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UNIVERSITY OF CALIFORNIA, SAN DIEGO
CALIFORNIA STATE UNIVERSITY, SAN MARCOS

Successes and Challenges of Instructional Strategies
in Two-Way Bilingual Immersion

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Education

in

Educational Leadership

by

Ana Margarita Hernández

Committee in Charge:

California State University of California, San Marcos

Professor Annette Daoud, Chair
Professor Erika Daniels

University of California, San Diego

Professor Carolyn Huie Hofstetter

California State University of California, San José

Professor Kathryn Lindholm-Leary

2011

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The Dissertation of Ana Margarita Hernández is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

Chair

University of California, San Diego
California State University, San Marcos

2011

DEDICATION

I dedicate this dissertation to my mother, María del Carmen Gómez, who taught me the value of perseverance in life and the importance of an education. She and my father worked hard all their lives, so that we could have an opportunity to attend school, have a good home, and achieve our goals. My mother, Mami, came to this country as a Cuban refugee with only the clothes on her back. She left all her belongings, her family, her job, and her country to provide us the opportunity for freedom. Mami worked hard to earn a living, learned English, and became a U.S. citizen. During her life, she worked as an assembly worker, was a fabulous cook, loved to garden, and enjoyed spending time with her grandchildren. Her determination in life to achieve one's fullest potential kindled my inspiration to excel in my education and career. In addition, her excellent example as a remarkable mother provided me with the guidance for my own personal realization as a wife and mother. I thank Mami for setting an example of how determination and dedication in life allows an individual to accomplish ones dreams. With all my love, I devote this dissertation in the memory of my loving mother.

TABLE OF CONTENTS

SIGNATURE PAGE	iii
DEDICATION	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	viii
LIST OF TABLES	ix
LIST OF PHOTOGRAPHS	x
ACKNOWLEDGMENTS	xi
VITA	xiii
ABSTRACT OF THE DISSERTATION	xiv
CHAPTER 1 INTRODUCTION.....	1
1.1 Rationale for the Study	4
1.2 Methodological Overview	7
1.3 Significance of Study	9
1.4 Delimitations	10
1.5 Organization of the Study.....	11
CHAPTER 2 REVIEW OF RELATED LITERATURE	12
2.1 Who Are English Learners?	12
2.2 Historical Perspective of Two-Way Bilingual Education	21
2.3 Theoretical Frameworks.....	28
2.4 Two-Way Bilingual Education.....	36
2.5 Program Designs for Two-Way Bilingual Immersion	39
2.6 Academic Achievement: Outcome Goals of Two-Way Bilingual Immersion.....	43
2.7 Salient Features of TWBI Programs.....	53
2.8 Cross-Cultural Competence: Third Goal of TWBI	56
2.9 Teacher Beliefs and Instructional Practices	63
2.10 Summary of Literature Review	70
2.11 Statement of Purpose.....	74

APPENDIX J Victory School: Triangulation of Photo-Elicitation Journal Strategies for Biliteracy Development	278
APPENDIX K Evergreen School: Triangulation of Photo-Elicitation Journal- Strategies for Biliteracy Development	284
APPENDIX L Codebook for Teacher Interviews at Evergreen and Victory Schools With Descriptive Codes, Categories, and Definitions	290
GLOSSARY	298
REFERENCES	301

LIST OF FIGURES

Figure 2.1: Racial/Ethnic Composition of English Learners U.S. Census Bureau 2005 American Community Survey.....	15
Figure 2.2: Vygotsky’s Social Development Theory: Zone of Proximal Development	35
Figure 2.3: English Achievement of ELs: Long-Term K-12 Standardized Tests in English Reading Across Seven Programs.....	45
Figure 3.1: The EnCompass Model of Appreciate Inquiry: The “4-1” Process.....	84
Figure 4.1: Perspectives and Innovations of Instructional Strategies.....	189
Figure 5.1: Converging Theoretical Frameworks for TWBI Instructional Strategies	245
Figure 5.2: Teacher Leadership for Cross-Cultural and Linguistic Equity in TWBI.....	251

LIST OF TABLES

Table 2.1: Characteristics of Programs Designed for English Learners	17
Table 2.2: History of Bilingual Education in the United States Federal and State (California) Laws, Regulations, and Policies	27
Table 2.3: Languages of Instruction in TWBI Programs	39
Table 3.1: TWBI Case Study Methods.....	87
Table 3.2: 2008-2009 AYP Scores for Evergreen and Victory Schools California State Department of Education	92
Table 3.3: 2008-2009 API Scores for Evergreen and Victory Schools California State Department of Education	93
Table 3.4: Research Questions and Methodology	97
Table 4.1: Teacher Questionnaires Knowledge Base of Participants at Evergreen and Victory Schools	124
Table 4.2: Teacher Questionnaires Background Knowledge of Teacher Participants at Evergreen and Victory Schools	128
Table 4.3: Teacher Questionnaires Support Systems for Participants at Evergreen and Victory Schools	130
Table 4.4: Pattern Matching of Guiding Principles for Evergreen and Victory Schools	139
Table 4.5: Teacher Reflection Forms and Lesson Observation Instrument for Guiding Principle 1: Research-Based Instructional Methods	151
Table 4.6: Teacher Reflection Forms and Lesson Observation Instrument for Guiding Principle 2: Instructional Strategies	152
Table 4.7: Teacher Reflection Forms and Lesson Observation Instrument for Guiding Principle 3: Student-Centered Instruction	153
Table 4.8: Teacher Reflection Forms and Lesson Observation Instrument for Guiding Principle 4: Multilingual and Multicultural.....	154
Table 4.9: Instructional Strategies for Biliteracy Development at Evergreen and Victory Schools	162

LIST OF PHOTOGRAPHS

Photograph 4.1: Language Functions: Classify, Compare, and Contrast.....	142
Photograph 4.2: Frontloading of Story Elements	167
Photograph 4.3: Theme Tables to Augment Curriculum	169
Photograph 4.4: Student’s English-Spanish Cognate Journal	172
Photograph 4.5: Teacher-Created Chart and Figurative Language Cooperative Learning Activity	174
Photograph 4.6: ELD Sentence Frames.....	180
Photograph 4.7: Frida Kahlo’s Biography and Student’s Personal Theme Connection.....	183

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My committee members at University of California, San Diego, and California State University, San Marcos provided me with continuous support in my research and dissertation process. Dr. Annette Daoud, my chair, guided my thinking and provided invaluable feedback. Also, Dr. Carolyn Huie Hofstetter and Dr. Erika Daniels

provided encouragement and support throughout this journey. I am most appreciative of the guidance from longtime friend and colleague, Dr. Kathryn Lindholm-Leary from San José State University, who is a Two-Way Bilingual Immersion researcher and content expert in the field. She provided a critical lens to move my research forward throughout the data analysis process and development of my dissertation.

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VITA

EDUCATION

California State University, San Marcos

University of California, San Diego

Joint Educational Doctorate in Educational Leadership, 2011

California State University, Long Beach

Master of Arts in Education Administration, 1988

California State University, Long Beach

Master of Arts in Curriculum and Instruction, 1984

California State University, Long Beach

Bachelor of Arts in Liberal Studies, Spanish/English Concentration, 1978

El Camino College, Torrance, California

Associate of Arts in Spanish and French, 1975

TEACHING CREDENTIALS

California State University, Long Beach

Preliminary Administrative Services, 1988

California State University, Long Beach

Bilingual-Cross Cultural Specialist, Life Credential, 1984

California State University, Long Beach

Multiple Subjects with Bilingual-Cross Cultural Emphasis, Life Credential,
1984

CAREER HISTORY

Valley Center-Pauma Unified School District

Two-Way Bilingual Immersion Program

Bilingual Teacher, 2008-Present

Lilac School: Kindergarten

California State University, San Marcos

College of Education

Distinguished Teacher in Residence, 2006-2008

CAREER HISTORY Continued.

Valley Center-Pauma Unified School District
Two-Way Bilingual Immersion Program
Bilingual Teacher, Valley Center Middle School: 7th and 8th grade; Valley
Center Elementary: 4th grade, 1996-2006

Long Beach Unified School District
Two-Way Bilingual Immersion Program
Bilingual Teacher, Patrick Henry School: 4th Grade, 1993-1996

Los Angeles Unified School District
District Office of Instruction: Model Bilingual Programs
Co-Project Director of District Two-Way Bilingual Immersion Programs,
1989-1993

Los Angeles Unified School District
Wilmington Park Elementary
Categorical Program Advisor, 1985-1989

Los Angeles Unified School District
Bilingual Teacher, Barton Hill Elementary: Kindergarten; 2nd grade,
1978-1985

RESEARCH / SCHOLARSHIP / CREATIVE ACTIVITIES

Publications

Hernandez, A. (March, 2008). Extraordinary journey into the past and future.
Multilingual Educator, California Association for Bilingual Education
Conference Edition.

Hernandez, A. (2007). Literature circles for upper grades. In C. B. Herrera (Ed.)
*Handbook for using Houghton Mifflin LECTURA in two-way bilingual
immersion contexts* (Section 3, pp. 1-28 and Section 4, pp. 1-4). Los Angeles
County Office of Education.

Hernandez, A. (2003). Making content instruction accessible to English language
learners. In G.G. Garcia (Ed.) *English learners: Reaching the highest level of
English literacy* (pp.125-149). Delaware: International Reading Association.

Hernandez, A. (2000). Interactive journals between students & parents. In R.
Routman, *Conversations: Strategies for teaching, learning and evaluating* (pp.
263-266). Portsmouth, NH: Heinemann.

Hernandez, A., & Infante, A. (1994). *Tag Alongs*. [English as a second language program]. Los Angeles, CA: Santillana.

Hernandez, A., & Infante, A. (1994). *School Ties*. [Spanish and English reading program for parents]. Los Angeles, CA: Santillana.

Research Presentations

Hernandez, A., & Lavadenz, M. (2011, April). *Cross-Linguistic Resource Sharing in Young Bilingual Learners*. Paper accepted for presentation at American Educational Research Association (AERA) Annual Conference, New Orleans, LA.

Hernandez, A. (2011, March). *Successes and Challenges in Instructional Practices for Two-Way Bilingual Immersion Programs*. Paper accepted for presentation at the 36th Annual California Association for Bilingual Education Conference, Long Beach, CA.

Hernandez, A., & Lindholm-Leary, K. (2010). *Third Goal: Two-Way Students' Cultural Competence*. Research Symposium presentation at the 18th Annual National Two-Way Bilingual Immersion Conference, San Diego, CA.

Hernandez, A. (2010). *Teaching Strategies in TWBI Classrooms*. Research Symposium presentation at the 18th Annual National Two-Way Bilingual Immersion Conference, San Diego, CA.

Hernandez, A. (2009). *Disaggregating Background Factors in the Achievement and Attitudes of Hispanic Students in Dual Language Programs*. Paper presented at the 17th Annual National Two-Way Bilingual Immersion Conference, Research Symposium, Monterey, CA.

Hernandez, A., & Lindholm-Leary, K. (2009). *Disaggregating Background Factors in the Achievement and Attitudes of Hispanic Students in Dual Language Programs*. Paper presented at the American Educational Research Association (AERA) Annual Conference, San Diego, CA.

Hernandez, A., & Solis, F. (2008). *Classroom across Borders / Aulas entre fronteras: Mexico and California*. Bi-national research study presented at the Center of Border and Regional Affairs Institute, California State University San Marcos, CA.

Service to the Profession

Two-Way California Association for Bilingual Education, 1993-present
Current President of the Executive Board
Past Vice President of the Executive Board
Past Teacher/Community Representative of the Executive Board
Annual Conference and Research Symposium Committee/Co-Chair
CABE South Bay Chapter: Past Vice-President and Special Projects Director

California State University San Marcos, 2006-2008
College of Education Executive Committee
Personnel and Student Affairs/Appeals Committee
Professional Mentoring Committee
Graduate Studies Office - Center for the Study of Border Pedagogy
Faculty Mentorship Program

Center for the Study of Border Pedagogy, 2006-2008
Board of Directors
Bi-national Teacher Seminars - California and Baja California, Mexico
Binational Standards Committee
Classroom Across Borders / Aulas Entre Fronteras Project

San Diego County Office of Education, 2004-10
AB 2117 English Language Learners: Promising Practices Pilot Project
Side by Side Project Committee

Los Angeles County Office of Education, 1991-2006
Dual Language Collaborative Committee
Two-Way Portfolio and Handbook Committee

California Department of Education, 1991-93
Evaluation Seminar of Consultants
ESL Instructional Materials Evaluation Panel Member

PROFESSIONAL AFFILIATIONS

American Education Research Association (AERA)
California Association for Bilingual Education (CABE)
Two-Way CABE
Center for the Study of Border Pedagogy
National Education Association
California Teachers Association
Valley Center Teachers Association

AWARDS & HONORS

Chancellor's Doctoral Incentive Program for three consecutive years. (2008-2011). Office of the Chancellor, California State University.

Chancellor's Doctoral Incentive Program Scholar Development Mini-Grant for two consecutive years. (2009-2011). Office of the Chancellor, California State University.

Stop and think: The story of Tuggles the bear. (2010). *Innovative Video in Education (iVIE) Award, K-2 Cross Curricular*. San Diego County Office of Education, San Diego Civic Theater, CA.

Education Studies Supplemental for Doctoral Research. (2010). University of California, San Diego.

Education Studies Fellowship for two consecutive years. (2008-2010). University of California, San Diego.

Center for Borders & Regional Affairs Mini-Grant: Classrooms across Borders. (2007-08). Graduate Studies Office, California State University San Marcos.

Summer Institute for Educators / Cursos para Profesores de Español de Estados Unidos y Canadá. (2007). Full scholarship to attend the University of Salamanca, Spain. Funded by the Spanish Embassy in Los Angeles, CA.

Certificado de Constancia en Seminarios de Pedagogía Fronteriza: Programa Binacional de Educación Migrante. (2007). Gobierno del Estado de Baja California/Sistema Educativo Estatal, México.

You Make a Difference Award. (2007). Board of Education, Valley Center-Pauma Unified School District, Valley Center, CA.

Maestra Bilingüe del Año. (2007). Consulado General de México, Los Ángeles, CA.

Maestra Bilingüe del Año Scholarship. (2007). Secretaría de Relaciones Exteriores, Instituto de los Mexicanos en el Exterior, Los Ángeles, CA.

State Bilingual Educator of the Year. (2007). California Association for Bilingual Education, Long Beach.

Distinguished Teacher in Residence. (2006-08). California State University San Marcos, College of Education.

Valley Center Teacher of the Year. (2006). Valley Center-Pauma Unified School District, Valley Center, CA.

Salute to Teachers. (2006). Top 50 Teachers, San Diego County Office of Education, San Diego, CA.

Educator of the Year. (2006). Valley Center Rotary Club, Valley Center, CA.

Statewide Student Writing Contest: 1st Place Winner, 4th Grade for four consecutive years. (1999-2002). California Association for Bilingual Education, CA.

“Escribo Español” Student Writing: 1st Place Winner, Elementary for two consecutive years. (2003-2004). Consulate of Spain, Los Angeles, CA.

Teacher Recognition Award for Spanish Literacy for two consecutive years. (2003-2004). Consulate of Spain, Los Angeles, CA.

Liber '93 [Trade show for the Editorial Industry of Spain]. (1993). Invited guest by Consulate of Spain. Barcelona, Spain.

ABSTRACT OF THE DISSERTATION

Successes and Challenges of Instructional Strategies in

Two-Way Bilingual Immersion

by

Ana Margarita Hernández

Doctor of Education in Educational Leadership

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Professor Annette Daoud, Chair

Growing numbers of English Learners (ELs) in public education are placed in a variety of second language programs across the nation. Policymakers, educators, and parents are indecisive on which programs are most beneficial for the linguistic and cultural needs of ELs. Empirical studies on two-way bilingual immersion (TWBI) programs seem to provide promising data for ELs receiving content instruction in their primary language while acquiring second language acquisition skills in classrooms

where students are integrated with native English speakers. The goals of TWBI programs are for all students to become bilingual, biliterate, and bicultural.

This study examined the instructional strategies teachers used to develop biliteracy and cross-cultural competence in TWBI. A single case study approach allowed the researcher to gain insights about the implementation of strategies in two TWBI programs in Southern California. The methods included multiple measures to collect and analyze the data through photo-elicitation journals, appreciative inquiry interviews, lesson observations, teacher reflections, and questionnaires. The sample population for this case study included nine bilingual teachers in TWBI programs with 90/10 model designs in grades first through sixth.

First, the research synthesized how the teachers gained their knowledge-base and professional support to implement their strategies. Second, the findings discussed how the framework for the Guiding Principles for Dual Language Education assisted teachers in the implementation of their instructional strategies. Third, the data analysis described the successes and challenges in the teachers' instructional strategies to develop biliteracy and cross-cultural competence with ELs and English Proficient students in their classrooms. Lastly, the study discussed how the teachers gained new insights about their practices based on their successes and challenges in their strategies.

Results of the study demonstrated that teachers were very experienced and knowledgeable in TWBI practices and supported each other through planning and lesson development. Teachers implemented strategies aligned to the four main guiding principles of instruction: research-based practices, instructional strategies, student-

centered instruction, and multicultural/multilingual learning environments. Convergence of multiple measures indicated that teachers experienced successes and challenges in their instructional strategies for biliteracy and cross-cultural competence, but established new perspectives and innovations to advance their practice.

Key words: two-way bilingual education, instructional strategies, biliteracy, cross-cultural competence, guiding principles for dual language education, English Learners, English Proficient students.

CHAPTER 1

Introduction

Problem Statement

The continued growth of English Learners (ELs) in the U.S. poses a concern with regard to their low-academic achievement and increased educational gap when compared to native English speakers, especially that of ELs who are immigrant children attending public schools (August & Shanahan, 2006; Gitomer, Andal & Davison, 2005; Howard, Sugarman, & Christian, 2003; Ray, 2008; Thomas & Collier, 2002; Valencia, 2002). Since, the National Clearinghouse for English Language Acquisition (NCELA, 2008) showed the enrollment of ELs in public education has more than doubled in the past 15 years from 2,030,451 students to 5,074,572; this impact of ELs in public education has tremendous implications for instructional practices that meet their growing needs.

Finding solutions to meet the educational needs of students who speak a primary language other than English has prompted much debate over the years about what are the best instructional practices (Genesee, Lindholm-Leary, Saunders & Christian, 2006). Historically, U.S. educators have not fully implemented adequate programs for ELs, as is evident in low-level curriculum, isolation from peers, inappropriate assessments, and overrepresentation of second language learners in special education programs (Abedi, Hofstetter, & Lord, 2004; Cummins, 1994; LaCelle-Peterson & Rivera, 1994; Lindholm-Leary, 2001). Although minimal skills in English can be acquired very rapidly, the development of cognitive academic skills required to succeed in school necessitate a variety of effective instructional strategies

over time (Collier, 1992; Cummins; LaCelle-Peterson & Rivera; Lindholm-Leary; Saunders & O'Brien, 2006; Valencia, 2002). Through the years, programs designed for ELs have differed in instructional practices and varying degrees of implementation that have lacked consistencies in teacher training programs, types of resources, and materials available to students (August & Hakuta, 1997; LaCelle-Peterson & Rivera; Nieto & Bode, 2008). All of these compounding elements add to the debate of finding solutions for programs that meet the needs of EL students.

Programs for ELs range in purpose and effectiveness. Although there are many types of educational programs provided in schools across the nation, few actually take into consideration the range of linguistic, academic, or sociocultural needs of ELs in grades K-12. And even within the programs designed specifically for ELs, there is variation of outcomes in primary and second language teaching and learning (August & Hakuta, 1997; Genesee et al., 2006; Lessow-Hurley, 2009; Peregoy & Boyle, 2005; Ramirez, Yuen, Ramey, & Billings, 1991; Thomas & Collier, 2002). The following statement affirms the need to design programs for ELs (Lindholm-Leary & Borsato, 2006):

ELLs are more successful when they participate in programs that are specially designed to meet their needs (ESL/SEI, bilingual) than in mainstream English classrooms and when the program is consistent throughout the student's education. A program that is enriched, consistent, and provides a challenging curriculum is also endorsed by research on factors associated with effective programs for ELLs. (p. 204-205)

Although research has clearly outlined the beneficial effects of valuing primary language education for ELs and the positive impact of bilingualism on cognition (Bialystok, 2007), there is limited or lack of empirical research associated with teacher

beliefs and practices with insights into instructional strategies in dual language programs (Flores, 2001). Research that examines empirical studies of instructional practices in dual language programs can inform program level decisions, teacher behaviors, and impact on student outcome.

Two-Way Bilingual Education as a Promising Outcome

In recent years, the growth of dual language programs has escalated at the national and state levels. The two-way bilingual immersion (TWBI) model has gained the public's interest as an academic program that meets the linguistic needs of ELs, as well as an enriched program option for language-majority students (Howard et al., 2003; Lindholm-Leary, 2001; Thomas & Collier, 2002). The premise of TWBI programs is to provide academic success, value the heritage language and cultures represented in the classroom, and erase the stigma of students deemed as subordinates in other programs (Alanís, 2000; Collier, 1992; Wright, 2004). Its goals are additive in nature as it adds a second language while maintaining the first language through grade level academic achievement and the development of positive attitudes across cultures (Lindholm-Leary). Two-way bilingual education (also known as two-way bilingual immersion or two-way immersion) is a program that serves ELs who speak a common primary language along with native speakers of English. Both groups of students attain bilingual and biliteracy skills without the risk of native language loss. Students learn academic content in both languages, as well as cross-cultural awareness. The duration of the bilingual program is 5 to 12 years for both groups of students.

Two-way bilingual immersion has demonstrated promising outcomes for the education of second language learners. Overall, ELs enrolled in TWBI programs at the

upper elementary grades and middle school level have scored at or above grade level on state mandated assessments when compared to students who have participated in transitional bilingual (students are “exited” from the bilingual program and placed in mainstream English-only classes within a two-to-four-year span) or English-only programs (Genesee et al., 2006; Lindholm-Leary, 2001; Lopez & Tashakkori, 2003; Thomas & Collier, 2002). English Proficient students, who make up the other half of the program participants, receive an enriched education that promotes their achievement in both languages without any risk of native language loss (Lindholm-Leary).

Rationale for the Study

Needed Research on Instructional Strategies

As TWBI programs continue to rise, there is a need to identify the key instructional components and strategies that meet the needs of all program participants (Howard et al., 2003). The research indicates that higher student outcomes are associated with effective instructional strategies, particularly with ELs (Howard, Sugarman, Christian, Lindholm-Leary, & Rogers, 2007). Knowing which instructional strategies facilitate the linguistic process for developing bilingualism and biliteracy in dual language programs can provide insights into lesson planning, use of specific techniques, and delivery of instruction. It is important to know and understand how teachers implement strategies to develop higher-level cognitive skills and oral/academic fluency in two languages with the integration of language-minority and language-majority students in the same classroom.

While there are a number of documents (Cloud, Genesee, & Hamayan, 2000; Cummins, 1994; Fortune & Tedick, 2008; Howard et al., 2007) that identify and suggest an array of effective strategies for TWBI programs, there is also a lack of scientific research in the field of bilingual education that examines the instructional elements of the programs and the type of strategies implemented by TWBI teachers. Howard et al. (2003) urged the field to move forward in employing new research in TWBI, “There is a need to move away from global program comparisons and towards a research paradigm that looks more closely at features within program model that impact student achievement, such as literacy instructional practices or grouping strategies” (p. 2). Further research in the area of TWBI practices is needed to identify specific teacher behaviors, beliefs, and instructional components that are associated with effective TWBI programs. There are limited scientific findings on how to make instruction more accessible and meaningful to students, in particular, the content areas most challenging to the students such as science and mathematics (Lindholm-Leary & Howard, 2008).

This study examines the theoretical frameworks and guiding principles of TWBI programs (Lindholm-Leary, 2001, 2005). The research analyzes the instructional strategies used in the teaching of English and the minority/heritage language through the lenses of the Guiding Principles for Dual Language Education (Howard et al., 2007), a document created by the Center for Applied Linguistics. Research in the area of teaching and learning in TWBI classrooms has strong implications for the future success of students learning a second language and maintaining their native tongue. More specific, learning about the impact of effective

instructional strategies for ELs could enable educators to develop higher-quality TWBI programs, which could further reduce the achievement gap. Lindholm-Leary and Borsato (2006) indicated the need to analyze instructional practices for ELs:

While research has examined the characteristics of effective content instruction, most of these findings emanate from studies in which the primary focus was not on the instructional characteristics. There is little research into how to make instruction more accessible and meaningful to ELLs in areas considered challenging by English Speakers that is science and math (p. 203)...Indeed, extant research fails to include sufficient information on the specific teacher instructional factors that are associated with and presumably responsible for successful content learning. (p. 205)

Purpose Statement

The purpose of the study is to examine the instructional strategies teachers use to develop biliteracy in two-way bilingual immersion programs. The study analyzes the reasons why teachers use these strategies and how they gain new insights about their instructional approaches based on their experiences with students. Lastly, the research synthesizes the knowledge base and support systems that help maintain the implementation of these strategies.

Research Questions

1. How have TWBI teachers gained their knowledge base and professional support to implement the strategies they use in class?
2. How are the Guiding Principles for Dual Language Education assisting teachers in the implementation of their instructional strategies?

3. How do TWBI teachers describe successes and challenges in their instructional strategies to develop biliteracy and cross-cultural competence with program participants, including English Learners and English Proficient students?
4. How do the successes and challenges of their instructional strategies bring about new perspectives or innovations in their practice?

