohreh Eslami, Katherine Wright and Sunni Sonnenburg-Winkler utilized think-aloud protocols to investigate the mental processes of EFL students as they encountered difficulties in reading two texts, one in their mother tongue (Arabic) and one in English. Results showed that overall readers focused more on language and used higher proportions of language-oriented strategies, monitoring strategies, and above-clause strategies when reading texts in their L2 (English) than when reading in their L1 (Arabic).

To further investigate the language needs of EFL students when reading science texts and the additional literacy support they may require, Katherine Landau Wright and Zohreh Eslami used Coh-Metrix, an automated online text analysis system, to compare the English-language texts used in English as a foreign language (EFL) and in science classes. It was found that the EFL texts tend to focus on basic communication skills, whereas the science texts require students to follow more complex text structures and vocabulary. Knowing how to scaffold the reading of such increasingly complex texts students encounter is of primary importance.

In Chapter Six, Yvonne Halleson and Pia Visén describe how text-talks may function as a scaffold for students' disciplinary reading literacy. Through the use of the analytical concept of text movability and intertextual analyses of lexical and conjunctive cohesion between text and discussion, they uncovered various ways in which the students define concepts from the text, explore both text content and subject field, and objectively question content.

The possibility of incidental vocabulary learning while reading and writing in intensive English medium instruction (EMI) university courses was investigated by Marina Dodigovic in Chapter Seven. A significant

vocabulary growth was found when bottom-up reading was paired with the use of tools and strategies conducive to vocabulary learning.

Chapter Eight looks at a commercial reader for the teaching of Chinese as a foreign language. Han Lin identifies a number of weaknesses in terms of the logical arrangement of cultural content, the authenticity of expression, and the appropriateness of cultural reflections. By using dialogues that present a realistic image of contemporary Chinese culture and linking content to current language usage trends and habits in China, student understanding of Chinese culture at the beginner level can be enhanced.

The final Chapter in this Part, Chapter Nine, provides an investigation of the national English Reference Word List (ERWL) in Taiwan. Through comparisons of the wordlist with the General Service List (GSL), the Academic Word List (AWL), and the Corpus of Contemporary American English (COCA), Lee-Yen Wang shows that while the ERWL is a reasonably defined list, it misses 52 academic words defined in the AWL, and 20 of them are with low or moderate ranks in the COCA's 500K Frequency Word List. This study also shows that a vocabulary list is audience oriented and it can be greatly influenced by the teaching context.

Current Issues in Writing Literacy

Part Two of this volume is a compilation of five papers on writing literacy. In Chapter Ten, Päivi Pietilä investigates the collocations used by advanced learners of English in their MA dissertations and compares that with a similar corpus by native English writers. Results showed that the English as a foreign language (EFL) writers used fewer collocations than the native English writers, but the distribution of the different collocation types was very similar across the groups, with collocations consisting of general vocabulary being the most frequent type. Erroneous collocations produced by the non-native writers were traceable to their L1.

The use of formulaic sequences in the writings of Japanese EFL students was examined by Natsumi Okuwaki in Chapter Eleven. It was found that while there is a relationship between the use of formulaic expressions and essay quality, there was no association between formulaic language use and L2 proficiency suggesting that there is a threshold of L2 proficiency below which there is little relationship between the use of formulaic expressions and L2 proficiency.

The use of interactive and interactional strategies in the results and discussion chapters of L2 doctoral writers was examined by Emmaline Lear and Huifang Li in Chapter Twelve. The results showed similarity in

the type and frequency of transitions in interactive metadiscourse, and boosters and hedges in interactional metadiscourse used by the L2 writers. These results will enable supervisors and academic advisors to better support L2 students develop their authoritative stance in thesis writing.

The use of argumentative essay writing skills by university EFL students was the topic of Peiling Xing's study in Chapter Thirteen. The study compared students' perceptions about their use of argumentative essay writing skills with their actual essay writing performance. The results showed the students' confidence levels of their argumentative essay writing skills use was substantially consistent with their actual performance.

The last chapter in this Part of the volume, Chapter Fourteen, deals with teacher and student perceptions of written corrective feedback (WCF) at the postgraduate level. Naif Althobaiti demonstrates that while the teachers' and students' perceptions were congruent on the importance of WCF, they were at odds in terms of the amount of WCF used and the directness of the WCF.