Methodological Overview

Constructivist Approach

A sociocultural constructivist theoretical framework (Grbich, 2007) allows the researcher and the participants to jointly interpret the experiences in the classroom through photo-elicitation interviews, observations and reflections. The voices of the teachers narrate their realities and points of view. This lens provides an in-depth understanding of the instructional strategies used by teachers in dual language programs, as well as highlights their successes and identifies their challenges in planning and implementing the instructional designs. These findings could lead to new perspectives and implications of instructional strategies in dual language programs for both language-majority and language-minority students. Howard et al. (2003) indicated that:

Finally, ethnographic research and other methods such as discourse analysis can provide valuable insights about a number of issues in two-way immersion education, such as student self-grouping patterns, teachers' perceptions about instructional strategies in two-way immersion programs, and teachers' and students' language use. (p. 2)

Qualitative Methods

A qualitative research design (Creswell, 2008) is used to collect data through a case study approach to better understand instructional practices in TWBI programs. The qualitative data analysis offers an array of documents from which to investigate nuances of instructional strategies, such as direct instruction, teacher and student interaction, biliteracy development, and student products. A case study approach examines the phenomenon in depth and within its real-life context in the classrooms (Yin, 2009). The analysis of multiple data sources for understanding the research problem and questions provides triangulation of measures using pattern matching of major themes found in the documents.

The sampling includes teachers in grades first through sixth at two TWBI programs in Southern California. The TWBI teacher population sampling includes schools located in urban areas implementing 90/10 and 50/50 program designs. The participants were identified through purposeful sampling of TWBI teachers recommended by other individuals, such as principals, directors of instruction, researchers, resource teachers, and exemplary teachers within the field of dual language.

The instruments to measure the teachers' instructional strategies in the study are as follows: (a) photo-elicitation journals, (b) interviews, (c) lesson observations, (d) teacher reflections, and (e) a questionnaire. Focus group interviews with the teachers provide a deeper understanding of why teachers use certain strategies across grade levels. Teachers used photographs to document their instructional practices for a photo-elicitation analysis of their strategies. Lesson observations permit the researcher

to document the actual strategies implemented in the classrooms and triangulate the data with the teacher reflections and questionnaire. A questionnaire is used to collect data at one point in time about the teachers' knowledge base and support systems in their schools and districts. An examination of qualitative and quantitative data is used with closed- and open-ended questions. The questionnaire, the observations, and the reflections instruments originated from the Guiding Principles for Dual Language Education (Howard et al., 2007). The Guiding Principles were developed as a tool to assist the planning and implementation of dual language programs.

Significance of Study

Research in this area has strong implications for the future success of ELs. Learning about the impact of successful programs specifically designed for ELs can increase the potential to reduce the achievement gap for these students across the country. This study augments educators' knowledge of best instructional strategies for ELs and English Proficient students who are becoming bilingual, biliterate, and developing cross-cultural awareness. The findings permit schools and parents to examine the types of instructional strategies teachers implement or adapt in TWBI classrooms to meet the needs of the program population.

Much of the research in TWBI is related to academic performance of both language-majority and language-minority students in the programs (Howard et al., 2003; Lindholm-Leary, 2001, 2005; Thomas & Collier, 2002). Careful consideration of instructional strategies and teacher support systems is an area of needed attention. Although existing documents outline TWBI program designs with recommendations

for salient instructional practices (Howard et al., 2007), the current research focuses on student outcomes without much consideration to examining the practices.

This dissertation provides important information for educators and policymakers in examining differentiated instruction for the diversity of cognitive and linguistic needs of language-majority and language-minority students. The study also provides a qualitative methods approach to the investigation of instructional strategies used to enhance biliteracy development in TWBI settings, which can inform the field on implications for practice.

The study's significance is to provide empirical research that focuses on teacher reflection of their instructional strategies, as well as provide TWBI programs with the opportunity to examine the type of professional development teachers acquire and the kinds of systems that support their instructional decisions. The results of the study can also be valuable for administrators' understanding of strategies used with EL students in dual language programs, as well as information pertinent to planning and implementing preservice programs to better train teachers of EL populations. The findings offer parents, stakeholders, and higher education teacher training programs information on instructional strategies indicative to the academic success of ELs and native English speakers in two-way bilingual immersion programs.

Delimitations

The study examines teacher practices in a 90/10 program design from two TWBI programs in California school districts. The following delimitations are outlined:

1. The criterion includes nine bilingual teachers representing grades first through sixth in two TWBI schools in Southern California.
2. TWBI population sampling includes schools located in urban areas.
3. The timeframe of the study is from February-April 2010.
4. A qualitative methods approach incorporates interviews, photo-elicitations, teacher reflections, lesson observations, and a questionnaire.
5. Protocols are established for all data collection during photo-elicitation interviews and observations.
6. Teacher reflections and questionnaires are sent electronically to teachers and are collected through email.
7. Researcher interviews participants and conducts classroom observations.

Organization of the Study

The remainder of the study will be organized into five chapters, a bibliography, and appendixes. Chapter 2 will review the theoretical framework and historical perspectives of TWBI. It will also synthesize the seminal and current studies in the field. Chapter 3 will delineate the case study approach to the study and describe the subjects, the sampling methods, the instrumentation and the procedures used to gather the data. The analysis of the data will be examined in Chapter 4, along with a presentation and discussion of the findings. Chapter 5 will consist of the summary conclusions, implications, and recommendations of the research. A bibliography and appendixes will conclude the study.

CHAPTER 2

Review of Related Literature

This chapter examines the current research on two-way bilingual immersion education (TWBI). First, it outlines a definition for the term English Learner (EL) and presents the national academic status of these students and the characteristics of programs implemented for their educational purposes. The terminology and explanations serve as background information to the literature review. Then the historical perspective of TWBI will demonstrate the national political trends in favor or against bilingual education for language-majority and language-minority students. The section is followed by a discussion of the theoretical frameworks in linguistics, cognitive thinking, and social development. The next segment outlines the overview of TWBI goals, program designs, and the salient features. Finally, the chapter concludes with the research on TWBI through the themes found across the studies: academic achievement of large- and small-scale studies, cross-cultural competence, how teacher efficacy influences instructional practices, and the statement of purpose.

Who Are English Learners?

The term *Limited English Proficient* (LEP) is used at the federal level (No Child Left Behind Act, 2001) when reporting data on students with native languages other than English and are labeled as students who speak English “well,” “not well,” or “not at all” (Fry, 2008; Gitomer et al., 2005). A widely used term by federal agencies is *English Language Learners* (ELLs), although, in recent years the term has been shortened to *English Learner* (EL) for a more common use by other institutions.

This terminology is used by public schools, authors, and researchers when referring to students who speak a primary language other than English (Abedi et al., 2004; Gitomer et al.). The acronyms EL and ELs are used throughout this dissertation to refer to the term of *English Learner* or *English Learners*. The designation procedures vary across states and school districts through the use of home language surveys, parent information, teacher observations, student records, teacher interviews, referrals, and report cards (Gitomer et al.). The NCLB's (2001) definition to identify ELL students is as follows:

An English Language Learner (ELL) is a student who...

- Ranges from ages 3-21
- Has diverse linguistic and cultural backgrounds
- Speaks a primary language other than English
- Is U.S.-born or immigrant
- Has difficulties achieving in English on state assessments
- Lacks abilities to successfully achieve in classrooms where the language of instruction is English
- May be denied full participation in society due to difficulties in speaking, reading, and writing in English

Academic Needs of English Learners

According to the 2006 National Center of Educational Statistics, Arizona, California, Florida, New York, and Texas encompass the largest populations of ELs and educated about 70% of the nation's EL students (Fry, 2008). Results of standardized assessments in all five states indicated ELs continued to perform below

basic standards, “irrespective of grade level EL students were much less likely than white students to score at or above the state’s proficiency level” (Fry, p. i).

According to the 2000 U.S. Census, the number of Americans who speak a language other than English increased by 47% between the years 1990 and 2000. School-aged children representing heritage languages other than English and who spoke the English language with difficulty increased 114% between 1979 and 2004 (National Center for Educational Statistics [NCES], 2008). The growing EL population presents large challenges for public education to meet the federal requirements of No Child Left Behind Act (NCLB, 2001), which mandates that all groups of students meet state proficiency standards in mathematics and reading by 2014 (Fry, 2008). Results from national and state assessments indicate that ELs are not performing as well as their English Proficient (EP) counterparts (National Clearinghouse for English Language Acquisition [NCELA], 2008) and are the group least likely to meet state proficiency standards.

English Learners have been documented as one of the lowest-achieving student groups in both mathematics and reading (Fry, 2008). The Nation’s Report Card (NCES, 2007) reported that 76% of EP students scored at or above basic in reading, while 74% also scored at or above basic in mathematics, as compared to ELs who scored considerably lower with 30% at or above basic in reading and only 31% at or above basic in mathematics. According to the NCELA Roundtable Report (2008) lack of academic achievement also impacts graduation requirements for ELs, “Students from households which speak a language other than English at home lag 20 points behind in high school completion rates” (p. 7).

The Pew Hispanic Center (PHC) projected the number of school-age children of immigrants needing EL services to increase from 12.3 million in 2005 to 17.9 million in 2020 (Fry, 2008). According to the 1990-2000 U.S. Census data, K-12 students who are native speakers of Spanish have grown by 57%. Hispanic students are amongst the largest group of ELs represented in the United States (Fry, 2007) (See Figure 2.1).

Racial/Ethnic Composition of English Learners

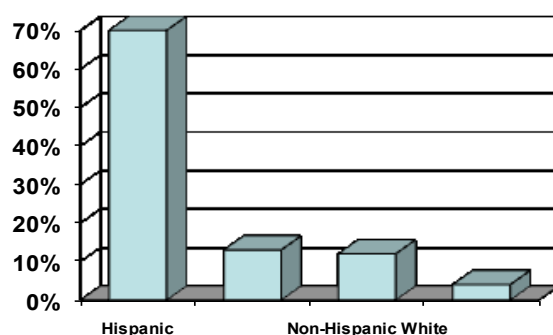


Figure 2.1: *Racial/Ethnic Composition of English Learners*
U.S. Census Bureau 2005 American Community Survey (Fry, 2007)

Hispanic ELs currently lag behind in academic achievement at an alarming rate. In reading and mathematics, Hispanic students have consistently shown a trend of underachievement as measured by the Nation's Report Card (NCES, 2008). In the years 1992-2007, the reading achievement gap between White and Hispanic fourth graders, on average, was 26 points. The eighth grade reading assessments between White and Hispanic students also demonstrated similar trends with an average of a 25-point gap. Between the years of 1990-2007, the reported gap in mathematics between White and Hispanic fourth graders was 21 points, while the eighth grade mathematic

results had no measurable change between the White and Hispanic student gap of 26 points.

The current demographics and societal needs to better educate the fastest growing group of learners with the lowest academic achievement in the United States is drawing interest in implementing programs with proven results on academic success for ELs (Howard et al., 2003). The following section of the literature review provides a description of programs (see Table 2.1) implemented in the United States for the education of ELs (August & Hakuta, 1997; Genesee et al., 2006; Lessow-Hurley, 2009; Ovando, 2003; Peregoy & Boyle, 2005; Thomas & Collier, 2002).

Table 2.1: *Characteristics of Programs Designed for English Learners*

Program	Purpose	Grades Served	Population	Language(s) of Instruction	Duration of Program	Other Information
Two-Way Bilingual Education or Two-Way Bilingual Immersion (TWBI)	Become bilingual, biliterate, and bicultural; some programs may offer a 3 rd language option	PreK-12	ELs with same primary language along with native speakers of English; both groups have varied cultural backgrounds	Literacy & content instruction in the primary language of ELs and English. programs vary between amount of English & primary language instruction throughout grades; some programs offer a 3 rd language option	5-12 years in both languages or with a 3 rd language option	Students continue to develop both languages and cross-cultural competence in the program. No exit criteria.
Developmental Bilingual Programs (DBE)	Become bilingual, biliterate and bicultural	Mainly K-12	ELs with same primary language & varied cultural backgrounds	English with use of primary language	5-12 years	Students develop both languages and develop cultural appreciation. Program designed for ELs. No participation of native English speakers.
Maintenance Bilingual Education or “Late-Exit” Bilingual Education	Develop English listening, speaking, reading, & writing; sustain academic proficiency in the primary language	Mainly K-5	ELs with same primary language & varied cultural backgrounds	English with primary language use throughout elementary grades	5-6 years for “late-exit”	Students continue in English-only education for their subsequent years.

Program	Purpose	Grades Served	Population	Language(s) of Instruction	Duration of Program	Other Information
Transitional Bilingual Education (TBE) or “Early-Exit” Bilingual Education	Acquire English through ESL/ELD, while students receive academic instruction in primary language at early grades	Mainly K-3	ELs with same primary language & varied cultural backgrounds	English with primary language use in early grades	2-4 years for “Early Exit”	As the level of English increases, students are “exited” from the bilingual program and placed in mainstream English-only classes.
Sheltered Instruction (SI) or Specially Designed Academic Instruction in English (SDAIE)	Acquire proficiency in academic English through the use of content instruction	K-12	ELs with intermediate levels in English; varied levels of primary language and cultural backgrounds	English	1-3 years of content instruction	Program develops content and language objectives with students in intermediate levels of English.
English as a Second Language (ESL) or English Language Development (ELD)	Acquire English skills in grammar, vocabulary, & communication	K-12	ELs with varied English & primary language proficiencies of various cultures.	English	1-5 years of English at students’ level of proficiency	Program may include a newcomer strand for 1-2 years for recent arrivals.
Structured English Immersion (SEI)	Attain English proficiency within one school year through a subject matter approach to ESL/ELD	Mainly K-8	ELs with beginning English skills; varied levels of primary language & cultural backgrounds	English	1 year immersion followed by placement in mainstream English program	Program under state referenda, such as Prop 227. Restricts bilingual instruction. Requires English-only approaches.

Characteristics of Programs for ELs

The characteristics of programs designed for ELs are described in this section and cross-referenced on Table 2.1. Refer to the table to compare and contrast program purposes, grades served, populations, languages of instruction, duration of program, and other information.

1. *Two-Way Bilingual Education or Two-Way Bilingual Immersion (TWBI).*

The goal of the program is to serve ELs who speak a common primary language along with native speakers of English. Both groups of students attain bilingual and biliteracy skills without the risk of native language loss. Students learn academic content in both languages, as well as cross-cultural awareness. Duration of the bilingual program is 5 to 12 years for both groups of students.

2. *Developmental Bilingual Programs (DBE).* The goal of the program is for ELs who speak a common primary language and have varied cultural backgrounds to become bilingual, biliterate, and appreciate their home culture. The grades served are primarily elementary grades; however, some programs' duration may last from 5 to 12 years.

3. *Maintenance Bilingual Education or "Late-Exit" Bilingual Education.* The goal of the program is for EL students to develop English listening, speaking, reading, and writing proficiency, as well as sustain academic proficiency in their primary language. Students participate in a biliteracy approach program for five to six years, and continue in an English-only education for their subsequent years.

4. *Transitional Bilingual Education (TBE) or “Early-Exit” Bilingual Education*. The goal of the program is for EL students to acquire English through an ESL/ELD approach (see Table 2.1), while they receive academic instruction in their primary language. As the level of English increases, the students are “exited” from the bilingual program and placed in mainstream English-only classes within a two-to-four- year span.

5. *Sheltered Instruction (SI) or Specially Designed Academic Instruction in English (SDAIE)*. The goal is for EL students to become proficient in academic English using content instruction. The duration of the program is one to three years of instruction. Instructional strategies through content and language objectives, visuals, modeling, and the use of simplified language allow lessons to be comprehensible and accessible to the students.

6. *Structured English Immersion (SEI)*. The goal of the program is for EL students to attain English proficiency within one school year through a subject matter approach to ESL/ELD (see Table 2.1). This program type restricts the use of bilingual instruction by requiring English-only approaches with the students. It is known as the program mandated by state referenda, such as California’s Proposition 227.

7. *English as a Second Language (ESL) or English Language Development (ELD)*. The goal of the program is for EL students from various linguistic and cultural backgrounds to acquire English skills in grammar, vocabulary, and communication. Students receive one to five years of English instruction at their assessed level of language proficiency. This program may include a newcomer strand for the duration

of one to two years for students who are recent arrivals. The newcomer goal is for students to acquire basic English acquisition and orientation to the U.S. culture.

Historical Perspective of Two-Way Bilingual Education

Implementation of dual language instruction dates back to the 19th century where a dozen states used heritage languages for educational purposes. German, Swedish, Norwegian, Danish, Dutch, Polish, Italian, Czech, Hebrew, French and Spanish were used as languages of instruction, as bilingualism was the rule rather than the exception (Crawford, 1992, 1999; Lessow-Hurley, 2009). Increasing immigration toward the end of the century provoked a wave of xenophobia targeting sentiments of anti-foreign-language instruction. With the developments of World War I, legislation aimed at eliminating German language instructional programs resulted in ending dual language programs across the country (Baker, 2006; Crawford, 1999; Lessow-Hurley).

Political and Social Interests

The events following the launching of Sputnik by the Soviet Union revitalized the study of foreign languages in the United States through the National Defense Education Act of 1958. The restoration of bilingual education began in 1963 in Dade County, Florida, as a response to the needs of middle-class Cuban refugees who wanted to maintain and develop their children's biliteracy skills in English and Spanish (Baker, 2006; Fortune & Tedick, 2008; Ovando, 2003). The program offered dual language instruction to both Cuban and English-only students as an enrichment opportunity through public and private funds (Fortune & Tedick; Lessow-Hurley,

2009). Shortly after the Civil Rights Act of 1964, Congress passed Title VII of the Elementary and Secondary Education Act of 1968, or the Bilingual Education Act, which provided funds to equalize educational opportunities through the use primary language instruction for ELs (Baker; Crawford, 1992; Peregoy & Boyle, 2005). It opened the door for the development of bilingual programs across the nation, utilizing Spanish, Vietnamese, Chinese, Japanese, French, and Portuguese as languages of instruction (Peregoy & Boyle). Subsequent amendments of the act allocated funds for teacher training, research, dissemination, and program support.

Established Guidelines

In 1974, the Supreme Court decision *Lau v. Nichols* mandated EL students to receive equal access in their education (Baker, 2006; Crawford, 1992, 1999; Nieto & Bode, 2008; Ovando, 2003). The *Lau Remedies* appropriated criteria for the identification of ELs and mandated language assessments (Crawford, 1992, 1999; Baker; Nieto & Bode). This appropriation paved the groundwork for the compliance of EL programs in public education through the Equal Educational Opportunity Act of 1974 (Lessow-Hurley, 2009).

Legislation Against Bilingual Education

In 1998, supporters of California's Proposition 227 (a statute requiring that all ELs be taught English as rapidly and effectively as possible through a Structured English Immersion approach) blamed bilingual education for the underachievement of ELs (Baker, 2006; Crawford, 1999; Nieto & Bode, 2008; Ovando, 2003). The passing of this measure prompted some school districts in California to dismantle their

bilingual programs and provide alternative approaches that lacked clear operational definitions about the education of ELs (McField, 2008; Wright, 2004). Bilingual education, in the national scheme, was weakened considerably by the dismantling of programs after Arizona passed a similar measure in 2000 and Massachusetts followed suit in 2002 (Baker; Nieto & Bode). Even after a decade of Structured English Immersion (SEI) programs in California (English programs for ELs that do not exceed one year of instruction), the achievement gap continued to widen for ELs with limited or no access to native language instruction (Gordon & Hoxby, 2002; Howard et al., 2003; McField, 2008; Parrish et al., 2006; Thomas & Collier, 2002; Wright). Baker (2006) understood the political pressures influencing instructional decisions for ELs by stating, “Bilingual education is not simply about provision, practice, and pedagogy but is unavoidably about politics” (p. 197).

National Accountability Tensions

Although the No Child Left Behind Act (NCLB, 2001) regards suitable English programs for ELs (Public Law 107-110, section 9101) to be focused exclusively on research-based scientific, empirical, and systematic studies with rigorous data analysis (Baker, 2006), NCLB lacks references to bilingual programs or strategies of instruction for ELs (Baker; Lessow-Hurley, 2009; Nieto & Bode, 2008). The legislation solely required states to: a) identify the languages of ELs, b) include ELs in statewide assessments, c) develop annual achievement objectives, and d) provide appropriate accommodations for assessments in third through eighth grades (Baker).

Historically, the United States excluded the participation of ELs from large-scale student assessment programs, which brought about concerns regarding the influences of language proficiency and academic achievement (Abedi et al., 2004). Although Abedi and colleagues indicated that NCLB's standards-based legislation along with a series of antidiscrimination laws and court cases have initiated changes in the education, assessments, and monitoring systems of ELs, other researchers seem skeptical of the accountability systems in place today. Baker (2006) has argued that the heavy influence on high-stakes assessments determines which groups of students are promoted to advanced placement courses, graduate from high school, and attend colleges/universities. Others are adamant that the impact on the accountability systems in recent years has further encouraged policy makers and school officials to promote an English-only education for ELs (Baker; Crawford, 2008) and damaging the continuation of bilingual education programs (Crawford, 2008):

Meanwhile, the availability of bilingual education is rapidly declining. A national survey reported that, in 1992, 37 percent of English learners were enrolled in classrooms with "significant" use of native-language instruction; by 2002, the figure was 17 percent. Further decline is evident under the high-stakes-testing regime inaugurated by the *No Child Left Behind Act* in 2002. It seems likely to continue unless current laws are rewritten. (p. 12)

Renewed Interest in Foreign Languages

In 2006 the National Security Language Initiative (U.S. Department of Education, 2006) developed a national plan to increase foreign language programs in K-12 systems, universities, and the workforce. The goal was for Americans to learn critical foreign languages specifically Arabic, Chinese, Japanese, Korean, Russian,

and languages in the Indic, Iranian, and Turkic families. In addition, the third version of the *Standards for Foreign Language Learning in the 21st Century* (American Council on the Teaching of Foreign Languages [ACTFL], 2009) added new standards for Arabic among nine other languages. The urgency for national security revitalized the 1988 Foreign Language Assistance Program (FLAP) to federally fund foreign language instruction in elementary and secondary schools as three-year grants to establish, improve, and expand innovative programs. This new surge for foreign language instruction presents challenges for finding highly qualified teachers fluent in critical languages (U.S. Department of Education, 2009). Although these efforts can bring new standards for bilingual education, these initiatives are mainly aimed at second language programs for majority-language students.

A Need for Global Perspectives

Globalization in economics and business, communications, travel, culture, and immigration has prompted an interest in developing global citizens in present-day students in the United States (Lindholm-Leary & Genesee, 2010). Students who acquire proficiency in English and other languages, and also attain positive attitudes about worldwide cultures are believed to have a competitive edge worldwide (Lindholm-Leary & Genesee). The Asia Society Business Roundtable (2005) stated that, “education has a critical role to play in positioning the United States in a knowledge- and technology-intensive economy that requires working with people from around the world” (p. 19). In addition, the Asia Society (2009) reported that 21 of the top 25 industrialized nations study world languages in grades K-5, with the

majority of the European countries requiring students to study a second language for at least nine years. In contrast, most foreign language instruction in the United States does not begin until age 14 and only requires students to take one to two years of coursework. As the United States continues to lag behind in the teaching and learning of languages other than English, bilingual education is gaining public interest in communities who know the advantages of multilingualism, specifically as TWBI programs continue to demonstrate academic success for ELs and offer an enrichment program for English Proficient students (Lindholm-Leary, 2001, 2005, 2009; Lindholm-Leary & Genesee; Thomas & Collier, 2002).

The following table entitled *History of Bilingual Education in the United States* (Daoud, 2005) provides a continuum that demonstrates a linear histogram of laws, regulations and policies that have impacted the instructional programs of ELs (see Table 2.2). The state laws refer to California legislative proceedings that impacted instructional programs for ELs. The historical events depicted include the onset of bilingual education programs with German-English schools in the late 1600s, and continuing through three centuries of legislation. The timeline ends with the most recent national ruling of NCLB in 2002. Not all the events shown on this table are discussed in this section of historical perspectives.

Table 2.2: History of Bilingual Education in the United States Federal and State (California) Laws, Regulations, and Policies (Daoud, 2005)

Theoretical Frameworks

Year	Event / Policy	Year	Event / Policy	Year	Event / Policy	Year	Event / Policy
1694	German-speaking Americans operating schools in their mother tongue and/or bilingual - German and English (earliest known date)	1780 - 1815	Continental Congress adopts "a policy to not have a policy" on language (1780) / Standardizing the "American language" is left to unofficial arbiters such as Noah Webster	1855	California legislature mandates English-only instruction in all schools along with other measures to discriminate against Spanish speakers	1906	U.S. Congress passes the first federal "language law" of any kind - an English speaking requirement for naturalization
1950's	Cultural deprivation theory used as a framework to explain under-achievement by minority children and their "language disability"	1915-1918	English language is equated with political loyalty - Americanization propaganda linking speaking good English and being a "good American"	1963	The Miami-Dade Public Schools establishes a Two-Way Bilingual Education program - probably the first "full-fledged" bilingual program since the 1920's		
1968	Title VII of the Elementary and Secondary Education Act (the Bilingual Education Act)	1970	Office of Civil Rights (OCR) Memorandum	1974	Lau v. Nichols	1975	Lau Remedies
1977	California adopts a Bilingual Education Act	1981	Castaneda v. Pickard	1987	California allows the Bilingual Education Act to sunset	1994	Proposition 187
1998	Proposition 227	2002	"No Child Left Behind" Act ends Title VII funding				

Theoretical Frameworks

Two-way bilingual immersion is a theory-dependent approach based on language development and cognitive thinking research. The conceptual underpinnings link theory and practice to programs that follow research-based designs. The theoretical foundations of TWBI address theories of additive bilingualism in second language acquisition for ELs (Cummins, 1994; Krashen, 1994). In addition, TWBI supports the constructs of immersion education strategies for English Proficient (EP) students (Cummins, 2000; Lindholm-Leary, 2001, 2005). Other theoretical underpinnings stress the fundamental role of social interaction between ELs and EPs in the role of “making meaning” and developing cross-cultural awareness (Lindholm-Leary, 2001, 2005). Vygotsky’s (1978, 1986) theory of social development emphasizes how culture and social factors affect and shape cognitive development. This theory aligns to the cross-cultural competence goal and language development of students in TWBI programs.