Current Issues in Visual Literacy

The third and final part of this volume, Part Three, comprises three chapters on visual literacy. In Chapter Fifteen, Mariko Boku compared how EFL learners infer the higher-order intention shown in reversed polarity tags (RPTs) in Audio-Visual (AV) materials, movie scripts and a short cartoon and whether Japanese learners' higher-order inference-oriented schema (HIOS) transfer occurs in the comprehension of RPTs in the second language. Results showed that learners tended to infer meaning by using AV information, which helped them build their schemas and was more helpful in the inference of higher-order intention from RPTs because it included the characters' intonation, eye movement, and facial expression.

In Chapter Sixteen, Danica Kelly, Gary Williams and Susan Morrison investigated the relationship between television viewing and the use of American vocabulary in Australian children under five years of age. The results indicated two-thirds of the children assessed produced American vocabulary, however, their use of American vocabulary was not significantly related to viewing increased amounts of television. The results of the study are presented in reference to current linguistic learning theories.

The final chapter in the volume, Chapter Seventeen, is a position paper that discusses how digital curation can be understood as a new literacy in a

society that constantly produces exponentially increasing amounts of information. Nayara de Barros presents *Storify*, a curatorial platform which can help with the critical processing of information, and can also broaden perspectives on a great range of themes.

Summary and Conclusions

While this is a small collection of studies on language literacy topics, the papers included in this volume investigate issues that are both typical of the field and also issues that have arisen from the recent developments in the field such as globalisation and the use of technology. Even though the list of topics represented in this volume is not by any means exhaustive, it does provide an insight into current research and the global trends in this field.

It is hoped that the collection of research papers in this volume will be of use to researchers, language teachers, teacher educators, curriculum developers, and language materials designers. Policymakers and educators can use the findings to infuse research-based instruction into first language and second language literacy programs. Following the recommendations from the authors of each chapter, researchers can further enrich this knowledge base by focusing on the specific gaps in our knowledge and extending and validating these research studies in order to enable language education programs to better address classroom literacy issues and provide adequate support to language learners.

Acknowledgements

This volume represents a collection of selected papers from the 17th World Congress of the International Association of Applied Linguistics (AILA2014) which was held in Brisbane, Australia. All papers included in this book underwent a rigorous double-blind review process. Initially 34 proposals were received of which 21 were selected for a double blind review process that involved a number of notable academics from different universities around the world. Through this process 16 papers were selected. These papers underwent further review and editing before being published in this book. Below is the list of academics (in alphabetical order) who were involved in the double blind review process.

Thomai Alexiou	Aristotle University
Sally Ali	United Arab Emirates University
Tandy Bailey	Higher Colleges of Technology
Ellie Cavalcanti	Higher Colleges of Technology
Heidi Ciarlo	Higher Colleges of Technology
Rania Jabr	American University of Cairo
Liz Jones	Zayed University
Emmaline Lear	University of Canberra
Daniel Mangrum	Higher Colleges of Technology
Neil McBeath	Sultan Qaboos University
James McLaughlin	Higher Colleges of Technology
Hala Nur	University of Khartoum
Josephine O'Brien	Zayed University
Denise Ozdeniz	Higher Colleges of Technology
Daniel Perrin	Zurich University of Applied Sciences
Ziad Rafhi	Higher Colleges of Technology
Julie Riddleburger	Khalifa University of Science and Technology
Ian Sinnot	Higher Colleges of Technology
Helen Weston	Higher Colleges of Technology

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ISSUES IN READING LITERACY

CHAPTER TWO

MIDDLE GRADE TEACHERS' PERCEPTIONS OF APPLIED READING ACTIVITY STRUCTURES AND STRATEGIES VERSUS OBSERVED PRACTICE IN SECOND LANGUAGE CLASSROOMS

NANCY ALLEN

Abstract

Since 2006, the language of instruction for science and mathematics in Qatar's K-12 schools has changed twice; first, from Arabic to English and then, in 2012, from English to Arabic. Supporting English-based science literacy is thus a question of significant concern. This study, based on the proposition that strategic reading is important for comprehension, examines teachers' self-reported use of literacy strategies and compares the findings to data from classroom observations. Ninety-eight teachers of English, science, and scientific English at the preparatory level completed a survey in which they indicated their use of reading activity structures and strategies on a Likert-type four-point scale. Observers noted the frequency of use of these same activity structures and strategies during 24 classroom visits. Findings indicated that teachers extensively over-reported their use of reading activity structures and strategies. Comparing and contrasting the findings of these separate instruments highlights the strengths, weaknesses, and areas of potential misconceptions regarding reading instruction, especially as it relates to the content area of science. The findings have important implications for the professional development of teachers in this context.

Introduction

In 2004, the small, oil-rich State of Qatar began a system-wide reform of its education system (Brewer, Augustine, Zellman, Ryan, Goldman, Stasz, & Constant, 2007). As part of this reform, science was taught in English from the elementary grades through college to enable students to fully participate in the greater scientific community. In 2012, policy makers reversed this decision, so that science would again be taught in Arabic. During 2013-2014, schools piloted a program to support English-based science literacy through three areas: science content in English courses, select scientific vocabulary in English in science class, and a new program in scientific literacy because the policy makers still felt that scientific literacy in English was important for full participation in the scientific community and wanted to make that opportunity available to all students.

This research is part of a three-year funded project seeking to understand the ways in which reading was taught and practiced in these three venues with the goal of improving reading in science at the middle grades level in Qatar. As professional development for teachers is part of the project, this part of the study aimed to identify those areas of concern that should be addressed in the professional development program and also to identify areas for improvement in the current programs. This chapter describes our efforts to understand teachers' self-perceptions of tasks related to reading and strategies to support literacy in science, how teachers incorporate reading tasks and classroom activities into their classes, what reading strategies they model and/or teach, and, finally, to understand the relationship between teachers' self-perceptions (or at least self-reporting) and their practices in the classroom in relation to supporting students' scientific literacy.

Background

The theoretical perspective of the present study is that the effective use of reading strategies by second language (L2) learners increases comprehension (Cohen, 2011; Grabe, 2004; National Reading Panel, 2000; Pressley, Billman, Perry, Reffitt, & Reynolds, 2007). Traditionally, reading instruction was based on the assumption that the ability to read is determined by knowledge of vocabulary, morphology and the sentence structure of a language; however, more recent research (Taylor, Pearson, Peterson, & Rodriguez, 2003) has shown that strategic approaches to comprehension processes have a higher positive correlation to academic

(reading and writing) growth and that the use of multiple strategies improves students' comprehension (Guthrie, Wigfield, Barbosa, Perencevich, Taboada, Davis, Scaffidi, & Tonks, 2004; Guthrie, Wigfield, Humenick, Perencevich, Taboada, & Barbosa, 2006; Van Keer & Verhaeghe, 2005). Baker and Brown (1984a, 1984b) also suggested that comprehension increases, if readers strategically interact with text to construct meaning. Sweet and Snow (2003) added that comprehension is especially important in the later elementary grades as it forms the foundation for academic achievement in secondary school and preparation for the 21st century workforce. Research further supports the importance of teachers scaffolding students' learning and use of reading strategies in the content areas (Finkbeiner, Knierim, Smasal, & Ludwig, 2012). The theoretical framework of this study, therefore, was that the explicit use and teaching of reading and comprehension strategies would enhance ESL learners' comprehension of science.

The L2 students in this study were being asked to read and comprehend science content. As Lee's (2005) review of the research on science education for L2 English learners shows, this is a significant challenge. Science readings contain specialized forms of language and text (Chung & Berry, 2000; Luykx, Lee, & Edwards, 2008; Schleppegrell, 2004). These materials may require extensive use of inference (Best, Rowe, Ozuru, & McNamara, 2005) and the comprehension of technical vocabulary (Miller, 2009) and have unique genre patterns (Stoller, Jones, Costanza-Robinson, & Robinson, 2005). Better readers in both a first language (L1) and L2 explicitly monitor their comprehension while reading and can apply multiple, cognitive and meta-cognitive strategies before, during, and after reading to improve comprehension (Cohen, 2011; Grabe, 2004; McKeown, Beck, & Blake, 2009; Taylor, Stevens, & Asher, 2006). In a meta-analysis of 23 studies, Taylor, Stevens, and Asher (2006) determined that specifically teaching L2 students how to effectively use strategies increases their comprehension. Many researchers (Cervetti, Pearson, Barber, Hiebert, & Bravo, 2007; Cohen, 2010; Cohen & Gomez; 2008) thus advocate integrating the teaching of reading strategies appropriate for these texts with content area instruction.