Second Language Acquisition

Krashen’s (1994) theories on second language acquisition ascertain that proper bilingual education assists students in gaining proficiency in their second language, while learning subject matter and developing cognitive skills in the primary language all of which are necessary for the development of language competence in English. Krashen’s second language acquisition theories stem from five hypotheses: (a) acquisition-learning, (b) natural order, (c) monitoring, (d) input, and (e) affective filter.

Krashen's (1994) first hypothesis, acquisition learning, is similar to the way that children "acquire" their first language by feeling or picking up a language subconsciously, and also by "learning" from explicit presentation of rules and error correction. The natural order hypothesis refers to how students acquire grammatical structures of the second language in a predictable order, in which some rules are acquired earlier than others. The monitor hypothesis is the relationship between acquisition and learning that allows the individual to internalize the structures of the language and communicate fluently by knowing how to use the rules and forms in normal conversations. The input hypothesis is the notion of acquiring the language by understanding meaningful messages or "comprehensible input" containing new structures that are somewhat higher than the level of the individual's production level. It is interpreted as ($i + 1$), meaning the student's current level of competence plus the next stage to be acquired. The affective filter hypothesis represents the role of affective "variables" that relate to the success of second language acquisition. These affective filters or "mental blocks" prevent students from successfully utilizing input to acquire language. Students with low affective filters are highly motivated, have positive self-confidence, and exhibit low anxiety toward their new language.

The implications of Krashen's (1994) theories promote the development of second language acquisition in TWBI programs as authentic communicative approaches in which students understand meaningful messages while acquiring second language competence (August & Hakuta, 1997; Cloud et al., 2000; Collier, 1992; Lindholm-Leary, 2001; Peregoy & Boyle, 2006). However, considerable controversy

has existed between researchers (August & Shanahan, 2010; Dutro, 2007; Dutro & Kinsella, 2010; Snow & Katz, 2010; Wong Fillmore & Snow, 2000) who have challenged the theories of implicit language instruction (Krashen) and have insisted on explicit second language instruction for the development of complex oral and written communication. Wong Fillmore and Snow stated,

All students require instructional support and attention to acquire the forms and structures associated with it. This is especially true for English Language Learners. Often explicit teaching of language structures and uses is the most effective way to help learners. (p. 22)

As a result, TWBI programs are encouraged to balance implicit and explicit instructional constructs as foundations for second language learning (Cloud et al., 2000). Using language as a medium of instruction, while students are exploring and learning language forms, is a preferred method by many scholars (Lindholm-Leary & Genesee, 2010). Genesee (2004) has argued that “Simply extending exposure to and functional use of the target language do not lead to increased linguistic competence” (p. 8). Functional use may impede the growth of the students’ communicative skills and formal linguistic competence, since students are able to “get by in school” with minimal structural skills (Genesee).

Evidently, now that legislation ties to accountability (NCLB, 2001), the English language development standards are associated with the progression and assessment of language acquisition. The paradigm of how to best teach second language acquisition for ELs or English Proficient students in TWBI contexts continues to evolve as the theories and practices integrate with empirical data (Williams, 2009).

Cognitive Language Proficiency

Cummins' (1994) threshold hypothesis explained how students who attained high levels of proficiency in their primary and second language demonstrated rapid academic and cognitive development. Conversely, low levels of proficiency in either language negatively affected cognitive growth. In Cummins' theory, knowledge in one language is interdependent of the second language, as languages share a common storage place in the brain referred to as the Common Underlying Proficiency in which the advancement of one language facilitates the learning of the second language. Cummins' (1994, 2008) theoretical framework of Basic Interpersonal Communicative Skills (BICS) and Cognitive Academic Language Proficiency (CALP) outlined a fundamental distinction between conversational and academic aspects of language proficiency. Conversational abilities (BICS) are easily developed through interpersonal and contextual clues, while mastery of academic functions of language (CALP) demand high levels of cognitive association that are decontextualized or lack interpersonal cues. Cummins (1994, 2008) reported that the development of grade level academic functions and cognitive demanding tasks (CALP) for ELs required five to seven years. Cummins (2008) affirmed that the development of BICS and CALP can deconstruct the academic failure among subordinate groups (ELs) and provide academic expertise to the students.

Cummins' (1994, 2008) theories provide positive implications for TWBI programs. First, Cummins supports the development of the native language as a vehicle for ELs to acquire academic English more rapidly, than in programs with

English-only instruction. Second, the theory of Common Underlying Proficiency supports the notion of language interdependency and how the primary language can facilitate the learning of the second language through the process of transference. According to Cummins, high levels of bilingualism are considered necessary before cognitive attainment can be achieved. This theoretical framework supports the development of dual language instruction for ELs in TWBI programs.

Subtractive and Additive Bilingualism

This nation's sociopolitical perspective denotes English as the language of power and prestige in the United States; therefore, language-minority students are at risk of losing their primary language and identity by the replacement of English as their dominant tongue (Cummins, 2000; Lee, 2006; Lindholm-Leary, 2005). This process is subtractive bilingualism, the erosion of the primary language by the dominant tongue (Cummins, 1994, 2000). However, immersing language-majority students in another language of instruction does not present a threat to the child's primary language and becomes the process known as additive bilingualism, which means to build on one's primary language skills by adding proficiency in one or more languages (Cummins, 2000; Lindholm-Leary, 2001, 2005). The foundations for TWBI programs have combined these theoretical constructs and research-based practices for language-minority and language-majority students to learn a second language through an additive process rather than subtractive.

The conceptual construct for language-majority students (English Proficient) stems from successful results of Canadian one-way immersion programs where

subject matter was taught in French, while students received primary language instruction in language arts (Cloud et al., 2000; Cummins, 2000; Krashen, 1994; Lindholm-Leary, 2001, 2005). Research studies in one-way French immersion have associated learning a second language with the benefits of additive bilingualism (Cummins, 2000; Lindholm-Leary, 2005). Cummins compiled 30 years of research studies on immersion education and identified the core features of the programs, the problem areas, and the principles of additive bilingualism through correlation studies. Cummins concluded that English language-majority students immersed in the French language during their schooling years gained second language literacy in reading, writing, speaking and listening without any loss to their native tongue (Cloud et al.; Cummins; Lindholm-Leary, 2001, 2005). The findings indicated high levels of proficiency in both English and French without any detriment to the students' culture or identity (Cloud et al.; Cummins; Lindholm-Leary, 2001, 2005).

The results of one-way immersion programs paved the way for the participation of English Proficient (EP) students in TWBI programs. Understanding the theoretical underpinnings of literacy development in the second language without any loss to the first language was a motivating factor for parents of EP students who chose TWBI as a program option (Lindholm-Leary, 2001). For children who speak a native language other than English, the benefits of additive bilingualism were perceived as advantageous in maintaining cultural traditions and language (Shannon & Milian, 2002). Parents of language-majority and language-minority students perceived bilingualism as an increased opportunity in education and career advancement

(Lindholm-Leary & Genesee, 2010). Shannon and Milian reported that English-speaking Hispanic parents also selected TWBI to prevent the continuation of heritage language loss resulting from generations of English-only instruction due to legislative mandates.

Social Development Theory

The theoretical framework of social interaction stems from Vygotsky's (1978, 1986) theories of sociocultural approaches to cognitive development, in which individual mental processes are assisted with a skillful tutor (more knowledgeable other) through social and cultural contexts embedded in the learning. The theory of social development stresses the fundamental role of social interaction in cognitive thought. This sociocultural interaction involves a co-operative or collaborative dialogue that promotes cognitive development. Often, peers or an adult may be the "more knowledgeable other" or experienced partner. Vygotsky's (1978, 1986) zone of proximal development (ZPD) relates to the difference between what a student can achieve independently and what the student can accomplish (range of potential) with guidance and encouragement from the more knowledgeable other (Nyikos & Hashimoto, 1997). Vygotsky placed an emphasis on "culture" affecting and shaping human psychological function and the role of language, in which social constructs precede the learning. This is in contrast to Piaget's notion of children's stages of development preceding learning: (a) Sensorimotor, 0-2 years; (b) Preoperational, 2-7 years; (c) Concrete Operational, 7-11 years; and (d) Formal Operational, 11 years and older (DeVries, 1997).

The principle of TWBI is to have a ratio of 50% language-majority and 50% language-minority students enrolled in the program. That is the connection of the term “two-way,” which represents the two language groups negotiating meaning and communicating authentically within the same classroom. Each group of students is the language model (more knowledgeable other) and conduit for skillful learning (ZPD) with the other group of students. This relationship (sociocultural connection) also fosters the development of cross-cultural awareness addressed in the third goal of TWBI programs. The following diagram shows the relationship of this theory within a TWBI context (see Figure 2.2).

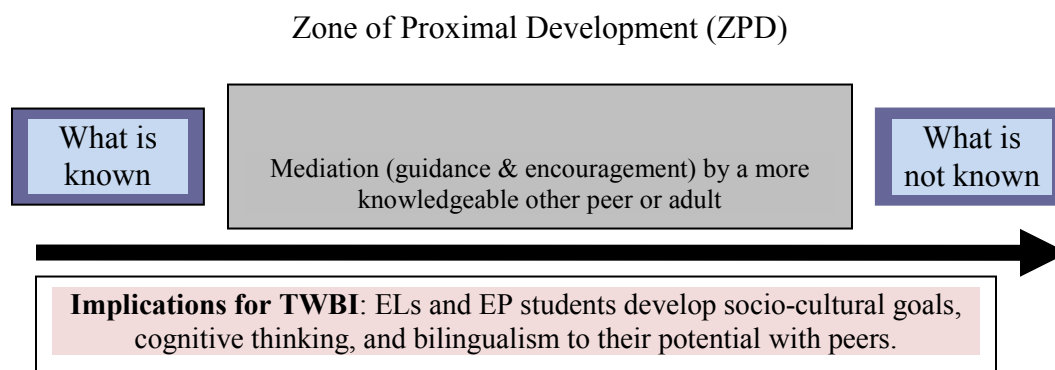


Figure 2.2: *Vygotsky's Social Development Theory: Zone of Proximal Development*

Summary

In summary the basic conceptual underpinnings of two-way bilingual immersion stem from Krashen's (1994) second language acquisition theories where students learn best through communicative-based approaches and interact in meaningful content through the language of instruction. Input is adjusted to the

students' conceptual and linguistic abilities in order to facilitate comprehension. Also, some scholars noted the need for formalized explicit instruction in English language structures and functions. Cummins (1994) outlined the ability for well-developed fluency in bilingual students to attain high cognitive skills. In addition, Cummins reported on the benefits of adding a second language without any detriment to the primary language. Vygotsky's (1978, 1986) theory of ZPD in social development supports the concept of language majority and language minority students working together to develop higher mental functions and cross-cultural competence through collaborative approaches. The theoretical foundations outlined in this section are the reasons why TWBI is considered a bilingual education approach that meets the needs of ELs and provides a successful immersion model for native English speakers.

Two-Way Bilingual Education

As TWBI programs continue to rise, there is a need to identify the key quality components and how these indicators meet the needs of the growing numbers of ELs in schools today. The premise of TWBI programs is to provide academic success, value the heritage language and cultures represented in the classroom, as well as erase the stigma of students deemed as subordinates in other programs (Alanís, 2000; Collier, 1992; Wright, 2004). A heritage language represents the native language spoken by indigenous people or immigrant minority groups (Lessow-Hurley, 2009).

TWBI education in the United States occurs when approximately equal numbers of language-majority (native English speakers) and language-minority (ELs)

students learn together in the same classroom by using English and the heritage language during content instruction (Baker, 2006; Fortune & Tedick, 2008; Lindholm-Leary, 2001; Thomas & Collier, 2002; Valdés, 1997). The term *language-minority* refers to students who have a link to an ethnic minority culture and a home language other than English (Genesee et al., 2006; Lessow-Hurley, 2009). The term is synonymous to ELs. The expression of *language-majority* signifies a student who is a native speaker of English, equivalent to the term English-only or English Proficient (Cummins, 1994; Genesee et al.; Lindholm-Leary).

The goal of the program is to produce bilingual students who are literate in both languages, starting in kindergarten and progressing through the grade levels. Most commonly known programs exist as a dual language strand within a public school, while few programs offer a language academy model, known as a schoolwide approach/magnet school for second language learning (Baker, 2006; Fortune & Tedick, 2008; Lindholm-Leary, 2001; Thomas & Collier, 2002). Participation in TWBI programs is generally on a voluntary basis through the recruitment of students within the district or nearby communities (Fortune & Tedick). Although the programs provide voluntary enrollment, ELs in some states must have a yearly parental waiver on file at the schools in order to participate in bilingual education as mandated by statutory measures. This leads to banning the use of primary language instruction, such as California's Proposition 227 and Arizona's Proposition 203 (Baker; Combs, Evans, Fletcher, Parra & Jiménez, 2005; Lee, 2006; Slavin & Cheung, 2005; Wright, 2004).

The Directory of Two-Way Bilingual Immersion Programs in the United States (Center for Applied Linguistics [CAL], 2009) reported 346 programs in 27 states that met the following criteria for its database: (a) *integration* of language minority and language majority students for at least 50% of instructional time across grade levels, (b) *instruction* in both languages was provided to all students with at least 50% of the *instructional day in the heritage language*, and (c) the program *population* had a balance of language-minority and language-majority students with at least one-third and two-thirds representation in the classroom.

Majority of TWBI programs in the United States are located in the state of California with 66 districts and 106 schools identified as meeting the criteria established by CAL (2009). Texas is the second state with the most programs implemented in 27 districts and 53 schools. The third-largest group of programs meeting the criteria is in the state of New York with 8 districts and 29 schools. Schools in the *Directory of Two-Way Bilingual Immersion Programs in the United States* (CAL, 2009) mainly represent K-5 elementary configurations followed by middle schools which are feeders for few high school programs. Spanish and English are the languages of instruction most represented within the nation's programs (see Table 2.3), followed by French/English and Korean/English (CAL, 2009). Across the nation, Spanish/English TWBI programs have the greatest impact on the education of Hispanic ELs identified by the Nation's Report Card (NCES, 2008) as the largest group of students underachieving in English reading and mathematics.

Table 2.3: *Languages of Instruction in TWBI Programs*

Languages of Instruction	Number of Schools Nationwide
Spanish/English	320
French/English	8
Korean/English	5
Cantonese/English	3
Japanese/English	3
Mandarin/English	3
Navajo/English	1
French/English, Spanish/English, German/English*	1
Chinese/English**	1
French/English, Mandarin/English *	1
Total number of schools	346

* These programs have separate strands at their school site for each language.

** This program teaches in more than one Chinese dialect.

Language of Instruction in TWI Programs, Center for Applied Linguistics, 2009.

Program Designs for Two-Way Bilingual Immersion

Three established primary goals for TWBI programs include: (a) high levels of proficiency in the students' first language, (b) high levels of proficiency in the students' second language, and (c) positive cross-cultural attitudes and behaviors (Baker, 2006; Fortune & Tedick, 2008; Lindholm-Leary, 2001; Thomas & Collier, 2002; Valdés, 1997). Lindholm-Leary stated that TWBI can promote the learning of languages in support for career demands in the global market. In addition, the National Security Language Initiative (U.S. Department of Education, 2009) stated the need for Americans to learn, speak, and teach critical languages impacting our national security and economic competitiveness. The critical languages include Mandarin, Arabic, Japanese, Korean, Russian, and languages in the Indic, Iranian, and Turkic families (Richey, 2007).

The duration of the students' participation in a TWBI program is essential to the proper development of languages. In order to develop cognitive academic language proficiency (CALP), duration in second language instruction should last for a minimum of five to seven years of study (Cummins, 1994). Two main TWBI program designs have been identified in the U.S. as enriched education (Baker, 2006; Howard et al., 2003; Lindholm-Leary, 2001). Programs often referred to as a 90/10 model or minority-language dominant provide most of the instruction (90%) in the heritage language in the early grades. This increases the amount of the second language or English (10%) as the grade levels progress until the two languages reach an equal amount of instructional time in the upper elementary, usually at about fourth grade. This model tends to defuse the power of English in the early grades in order to allow the heritage language and ELs to gain status in the classroom by promoting literacy skills in the heritage language (Lindholm-Leary, 2005).

The 50/50 model or balanced language provides equal amounts of instruction in the two languages from the beginning of the program at kindergarten and through the elementary grades (Lindholm-Leary, 2001, 2005). The premise behind this model is for all students to first acquire reading instruction in their native language and then add the second language. Other 50/50 programs develop simultaneous literacy with half the day in the minority language, and half a day in English instruction. Further research is needed to study the variations within 50/50 designs across districts and communities.

Lindholm-Leary's (2001) longitudinal and cross-sectional sample of 395 TWBI students in grades 1-4 analyzed norm-reference achievement assessments in reading and mathematics. Although both 90/10 and 50/50 programs promoted bilingualism and biliteracy in both languages, the research concluded that students in 90/10 models developed higher bilingual proficiency levels than students in 50/50 programs. The study found English proficiency to be equally developed in both program models for language-minority and language-majority students. Lindholm-Leary acknowledged that more highly developed levels of Spanish fluency were found in the 90/10 model for both groups of students, since more exposure and instructional time was dedicated to the development of the heritage language during the early grades.

Howard and colleagues (2003) confirmed that a small amount of national programs (2%) called differentiated provided instruction in two languages for majority and minority-language dominant students in a model that separated instruction of languages at different ratios, outside the popular 90/10 and 50/50 models. Fortune and Tedick (2008) presented a fourth strand within TWBI for the inclusion of indigenous immersion programs dedicated to the cultural and linguistic revitalization for Native or Aboriginal groups who speak English at home, but desire to learn their ancestral language in school.

Other models of TWBI include schools with a multilingualism and multiculturalism goal for students who elect to study a third language option such as Russian, Chinese, Japanese, French or German (Howard, 2002). These models are also

referred to as 80-10-10, since 80% of the time is devoted to the minority language, 10% is allocated to English, and 10% of the instructional day is designated to the third language in the early elementary grades. The percentages between the minority and English eventually even out to 45%/45% in the upper elementary grades, while the third language elective remains at a constant 10% throughout the grades. Howard reported that Alicia Chacon's International School in El Paso, Texas, was a strong indicator for enriched educational opportunities thriving in multilingualism and academic proficiency.

In addition to elementary schools, some TWBI programs continue through the middle level and high school. Montone and Loeb (2000) identified benefits for continuing the TWBI programs in secondary education in order to prepare students for advanced placement courses in high school and college, adding the study of a third or fourth language, or enrolling in international baccalaureate programs. The planning, staffing, and student participation in TWBI middle level and high school programs become a challenge as students are faced with other academic interests competing with their schedules, such as electives, or the desire to mix with other non-TWBI peers in educational experiences (Howard et al., 2003; Montone & Loeb, 2000). Howard and colleagues found that the challenge of motivation to stay in the program shifted from the parents' interest in the benefits of bilingual education to the adolescents' incentive to continue in the program, after developing new interests conflicting with their school schedules.

Summary

Four main TWBI models define the program designs: (a) 90/10 model is minority-language dominant in the early elementary grades, (b) 50/50 model is a balanced language approach throughout the program, (c) differentiated model has different language ratios, and (d) third language option model offers opportunities to become multilingual. Regardless of the model designs, the programs normally continue the full span of the elementary/middle grades (K-8) by promoting bilingualism, biliteracy, and cross-cultural awareness, even opportunities for multilingualism and multiculturalism.

Academic Achievement: Outcome Goals of Two-Way Bilingual Immersion

Language-Minority Students

Studies that have examined long-term, academic data of language-minority students (Collier, 1992; Lindholm-Leary, 2001; Thomas & Collier, 2002) have supported the theoretical constructs of how ELs learned best when their native language was valued and taught in academic settings along with the learning of cognitive tasks in English. Collier supported this notion by stating,

The greater amount of L1 instructional support for language-minority students, combined with balanced L2 support, the higher they are able to achieve academically in L2 in each succeeding academic year, in comparison to matched groups being schooled monolingually in L2. (p. 205)

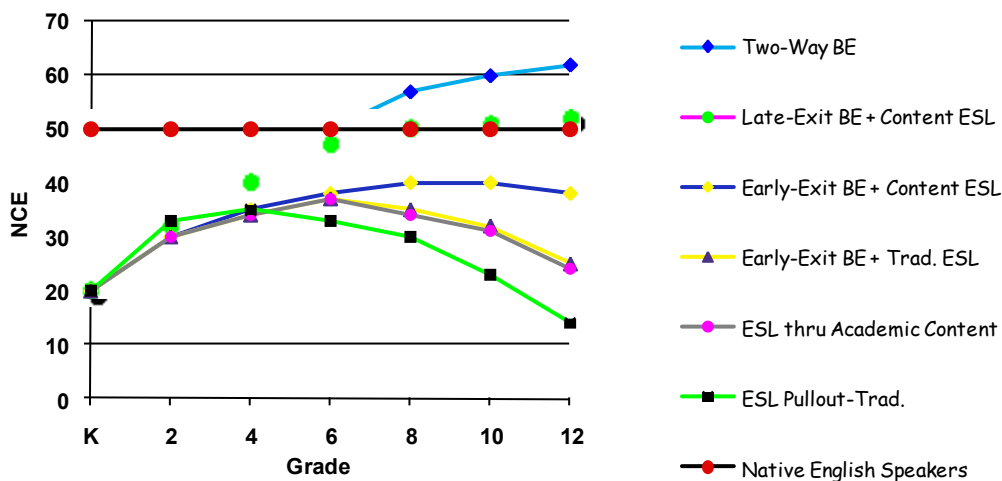
Two major longitudinal, large-scale comparative studies have been conducted to research the academic achievement across various programs for ELs in TWBI

(Lindholm-Leary, 2001; Thomas & Collier, 2002). In addition, the National Literacy Panel on Language-Minority Children and Youth (August & Shanahan, 2006) conducted a comprehensive evidence-based review (1,800 potential research studies that met the panel's criteria) of the research literature on the literacy development of language-minority students between the years of 1980 to 2002. These research findings are summarized below:

The first study demonstrated the effectiveness of TWBI programs in a large-scale, 15-year national longitudinal study of various programs for ELs (Thomas & Collier, 2002). Thomas and Collier presented findings from 23 schools districts in 15 states with a longitudinal analysis of more than 2 million student records to show that dual language programs can close the achievement gap for ELs and provide a superior education for native English speakers. The national study was a large-scale, longitudinal analysis from 1985 to 2001 of K-12 students in seven program models: (a) TWBI (90/10 and 50/50 programs), (b) Late-Exit Bilingual (primary language and English instruction through the upper elementary grades), (c) *Early-Exit Bilingual* (primary language and English instruction through the early elementary grades), (d) *Traditional English as a Second Language* (ESL), (e) *ESL through Academic Content* (sheltered English instruction), (f) *ESL Pull-Out* (English language development instruction outside the context of the regular classroom), and (g) *Native English Speakers* (monolingual education). Thomas and Collier concluded that only TWBI and Late-Exit Bilingual programs enabled ELs to reach or surpass the 50th percentile on standardized tests on English reading achievement (see Figure 2.3). The

results demonstrated that TWBI programs promoted the highest levels of English language proficiency in standardized tests and found the programs to have the highest long-term success for ELs. Thomas and Collier went on further to find that the fewest student dropouts came from these programs. After four to seven years of participation, students in 90/10 and 50/50 TWBI programs were found to outperform the native English speakers, who were educated monolingually in English. The achievement gap between language minority students in segregated, remedial quality ESL programs and their TWBI peers was found to widen even after language minority students met criteria to re-enter mainstream classes.

English Learner's Long-Term K-12 Achievement in Normal Curve Equivalents (NCEs) on Standardized Tests in English Reading Compared Across Seven Program Models



Elementary Gains Range: 3-4 NCEs/yr. (Gap closure for all programs).

Middle School Gains Range: -1 to +4 NCEs/yr. (Little or no gap closure for most programs, except TWBE and Late-Exit BE).

High School Gains Range: -3 to +2 NCEs/yr. (Gap increase for most common programs, except TWBE and Late-Exit BE).

From, California Department of Education Language Policy and Leadership Office, Copyright 2004 by Wayne P. Thomas & Virginia P. Collier.

Figure 2.3: *English Achievement of ELs: Long-Term K-12 Standardized Tests in English Reading Across Seven Programs*

The second study (Lindholm-Leary, 2001) analyzed EL outcomes across 18 schools in California and one school in Alaska. The sample population of 4,854 students represented more than a 66% language-minority population with 61% Hispanic ELs from different program models, including two-way bilingual immersion models, transitional bilingual education (use of primary language instruction through second or third grade only), and English-only (no primary language instruction). The programs ranged from low to high socioeconomic status (SES) and ethnic density in urban and suburban communities. In Spanish oral language proficiency (cross-sectional data), Hispanic ELs rated higher in 90/10 programs with high and low SES than in 50/50 models. In English oral language proficiency, students in 90/10 programs increased their scores across grade levels, while TBE students stayed constant. Academic achievement in the primary language for ELs in TBE was average up to fourth grade, where scores normally “dipped” as the complexity of the language increased, while ELs in TBE and English-only programs scored well below average at all grade level, and below statewide averages. Academic achievement in the students’ second language showed that by sixth and seventh grade ELs scored closer to average in English. In mathematic achievement ELs scored similarly to peers across the state. Overall, Spanish-speaking ELs scored the lowest across all areas in TBE programs, while ELs in TWBI programs acquired high-proficiency levels in both English and Spanish.