Another strand of research important to this study is the accuracy of self-reported data from teachers about their classroom practices. Although this area of study has been reported in the literature since the early 1970s (Weiss, 1973), there is neither an abundance of research nor agreement concerning the degree of accuracy of self-reported data (Ganey, 2010; Hook & Rosenshine, 1979). Kaufman and Junker (2011) did find, however, that although the degree of accuracy of self-reporting by teachers

varied from school to school, those schools with higher levels of accuracy also had higher levels of student achievement. This would suggest that understanding the relationship between self-reported data and classroom practices may have much to offer to professional development in education.

The Study

A descriptive methodology was employed in this study. The purpose was to provide as true a picture as possible of the phenomena under study (Shenton, 2004). Data for this study consisted of two main sources. The first was an online survey that we created in Arabic that was sent to science, scientific English, and English teachers in preparatory (grades seven and eight) schools in Qatar. The survey had been developed and then revised in reference to feedback from individuals experienced in teacher education, English as a second language (ESL), K-12 teaching, and professional development. The survey collected demographic data about the teachers and then asked them to rate the frequency with which they engaged in specific practices related to the organization of reading. (e.g., how the reading activity was organized) and to the teaching, modeling and/or use of specific strategies for comprehension. A Likert-type four-point scale was used (1=*I don't do this*, 2=*I rarely do this*, 3=*I sometimes do this*, and 4=*I frequently do this*).

To help gain a better understanding of the nature of reading tasks in the curriculum, there were seven descriptive phrases related to activity structure targeted in both the survey and observations. These dealt with whether students read aloud and/or silently, whether the teacher read aloud, whether there were activities that required reading, whether topics associated with a reading were discussed before or after reading, and whether readings other than the text were included.

There followed 28 strategies for reading and reading instruction. The strategies were divided into categories according to purpose: global understanding, support for reading, vocabulary learning, and compensation strategies. Although there is no universally accepted way to categorize strategies (Hsiao & Oxford, 2002; Oxford & Cohen, 1992), we drew from a number of scholars to form our categories (Abbott, 2006; Anderson, 1991; Block, 1992; Chamot & El-Dinary, 1999; Cohen, 2011; Hosenfeld, 1977; Mokhtari & Sheorey, 2007). The seven activity structures (descriptive terms used to identify the form of a reading activity) and 28 strategies were also listed in the classroom observation form that was used to collect data during the observations. The online

survey had three vocabulary learning strategies that were not on the observation form, specifically: *teach students to use mnemonics*, *use vocabulary flash cards*, and *have students write sentences with vocabulary words in them*. These were excluded from the observation form as it was considered unlikely that they would be demonstrated in randomly selected classrooms.

The sample was stratified, consisting of teachers within 12 Qatari preparatory schools that were targeted for data collection during the baseline investigations. Government schools in Qatar are differentiated by the year in which they became part of the education reform process (Brewer et al., 2006), which also equates to the number of years they have taught mathematics and science in English. The schools that entered the reform during the same year are called a *cohort*. Schools were chosen from different cohorts, with four schools from early cohorts, four from mid-reform cohorts, and four from recent cohorts. In Qatar, schools are differentiated according to gender; for this reason within each group of four schools from similar cohorts there were two boys' and two girls' schools. The sample was therefore stratified according to grade level, cohort, and gender. The online survey was made available to all teachers of science, English, and scientific English in the 12 schools. Complete responses were received from 98 teachers, which represented a return rate of approximately 80%.

The demographics of the sample are representative of the teaching population in Qatar. The males in the sample, all of whom teach in the boys' schools, are almost exclusively expatriates. In girls' schools, there are some Qatari female teachers, but again the majority are female expatriates who have been educated in their home countries and often have taught there as well. For the overwhelming majority (96%), their highest qualification was a bachelor's degree. Most of the teachers in the sample were experienced; more than a third of the survey respondents had 12 or more years of teaching experience; only 12% had less than that or had three years (see Table 2-1).

In addition to the data obtained from the survey, we observed classes in the 12 target schools, using an observation instrument with the same activity structures and strategies as the survey (see Table 2-2). For practical reasons and to minimize disruption in the schools, the observations were limited to science and scientific English classes. In each school, the administrators selected the classes to be observed.