The third study was a comprehensive evidence-based review by the National Literacy Panel (NLP) on Language-Minority Children and Youth (August &

Shanahan, 2006). The review included experimental, quasiexperimental and multiple baseline studies published in peer review journals, dissertations, and/or technical reports. Studies were coded by characteristics and examined statistically through a meta-analysis by an independent reviewer. The panel reported that developing first language literacy was advantageous when learning a second language due to the positive transfer of skills between language and cognition, such as cognates, reading strategies, reading comprehension, spelling, and writing. The NLP concluded that bilingual education had a positive effect on children's literacy skills in English as compared to peers in English-only instruction. The implications of this study validate the goals of TWBI for developing literacy in the students' primary language while acquiring English skills.

Language-Majority Students

There has been extensive research in the language and academic progress of language-majority students (English Proficient [EP]) in bilingual education (Genesee, 2004). English proficient students in TWBI programs have maintained their English fluency and added a second language, while having achieved well above the 50th percentile in all subject areas on norm-referenced tests in English (Lindholm-Leary, 2001; Lindholm-Leary & Genesee, 2010; Thomas & Collier, 2002). Language-majority students have outperformed their comparison groups who are taught monolingually (Thomas & Collier, 2002). Lindholm-Leary reported that by the time EP students begin formal English reading instruction in third grade, they perform at grade level and at least as high as the California statewide norms for native English

speakers instructed monolingually. Students in 90/10 TWBI programs performed at similar levels of English proficiency as students in 50/50 TWBI programs. In mathematics, EP students in TWBI programs performed average to above average at all grade levels and in both program types as measured by California statewide norms in English (Lindholm-Leary). Genesee (2004) stated that EP students educated in bilingual programs within diverse settings acquire significantly more advanced levels of functional proficiency in the second language than students who receive conventional second language instruction for limited time periods in homogeneous settings. In the learning of the primary language, EP students developed the same levels of proficiency as EP peers in monolingual instruction (Genesee; Lindholm-Leary). Genesee reported EP students in bilingual programs achieving at the same levels in content academic achievement (mathematics, science, social studies) as English peers in monolingual programs (Lindholm-Leary).

Small-Scale Studies

Most empirical research studies in TWBI are cross-sectional with only a few representing large-scale longitudinal investigations (Lindholm-Leary, 2001; Thomas & Collier, 2002). Several researchers have also conducted reviews of the literature or meta-analyses (Howard et al., 2003; Lindholm-Leary, 2005; Rolstad, Mahoney, & Glass, 2005). This section will present a few of the small-scale studies on TWBI outlined by themes.

1. *Bilingualism*. Results over time have shown that TWBI promotes proficiency in English and the target language (Fortune & Tedick, 2008; Genesee,

2004; Howard et al., 2003; Lindholm-Leary & Genesee, 2010). No evidence has suggested delayed native language development due to participation in TWBI. On the contrary, studies have shown that students do become proficient in both languages (Lindholm-Leary, 2001; Thomas & Collier, 2002). However, Lindholm-Leary confirmed that students in 90/10 programs developed higher levels of bilingual proficiency than did students in 50/50 models. English proficiency developed equally in both program models. Conversely, high levels of Spanish proficiency for both language-minority and language-majority students was much more likely to occur in 90/10 (high level bilinguals) than in 50/50 (medium level bilinguals) programs.

Keeping true to the program design can have affirmative effects on bilingualism. A study conducted by Alanís (2000) reported on the effects of linguistic achievement. Alanís found two TWBI schools near the border of Texas and Mexico not developing bilingual proficiency for all students. The evidence pointed to teachers spending more time in English instruction than on the minority language and lacking classroom materials in Spanish. Students preferred English, as they saw less cultural capital for Spanish at the school, even though there was evidence of support for bilingual education.

2. *Benefits of long-term programs.* The study conducted by Lopez and Tashakkori (2003) demonstrated the outcomes of programs for ELs at different language entry levels. This mixed-method approach of a casual-comparative study included three purposely selected schools matched to three other sites with similar demographic characteristics for ELs in a large school district in the southeastern

United States. In contrast, Rolstad and colleagues (2005) and colleagues selected a corpus of 17 studies of programs for ELs with statistical data for treatment and comparison groups, excluding students in special education. Similarly, both studies investigated traditional bilingual education, English-only instruction, and two-way bilingual immersion programs where groups of students were randomly selected. Standardized exams were used as instruments to measure growth. Both studies reported benefits of bilingual education over English-only programs for the academic success of ELs, particularly students participating in TWBI programs. These programs provided a maintenance approach with consistent and continuous development of both native and second language instruction needed for positive outcomes. Limitations reported by Lopez and Tashakkori included the need for future research with longitudinal data. However, Rolstad and colleagues concluded that policies to ban bilingual education were not justified and that federal policies encouraging the rapid transition to English, embedded in No Child Left Behind (2001), were ill advised and should have encouraged the implementation of bilingual education approaches in all U.S. schools serving ELs.

3. *Low-SES levels.* Alanís (2000) and Lindholm-Leary and Block (2010) both studied the results of TWBI programs in low-socioeconomic status (SES) communities. Alanís examined two 50/50 programs located by the Texas and Mexico border region. The student population had a concentration of ELs segregated in residential patterns of SES. Similarly, Lindholm-Leary and Block studied the academic achievement of four largely low-income schools in California with student

populations of at least 66% low SES and 80% Hispanic students. Alanís concluded that reading achievement indicated that TWBI participants (English and Spanish dominant) scored slightly higher than the nonparticipants for all three years of the study, and those students' scores continued to rise with every additional year in the program. Both participating schools demonstrated performance at or above the state passing level in reading achievement, and significant math gains. Consistent with these findings, Lindholm and Block reported that scores on the California Standards Test increased more rapidly for ELs in TWBI than scores for mainstream ELs in English-only instruction which seemed to decrease. The scores between ELs and EP students in TWBI seemed to close the achievement gap between the two groups, whereas the gap widened between mainstream ELs and EP students in monolingual instruction.

4. *Parent attitudes and involvement.* Studies showed positive parental attitudes and participation in TWBI programs (Lindholm-Leary, 2001; Shannon & Milian, 2002). In California as well as in other states, parents of ELs must select TWBI as a program option for their children. The main reason parents of ELs selected the program was for the desirability to maintain the cultural and linguistic heritage, and communicate with other native Spanish speakers, while White parents of TWBI students valued the added benefits of bilingualism for better career opportunities for their children. High poverty rate (SES) parents felt less supported by school staff than parents from lower rates of poverty. Overall, Hispanic parents were more satisfied with the programs than White parents. Related to this study was a survey conducted by

Shannon and Milian about parents' beliefs and attitudes in TWBI programs in Colorado. The survey results indicated that Spanish-speaking parents freely selected the program option for their children, understood the models, and believed them to be effective. Parents also viewed TWBI as excellent educational opportunities for their children and expressed desire for these programs to expand in other communities. Lindholm-Leary found parental involvement in TWBI to be a complex phenomenon with a mixture of low-SES parents with lower educational levels and the high status parents who are educated middle-class and only speak English. Lindholm-Leary has noted that school involvement of parents is normally associated with the participation of one group of parents, either low- or high-SES, but not both. Shannon and Milian further explained how parents are the strongest allies of well-implemented bilingual programs; therefore, the choice and voice of both parent groups are fundamental for the development, progress, and continuation of these programs in their communities.

Summary

Research studies in two-way bilingual immersion programs demonstrated the highest long-term success of primary and second language learning among both language-minority and language-majority students. Scientific research documented the closing of the achievement gap for ELLs, specifically for Hispanic students, when compared to their EL peers in English-only or TBE programs. The NLP concluded that primary language development assisted the learning of the second language due to the transfer of higher order reading skills and connection to vocabulary development. Overall, studies showed that EL and EP students participating in TWBI program

models become bilingual without any detriment to their native language development. Smaller-scale studies also supported the academic achievement of students in TWBI programs. Some outlined the need to continue long-term programs for ELs in order to develop strong bilinguals. Other studies supported the implementation of TWBI in low-SES communities, and to involve parents as strong advocates for the development and continuation of TWBI programs in their own communities.

Salient Features of TWBI Programs

The publication entitled *Guiding Principles for Dual Language Education* from the Center for Applied Linguistics (Howard et al., 2007) outlined seven characteristics of effective TWBI programs that have been researched-based and follow the theoretical frameworks of dual language education. Other comprehensive research-based sources for planning and implementation guidelines include *Dual Language Instruction for Enriched Education* (Cloud et al., 2000) and *Designing and Implementing Two-way Bilingual Programs* (Calderón & Minaya-Rowe, 2003). Today, as communities of practice converge to develop TWBI programs, Mora, Wink and Wink (2001) cautioned programs to clarify the intent of purpose with clear ideologies and pedagogically sound designs that benefit their school communities. Monitoring the implementation of the model's effectiveness to the fidelity of the design is highly critical to establish congruency among theory, practice, and community needs.

The following strands represent the seven recommended salient features outlined in the Guiding Principles (Howard et al., 2007): (a) assessment and accountability, (b) curriculum, (c) instructional practices, (d) staff quality and professional development, (e) program structure, (f) family and community involvement, and (g) support. Each strand is briefly discussed below:

1. *Assessment and accountability.* Evaluation systems are in place in accordance with the national standards (NCLB, 2001) and for program appraisal in both languages. Data management systems should track students over time through scientifically rigorous methods.

2. *Curriculum.* The principles of TWBI aligned with the goals of bilingualism, biliteracy, and multiculturalism, including alignment to standards and assessments in both languages of instruction. The curriculum is enriched, uses higher order thinking skills, and is integrated thematically through a horizontal and vertical alignment.

3. *Instructional practices.* The approaches provide positive and interactive student participation that capitalizes on cooperative learning, sheltered instruction, modeling, visual aids, language and content objectives, and monolingual lesson delivery. Lesson delivery meets the needs of both language-minority and language-majority students.

4. *Staff quality and professional development.* Teachers should have appropriate teaching credentials and native or natively like command of either or both languages of instruction. Teachers have knowledge of bilingual and second language acquisition strategies. Highly qualified teachers are trained in a variety of strategies:

second language acquisition, biliteracy instruction, cooperative learning, critical thinking, dual language models, educational equity, and technology. Teachers also articulate across grade levels for professional development.

5. *Program structure.* Programs designed with a shared vision for bilingual, biliteracy, and bicultural goals for students across grade levels, include high expectations for the achievement of all students. Educators provide a continuous planning effort for scope, sequence, and alignment of appropriate practices for all proficiency levels in both languages. The duration of the program for a minimum of six to seven years is a critical feature for higher student outcome.

6. *Family and community involvement.* The program incorporates a home/school collaboration approach. The school has a welcoming environment for all parents, including an office staff that speaks the target language, and environmental signs in dual languages. The program establishes parent liaisons for both languages.

7. *Support.* The program exhibits effective leadership at all administrative levels, including the role of the principal as the main advocate for the program. The support demonstrates considerations for continually developing or refining the program goals and outcomes. Bilingual education is not regarded as a remedial program, but rather a prolonged commitment for sustained educational equity, duration of program, and community relations. The principal sustains interaction among staff and provides equal access to quality materials and resources.

Summary

There are various documents that provide guidelines for program planning and implementation. The three sources outlined in this section are research- and experience-based publications geared for administrators, teachers, and parents. All the publications outlined similar critical features on program design, including adapting curriculum, assessment, and parental involvement. Program congruency between the theoretical underpinnings and instructional practices need to be evaluated by each school community for curricular effectiveness.

Cross-Cultural Competence: Third Goal of TWBI

The topic of bilingual education is deeply rooted in the area of social justice and equity, since it delineates the need to provide meaningful and engaging equitable opportunities for students who are second language learners and reside in low- to high-SES communities (De Jong, 2006; Fitts, 2006; Lindholm-Leary & Block, 2010; Palmer, 2008). Studies indicated the overwhelming success of ELs when their primary language is used as a vehicle to bridge the learning of a second language (August & Shanahan, 2006; Howard et al., 2003; Lindholm-Leary, 2001, 2005; Thomas & Collier, 2002).

Student Attitudes

Studies based on student attitudinal questionnaires/surveys have important implications for determining student success in school that links to motivation. The study conducted by Lindholm-Leary (2001) examined 611 students in third through

eighth grades from 9 different TWBI schools that completed an 80-item attitudinal survey in either English or Spanish. Students in low to high SES communities rated nine different categories on a four-point Likert scale. Findings revealed student attitudes were consistently high toward people or peers from diverse cultural and linguistic backgrounds. Students demonstrated positive academic attitudes, behaviors, and satisfaction in their lives in general. TWBI students also demonstrated contentment toward school, teachers, and family life. This study demonstrated no difference between Hispanic and White European students' rating on scholastic competence and their global self-worth.

The results of Lindholm-Leary's (2001) study are comparative to Portland State University's survey of 280 Latino students in bilingual classes in 7 urban middle schools in California (Lee, 2006). Consistent with Lindholm-Leary's results were Lee's findings, which demonstrated that bilingual education helped the students' educational experiences by 90%. Although 71% felt bilingual education was supportive of their cognitive thinking and affective well-being, 71% did not feel that bilingual education affected their self-esteem or self-confidence levels, which was found as a positive attitude in Lindholm-Leary's study. Lee found that 79% did not believe learning in two languages impeded their education and 74% supported the use of two languages in the classroom.

Lindholm-Leary (2001) pointed out that these attitudinal studies are important, because other scholars have shown causality between perception of scholastic competence and achievement. Therefore, one's motivational orientation can influence

academic achievement. In addition, Lee stated that, “Stigma attached to bilingual education has been raised as a potential variable influencing the parents’ preferences to place their children in non-bilingual classes. This study found no evidence of stigmatism among students only 10% thought that bilingual education lowered their self-esteem” (p. 116). This is an important notion to discuss with parents and an important study to include in this chapter, since TWBI has a different connotation in the realm of bilingual education. The program is considered an enrichment option for students, rather than compensatory education, which has a deficit theory approach to instruction. Undoubtedly, the participation of EP students who are considered dominant and empowered by society could also be raising the status of the program by eliminating the stigma attached to bilingual education.

Attitudes About College

Lindholm-Leary and Borsato (2002) examined the impact of participation in a TWBI program on the language and achievement outcomes of former program participants and on their current schooling path and college plans. The study explored outcomes for three groups of students representing 142 TWBI high school participants: (a) Hispanic students who began the two-way program as ELs, (b) Hispanic students who began the program as English- only or English-dominant speakers, and (c) European American students who entered the program as monolingual speakers of English. The results of this study demonstrated that high school students who participated in the two-way program developed high levels of academic competence and motivation/ambition to go to college. Lindholm-Leary and

Borsato stated, “The results point to the development of a sense of resiliency among Hispanic students, particularly those learning English and those from low-income families” (p. 2). Hispanic students appeared to possess characteristics identified with resiliency and success. These characteristics which were not normally associated with students living in adversity or from high-risk environments, but with students who seemed well adjusted and achieved well academically. Findings in this study were unique since it examined secondary education students and their attitudes about college. Interestingly, Lindholm-Leary (2009) has also mentioned that students who participate in TWBI programs through middle school have higher high school exit exam rates in California than students participating in other programs throughout the state.

Equal Status in the Classroom

One of the most difficult challenges in TWBI is to maintain social equity in the classroom, since English is considered the language of power in American society. While TWBI programs have developed cross-cultural competence, some studies on cultural and linguistic status between language-majority and language-minority students in TWBI programs have demonstrated that the classroom teacher struggled at times to provide equal status during class interactions (De Jong, 2006; Fitts, 2006; Palmer, 2008). In Palmer’s ethnographic studies of audio recordings and videos (taped twice per week in an 11-week period), the study showed how English dominant students disrespected the academic spaces of language-minority students by cutting off classmates and taking over oral contributions. The study by De Jong examined teacher

reflections on integration outcomes in TWBI programs and pointed out that even through integrated settings, the students still self-selected identity groups by status. This caused ELs to feel less confident and unable to demonstrate their academic knowledge. Similarly, Fitts studied the stigmatization of bilingual students by reconstructing the status quo of equity in the classroom. Ethnographic observations and interviews of 18 fifth graders, 2 teachers, and staff outlined the misconceptions about bilinguals and the challenges of students conforming to subordinate roles. These studies pointed out the importance of developing strong cross-cultural ties among the students to minimize the marginalization of culturally and linguistically diverse groups in the classroom.

As a result, TWBI programs must encourage strong academic participation from language-minority students by providing a nonthreatening environment and dominance of one group over another (De Jong, 2006; Fitts, 2006; Palmer, 2008). Hence, it is the staff's and teachers' responsibility to ensure the positive participation of ELs by building background, preteaching concepts, and increasing the academic status of ELs. Through a different perspective, Wong Fillmore and Snow (2000) encouraged teachers to provide interaction between ELs and EP students, so that English speakers can provide access and corrective feedback as students negotiate and clarify communicative intentions. Wong Fillmore and Snow added that if ELs are to be successful in the acquisition of language, then they must interact directly and frequently with other students who know the language well. These findings are important to consider in this literature review, since program planners need careful

considerations when creating language experts, due to the need to balance the dominance of one group over the other. Although the academic results look promising for TWBI programs, researchers need to continue studying the impact of these programs on positive and negative issues of social justice and equity for both language-minority and language-majority groups.

Social Capital

As a cautionary note, Valdés (1997) pointed out to parents, researchers, and policymakers that although TWBI provided ELs opportunities for advancement in academics, the programs could possibly provide negative effects related to the success and failure of Mexican-origin children. Possible drawbacks were the quality of instruction in the minority language, the effects of dual immersion on intergroup relations, and how TWBI fits into the relationship between language and power, affecting the children and society. Valdés used anecdotes from conversations with students, as well as a look into the literature review of studies examining the schooling failures of Mexican-origin populations. Valdés pointed out that teaching the heritage language to children of language-majority and language-minority in early grades must meet the linguistic needs of both groups. Valdés argued that these programs could reduce Latinos' natural advantage as bilinguals for future employment and promotion opportunities, as they compete with language-majority bilinguals in the workforce. This is a valuable insight presented by Valdés, since one important dilemma for TWBI is to reframe the sociopolitical notion of keeping the dominant class powerful and the subordinate group powerless.

From a different perspective, Lindholm-Leary and Genesee (2010) viewed TWBI programs as systems that are essential to reducing prejudice and discrimination as they provide modes of cultural and social interactions to facilitate relationships in diverse settings and prepare students as global citizens with a competitive edge for business and economics. Lindholm-Leary and Genesee also mentioned that TWBI provides cultural advantages to language-minority students when referring to cultural norms of the home and school. Mainstream teachers in English-only programs could interpret these types of behaviors as signs of resistance, indifference, or even learning disabilities. These interpretations are least likely to occur in TWBI programs where teachers are sensitive to the cultural norms of the students.

Summary

The review of the literature supported the goal of cross-cultural competence for both language-majority and language-minority students. First, the need is to provide an equitable education for all students, including parental participation for both language groups. The research indicated that the majority of students in TWBI have positive self-images and attitudes about cross-cultural awareness and other languages. Students also developed contentment regarding school and desire to attend college. Students in TWBI tended to complete high school rather than drop out of school, and acquired higher passing rates in high school exit exams than peers in other programs. However, much research is still needed to examine areas of equal status in the classroom, and social interactions between both cultural groups. Social capital and

group empowerment need to be further explored to outline the benefactors and/or challenges affecting both groups of students.

Teacher Beliefs and Instructional Practices

This section outlining teacher efficacy and instructional practices serves as the introduction to this dissertation study on teacher instructional strategies and support systems. Teacher efficacy is defined as the teachers' level of confidence and ability to encourage student learning (Hoy, 2000). A significant positive relationship between teacher experiences with multicultural populations and their attitudes toward multicultural pedagogy indicate important implications for teachers educating culturally diverse students, which includes their willingness and competence to teach in diverse settings (Tyler et al., 2008). The studies presented in this section represent recurring themes appearing throughout the TWBI literature review on teacher beliefs and efficacy as follows: (a) teacher efficacy, (b) instruction in both languages, and (c) benefits and challenges related to instructional practices.

Teacher Efficacy

Teachers in TWBI programs who had bilingual credentials and teaching experiences with ELs felt more qualified to teach in the programs than teachers lacking appropriate credentials and/or experiences with diverse populations (Howard et al., 2003; Lindholm-Leary, 2001). Lindholm-Leary analyzed questionnaires completed by 126 teachers representing 90/10 and 50/50 programs in California and Alaska. The study found that teachers rated their efficacy differently according to the

school at which they taught. Consequently, Lindholm-Leary concluded that teachers who felt supported by their principals, staff, parents, and district felt more satisfied with their teaching positions and rated themselves as having higher teacher efficacy. The study indicated that differences were noted across schools rather than program type, suggesting that support systems need to reflect considerations for TWBI programs at schools and districts. High efficacy was also noted in programs where teachers planned together and felt the students' diverse needs were met. Teachers with higher efficacy provided more positive environments and tended to use strategies specifically for second language development. This study is included in the literature review so educators will carefully consider the strong connection between teacher efficacy and program satisfaction.

In a small-scale study, Calderón (1995) reported that creating a Teacher Learning Community (TLC) in two TWBI 50/50 schools fostered peer ethnographies to analyze and discuss data collected by the teachers. The experience created a cycle of observation, analysis, reflection, readjustments, and continuous learning with the staff. The importance of this small study is the manner in which a supportive system can positively influence teacher efficacy. Other studies with Navajo/English TWBI programs concluded that teachers who held a personal stake in these programs revitalized their community interest, involvement, and support for the program (Goodluck, Lockard, & Yazzie, 2000). Similarly, bilingual teachers understand the social and linguistic issues pertinent to their school communities and the importance

of their advocacy for marginalized groups of students in Spanish/English programs (Howard et al., 2003).

Instruction in Both Languages

Program models in TWBI must plan for the amount of instruction delivered in each language at each grade level. All teachers must have a sense of fidelity to the model design for consistency of language ratios and instructional practices (Sugarman & Howard, 2001). Curriculum planning and articulation should be built into the program model to create a cohesive design across grades and/or feeder schools. Programs must consider high quality materials for both English and the minority language, and must reflect a multicultural curriculum to address the goal of cross-cultural competence (Cloud et al., 2000; Lindholm-Leary, 2001; Sugarman & Howard).

The manner in which teachers use English and the minority language in class varies within studies in TWBI programs. Lindholm-Leary (2001) indicated how teachers maintained the fidelity to the program by avoiding code-switching between languages when delivering instruction. Other studies revealed the linguistic challenges of maintaining the separation of languages during instruction as teachers felt unqualified or unprepared to use specialized strategies. Teachers also felt pressured by students or adults to use concurrent translation, code-switching, or to permit students to use the dominant language as a medium of communication instead of the language of instruction (Carrigo, 2000; Johnson, 2000). However, research in this area agreed with the premise that theoretically grounded teacher preparation programs were

considered vital in providing congruity between teacher beliefs and practices (Flores, 2001; Howard et al., 2003; Lindholm-Leary, 2001).

Although studies consistently addressed the ratio of languages of instruction and emphasized separation of languages for instructional purposes, studies were limited on how teachers delivered instruction. The current research of the related literature review lacks documentation on identifying the specific strategies teachers used in their classrooms, the reasons for implementing the strategies, and how the teacher acquired such strategies.

Benefits and Challenges

Teachers and researchers have reported that TWBI programs enable students to develop high levels of language proficiency and academic achievement for language-minority and language-majority students, as well as cross-cultural appreciation of other cultures represented in the classroom (Genesee et al., 2006; Lindholm-Leary, 2001; Lopez & Tashakkori, 2003; Thomas & Collier, 2002). Teachers reported that TWBI models have the potential to eradicate the negative status of bilingual education in schools and communities that provide English-only instruction, and provide cross-cultural attitudes among all school staff (Howard et al., 2003). In a worldwide perspective, Genesee (2004, 2009) stated that TWBI programs can meet the demands for bilingualism and multilingualism due to the globalization of business and commerce. The internationalization of industries, telecommunications, and the Internet have increased the demand for doing business in local and regional languages (Lindholm-Leary & Genesee, 2010). Also, the increased emphasis of our national

security has awakened a critical need for the development of languages other than English (Richey, 2007).

Teachers are aware of the challenges of working in TWBI programs. Howard and colleagues (2003) reported that teachers perceived teaching in two languages as the following: (a) highly demanding since equitable materials may not be available, (b) increased linguistic complexity in the classroom, (c) parents may be unaware of how the program works, (d) tensions may develop between TWBI teachers and English-only counterparts in separate program strands within the same school, and (e) TWBI teachers may need additional training on using appropriate instructional strategies. These challenges can affect the overall implementation of TWBI programs. Therefore, inquiry-based research is needed to document teacher narratives in order to understand the complexities in TWBI programs affecting instructional strategies and teacher efficacy.

Many TWBI programs have experienced setbacks due to statutory measures against bilingual education, such as California's Proposition 227 (Crawford, 1992, 1999; McField, 2008), and the high-stakes assessment/accountability demands of NCLB (Baker, 2006). In connection to accountability, teacher concern to maintain the TWBI program design at their schools increased with pressure to prepare students for high-stakes testing in English (Ray, 2008). Also noted by Ray was the importance of maintaining the minority language as the language of instruction, as teachers' sensed urgency to focus on instruction geared toward enhancing English performance on state assessments. This study is crucial to the literature review, because many TWBI

schools in California and other states are facing this national dilemma. Finally, Ray stated, "The belief system of the teacher provides insight into motivations for current practice...it is highly influential on the daily work of teachers" (p. 1668). Similarly, Lindholm-Leary (2001) noted that the factors over which teachers had control were not related to satisfaction. Instead, fulfillment or dissatisfaction was related to how well the school's program met the needs of the students, the level of administrative and community support, and their involvement in program planning.

The issue of using more English in TWBI programs in order to perform better on standardized tests by reducing the time spent on the minority language is a concern for many teachers. Lindholm-Leary and Genesee (2010) explicitly explained this new phenomenon appearing in TWBI program designs without scientific proof that this tactic works. On the contrary, adding more English "time-on-task" does not expedite the acquisition of English and improve test scores. First, research evidence presented earlier in this dissertation demonstrated that students who receive instruction through their first language actually score higher than students who receive English-only instruction. Second, large- and small-scale studies conducted on the impact of Proposition 227 and the achievement of students in California found that increasing the ELs' exposure to English did not make a difference in outcomes (Parrish et al., 2006). In addition, students who were shifted from bilingual programs into Structured English Immersion (SEI) programs after the onset of Proposition 227 exhibited diminished results in reading by 12% and a math loss of 27% in grade 3-5 (Gordon & Hoxby, 2002). Finally, ELs who had more instruction in English through participation

in 50/50 programs did not achieve at higher levels in English than ELs in 90/10 programs with less exposure to English in the early elementary grades (Lindholm-Leary & Howard, 2008).

In relationship to the literature, limitations found in the methodologies were connected to the manner in which the teacher data were collected. Most studies presented an analysis of teacher beliefs through self-reported practices on surveys or questionnaires, mainly attitudinal surveys. Few studies conducted classroom observations or videotaping of lessons. Only the small-scale studies conducted some teacher interviews. There was an apparent gap in the literature with regards to studies using mixed methods approaches to triangulate the data between the surveys/questionnaires, classroom observations, and teacher interviews. Only one study conducted by Fortune, Tedick, and Walker (2008) on integrated language and content teaching included a methodological approach that triangulated videotapes of classroom sessions, interviews, and reflections. However, the study was limited to five teachers from three different immersion schools, and only one of the participants was from a TWBI program. The rest of the teachers were from one-way immersion programs involving language-majority students, not ELs. It is hard to generalize outcomes for instructional practices when one TWBI teacher participated in the study.

Summary

Teacher efficacy is one of the themes most explored in TWBI instructional practices. Overall, teachers in these programs tended to be well qualified with appropriate credentials and training in second language acquisition theories. Teachers

seemed motivated to work in diverse settings and understood their role as advocates for their students. The second area most widely investigated was the instruction of languages in the classroom. The findings mainly explained the manner in which teachers stayed true to the model by implementing instructional blocks to separate languages for instruction, or reported how teachers deviated from the model and used code-switching or more English language with the students in class. Some studies explored the pressures felt by teachers to use more English in the model due to the urgency for high-stakes testing. Most of the literature review focused on studies of instructional language ratios, rather than on instructional practices for both languages. Studies also explored the benefits and challenges perceived by teachers in the program. Limitations of these studies are that they were largely based on attitudinal studies versus an examination of strategies implemented in the classrooms.

Summary of Literature Review

The scientific research on TWBI programs has a rich data source on academic achievement of students in reading and mathematics, whether students are enrolled in 90/10 or 50/50 configurations (Howard et al., 2003; Lindholm-Leary, 2001). Most of this data is acquired from state standardized measurements in English and the minority language, if tests are available in other languages. Data analysis shows that the English academic gap between ELs and EP narrows by fifth grade and closes by late elementary grades or middle school (Collier, 1992; Lindholm-Leary, 2001, 2005; Thomas & Collier, 2002). The reason for the closure stems from the research

knowledge that ELs participating in TWBI programs maintain their primary language while learning academic English and developing cognitive thinking; therefore, students outperform ELs in English-only programs (Genesee et al., 2006; Howard et al.; Thomas & Collier). Studies have demonstrated that there is a relationship between high-level proficiency in the primary language, and greater transferability to higher proficiencies in the second language (August & Shanahan, 2006; Howard et al.; Lindholm-Leary, 2001, 2005; Thomas & Collier). The research has indicated that language-majority students also benefit from increased cognitive academic language skills and additive bilingualism without any loss to their primary language (Cummins, 1994, 2000, 2008).

The research confirms that the program model can make a difference for ELs, since more time spent in the primary language yields higher academic achievement in English, contrary to the belief that more time in English increases the development of the second language more rapidly (Genesee et al., 2006, Genesee & Lindholm-Leary, 2010). ELs in segregated, predominantly Hispanic, low-income schools enrolled in TWBI programs achieve at or above peers in mainstream English programs (Alanís, 2000; Lindholm-Leary & Block, 2010). Attitudinal surveys and questionnaires on cross-cultural competencies have demonstrated positive beliefs about how students perceive their participation in TWBI, self-image, and desire to attend college (Lindholm-Leary & Borsato, 2002). TWBI students have the lowest rate of high school dropouts and the highest rate in passing high school exit exams, if they have

attended a TWBI program through the middle school years and beyond (Lindholm-Leary, 2009).

Research shows that teachers with more preservice preparation in bilingual theories and second language learning have more positive attitudes toward the program (Calderón, 1995; Flores, 2001; Lindholm-Leary, 2001). Teachers perceive satisfaction in TWBI when they know the goals are meeting the needs of the students by keeping true to the model and not deviating from the design for the sake of standardized state testing (Sugarman & Howard, 2001). Teachers feel high levels of self-efficacy when they know their principals and staff support their programs and understand the theories of bilingual education (Lindholm-Leary). Research on the Guiding Principles shows the importance of teacher planning and a well-developed curricular outline for effective programs (Howard et al., 2007).

Future Research for Two-Way Bilingual Immersion

Highly qualified staff and professional development is critical to the success of the programs (Howard et al., 2007; Lindholm-Leary, 2005). Further research is needed to identify specific teacher behaviors and instructional practices that are associated with effective TWBI programs and the model variations. There is limited research on how to make instruction more accessible and meaningful to students, in particularly the areas most challenging to the students, such as science and mathematics (Lindholm-Leary & Howard, 2008).

In addition, there is a clear lack of observational and ethnographic studies on academic achievement, dual language, and biliteracy development in TWBI contexts.

There needs to be a deeper understanding of how students develop language in the various TWBI configurations (90/10; 50/50, and other differentiated models). There is scant literature on the negotiation of language in the classroom for conversations around content and literacy (Genesee et al., 2006). More scientific research with comparison groups and longitudinal studies is needed to further learn about the implications of dual language instructional practices with language-minority and language-majority students (August & Hakuta, 1997; Howard et al., 2003; Lindholm-Leary, 2001). There needs to be better understanding of student backgrounds in TWBI, as to who is more successful in these types of programs and outline the reasons why there are different outcomes for the students. Also, more research is necessary to understand the achievement of English speaking students who come from diverse backgrounds and ethnicities, in addition to what is already known about the success of White middle class students in these programs.

Most of the research in TWBI is predominantly focused on elementary grades, meaning there is a dearth of studies in the implementation of these programs at the secondary level. No studies were found on the differences between K-8, K-5, and 6-8 grade configurations in TWBI programs. A handful of studies addressed the goals and challenges of implementing TWBI at the middle school level.

There is no evidence of empirical research studies that have examined the effectiveness among the different models of 50/50 programs, which seems to be a current issue as these programs are implemented without scientific data on best models developing simultaneous literacy. There is also scant research on examining

the teaching and learning of the minority languages in the models, since much of the research revolves around the academic proficiency of the students in English.

Statement of Purpose

Although there are abundant documents on the development of salient features for effective TWBI programs, there is a lack of empirical research associated with teacher instructional strategies. Studies have documented how highly trained and qualified teachers account for the higher success rate with English learners. However, few studies document the type of behaviors exhibited by highly qualified teachers in TWBI programs and how they have developed their expertise in the field. Various surveys have reported that site principals are critical support system for teachers, when the administrator approves and clearly demonstrates interest in the teachers, students, and program. Although current focus on Professional Learning Communities (Dufor, Dufor, Eaker & Many, 2006; Marzano, 2003) claim importance of social supports and networks for teachers, additional research is needed on how these types of support systems within the schools or districts affect TWBI teacher practices and efficacy. Studies lack insights on how TWBI teachers make daily decisions about instruction and which techniques are used for short- or long-term planning, selection/adaptation of materials/resources, or type of activities throughout the day. In reality, teachers are the heart of the programs and without the opportunity to capture their voices, minimal information is known about their instructional strategies and decision-making.

This dissertation provides a snapshot into the workings of TWBI classrooms and augments the shared knowledge regarding instructional practices. The research study examines the types of instructional strategies used to develop, maintain, and connect languages in TWBI classrooms. The purpose of the study is to examine the instructional strategies teachers use to develop biliteracy and cross-cultural competence in two-way bilingual immersion programs. The research analyzes the reasons why teachers use these strategies and how they gain new insights about instruction through their day-to-day successes and challenges in the classrooms. Lastly, the research synthesizes how teachers implement the frameworks in the Guiding Principles, their knowledge-base/trainings, and support systems that maintain the implementation of their strategies.

Research Questions

The research addresses the following research questions:

1. How have TWBI teachers gained their knowledge base and professional support to implement the strategies they use in class?
2. How are the Guiding Principles for Dual Language Education assisting teachers in the implementation of their instructional strategies?
3. How do TWBI teachers describe successes and challenges in their instructional strategies to develop biliteracy and cross-cultural competence with program participants, including English Learners and English Proficient students?
4. How do the successes and challenges of their instructional strategies bring about new perspectives or innovations in their practice?

CHAPTER 3

Methods

This chapter outlines the methodology for the research. The beginning of the chapter states the purpose of the study and research questions. The proposed research design of a single-case study using qualitative measures is outlined in three phases. The sampling includes nine teachers from two distinct dual language programs in California. The criteria for the selection of the schools sites and teachers are also described in this chapter. A detailed explanation of the instruments and their purposes is discussed and referenced along with the supporting documents found in the appendixes. A discussion of the data collection and analysis, including the coding techniques and overarching themes, is outlined with details on various tables. Criteria for judging the quality of the research is presented through a presentation of factors influencing the validity and reliability of the procedures. The instruments used in a pilot study conducted in 2009 are explained to support the selection of the methods and tools for the proposed research. The chapter concludes by presenting the researcher's positionality and limitations of this dissertation.

Purpose of Study

The purpose of this research was to examine the instructional strategies teachers used to develop biliteracy and cross-cultural competence in two-way bilingual immersion programs. The study analyzed the reasons why teachers used these strategies and how they gained new insights about instructional practice based on their successes and challenges with the strategies. The research also analyzed how teachers utilized the Guiding Principles for Dual Language Education (Howard et al.,

2007) frameworks to guide their instructional strategies. Lastly, the study synthesized the knowledge base and support systems that maintained the implementation of their strategies.

Research Questions

1. How have TWBI teachers gained their knowledge base and professional support to implement the strategies they use in class?
2. How are the Guiding Principles for Dual Language Education assisting teachers in the implementation of their instructional strategies?
3. How do TWBI teachers describe successes and challenges in their instructional strategies to develop biliteracy and cross-cultural competence with program participants, including English Learners and English Proficient students?
4. How do the successes and challenges of their instructional strategies bring about new perspectives or innovations in their practice?

Research Design

Epistemology: Constructivism

This dissertation addressed the research foundations through the philosophical assumptions of constructivism. This term is associated with the understanding or meaning of a phenomenon formed by socially constructed interactions with others and their own personal interpretations, histories, and narratives (Creswell & Plano Clark, 2007). This methodology was shaped from a bottom-up perspective to generate the notions that guide practices in dual language contexts. The approach was part of cultivating a community of practice that generated the process in which teachers

determined which strategies and structures were more or less likely to be accepted in their fields (Mir & Watson, 2000; Wenger, McDermott, & Snyder, 2002). *Communities of Practice* are groups of people who share a passion about a topic and deepen their expertise by often collaborating with peers (Wenger et al.). Through this approach, participants defined their shared assumptions through conversations that linked theory to practice as transparent processes in dual language education. Through peer collaboration, theories guide the discursive practice of inquiry by participating in the process of the study within the conversations of a community of mutually held assumptions, rather than merely observing reality through the lenses of the researcher and reporting the findings through one vantage point. In the following statement, Mir and Watson confirm that knowledge is theory-driven:

While realists conceive of the research process as *excavation*, where the terrain of phenomena is mined for valuable nuggets of naturally occurring insight, constructivists view the process more as an act of sculpting, where the imagination (or the theory-base) of the artist interacts with the medium of phenomena to create a model of reality which we call knowledge. (p. 943)

The purpose for utilizing a constructivist epistemology in this study was to use a frame of reference or an assumption to make sense of strategies used in the classroom by TWBI teachers. This methodology worked at the level of assumption made by the researcher that reality was socially constructed with the participants to avoid the perils of overgeneralization and universality (Mir & Watson, 2000). The appropriateness of this methodology assisted the researcher to understand the foundations of the strategies used within the context of teaching and learning in TWBI programs. This allowed the researcher to formulate assumptions about practices

through a theoretical perspective of “organizational-environmental dichotomy” (Smircich & Stubbart as cited in Mir & Watson, 2000, p. 950) in which the researcher needed to recognize how the experience was enacted or socially constructed in the organizational setting, rather than interpreting a perceived notion of the practice.

Qualitative Method: A Case Study Approach

Qualitative research is designed with a philosophical supposition to guide the collection and analysis of data through a naturalistic approach (Miles & Huberman, 1994). This research design explicated how teachers implemented instructional strategies in TWBI. The method provided comprehensive evidence to the problem statement by capturing the perceptions of the local actors from their own classrooms. This process of intense investigation outlined how teachers planned and managed their day-to-day instructional procedures. The qualitative data analysis offered varied perspectives from the field in which to examine teachers’ lived experiences “from the inside core of the classroom” about teaching and learning in a dual language context.

A case study approach (Yin, 2009) focused on this phenomenon within a real-life situation by gathering multiple sources of data for triangulation. Yin provided a twofold definition for a case study: the scope and logic of the design as well as the data collection and analysis. Yin stated the following:

A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident...The case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulation fashion, and as another

result benefits from the prior development of theoretical propositions to guide data collection analysis. (p. 18)

A single-case study approach for typical or representative research (Yin, 2009) captured the circumstances of instructional strategies implemented in typical designs of TWBI programs with representative teachers in the field. The objective of this single-case study was to capture the circumstances and conditions of the teachers' everyday situations in the classroom. The explanatory nature of the case study can inform the field about the experiences of representative teachers in dual language programs. In addition, the researcher explained the phenomenon of the strategies implemented by the teachers to develop biliteracy and cross-cultural competence with the students in the program. Lesson observations, teacher reflections, and photo-elicitation interviews provided data analysis through a revelatory approach.

Photo-Elicitation

This research examined the methodology of photo-elicitation as part of the qualitative research. The approach permitted teachers to intensively explore their instructional strategies in their TWBI classrooms. *Photo-elicitation* is when a research interview is conducted with photographs as a projective stimulus or probe (Harper, 2002; Heisley & Levy, 1991). The premise of photo-elicitation is that "images evoke deeper elements of human consciousness than do words" (Harper, 2002, p. 13). According to Harper, this involves using different parts of the brain to elicit conversations; therefore, the process may yield a different cognitive frame and dimension of information than simply automatic responses in an interview governed by the researcher, as photos sharpen the informants' memory and reduce areas of

misunderstanding. In addition, Harper noted that pictures elicit lengthier and more detailed conversations in direct response to visual prompts without the fatigue of answering questions in conventional interviews.

In addition, photographs have been thought to generate an “unmediated and unbiased visual report” of raw material that becomes a receptacle that triggers meaningful personal narratives with the viewers for rich data sources (Schwartz, 1989, p.120). Photos encode data and evidence in a single representation, which informs or allows individuals to reflect at levels in which speech and writing cannot evoke (Rose, 2007). According to Rose, the process of photo-elicitation has six stages: (a) an initial interview to present the idea of photo-elicitation; (b) interviewees are given a camera; (c) photos are developed and interviewees write a reflective piece; (d) researcher conducts a photo-elicitation interview; (e) photographs and interview data are interpreted, coded, and categorized by themes; and (f) report of research findings is about the discourse analysis between the researcher and the interviewees.

Methodological Procedures

The first phase (see Table 3.1) of the qualitative study commenced with a walk-through/casual observation of four to five classes at two elementary schools providing TWBI programs in San Diego and Los Angeles counties in California. The researcher used this opportunity to get acquainted with the learning environment and culture of each class. At the end of the day, the researcher met with the TWBI teachers in one of the classrooms for an orientation meeting concerning the study.

In the second phase (see Table 3.1) of the qualitative study, the teachers prepared a photo-journal of their strategies (see Appendix B) to document important aspects of their instructional programs. Teachers photographed their classroom environments, progression of lessons, student work samples, participation of students, group structures, or other means of portraying their strategies in the learning environment. Using a constructivist approach to photo-elicitation (Harper, 2002; Rose, 2007), teachers created their own frameworks for photographing items, structures, and/or participants within a unit of study during the spring semester. The purpose was to capture teachers and students involved in their natural process of teaching and learning during a segment of their regular school year and everyday classroom contexts/routines. For this research, teachers were instructed not to recreate any specific tasks for the photographs or deviate from their district/state curricular standards or procedures, such as pacing guides. The procedure was to collect images of authentic situations occurring in their normal environment. The timeframe to collect the photographic data for this phase was the spring semester of the 2009-2010 school year.

During this timeframe (see Table 3.1.), teachers prepared a photo-journal (see Appendix B) of the selected photographs prior to the photo-elicitation interview. According to Briggs and Coleman (2007), journals stimulate additional explanation, clarify data, and allow the researcher to gain insights into current patterns of educational life. Journals act as a record of objective notes and free-flowing accounts made available about the “inside” information that might not be available or visible to

the researcher. The photo-journal acted as a source of “substitute for observation” (Briggs & Coleman, p. 300) when the researcher was not available or present to capture the moment. Combined with other forms of data collection and analysis (see Table 3.1), journals deepened the representation of what the phenomenon meant to the group or individual teachers. The photo-journals were semistructured with close- and open-ended questions for the participants.

During phase two, the teachers participated in a focus group interview at each school site through an Appreciative Inquiry protocol approach (see Appendix C). *Appreciative Inquiry* (Preskill & Catsambas, 2006) is a group process that allows individuals to recognize best practices, affirm strengths, successes, assets, and potentials by developing an inquiry around the phenomenon, issues, challenges or changes that energize the members of an organization. It is a constructivist approach related to the perceptions and shared understandings of the organization. The process is a positive experience that stimulates vision and creativity through a participatory engagement that is affirmative, inquiry-based, and improvisational. The EnCompass Model of Appreciative Inquiry (see Figure 3.1) allows the participants to inquire, imagine, innovate, and implement (Preskill & Catsambas, 2006, p. 15). In the first stage, the Inquire/Discovery process, the participants share stories through peak experiences in the interview process. The second stage is the Imagine/Dream stage where participants envision the possibilities of the organization through visualization exercises. In the Innovate/Design stage, individuals begin to strategize and create

change. And in the last stage, the Implement/Destiny phase, the participants implement the innovations and monitor propositions to evaluate results.

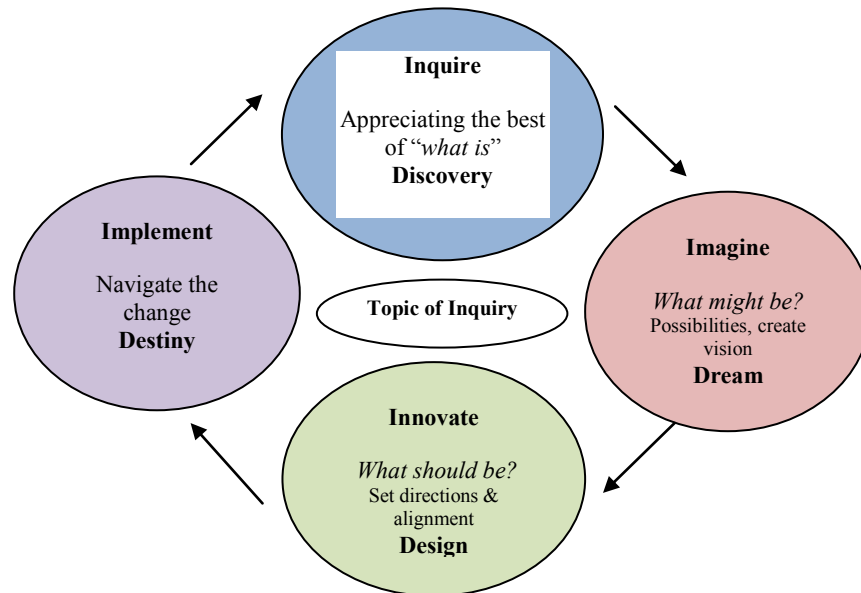


Figure 3.1: *The EnCompass Model of Appreciative Inquiry: The "4-1" Process*

After the completion of the photo-journals (two to three weeks), the teachers met individually and in focus groups with the researcher and described 5 to 10 of their visual images through an "Appreciative Inquiry: Photo-Elicitation" interview (see Appendix C). Teachers applied the principles of appreciative inquiry for this process: (a) Discovery/Inquiry saw the photographs through fresh eyes and told their stories, (b) Imagine/Dream immersed teachers in the context of their classroom strategies to validate practices and set new visions, (c) Innovate/Design discussed new understanding and strategized new insights through the Guiding Principles of Dual

Language Education (Howard et al., 2007), and (d) Implement/Destiny debriefed how the process of photo-elicitation developed new perspectives, modifications, or innovations to incorporate future strategies. By the end of the session, the teachers identified and classified photographs from their photo-journals by themes. Teachers also examined the effects of the strategies through stories/narratives of successes and challenges.

During the photographic phase of the study (second phase, see Table 3.1), the researcher contacted the teachers to schedule a formal lesson observation (see Appendixes F and G) of each of the classrooms using the Guiding Principles for Dual Language Education Rating Template: Strand 3, Instruction, Action Plan (Howard et al., 2007). The principles were based on the Dual Language Program Standards developed by the Dual Language Education of New Mexico. It is organized into seven strands, reflecting the major dimensions of program effectiveness, such as assessment and accountability, curriculum, instruction, staff quality and professional development, program structure, family and community, and support and resources. For the purpose of this study, the researcher only used the Guiding Principles' strand for instruction. The researcher observed lessons that addressed the principles of dual language instruction: (a) Principle 1 instructional strategies derived from research-based principles, (b) Principle 2 strategies that enhanced the development of biliteracy, (c) Principle 3 instruction was student-centered, and (d) Principle 4 creation of a multilingual/multicultural learning environment. After the researcher conducted

this formal observation, the teachers submitted a reflection (see Appendix D) of their implementation of the Guiding Principles.

During the third phase (see Table 3.1) of the research study, the teachers completed a questionnaire (see Appendix E) related to their demographic information, background knowledge, and support systems at their school or district. The use of a questionnaire provided the researcher with additional data sources to compare and contrast with other documents gathered during the study. The researcher was able to merge, integrate, link, and/or embed the data sources in a triangulation analysis. The analysis provided opportunities to examine the emerging themes and use of similar strategies to determine if there was evidence for generalizability of the instructional strategies within and across each of the teachers/schools in the study.

The following table outlines the process of the case study in three phases with the timeframe, methods employed, and their purposes (see Table 3.1).

Table 3.1: *TWBI Case Study Methods*

Timeframe	Methods	Purpose
Phase 1: Orientation (1 day at each site) February 2010	Walk-through/Casual Observation: Researcher visited classrooms for first time.	Observed overall classroom instructional practices.
	Group Meeting: Orientation, purpose of study, and protocols.	Explained research process and instruments to teachers after school.
Phase 2: Data Collection: Researcher and teachers (February-April, 2010)	Photographs:	
	Teachers photographed their classroom strategies and created photo-journals.	Photos documented images of TWBI classroom strategies. Photos shared at the AI interviews.
	Formal Observations:	
	Researcher observed classes and collected data with the Guiding Principles of Dual Language Rating.	Observations provided another source of data to compare and contrast with the teachers' photo-elicitation, Guiding Principles, and reflections.
	AI Interviews:	
	Individual and focus group interviews for photo-elicitation.	Debriefed and classified photographs with teachers. Collected photo-journals. Discussed observations.
	Reflections:	
	Teachers submitted their documents to researcher.	Teachers reflected on their instruction strategies, lessons, and photo-elicitation process.
Phase 3:	Questionnaires:	
Questionnaire (April, 2010)	Teachers completed and submitted questionnaires to researcher.	Collected demographic data, background knowledge, and support systems of participants to match with implementation of strategies.
Transcriptions (May-June, 2010)	Researcher transcribed interviews. Sent transcripts to teachers for "members check."	Coded transcripts. generated categories and themes.
Data Analysis (July-September, 2010)	Researcher began and completed data analysis.	Used multiple data sources for triangulation analysis.

Population and Sample

Participants

The participating teachers at Victory and Evergreen schools had students enrolled at the TWBI programs described in this section. The TWBI program at Victory School was considered an optional educational opportunity for the students and it was a strand within the school that offered other programs, while Evergreen School was a magnet TWBI school in its district. A magnet school is a public school that offers specialized courses or curricula to attract student enrollment across their neighborhood school boundaries. Victory and Evergreen schools were selected for the research because their TWBI programs met the following criteria established by the Center for Applied Linguistics (CAL, 2009): (a) a minimum of 50% to a maximum of 90% of instruction in the target language, (b) strict separation of languages for instruction (no translation), and (c) balanced classes with close to equal ratios of students who are English Proficient and English Learners.

Teachers. The sample-size included nine bilingual teachers at two elementary TWBI programs within Southern California. The teacher population sampling represented schools located in urban areas implementing 90/10 TWBI program designs (see Chapter 2). The sampling is a typical or representative design (Creswell, 2008) in which the study used teachers who were “representative” of TWBI programs and were identified by a convenience sampling. Creswell defined a convenience sampling as participants who are willing and available to be studied, as well as convenient subjects to the researcher. Teachers were identified through a purposeful

sampling of TWBI teachers from a snowball effect. A snowball sampling effect is defined by Creswell (2008) as an alternative to convenience sampling in which the researcher “asks participants to identify others to become members of the sample” (Creswell, p. 155). The teachers selected for the study were recommended by individuals, such as researchers, principals, directors of instruction, resource teachers, and/or exemplary teachers in the field. Recommendations were based on the criteria established to select the participating teachers (see Sampling Procedures). Prior to commencing the study, the researcher identified the participants in the research at each of the schools. Although the sampling did not represent TWBI teachers across all programs, the study included representative teachers in these programs.

The criteria established to identify the “representative teachers” in the program corresponded to individual recommendations of teachers with a minimum of three to five years of experience teaching in a TWBI program. Teachers had acquired the California state certification to teach in diverse and bilingual settings known as the Bilingual, Crosscultural Language and Academic Development (BCLAD) certificate. The teachers instructed language arts or subject matter instruction in English and/or the target language in the TWBI program in self-contained classrooms or in a team teaching approach. Teachers in this convenience sampling had literacy proficiency in English and Spanish and held a valid Multiple Subjects credential.

Schools. Two California locations for the study included TWBI programs in San Diego and Los Angeles counties. Both sites were identified as convenience samplings of schools that were listed on the Directory of Two-Way Bilingual

Immersion Programs in the U.S. (Center for Applied Linguistics, 2009) and had met the criteria established for dual language programs. Pseudonyms for the schools were used throughout the study to protect the identity of the research participants. The following paragraphs offer a description of the sites.

Evergreen Elementary School (pseudonym), grades K-6, was in a moderately large urban district in the county of San Diego and offered a language academy option for families interested in the two-way Spanish immersion program that was noted as a well-established 90/10 model for close to 20 years in existence (see Chapter 2). The school was located 11 miles from the U.S.-Mexico border. According to the 2008-2009 DataQuest reports from the California Department of Education (CDE), the school's population was 990 with 87% Hispanic, 4% White, 5% African American, and 4% other. This program was recommended by the director of English Learners and Support Services in the San Diego County Office of Education as a school that was implementing various dual language strategies and included some of the founding teachers of the program as well as new faculty. Evergreen School was also been recommended by TWBI leading researcher, Dr. Kathryn Lindholm-Leary, who had been the program evaluator, and was familiar with the implementation and history.

The second site was Victory Elementary (pseudonym), grades K-5, a California Distinguished School located in a large urban district in Los Angeles County. According to the 2008-2009 DataQuest reports (CDE), the school had 480 students representing 53% Hispanic, 34% White, 8% African American, and 5% other. The school had been awarded the California Association Bilingual Education Seal of

Excellence in 1997, and had had a well-established 90/10 program design for more than 20 years. The program had served as a model for other schools establishing 90/10 models in the district. Some of the original staff, who founded the TWBI program, still taught at this site. Dr. Lindholm-Leary, former evaluator of the program, had also recommended this site for the research study.

California's accountability system for academic achievement of all schools K-12 is based on state requirements established by the Public Schools Accountability Act (PSAA) of 1999 and on federal requirements established by No Child Left Behind (NCLB) Act of 2001. The following tables offer information concerning the schools' Adequate Yearly Progress (AYP) (see Table 3.2) and Academic Performance Index (API) (see Table 3.3) scores for California schools in 2009. The AYP report indicates school academic performance and participation on attainment of common standards in math and English language arts (ELA). The API is a number between 200 and 1,000 and is calculated from the students' standardized test results. The state has set 800 as the API target for all schools and those that fall short of 800 are required to meet annual growth targets each year until school meets attainment of goals. Also included are scores for subgroups and the schools' Program Improvement status. Schools and educational agencies that do not attain Adequate Yearly Progress are identified as Program Improvement (Years 1-5) under the Elementary and Secondary Education Act (ESEA). More detailed information on scores and rankings can be found in the Sampling Procedures section following the tables.

Table 3.2: 2008-2009 AYP Scores for Evergreen and Victory Schools
California State Department of Education

Evergreen School K-6	Participation Rate	Participation Rate	Proficiency Rate	Proficiency Rate
Met 17/17 AYP Criteria	ELA	Math	ELA	Math
Schoolwide	Y	Y	Y	Y
Hispanic/Latino	Y	Y	Y	Y
Socially Disadvantaged	Y	Y	Y	Y
English Learners	Y	Y	Y	Y
PI Status – Year 4				
Victory School K-5	Participation Rate	Participation Rate	Proficiency Rate	Proficiency Rate
Met 21/21 AYP Criteria	ELA	Math	ELA	Math
Schoolwide	Y	Y	Y	Y
Hispanic/Latino	Y	Y	Y	Y
Socially Disadvantaged	Y	Y	Y	Y
English Learners	Y	Y	Y	Y
PI Status – None				

Table 3.3: 2008-2009 API Scores for Evergreen and Victory Schools
California State Department of Education

Evergreen School K-6	2008 Base	Rank	Growth	2009 Growth
Schoolwide	702	2	26	728
Hispanic/Latino	693		5	698
Socially Disadvantaged	670		7	677
English Learners	656		7	663
Victory School K-5	2008 Base	Rank	Growth	2009 API
Schoolwide	813	7	23	836
Hispanic/Latino	782		15	797
Socially Disadvantaged	754		30	784
English Learners	735		33	768

Sampling Procedures

The population for this study consisted of nine teachers from two TWBI programs in two distinct districts and counties in California. Both program designs were 90/10 models of TWBI. Evergreen School ranked number two on the California ranking of schools, while Victory School ranked seven (see Table 3.3). According to the CDE (2008-2009), ranking is measured by deciles in which 10 is the highest and 1 is the lowest score. The school's API determines its rank. API growth is determined on a yearly basis by using the previous year's baseline score. Schools must meet their projected growth target each year. Schools that participated in this study met all their schoolwide and subgroups' API targets for 2009 (see Table 3.3). Although one of the

two schools was in their fourth year of Program Improvement, the school continued to meet their targeted scores.

Purposive sampling was used to identify the criteria for the schools' selection. The rationale for the first criterion reflected the school's performance on statewide assessments, the second resulted from the criteria established for TWBI programs by the Guiding Principles (Howard et al., 2007), and the third criterion was based on the school's willingness to participate in the study (convenience sampling). Although state assessments do not test students by programs of instruction, it was apparent that English Learners were approximating the English language arts standards in their TWBI programs. Teachers participating in the study were recommended by individuals who knew them as dedicated two-way bilingual teachers who met NCLB criteria as highly qualified educators in their field, and were also willing to participate in the study.

Ethical Considerations

In order to protect the rights of the participants in the study, I completed the Institutional Review Board (IRB) application and process for the protection of human subjects through California State University, San Marcos and the district's Office of Research, Planning, and Evaluation of the school located in Los Angeles County. The district required that I file an application to conduct research and shortly afterward their IRB office approved the research. The research participants signed the Teacher Consent to Participate in Research form (see Appendix H) delineating the risks, inconveniences, safeguards, and benefits with their involvement in the study. TWBI

parents and students at both schools also signed consent forms to participate in the photographs and lesson observations (see Appendix I).

Participation in the research study was on a voluntary basis and participants could terminate their involvement at any time during the process without any consequences to them. Confidential files of interviews, photo-journals, reflections, observations, and questionnaires were only available to the researcher for data analysis. Teacher interviews were conducted in private conference rooms on campus without the presence of school administrators or other staff members. Photo-elicitation interviews were only used to discuss instructional practice, not the individual students' identity or background information. Photographs were only used for the purpose of this dissertation, not for public release. Pseudonyms for the schools were used in this study to protect the identity of the participants, and teachers were not identified by name, grade, or years in the program. Transcriptions of interviews, electronic copies of teacher reflections, questionnaires, and data sources (codebook, tables, and comparison charts) were kept on the researcher's computer with password-protected files. Photo-elicitation journals, lesson observations, field notes, and hard copies of electronic files were also organized and kept in a binder under the possession of the researcher.

Measurements

Instrumentation

The following instrumentation was used in the study to answer the research questions: (a) Photo-Journal (Briggs & Coleman, 2007) (see Appendix B), (b) Appreciative Inquiry group interview (Preskill & Catsambas, 2006) (see Appendix C), (c) Teacher Reflection Form (Howard et al., 2007) (see Appendix D), (d) Questionnaire for TWBI Teachers (Lindholm-Leary, 2007) (see Appendix E), and (e) Lesson Observation Instrument (Howard et al., 2007) (see Appendix G). In addition, the researcher kept field notes of classroom visitations related to the learning environment, seating arrangements, displays, and materials available in the classrooms. The alignment of the research questions and the methodology used in the study are outlined in Table 3.4. The information recorded on the table stated the questions, described the instruments, the purpose, the validity and reliability of the instrumentation, who was responsible for the completion of the instrument, and references to the documents in the appendixes.

Table 3.4: *Research Questions and Methodology*

Research Question	Instrument	Purpose	Validity (V) & Reliability (R)	Who/What
How do TWBI teachers describe successes and challenges in their instructional strategies to develop biliteracy and cross-cultural competence with program participants?	Photo-Journal	Photo-elicitation	V: Evidence of strategies R: All teachers used same data collection protocols	Teachers Appendix B
	AI Interview	Narratives about strategies	V: Appreciative inquiry protocol is research-based R: Same protocol administered at each site under similarity of conditions	Researcher Appendix C
	Lesson Observation	Observe lesson & document strategies	V: Guiding Principles Research-based rating scale R: Same protocol administered with each teacher	Researcher Appendix G
	Teacher Reflection & Questionnaire	Rating scale & questions	V: Guiding Principles is a research-based tool R: Same protocol administered	Teachers Appendixes D & E
How do the successes and challenges of their instructional strategies bring about new perspectives or innovations in their practice?	AI Interviews	Narratives about strategies	V: Appreciative inquiry protocol is research-based R: Same protocol administered under similar conditions	Researcher Appendix C
	Teacher Reflection	Rating scale & questions	V: Guiding Principles is a research-based tool R: Same protocol administered	Teachers Appendix D
	Questionnaire	Close- and Open-ended questions	V: Developed for TWBI teachers, research-based tool, widely used R: Same questionnaire used	Teacher Appendix E
	Photo-Journal	Photo-elicitation	V: Evidence of strategies. R: All teachers used same data collection protocols	Teachers Appendix B
How are the Guiding Principles of Dual Language Education assisting teachers to implement their instructional strategies?	Photo-Journal	Photo-elicitation	V: Evidence of strategies. R: All teachers used same data collection protocols	Teachers Appendix B
	AI Interviews	Narratives about strategies	V: Appreciative inquiry protocol is research-based R: Same protocol administered under similar conditions	Researcher Appendix C
	Teacher Reflection & Questionnaire	Rating scale & questions	V: Guiding Principles is a research-based tool R: Same protocol administered with each teacher	Teachers Appendixes D & E
How have teachers gained knowledge & support to implement strategies?	Questionnaire	Close- and Open-ended questions	V: Developed for TWBI teachers, research-based tool, widely used R: Same questionnaire used at each site	Teacher Appendix E

Photo-Elicitation (Appendixes A and B). Photographs were used for the photo-elicitation phase of the study. Teachers used their digital cameras to capture their instructional strategies through visual images. The photographs allowed teachers to engage in a discourse analysis about their instructional practices (Rose, 2007). The benefit of this technique was to create comfortable spaces for discussion and open opportunities to involve the teachers in meaningful dialogue about their own classroom practices without limiting their responses to strictly memory. The photo-elicitations provided answers to the research questions with regards to the type of strategies used, why and how strategies were implemented, narratives of their successes and challenges, and new ways to refine their techniques.

Teachers took approximately 20 to 25 photographs of their instructional strategies and then selected 5 to 10 pictures that best elicited their strategies in TWBI classrooms. Teachers photographed their strategies during the span of an instructional unit (two to three weeks), so they could capture as many strategies as possible. They placed the selected pictures into a photo-journal (see Appendix B) with written explanations of the following: (a) What strategy is represented in this photograph? (b) Why do you use this strategy? (c) When and how often do you use this strategy? (d) Who are the students who benefit from the strategy? (e) Name challenges with strategy and (f & g) Additional comments (open-ended questions). This photo-journal served as an organizational tool for the Appreciative Inquiry interview (see Appendix C) where the teachers freely discussed their photographs and engaged in the dialogue.

Photo-elicitation is a method that has been rooted in the field of scientific research since the mid-1950s for visual accounts of people, objects, and artifacts (Harper, 2002; Heisley & Levy, 1991). Photos have been used to evoke dialogue about events of collective and institutional experiences. Researchers have used photographic images to elicit in-depth interviews since photos sharpen the participants' memory and reduce misunderstanding. According to Harper, photo-elicitation has been used in the disciplines of psychology, education, and organizational studies. Cappello (2005) wrote about successful accounts of photo-elicitation with children in classroom writing as a preferred methodology to engage participants in a rich dialogue. The use of photographs captures a constructivist view by allowing the participants to photograph the environment through their own cultural lenses, social position, personality and personal history (Rose, 2007). This seemed an appropriate tool for this dissertation research in order to document accounts of instructional strategies in the classroom.

Appreciative Inquiry Interview (Appendix C). During the individual and focus interviews at each site, the researcher utilized an Appreciative Inquiry (AI) Protocol (Preskill & Catsambas, 2006) with guided questions to elicit teacher responses through stories, values, wishes, vision, and plans for implementing their strategies in the classroom. The AI protocol elicited ample data sources with authentic student examples and teacher insights about TWBI instructional strategies. The AI process allowed the researcher to make personal connections with the teachers by creating a culture of trust. This process permitted a nonthreatening approach, which excluded the

development of leading questions and bias. The researcher framed questions with positive and meaningful formats to enrich the depth and quality of the data that is sometimes difficult to obtain with traditional interview methods (Preskill & Catsambas). Teachers also viewed and discussed the instructional strand of the Guiding Principles for Dual Language (Howard et al., 2007). The individual and focus group AI interviews lasted approximately one hour each.

The benefits of this instrumentation allowed the researcher to guide the participants through a process of reflection about successful experiences and ways to examine their instructional strategies. The process was designed to conduct interviews with individuals or groups through the “4-1” Process of the EnCompass Model of Appreciative Inquiry (see Figure 3.1). Preskill and Catsambas (2006) documented case studies of the success of the AI model in collaborations with many worldwide sectors, such as the Centers for Disease Control and Prevention, World Bank, Girls Scouts Beyond Bars, Women’s Empowerment Program in five European countries, and other organizations. The appropriateness of the AI tool related to a clear step-by-step guide that framed the process for individuals working in the same organizational systems, the opportunity to relate to current issues in day-to-day work settings, and the prospect to shift environmental conditions through innovation of new strategies.

Teacher Reflection Form (Appendix D). This rating scale was similar to the instrument used by the researcher to conduct the lesson observations. The teachers self-rated their instructional strategies based on the Guiding Principles for Dual Language Rating Template: Strand 3, Instruction (Howard et al., 2007). This tool was

part of the action plan delineated in the Guiding Principles. The rating scales were based on the following descriptors of minimal, partial, full or exemplary implementation of the four principles outlined in the Guiding Principles Instruction Strand. This teacher reflection required about 30 minutes to complete. The tool allowed the teachers to document individual thoughts about his or her own classroom practice without being influenced by others' thinking or feeling restricted to make personal comments in front of other colleagues.

The researcher utilized the data from the teacher reflections to compare and contrast the results of the researcher's observation tool, which was similar to the teachers' reflection form. Both of these instruments allowed the researcher to deepen the understanding of the phenomenon and seek ways to converge the data for analysis. The benefit of the teacher reflection tool was to allow teachers to freely express their thoughts through an anonymous format (Howard et al., 2007).

Questionnaire for Two-Way Bilingual Immersion Teachers (Appendix E). The questionnaire was used to collect data at one point in time about current practices, knowledge base, and support systems for TWBI teacher participants in the study. The questionnaire (Lindholm-Leary, 2007) included close- and open-ended questions. Since the sampling of nine teacher participants was not large enough to conduct a statistical analysis, the researcher coded the responses, categorized them by themes, and averaged some of the quantitative data into percentages for the analysis. Questionnaires were emailed to the teachers and collected within a two-week period. To acquire a good response rate, the researcher provided reminders through email and

offered a small incentive to encourage teachers to return the completed survey. The researcher protected the identity of the teachers by avoiding questions that revealed personal information or asking teachers to share their responses from the individual interviews during the focus group sessions.

The questionnaire (Lindholm-Leary, 2007) was based on the Guiding Principles for Dual Language Education (Howard et al., 2007), which was developed as a tool to assist the planning and implementation of dual language programs. The tool aligned to the Guiding Principles' rating scale that was used for the observations and teacher reflections in this research, which was a benefit to this study. For the purposes of this study, the researcher only focused on the instruction strand, which is one of the seven guiding principles outlined in the document. For validity and reliability purposes, Dr. Lindholm-Leary has tested and used the questionnaire in TWBI schools to collect data with various dual language teachers in California. With the guidance and permission of Dr. Lindholm-Leary, the researcher adapted some of the questions for this research. The researcher field-tested the questionnaire during the pilot study conducted in the spring of 2009 (see Pilot Study in Chapter 3).

Lesson Observation Instrument (Appendices F and G). The observation tool was used to gather data of lessons presented in the classrooms by the participants. The Guiding Principles for Dual Language Rating Template: Strand 3, Instruction (Howard et al., 2007) has been used by the developers and educators of dual language programs for several years. The tool is recommended by the Two-Way California Association for Bilingual Education (Two-Way CABE) and the Dual Language Education of New

Mexico as a trustworthy instrument for the assessment of TWBI program planning and implementation. This rating scale were that it has served as a reliable tool for gathering data about instructional practices in dual language settings across the nation, which proved beneficial for this study.

The observation rating scale allowed the researcher to document strategies implemented by the TWBI teachers in their lessons. There were four to five teachers observed at each school. The researcher also used the rating scale to compare and contrast the observations of the teachers' strategies with responses from the teachers' photo-elicitations, AI interviews, reflections, and questionnaires. This instrument provided the researcher with data about the actual implementation of the strategies mentioned by the teachers and the opportunity to analyze the teachers' perceptions of their implementation with formal observations of their lessons. The researcher also used this rating scale to triangulate the data with other multiple measures collected during the case study.

Rationale for the Instrumentation

The instruments for this research study represented tools currently used in the field of bilingual education to collect information about instructional practices. The tools were appropriate to the context of the research, as well as the populations and settings represented in the study. Teachers were familiar with the observation process at their school sites by principals, mentors, colleagues, professors, and parents. The idea of using data to discuss instructional strategies is a common practice nowadays with the movement towards professional learning communities (Dufour et al., 2006;

Marzano, 2003) and the provisions under NCLB to use data for assessment of student achievement.

Teachers and students were also aware of implementing the use of photographic images in their classrooms for projects, multimedia presentations, room environment, documentation of student progress, and school or community events. Teachers also used reflections as tools to gather data about instructional practices, professional development, end-of-year professional goals, and teacher evaluations. None of the instruments used during the data collection phase were of foreign nature to the teachers or intrusive to the students' learning environments. The purpose was to utilize tools that were part of the everyday experiences of teachers to minimize disruption to normal classroom practices and routines.

Criteria for Judging the Quality of the Research

Validity and Reliability

In order to increase the construct validity of the case study, the researcher identified correct operational measures for the concepts studied (Yin, 2009). One way the researcher could measure the construct validity was to triangulate the multiple sources of data collected in the research, which included interview transcripts, lesson observations, photo-elicitations, teacher reflections, and a questionnaire. The researcher merged the data sources to find common themes and trends of the phenomenon established through the evidence in the findings. By creating and maintaining a chain of evidence throughout the data-gathering process, the researcher

increased construct validity by establishing protocols, recording data collected during the process, and cross-referencing the data with the research questions. Lastly, the researcher sent the interview transcripts to the participants for a “members check” of the transcribed content, with the opportunity for participants to accept transcriptions or revise their content. The researcher worked closely with the dissertation committee chair, Dr. Daoud, and the content specialist on TWBI, Dr. Lindholm-Leary, to review data collection and analysis during the process.

In order to address the internal validity of the methodology, the researcher used the research questions to guide the case study analysis and detect pattern matching in the data that explained the phenomena in the classrooms. The researcher also examined rival explanations prior to or during data collection by including evidence about “other influences” that might change the outcome of the findings (Creswell, 2008; Yin, 2009). The only notations on the field notes that pertained to a possible rival explanation were observations of some teachers infusing test-taking strategies during parts of their lessons. This notation was partly due to the fact that in the months of February through April which was the data collection window for this research is when teachers, in general, tend to concentrate on test preparation strategies in California schools.

Since this single-case study with only two schools was rather a small sample of TWBI programs, the researcher recommended that the study’s findings should not be generalizable across all 90/10 TWBI program designs, particularly with schools that are implementing new programs with novice teachers. This observation on the

generalizability of the findings eliminated problems with external validity since results were only representative of a limited number of teachers across two schools, and it is unknown if TWBI teachers in other school districts implement similar learning conditions and match the teachers' knowledge base and support systems.

The data collection phase maintained reliability by eliminating errors in the data collection and biases in the study (Creswell, 2008; Yin, 2009). The researcher maintained stability on the repeated administration of the instruments at each site. The use of established protocols during interviews eliminated errors in the administration of the tools and procedures for collecting data. Most of the instruments were previously administered in the field by researchers and educators in other organizations, such as the Appreciative Inquiry protocols, Guiding Principles for Dual Language rating scale, Questionnaire for TWBI Teachers, and the photo-elicitations. In this research study, these instruments were all administered using the same procedures at each of the sites to ensure reliability in the various classrooms. Taking careful steps in the collection of the data produced consistency in the administration of the instruments. (see Appendixes for protocols A, C and F).

Pilot Study

A pilot study was conducted in the spring of 2009 to test the instruments for the study. The purpose of the pilot study was to collect sample data of the instructional strategies implemented by bilingual teachers to develop the goals of bilingualism, biliteracy and cross-cultural competence in TWBI programs. The sample size represented a convenience sample of 19 TWBI teachers at 4 different schools in one

district. The pilot study provided the researcher with the opportunity to field-test the teacher reflection tool and questionnaire across the schools and experiment with the lesson observation instrument and AI interview protocol at one of the sites. The implications of the findings allowed the researcher to test and identify possible tools and data collection approaches for the dissertation.

Selected bilingual teachers at Flower Elementary (pseudonym) in San Diego County, California field-tested the *Questionnaire for TWBI Teachers* (Lindholm-Leary, 2007) with think aloud sessions to examine their responses to the questions and investigate if there were any confusing items, misinterpretation of content, or misleading questions on the form. The researcher took notes as the teachers read the questions and gave their responses. This permitted the researcher to make notations regarding the construct validity of the instrument and the participants' ability to answer the questions. District bilingual TWBI teachers also had the opportunity to provide written feedback and suggestions on the types of questions and format of the questionnaire. The researcher also conducted an Appreciative Inquiry (Preskill & Catsambas, 2006) interview to practice the process and field-test the AI protocol with the participants. In addition, the researcher conducted one classroom observation with the Guiding Principles for Dual Language Rating Template: Strand 3, Instruction scale (Howard et al., 2007). The rating scale was shared with the teacher prior to the observation, and then the results were discussed.

The teachers provided suggestions on how to shorten the length of the questionnaire, since it took almost 45 minutes to complete, as well as revise a few of

the questions by simplifying the language. The rating scale had items that could not be observed in a 45 minute lesson, such as support staff services. Therefore, these items were also noted as difficult to rate during the collection and analysis of data. The response rate of the questionnaire was 19 out of 37 teachers, almost half of the TWBI teachers at all the 4 schools. A small incentive was offered to the teachers. Feedback on the AI protocol was positive with no revisions to the process.

Data Collection Procedures

Data Collection and Management

The researcher commenced the collection of data during the 2010 spring semester of the traditional school year at both school sites. All the projected data collection was completed by the end of the spring semester. Visitation days for data collection at the two sites were conducted during the months of February through April. The researcher requested personal release days from her district to observe lessons and conduct interviews at other institutions, since the researcher was also a classroom teacher at another district.

The individual and focus group interviews were tape-recorded and transcribed after each session. Protocols followed the same procedures at each of the schools. Interviews were conducted in designated conference rooms to honor participant confidentiality. The researcher did not notice any significant rival explanations during the data collection that could have affected the interviews or lesson observations during this phase. The lesson observation rating scales, field notes, and documents

collected during the school visits were kept in a confidential notebook to protect the participants' identity. Confidential information gathered during the research was not shared with school administrators. All documents were safely guarded and filed at the researcher's home. Data inputted into the researcher's laptop had a secured password.

Teacher reflections were administered toward the end of the data gathering process and were collected by the researcher. Information gathered was kept confidential and documents were in the researcher's possession at all times. Later, the researcher compiled the data into charts/tables and examined the emerging themes that appeared in the teachers' writings, as well as overlapping ideas across other multiple measures implemented in the study.

Teachers photographed their own classrooms and shared the photos with the researcher during the photo-elicitation interviews. The researcher used the photo-journals for the elicitation of the teachers' conversations and later categorized the photos by strategies. All photo-journals will be returned to the teachers after the research is completed. Teachers, students, and parents of student participants were informed through the consent forms of the purposes, methods, and intended uses of the photographs, including their participation and possible risks (see Appendixes H and I). All students photographed by their teachers (under age 18) completed a consent form (Appendix I) that was kept in a file folder in their classrooms or school office. Students unwilling to participate or parents who did not grant permission for their children to be photographed were excluded from the study and the photographs (see Appendix I).

The data was collected from nine teachers at two school sites by following the protocols established for the utilization of the instruments. The researcher collected and filed the signed teacher consent forms (see Appendix H) prior to the commencement of the research. Data was carefully collected and organized, and records were stored in safe locations. Electronic data was kept on the researcher's personal computer under carefully labeled files for confidentiality. The researcher adhered to ethical conduct in the administration of the instruments and honored the anonymity and/or confidentiality of documents elicited from the participants. Throughout the case study, the researcher developed a formal and presentable database of themes from transcribed interviews, documents and observations for committee members or other investigators to review the chain of evidence. Utilizing a case study database increases the reliability of the entire case (Yin, 2009).

Data Analysis

One of the ways in which the multiple data sources were analyzed was by finding types of patterns in the collection of photo-journals, lesson observations, interviews, reflections, and questionnaires. The utilization of two school sites in a single-case study allowed the researcher to compare and contrast strategies across classrooms in both TWBI programs. This opportunity to pattern-match the successful and challenging instructional strategies teacher utilized strengthened the internal and external validity of the learning conditions. In addition, the researcher ruled out any arguments for potential threats to validity that could possibly cause incorrect

conclusions about the instructional strategies due to the teachers' profound level of teaching experiences, advanced degrees in education, and continuous support systems evidenced in the data analysis. Careful examination of the data provided crucial information in order to avoid incorrect generalizability about representative teacher behaviors in TWBI settings. The researcher refrained from postulating very subtle patterns in the data, and rather presented gross pattern-matching or mismatching, so interpretations were relevant to the study's outcomes (Yin, 2009).

An explanation-building process (Yin, 2009) provided an iterative rationalization of the phenomenon of teaching in TWBI contexts. The process of identifying and describing "how" and "why" teachers used certain instructional strategies to develop bilingualism and cross-cultural competence not only provided the evidence to answer the research questions, but also connected the literature review and theoretical frameworks presented in Chapter 2 to the findings. The comparison and contrasts of the results from both schools presented new perspectives about the instructional strategies teachers implemented in their programs. Maintaining the same protocols at each of the sites and focusing on the original purpose of the study reduced any potential problems in misinterpreting the data. The researcher validated the findings by triangulating data from multiple sources. Multiple measures used in the case study established converging lines of inquiry to examine the same phenomenon through individual and focus interviews (Appreciative Inquiry), photo-elicitation journals, observation of lessons (Guiding Principles for Dual Language Rating Scale), teacher reflections, and a questionnaire (Questionnaire for TWBI Teachers).

Coding Techniques

The data corpus for the case study captured language-based and visual information that consisted of transcripts, observations, journals, reflection forms and questionnaires that seemed to naturally converge into notable patterns of teacher behaviors documented in the analysis. During first-cycle coding, the method of initially coding the data and dividing it into categories, the researcher implemented structural coding techniques to gather major topic lists related to the research questions. Structural coding is the process of labeling or indexing chunks of data framed by specific research questions or topics (Saldaña, 2009). Therefore, the researcher segmented the data related to the topics of inquiry and later applied other coding methods for further analysis within and across themes. One of the ways in which categorization techniques allowed for data reduction was through frequency counts that helped identify which ideas were mentioned more often in the documents and which ones the participants at both schools rarely discussed. This allowed the data to be organized in discrete parts that permitted the researcher to investigate the similarities and differences in strategies at both schools.

The use of descriptive coding allowed the researcher to summarize in short phrases the basic topics found in the segmentation or categorization of the data. This process provided the “basic vocabulary” of the coded data that later allowed the researcher to organize a codebook with overarching themes (see Codebook, Appendix L). During second-cycle coding methods, the process of returning to the data corpus to reorganize and reanalyze the data coded through the first-cycle methods, the

researcher combined or reduced data into smaller sets of constructs in which major themes developed from the analysis of pattern coding, which is “a more meaningful and parsimonious unit of analysis” (Saldaña, 2009, p. 152).

Generating Categories and Themes

After coding the teachers individual and focus interviews, the researcher generated lists of topics that emerged from the first-cycle coding. These topic lists were clustered around categories produced by noting patterns in the data sets through the second-cycle coding methods. This process involved classifying common elements in the data corpus that were identifiable as patterns and later sorted into categories (Miles & Huberman, 1994; Saldaña, 2009). Further examination of the categories led to data reduction and merging of concepts as the researcher continued to integrate the multiple measures for similarities and differences in the triangulation. The method of triangulation is the manner in which to confirm the findings “by showing that independent measures of it agree with it or at least, do not contradict it” (Miles & Huberman, p. 266). Through this iterative process of interpretation and discovery of phenomenological descriptions, major themes captured the essential notions of the data for each of the research questions.

Positionality

I have a personal and professional interest in TWBI programs. I have been a bilingual teacher for 32 years. In addition, I developed and coordinated the first TWBI programs for a large district in Los Angeles by writing two Title VII grants that were funded in the 1990s. I became the Categorical Program Advisor for the grant and

provided staff development and parent training components for the dual language programs. After the grant concluded, I had the opportunity to teach in a dual language program at a nearby school district and, at that time, became a parent of a child in the program.

Since 2003, I have been a member of the Two-Way CABE Executive Board. My first seat on the board was the teacher and community liaison, then as vice president, and my current position on the board is president of the organization. One of my responsibilities as a board representative is to assure that TWBI members receive adequate training in the strategies and instructional components of the program by sponsoring a yearly national conference for teachers, parents, and administrators. I have acted as cochair for the annual event and have presented at their conferences for the last 18 years. In addition, I have been a consultant for TWBI programs at the state and national level for more than 20 years. I want to ensure that my passion for TWBI programs does not create a bias to promote the programs blindly, but to critically look at the successes teachers indicate are occurring in their classrooms and to also closely examine the challenges facing the implementation of instructional strategies.

This dissertation contributed to the field of TWBI by informing the practice of teaching and learning in TWBI contexts. The research results can have a great impact on how and why teachers implement certain strategies to meet the goals of biliteracy and cross-cultural competence. The findings can inform the field at many levels from the perspective of the classroom practices, to the development of teacher training programs at university levels. My hope is *not* to use my positionality to influence the

thinking of the teacher participants in the study, but to have a greater understanding of the behaviors and strategies they deem important to the development of bilingualism, biliteracy and biculturalism. The purpose of the study was to hear their voices and view the instructional strategies through their lenses as they performed everyday tasks within their own classrooms.

Limitations of the Study

Advance limitations of the research are potential weaknesses or problems in the study related to the participants, sample size, data collection and/or analysis (Creswell, 2008). The first anticipated area of concern regarding this research study is the small sample size of teacher participants. Due to this constraint, it might be difficult to apply generalizability to the outcomes of the research with a limited pool of teachers.

Second, the window for data collection posed another constraint in the methodology of the study, since the collection began in the spring. This created a potential problem, since most schools in California begin to prepare students for standardized exam routines during the second semester of school, which may not represent very organic characteristics of dual language instruction or opportunities to develop authentic uses of language. The data collection process was limited to a few weeks of real-life situational teaching opportunities before the commencement of the California assessment system.

The third potential problem was that I am a classroom teacher and the amount of time I spent collecting data at other schools was limited, since it entailed substitute release days. As a result, I was only be able to visit each of the school sites three to four separate times during the data collection phase.

Summary of Methods

This chapter outlined the methodological aspects of the qualitative research with a focus on a single-case study approach. The study documented the types of strategies TWBI teachers deemed successful with their students, as well as how teachers gained new insights through the instructional challenges they faced in the implementation of their strategies. Data collection included the administration of multiple measures that included photo-elicitation journals, individual and group interviews, lesson observations, teacher reflection forms and questionnaires. Data analysis established converging lines of inquiry to examine the same phenomenon through the various instruments. Structural coding segmented the data sources into chunks of information relevant to the research questions. Further coding of the data sets revealed categories and patterns across grades and schools. Through refinement and merging of data, the researcher arrived at the overarching themes of the study. However, due to the limited sample size of participants in the study, the findings cannot be generalizable across all 90/10 models in TWBI programs. The following chapter will present a discussion of the results of the research study and Chapter 5 will

present the major findings, implications for action, recommendations for further research, and classroom implications.

CHAPTER 4

Results and Discussion

Previous chapters in this dissertation presented the purpose of this research, provided a detailed literature review of two-way bilingual immersion (TWBI), explained the theoretical frameworks that guided the inquiry, and discussed the research design, methodology and research questions. The purpose of the study, as stated in Chapter 1, was to examine the instructional strategies teachers used to develop biliteracy and cross-cultural competence in TWBI programs. In the first section of this chapter, the researcher synthesized the knowledge base and support systems that helped the teachers implement their strategies. Then, the researcher analyzed how teachers utilized the Guiding Principles for Dual Language Education (Howard et al., 2007) frameworks to guide their instructional strategies. Lastly, an analysis of the reasons why teachers used certain instructional strategies will be presented, as well as how teachers gained new insights about instructional strategies based on successes and challenges in their practice.

This chapter will first provide the knowledge base and professional support systems of the teacher participants in the study. Then, the researcher will outline the findings by addressing all four questions in each of the sections with evidence from the multiple measures used to document the findings, such as photo-elicitation journals, teacher interviews, lesson observations, teacher reflections, and questionnaires. The following research questions will be addressed:

1. How have TWBI teachers gained their knowledge base and professional support to implement the strategies they use in class?
2. How are the Guiding Principles for Dual Language Education assisting teachers in the implementation of their instructional strategies?
3. How do TWBI teachers describe successes and challenges in their instructional strategies to develop biliteracy and cross-cultural competence with program participants, including English Learners and English Proficient students?
4. How do the successes and challenges of their instructional strategies bring about new perspectives or innovations in their practice?

Knowledge Base and Professional Support

Analysis of the Questionnaire for Two-Way Bilingual Immersion Teachers (see Appendix E) revealed the background knowledge the teachers acquired throughout their careers as dual language educators and indicated the type of professional support they received at their schools and districts. The importance of this information was to establish the credibility of the teachers in the study in terms of their level of expertise, years of experience in the field of TWBI, and collaboration between colleagues. This section of the chapter examined the first question of the dissertation: How have teachers gained their knowledge base and professional support to implement the strategies they use in class?

Knowledge Base

Teachers attributed gaining much of their knowledge base while teaching in a dual language program. According to the interviews and questionnaires, teachers reported learning their strategies through the day-to-day practices in their classrooms and in the conversations with colleagues who teach in the program. They reported acquiring new skills or improving strategies when they implemented ideas from other immersion teachers. Teachers indicated wanting to learn about strategies that worked well in other classrooms and provided assurance of positive results. They conferred with one another on a weekly basis about lesson development and new adaptations to the curriculum. Hence, grade-level teams met weekly to plan lessons, student activities and strategies. This quote summarized the grade level effort in the following manner:

Every Monday we meet and stay here until about 5:00-5:30 PM. We talk all the time. In the mornings we will talk about the lesson... I will ask, "How did you explain this? I did this yesterday and it just didn't work out. And we will touch basis on different things. That is one thing that I think has helped us. We are constantly communicating. It is not that we plan on Mondays and then that is it. "Ya no me hables." We will sit at lunch time and discuss "How did this go, what did you do here? Oh, I am going to try that too." We have the same lesson. We are planning the same thing... It helps to have conversations when we are having discipline problems or other issues with kids. But it does take a lot of time. You have to have that team. You have to have that collaboration. If you don't have that, it can get very difficult. (Teacher Interview, Evergreen School, April 8, 2010)

All teachers responded positively to their grade-level support with relationship to planning together and developing curricular lessons within the context of TWBI. In addition, teachers reported attending monthly meetings with other immersion teachers at their schools to discuss programmatic issues/schedules, plan activities, share

benchmark results, set new goals, articulate vertically across grade levels, or share new learnings from conference participation. The following quote provided a reference to the variety of ways in which teachers articulated with one another:

We have two programs at our school. We have the TWBI and the English only program. So, one grade level meeting or one staff meeting a month is designated for program meetings. As immersion teachers, if we need to continue the meeting after school we do that. We are guaranteed one immersion meeting a month. We also meet after school. My grade level immersion team meets quite a bit after school. We dialogue on the fly when we see each other to quickly communicate what you need. You just grasp whatever time you can. (Teacher Interview, Victory School, April 1, 2010)

This quote revealed how teachers felt a continuous need to communicate their needs about instructional practices at various levels, from designated monthly meetings to weekly or daily interactions. The teachers seemed to have developed a system of support for developing their knowledge base and improving their instructional strategies. Besides weekly articulation amongst dual language teachers to improve or acquire their knowledge base, teachers also reported attending various bilingual conferences (California Association for Bilingual Education [CABE] and Two-Way CABE) and institutes to gain new learnings on how to better implement their program.

The analysis of the data indicated how TWBI teachers developed a *community of practice*, which is defined (Wenger et al., 2002) as groups of people who share a passion about a topic and deepen their expertise by often collaborating with peers. It is evident in this research study that TWBI teachers embraced mutual beliefs about their instructional strategies and inquired about their teaching methods through conversations and shared knowledge. Teachers socially constructed their instructional

experiences in organizational setting through peer collaboration by confirming, clarifying, and building on their prior knowledge, rather than just following a perceived notion of their practices in accordance with Mir and Watson's study (2000). Teachers also discussed assisting each other in gaining knowledge base when creating common assessments at their grade levels in both languages in order to meet the goals of the programs and measure student achievement in English and Spanish.

Overall, teachers felt highly supported by their peers and grade level teams in the development of materials for the classrooms that met the needs of their student population. Teachers confirmed that their state-adopted instructional materials lacked adequate lesson development for dual language education goals; therefore, it was critical to create materials that addressed both language and content objectives as part of building background. The findings from Howard and colleagues (2003) are in accordance with the need for teachers at Evergreen and Victory to develop materials to meet the program goals. Howard's research indicated that teachers perceived teaching in two languages as highly demanding, since equitable materials were often not available at the schools.

In addition, teachers communicated in their interviews the importance of dialoguing lesson development to achieve consistency across grade levels, which was reported as not happening at all grade levels by teachers at Evergreen School. One teacher stated in her interview (Evergreen School, April 8, 2010), "... que todos fuéramos coherentes en todo lo que enseñamos, con más consistencia" (that all of us could be more coherent about all that we teach, through more consistency). This

teacher felt that the program had expanded quickly in the growth of TWBI classes and needed to focus on lesson consistency at a specific grade level.

Major Themes in Knowledge Base

1. *Training received and frequency of use.* By using the teacher questionnaire (see Appendix E), teachers rated their background knowledge on theory and instructional practices. In addition, teachers marked the frequency use of these strategies in the classroom. The ratings for both schools were averaged together and reported in percents on Table 4.1.

Table 4.1: *Teacher Questionnaires*
Knowledge Base of Participants at Evergreen and Victory Schools

Teacher Training/Knowledge	Trained, Somewhat Knowledgeable	Trained, Very Knowledgeable	Frequency Use of Training
1. TWBI theory and model	20%	80%	96%
2. Theory of second language development	40%	60%	96%
3. Instructional strategies for language arts (English)	20%	80%	100%
4. Instructional strategies for language arts (Spanish)		100%	100%
5. Cooperative activities with mixed ability level groups	40%	60%	89%
6. Differentiated Instruction to meet the needs of all learners (e.g. gifted, special ed., flexible groups)		100%	96%
7. Thematic instruction across content areas	20%	80%	71%
8. Sheltered instruction in both languages	60%	40%	89%
9. Graphic organizers (e.g., story, thinking maps, word webs)		100%	96%
10. Metalinguistic & metacognitive skills	80%	20%	82%
11. Instructional strategies for academic language development in L1/L2	20%	80%	93%
12. Use of multimedia and technology in the classroom.	20%	80%	75%
13. Transferability of skills for both program languages	20%	80%	89%

Descriptors for training/knowledge rating:

- 1 NEED training, no understanding/knowledge
- 2 No training, but some understanding/knowledge
- 3 Training, but still don't quite understand
- 4 Training, and somewhat knowledgeable
- 5 Training, very knowledgeable

Frequency of use rating:

- 1 Never, rarely
- 2 Occasionally
- 3 Frequently
- 4 Daily

NOTE: Teachers did not report any training/knowledge related to descriptors 1 and 2.

In general, teachers at both schools declared being very knowledgeable about theoretical frameworks and instructional strategies related to TWBI in their questionnaires. They reported implementing practices aligned to dual language theoretical tenets 96% of the time. Teachers also reported being somewhat knowledgeable (40%) and very knowledgeable (60%) about theories of second language development and implemented these theoretical constructs with a frequency rate of 96%. There was a difference noted by the teachers on their knowledge of instructional strategies in English at 80% (very knowledgeable) and 100% very knowledgeable in Spanish strategies. However, both schools stated 100% implementation of the training received on English and Spanish instructional practices. Teacher knowledge base of instructional strategies for academic language development in the students' primary and second language were reported as somewhat knowledgeable at 20% and very knowledgeable at 80% with 93% frequency in the use of these strategies. Subsequently, teachers also acknowledged they were well trained in the transferability of skills between English and Spanish at 20% somewhat knowledgeable and 80% very knowledgeable with 89% implementation of strategies learned at trainings.

In addition, teachers reported receiving training in student integration during instruction using cooperative learning, as well as practices for differentiated instruction. Questionnaires indicated 60% of the teachers felt very knowledgeable about using cooperative learning structures with mixed ability groupings and felt they implemented this training 89% of the time in their classrooms. On the other hand,

teachers indicated being very knowledgeable (100%) on how to differentiate instruction for all learners in their classrooms, and utilized differentiated techniques 96% of the time, including formulating flexible groupings to meet the needs of special education students and gifted learners.

Teachers indicated being very knowledgeable (80%) about designing lessons through thematic instruction across content areas, but implemented such instructional practice only 71% of the time. The implementation of thematic instruction received the lowest rating from the teachers amongst all the strategies listed on the questionnaire. During the interviews, teachers considered this strategy beneficial for all their students; however, they reported it required a vast amount time for planning and coordination of resources across content areas to implement it appropriately.

The use of multimedia and technology in the classroom, as rated on the questionnaires, received the second lowest rating by the teachers at 75% frequency use. Some teachers discussed in their interviews the use of technology as a growing technique in the classroom, but felt they needed additional training and more computers/multimedia equipment in their classrooms to make an impact on their instructional strategies.

Even though teachers admitted implementing sheltered instruction 89% of the time hence, being more widely used in the classrooms than thematic and multimedia instruction they rated their training as 60% somewhat knowledgeable and 40% very knowledgeable. These findings could indicate that teachers deemed sheltered instruction as a fundamental method in the students' dual language development, and

preferred this technique in a TWBI program above thematic and multimedia instruction.

Teachers also considered supporting their students' learning through the use of tools for instruction, such as graphic organizers for language development and vocabulary at 96% frequency use in their lessons. Teachers felt 100% very knowledgeable about using graphic organizers and in their interviews teachers reported incorporating these tools frequently as scaffolding techniques during instruction. Teachers implemented metalinguistic (ability to consciously think about how language is used) and metacognitive (ability to know about one's own learning processes) skills 82% of the time even though most of them stated being somewhat knowledgeable at 80% and very knowledgeable at only 20%.

2. Participants expertise. As noted earlier in this dissertation, the researcher intended to find "representative" teachers in TWBI programs to participate in the study. However, after examining the results of the Questionnaire for Two-Way Bilingual Immersion Teachers (see Appendix E) the demographic information revealed that the teachers averaged between 17 and 19 years of teaching experience with 13 years in TWBI programs. This information confirmed that teachers in this study were very experienced educators with an ample accumulation of knowledge-base to implement a variety of strategies in their programs. Teachers rated their language fluencies as full professional proficiency or native speakers of English and Spanish. All teachers were also highly qualified with certificates or endorsements in bilingual education, including earned master's degrees for six of the nine educators

participating in the study. Therefore, the findings presented in this study represent the collective knowledge of teachers with extensive background knowledge and advanced degrees in education. Converging data analysis of highly qualified participants in the field of TWBI provided trustworthy evidence of construct validity. Table 4.2 below delineates years of experience, proficiency levels, certificates and advanced degrees of the teachers in the study.

Table 4.2: *Teacher Questionnaires*
Background Knowledge of Teacher Participants at Victory and Evergreen Schools

Demographics	Teachers at Evergreen School	Teachers at Victory School
Participants	5 teachers	4 teachers
Years teaching	19 years average	17 years average
Years TWBI	13 years average	13 years average
Languages of instruction	All teachers English & Spanish	All teachers English & Spanish
Proficiency in English	All teachers full professional proficiency or native speaker	All teachers full professional proficiency or native speaker
Proficiency in Spanish	All teachers full professional proficiency or native speaker	3 teachers full professional proficiency or native speaker 1 teacher professional proficiency
Certificates or endorsements	All teachers bilingual certification	All teachers bilingual certification 1 teacher has a 2 nd endorsement for a reading specialist credential
Masters' degree	3 teachers	3 teachers

Note. Criteria for language proficiency as described in questionnaire (Lindholm-Leary, 2010):

- Full professional proficiency or Native Speaker: Proficiency is adequate to provide a wide range of educational services without need for special preparation.
- Professional proficiency: With some preparation, usually minor in nature, proficiency is adequate to provide a wide range of classroom instruction.

Major Themes in Support Systems

1. *Community of practice.* Data collected from the questionnaires and interviews indicated that teachers received professional support at various levels. The most important instructional support to all teachers was the ability to collaborate with one another and create a community of practice within their program. They reported this area as most critical to their support as TWBI teachers. In Table 4.3 teachers strongly agreed (71%) that working in teams to plan for instruction to be the strongest indicator of support in their program. Half of the teachers strongly agreed to allocating time at their schools for articulation, teacher collaboration and joint planning sessions.

Table 4.3: *Teacher Questionnaires*
Support Systems for Participants at Evergreen and Victory Schools

Rating of Support Systems From School or District in Percentages				
Teacher Support Systems	Strongly Agree	Agree	Disagree	Strongly Disagree
1. All teachers, including new teachers to the program, are trained to adhere to the model design, program features, and curriculum.	28.5%	43%	28.5%	
2. While teachers have received training in biliteracy skills, follow through is needed to help us correctly implement these strategies in the classroom.	50%	50%		
3. Professional development is supported or provided through conferences, institutes, trainings, buy-back days, before/after school meetings, etc.	33%	67%		
4. Time is allocated at school site/district for articulation, teacher collaboration, and/or joint planning.	50%	50%		
5. TWBI teachers work together in teams or as a group to plan for instruction and the development of linguistic skills in both languages.	71%	29%		
6. Routinely, TWBI teachers use assessment data for instructional decision-making on biliteracy.	57%	45%		
7. Both languages are equally valued throughout the program, and particular consideration is given to elevating the status of the minority language.	71%		29%	
8. Teachers have appropriate access to resources at school/district in both languages (e.g. core & supplementary materials, state adopted textbooks, supplies, materials, technology, equipment) needed for their instructional program.	43%	28.5%	28.5%	
9. I feel supported by school/district to implement the TWBI program to the best of my abilities.	14%	72%	14%	

2. *Administrative support.* Only 14% of the teachers reported that they strongly agreed that the school/district supported their efforts to implement the TWBI program to the best of their abilities; overall, there was 86% agreement and 14% disagreement. Although some teachers disagreed with the level of support from the administration, in general, teachers felt supported by their site administrators and acknowledged their leadership skills in a complex program. According to the Guiding Principles (Howard et al., 2007), programs need to exhibit effective leadership at all administrative levels, including the leading role of the principal as an advocate. One teacher wrote on her questionnaire, “The principal and two-way staff support system is what has kept our two-way program in place” (Evergreen School, April 30, 2010). The following quotes also recognized the efforts of the principals at both sites to support the teachers in their programs.

This first quote stated how the principal’s supported the writing component of the program and involved parents in assisting the teachers in the classrooms.

But at the school our principal is quite wonderful. She has made writing to be the one thing she wants us all to have across the school and she does the training herself. That is the kind of support provided... Having the support from the principal who knows this parent who has a child in the school that is not in my class, but is passionate about writing to come in twice a week to work with me and the students is tremendous. (Teacher Interview, Victory School, March 31, 2010)

Another teacher stated the importance of the school administration to support their instructional practices and allowed the staff to interview possible teacher candidates for their program.

I believe we have an exemplary program, based on the best practices of Dual Language Instruction. We have had the opportunity to interview each teacher in our program to make sure that every teacher is

committed to the philosophy and the program model. I feel a lot of support for the administration and good practices will not be replaced with sanctions and testing pressures. (Teacher Questionnaire, Evergreen School, April 30, 2010)

This third quote demonstrated how the principal supported the teachers with a substitute release day to address the cross-cultural goal of the program.

It came out of one of the immersion meetings that it was becoming problematic at 5th grade. The cohesiveness that they had in primary was not that evident in 5th grade any longer. So, we decided that we are going to have a planning day, and our principal is going to help us get sub, a planning day that we are going to look at goal three and plan ways to promote our students identifying as bilinguals. (Teacher Interview, Victory School, April 1, 2010)

During the interviews, teachers felt that although the districts supported the implementation of their programs, the organizations lacked sufficient knowledge of the theories and philosophy of TWBI to fully understand the teachers' efforts. One teacher felt the district could provide more support with EL students in TWBI. "Effective ELD guidelines and program for our specific model need to be researched and implemented so our ELs can have the same success as our English proficient students. Training and materials need to be provided" (Questionnaire, Victory School, April 30, 2010). While another teacher concerned with the possible displacement of TWBI teachers at her school due to the state budget crisis for school funding could have an adverse effect on the quality of the school's program,

It is important to ensure that the direction of instruction remains student-centered and that teachers are able to work together with colleagues who share their philosophy of leaning and believe in the importance of language and culture as defining aspects of our lives. (Teacher Questionnaire, Victory School, April 30, 2010)

Most teachers felt the district could support them better with curriculum and materials for their program, as one teacher wrote on her questionnaire, “We need support for equal access to all textbooks both in Spanish and English” (Victory School, April 30, 2010).

Overall, teachers felt some level of support from their districts; otherwise their programs would not exist in their communities. One teacher recognized the district efforts in providing general training to all schools, but felt she needed to go beyond the basic knowledge provided at the trainings.

The district is actually very good about making sure that there are certain things we all do that are the same. Specifically math has been one area because there is still funding, so there’s training for math. However, after the first two, I said, “I don’t need to go, because I did not think there was anything new and I am still going to try to do other things in addition to what they are telling me.” The district does try very hard to make sure we all have a basic knowledge base and that we all are following the same pacing guides. (Teacher Interview, Victory School, April 1, 2010)

3. *Parental support.* One final element for professional support included the recognition of parents in the program as supporters of the strategies being implemented by the teachers at Evergreen and Victory schools. Teachers reported parents’ involvement in writing celebrations, student presentations, preparing classroom materials, and assisting with practices incorporated into their instruction. In the literature review, Shannon and Milian (2002) explained how parents were the strongest advocates of well-implemented programs and supported the development and progress of the curriculum, just as the teachers in this study have found the relationship with their communities. One teacher stated in her interview, “I think,

parents are really great. They are supportive in anything that you do” (Victory School, April 1, 2010). Another teacher discussed how parents could make a difference in her classroom, especially when providing more individualized instruction to 37 students during writing.

I actually have a parent who is a teacher who stopped teaching to be with her kids. She is a writing teacher. The biggest support that I have had is that she comes into my classroom. At the beginning of year, she was modeling writer’s workshop for me. I plan with her and I write with her. Now we have divided the kids for writer’s workshop into two groups so that I can give my students more attention. She has watched me teach and then will give me some input. To me that has been an incredible source of support that I have really appreciated this year. (Teacher Interview, Victory School, March 31, 2010)

Teachers explained how parents made the effort to attend student performances and presentations at school. One teacher referenced the 10 hours of service required of parents at the school and said, “Nothing gets done without the support of the parents. They help us get materials ready for class” (Interview, Evergreen School, April 9, 2010). Teachers also felt they communicated well with parents through bilingual newsletters, blogs, telephone calls, and face-to-face interactions. One teacher described parent accountability as having the students take their math journals home and explaining the entries to their parents. Then the parents had to sign the journals and write a comment to the teacher. The teacher stated,

This really helps when we have parent conferences too or because when the students are not moving in their progress at all. I will schedule a parent conference and say, “You know how you have been signing the journal...” that keeps parents accountable. (Teacher Interview, Evergreen School, April 8, 2010)

During lesson observations, the researcher observed parents involved in the students' education by assisting in classrooms with group rotations, bringing food for cultural activities, organizing materials in the science lab, teaching writing, tutoring individual students, and attending classroom celebrations, such as writer's workshop. The researcher also noted an open-campus atmosphere at both schools where parents appeared welcomed at their sites, school personnel spoke to parents in their native language, and many signs on the campuses were written in both English and Spanish.

Parents viewed TWBI as an excellent educational opportunity for their children. Shannon and Milian (2002) explained how parents became the strongest allies of well-implemented TWBI programs and expressed their desire to expand these programs. High participation of parents of low-socioeconomic status was associated with TWBI programs, which was not the case in programs emphasizing English-only instruction for English Learners (Lindholm-Leary, 2001). The Guiding Principles (Howard et al., 2007) outlined the incorporation of a strong home/school collaboration approach with established parent liaison for both languages. These studies concurred with the observations made at Evergreen and Victory by the researcher and teacher comments recorded in the interviews.

All teachers expressed in their interviews that they had pride in teaching in their communities, schools, and TWBI programs. They felt supported by their colleagues, administrators, districts, and parents. These findings are congruent with the study conducted by Lindholm-Leary (2001) where teachers who felt supported in

their schools and districts felt more satisfied with their teaching positions and rated themselves as having higher teacher efficacy.

Teachers also reported receiving support from their own family members to stay late at school for planning, bringing home schoolwork, and attending conferences away from home or family time. They declared having a sense of trust in their programs; consequently, the majority had had their own children enrolled at their schools' dual language programs sometime during their teaching careers. Most importantly, teachers felt they worked in a place where the faculty shared similar philosophies about bilingual education and worked hard to make the program successful.

Summary

The findings in this study support the salient features of well-established TWBI programs where teachers have appropriate credentials, native-like command of the languages of instruction and are trained in a variety of strategies, including theoretical frameworks, second language acquisition strategies, and student engagement (Howard et al., 2007; Lindholm-Leary, 2001, 2005). Teachers demonstrated a strong knowledge base on the critical elements of professional development for dual language education, and reported implementing those strategies frequently in the classrooms. The evidence from the interviews and questionnaires revealed that teachers valued collaboration, dedicated time to plan together, received administrative support, and acknowledged parental involvement as a strong connection to their communities.

Guiding Principles for Dual Language Education

Relationship Between the Guiding Principles and Instructional Strategies

Data from the photo-elicitation journals (see Appendix B) not only informed the research study on how teachers implemented the strategies for biliteracy development, but also presented the manner in which the strategies related to the four principles of instruction in the Guiding Principles (Howard et al., 2007). The second research question analyzed in this section states: How are the Guiding Principles for Dual Language Education assisting teachers in the implementation of their instructional strategies?

Appendix J, entitled Victory School: Triangulation of Photo-Elicitation Journal Strategies for Biliteracy Development, and Appendix K, called Evergreen School: Triangulation of Photo-Elicitation Journal Strategies for Biliteracy Development, showed the relationship between the photo-elicitation journal strategies and the Guiding Principles (Howard et al., 2007) by listing the principles and their subcategories with each of the photographs. In column six, codes represented the four principles by its number and letter that correspond to the subheadings of the principles in the teacher reflection forms in Appendix D. This column permitted the researcher to cross-reference the research-based practices of the Guiding Principles to the instructional strategies. Structural coding methods applied in the study a way to segment data that relates to specific research questions provided a system of labeling and categorizing the data corpus for further reduction. Table 4.4 matched the Guiding Principles with the number of times teachers referenced the implementation of the

principles during the interviews, reflections forms and questionnaires at the two schools. Further analysis of the results between the similarities and differences of the four main principles and the instructional strategies are presented below.

Table 4.4: *Pattern Matching of Guiding Principles for Evergreen and Victory Schools*

Guiding Principles: Strand 3, Instruction	Victory School # times teachers referenced GP	Evergreen School # times teachers referenced GP
Principle 1: Instructional methods are research-based		
1A: Explicit language instruction in both languages	11	13
1B: Academic content instruction in both languages	7	14
1C: Program & curriculum faithfully implemented	1	0
1D: Instruction through separation of languages	6	7
1E: Variety of strategies for student comprehension	23	26
1F: Instruction promotes metalinguistic awareness & metacognitive skills	29	21
Principle 2: Instructional strategies enhance development of bilingualism, biliteracy, & academic achievement		
2A: Teachers integrate language & content objectives	28	21
2B: Teachers use sheltered instruction, build prior knowledge, routines/structures for comprehension & L2 development	13	12
2C: Instruction geared for native speakers & L2 learners when integrated for instruction	26	26
2D: Instructional staff incorporate technology into their instruction	1	1
2E: Support staff coordinate instruction with model & approaches	1	0
Principle 3: Instruction is student-centered		
3A: Active learning strategies (thematic, cooperative learning, learning centers) meet learners' needs	13	9
3B: Teachers create meaningful language use	27	14
3C: Student groupings benefit from peer models	20	13
3D: Instructional strategies build independence & ownership of the learning process	25	17
Principles 4: Teachers create a multilingual and multicultural learning environment		
4A: There is cultural & linguistic equity	18	9
4B: Instruction considers language varieties	4	0
4C: Instructional materials in both languages reflect student population & cross-cultural appreciation	10	6

Principle 1: Instructional Methods Are Research-Based to Develop Bilingualism and Biliteracy in Children

Explicit instruction. Both schools reported implementing research-based practices with each of the instructional strategies in their photo-elicitation journals and questionnaires. Under Principle 1 (see Table 4.4), the use of explicit language arts instruction in both languages became evident across all classrooms at both schools. Teachers also referred to the separation of languages for instruction as a critical aspect to the development of biliteracy skills; thus, during the modeling of the language structures, teachers did not concurrently translate the content. In addition, all teachers embedded a variety of strategies involving a range of modalities to ensure student comprehension during lessons, including hands-on activities, scaffolding, and support tools such as graphic organizers, charts, and technology. One of the teachers shared the following strategies for reading in the content area in Spanish:

I discovered that summarizing is a big thing for them, “la idea principal.” ¿Qué leemos aquí? ¿Qué sucedió aquí? “Vamos a ver esa información.” It is a lot of summarizing in social studies and science. It is lot of thinking maps, and that is how they are going to understand. So, I read it to them, and the next day we do a summary, like a mini-script, or we do a tree map to summarize main idea and details. Each lesson in the chapter had a tree map and then we did an overall map for all the unit content. (Teacher Interview, Victory School, April 1, 2010)

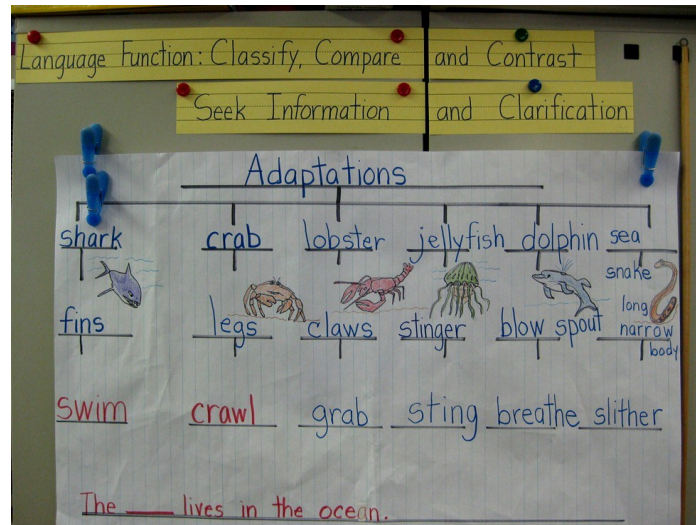
According to the Guiding Principles (Howard et al., 2007), effective instructional practices have been associated with increased student performance. Since instruction in TWBI is more complicated than in other traditional programs due to the added goals of bilingualism, biliteracy, and multicultural competence, it is crucial to balance the need of both groups of students across all content areas. Therefore, the use

of differentiated instruction and the need to address the various learning styles of the students is imperative to their success in the program. Strategies used by the teachers were aligned to the Guiding Principles of second language acquisition by contextualizing new language structures and vocabulary with gestures, scaffolding for meaningful lesson delivery, and carefully planning instruction so that all students had access to the curriculum.

Principle 2: Instructional Strategies Enhance the Development of Bilingualism, Biliteracy and Academic Achievement

Objectives. According to the lesson observations, teachers at both schools integrated language and content objectives during their lessons. Content presented in class related to grade-level standards and state-adopted materials. Teachers at both Evergreen and Victory wrote the standards on the board or worksheets and/or stated the content objectives to the students. In addition, teachers also stated a language objective for their content lessons that indicated a language form, sentence frame or reading/writing objective to guide the acquisition of the second language in a variety of formats, such as: (a) learning to state complete answers to the questions in social studies, (b) creating well-developed ideas in the students' writings, (c) inserting figurative language in their response to literature, (d) using descriptive vocabulary in their science graphic organizers, or (e) using transitional words in their content summaries. Photograph 4.1 represented how a teacher at Victory School stated

objectives for language functions in English language development on a sentence strip above a classification chart.



Photograph 4.1: *Language Functions: Classify, Compare, and Contrast* (Photo-Journal, Victory School, April, 2010)

Standards were clearly visible on bulletin/white boards, daily agendas, journal pages, charts and PowerPoint presentations. Students were also asked to write the standards for the lessons on their journal pages. Based on teacher interviews and their photo-elicitation journals, instructional strategies for both schools built on prior knowledge and connected lessons across curricular strands. Teachers talked about establishing instructional routines and classroom structures at the beginning of the year and built on those organizational frameworks throughout the year as subsequent lessons became more complex. Their daily use of sheltered instructional practices allowed for the complexity of the content and academic vocabulary to be delivered through comprehensible input. Teachers used a variety of visuals, realia, focus/theme

walls, thematic instruction, drawings, gestures, and hands-on activities to convey the content in meaningful ways and develop language objectives as evidenced by the lesson observations. Table 4.4 shows more similarities than differences between the schools.

Differentiation. Instructional strategies addressed the needs of the population of English Learners (ELs) and English Proficient (EP) students by increasing the complexity of the tasks or structures for native speakers, while supporting second language learners to acquire the same objectives through scaffolding practices when students were integrated for instruction as reported in their interviews and photo-elicitation journals. During lesson observations, teachers at both schools maintained the rigor of the content standards without watering down the curriculum. Instead they used various modalities to present activities and delivered content through different mediums, for example textbooks, PowerPoint presentations, notes, discussions, and manipulatives. In class, teachers differentiated instruction throughout the day and used flexible groupings based on results of daily work or assessments during lesson observations. The following quote demonstrated an example of how a teacher differentiated instruction during mathematics:

First trimester, I did the district's planned curriculum for math, but it didn't work for most of my students. The program had very specific strategies, less hands-on, it was more paper and pencil. The second trimester, we did, "I am going to pull you into a small groups and do more hands-on." We were drawing a picture of the mathematical concept and writing a sentence together. This vocabulary work was done whole class. I said, "Here is the vocabulary word *volumen*. I give you a picture of it and give you a definition for it." We continuously worked with it. It was not them looking it up in a dictionary or a glossary. I gave it to them, and showed them with hands-on materials

what *volumen* looked like. I continued with that and worked with small groups. Then, I did math centers. They rotated for math during 20 minute blocks ... While students worked at the centers, I pulled students for lessons, especially the ones that lacked the vocabulary. The centers reinforced whatever I had taught previously with manipulatives. It worked. (Teacher Interview, Victory School, April 1, 2010)

This quote revealed how the teacher was cognizant of the students' needs and structured the second semester of mathematics to reflect a more student-centered classroom designed for success, not just following the district's curriculum, but actually providing curricular access to all the students and meeting the second guiding principle (Howard et al., 2007) of instruction.

Principle 3: Instruction Is Student-Centered

Student interactions. Teachers at both schools used active learning strategies as evidenced by their interviews, photo-elicitation journals, lesson observations, and teacher reflection forms. They reported using such strategies as cooperative learning structures to meet the needs of the diverse learners in the classrooms. Teachers implemented peer group structures throughout the daily program across all content areas. Students sat in clusters of four to five members per group of tables and responded to the teacher according to their assigned role or number. Groups were assembled in mixed abilities, languages, ethnicity, and gender. The researcher observed students working in their groups while the teacher monitored the lesson in progress and walked around the classroom prompting students or clarifying information. During group interactions, students were accountable for the group

product as well as their individual work. Teachers also implemented learning centers and thematic instruction to connect content and language learning across all subjects.

Similarities and differences. Triangulation of the photo-elicitation journals, observations, interviews, teacher reflections and questionnaires revealed similarities and differences in the implementation of the third principle by the teachers at the two schools. Table 4.4: shows similarities and differences in the implementation of the Guiding Principles between both schools. The table represented the number of times the teachers referred to each of the guiding principles during their interactions with the researcher and statements on their documents. The results indicated various similarities between the teachers at both schools in implementing Principle 1 instructional methods that are research-based, and in implementing Principle 2 instructional strategies that enhance biliteracy.

Evidently, the largest contrast between the teachers at both schools in Table 4.6 appeared to be within the following subcategories in Principle 3: (3B) teachers create opportunities for meaningful language use, (3C) student groupings benefit from peer models, and (3D) instructional strategies build independence and ownership of the learning process. At Victory School, teacher interviews revealed how they created more meaningful student-centered language experiences than teachers at Evergreen School. In addition, teachers stated that student groupings benefited from peer models more often at Victory than at Evergreen School. Finally, teachers at Victory School reported in their interviews that they were building independence and ownership of the learning process; more teachers mentioned this at Victory than at Evergreen School.

As stated previously in this chapter, teachers at Victory School declared that they had more autonomy with their scheduling, selection of materials, and curricular decisions than was true for the teachers at Evergreen School, who acknowledged having to follow a more rigid curricular implementation with state-adopted materials that was closely monitored by the school/district. This divergence in curriculum and instruction between the two schools could account for the differences in the implementation outcomes for student-centered instructional practices.

Principle 4: Teachers Create a Multilingual and Multicultural Learning Environment

This principle consisted of three subcategories: (4A) cultural and linguistic equity, (4B) instruction takes language varieties into consideration, and (4C) instructional materials in both languages reflect the student population and encourages cross-cultural appreciation.

1. *Cultural and linguistic equity.* According to the findings on Table 4.4, teachers at Evergreen and Victory reported during their photo-elicitation journals the need and desire to create a learning environment where all linguistic and cultural groups were equally valued. However, the difficulty for the schools arose when trying to balance their academic and cultural program goals with the demands of test preparation and ongoing assessments to meet state and district expectations. The quote below represented the continual struggle to find time to address the cross-cultural competence goal.

Unfortunately, throughout the school year we are going so fast and before you know it is the next benchmark and we have to do that. At the end of the year, right after the CST we have already scheduled for a couple of weeks to do what is called the Telementor Program. It's all technology. We bring in the literature from different types of cultures. And bring in different pieces on how kids can connect to different family lives; some of them very much like theirs and some of them very different. Then they have to do an actual movie on their life, their home, their life style, their upbringing, and their ancestors. (Teacher Interview, Evergreen School, April 8, 2010)

The concerns to address the goal of cross-cultural competence in TWBI programs presented a challenge for teachers wanting to implement the framework of the Guiding Principles (Howard et al., 2007). As a result, teachers stated in their interviews that they felt pressured to postpone the implementation of the goal until after completing the state standardized exams, which happened nearly at the end of the school year. The issues pertaining to social justice and equity in cultural diversity were a common thread that continued to surface through the photo-elicitation interviews at both schools. Teachers were conscious of the need to address this goal throughout the year, but felt required to spend the time on the academic goals, due to testing, rather than on cultural objectives. In general, teachers expressed during their interviews that the linguistic and cultural goals of the program seemed to be two distinct entities that needed to be taught at different times of the year. Part of the year appeared to be devoted to academic goals (gearing up for benchmarks and state assessments) and other times (mostly after school and after testing) designated for cultural endeavors to meet the third goal.

Language variety. When teachers at both schools responded about teaching word variety used by their students, teachers generally stated they only discussed

language variety if students brought it to their attention during class. Most teachers did not report addressing this principle. One teacher addressed dialectical differences only if students said words that were unusual to others in class.

I think the kids would see each other with a different lens. This would help them see who they are and respect each other more, not just with each other as boy/girl or Mexican/American. I once had a student from Puerto Rico and he spoke kind of different, and mentioned a word that to him was nothing, but to the other kids it meant something else (bad word), so I did have to address that at that point to clarify what he meant culturally to the others. There are certain times where it is appropriate to talk about that. It is not often, unless we run into something. (Teacher Interview, Evergreen School, April 8, 2010)

This quote revealed the need for teachers to address dialectical differences when students misinterpret others culturally in class, but to also provide a framework during instructional opportunities to address dialectical nuances of the heritage language. Spanish is spoken in multiple variations throughout 21 countries in the world, particularly with vocabulary words that are connected to their regional origins. The teaching of language varieties in the classroom was not clearly understood by all teachers during the interviews and seemed to happen spontaneously in class, only if the opportunity presented itself with student dialogue. The teaching of dialectical differences in the language of instruction appeared to be a weak area in addressing the Guiding Principles (Howard et al., 2007), since it is not stated how to address this principle instructionally in the document, and teachers could not reference areas where it was addressed in their curriculum. This principle related to dialectical differences did not appear to the teachers to rank as a prominent feature of language instruction as other theoretical constructs in the Guiding Principles.

Materials. As teachers examined their instructional materials in both languages in their teacher reflection forms, teachers at Victory School declared having more materials that addressed their students' population and encouraged cross-cultural appreciation. In contrast, teachers at Evergreen School reported using mainly state adopted materials that did not address the third goal of TWBI cross-cultural competence and they said they made progress towards their multicultural goal mainly after the administration of standardized tests in late spring. This multicultural curriculum acquired through the Telementor Project (grant) addressed lessons on self-identity with a focus on literature and research. The following quotes reflected the teachers' responses to this principle:

The students select a country and share the culture. Everyone must do one. There is an oral presentation and parents bring something to share with the class food from that country. Then they develop a traditional head piece from that country and eventually a traditional outfit that the kids use for the family presentation...All the students are in the outfits' of the countries they studied. The theme song is "It's a Small World," which brings them all together. We start at least in February sending all the notices and details and keep reminding them for the deadlines, because every month there are things to turn in and a presentation. The presentation is usually at the beginning of June and we give ourselves a few weeks post testing. (Teacher Interview, Evergreen School, April 9, 2010)

When I first started here as an instructional assistant, we used to do a lot more in multiculturalism, but I feel that as a school we have lost some of that. I try to bring it into the classroom by celebrating and acknowledge most of the holidays that occur ... I will also try to acknowledge certain cultures represented in the classrooms... Through the readings we tend to bring in more of the multiculturalism. Right now that we are almost ready for testing, it is really hard, but at the end of the school year we finish off with this project called the Telementor Project. We read them some stories of kids in other cultures. The kids will get a chance to develop a PowerPoint to bring in the social justice,

biculturalism through a culmination piece and we tie it all together through why it is important to be bilingual/biliterate and what offerings are you going to give to the world with what you have acquired by being in the bilingual program. It is a nice piece at the end, and it helps to bring the class together. (Teacher Interview, Evergreen School, April 8, 2010)

Both of these quotes demonstrated that the teachers at Evergreen School were aware of the importance of addressing the third goal in their classrooms and tried to incorporate different multicultural activities in class. However, both teachers expressed the need to spend the time to teach multiculturalism at the end of the school year, incorporating this goal more predominantly in their curriculum after completing their assessments in May. Teachers also sensed that they were incorporating unique and special activities in their classrooms that brought their students together as a community at the end of the year, since they felt constricted to devote more time on academics during the school year.

Teacher Reflections and Classroom Observations

The research study also examined the teacher reflection forms related to the Guiding Principles (Howard et al., 2007) and compared the data to the researcher's classroom observations, which consequently were identical measures of the implementation of the Guiding Principles. Tables 4.5 through 4.8 showed the results of the rubric scale averages of the teacher reflection forms and the lesson observations in relationship to the implementation of the principles. Teachers rated their practices according to the four Guiding Principles in terms of minimal, partial, full, or exemplary implementation of each of the constructs and subcategories. The implementation of practices is represented on the tables as follows: letter "M"

represents minimal implementation of the principles, letter “P” means partial, letter “F” is full, and letter “E” exemplary. Teacher reflection forms (see Appendix D) and the lesson observation instrument (see Appendix G) corresponded to matching measures of the Guiding Principles. The researcher’s ratings represented the implementation of the principles during three to four lesson observations per teacher between the months of February and April, 2010. Therefore, a limitation to this section of the analysis might be that teacher ratings signified a broader and more in-depth reflection of their implementations of daily classroom interactions throughout the year and experiences in the program, while the researcher’s ratings might have had a narrower perception of the level of implementation due to the limited time spent observing lessons. In the analysis, the greatest discrepancy between the teachers and the researcher was with the implementation of principles 1, 2, and 4, while principle 3 had a closer relationship between the teacher ratings and the researcher’s observations.

Table 4.5: *Teacher Reflection Forms and Lesson Observation Instrument for Guiding Principle 1: Research-Based Instructional Methods*

Research-based instructional methods	Victory School				Evergreen School			
	M	P	F	E	M	P	F	E
Teacher reflections			33%	67%	8%	59%	33%	
Lesson observations			67%	33%			10%	90%

Although there are differences among the level of ratings between the teachers and the researcher, overall teachers at both schools appeared to be implementing research-

based instructional strategies in accordance to Principle 1 at full and exemplary ratings based on the results of the teacher reflections and lesson observation instruments.

Table 4.6: *Teacher Reflection Forms and Lesson Observation Instrument for Guiding Principle 2: Instructional Strategies*

Instructional Strategies	Victory School				Evergreen School			
	M	P	F	E	M	P	F	E
Teacher reflections	10%	20%	30%	40%	5%	5%	45%	45%
Lesson observations	25%		55%	20%		5%	20%	75%

Teachers at Victory and Evergreen schools demonstrated a range of ratings in their instructional strategies. Interestingly, the teachers with the highest ratings in instructional practices from the researcher were the ones who rated themselves the lowest on the rubric scales. These teachers later reported during their interviews that they tended to be very critical of their own practices and felt that after reflecting on their strategies, they thought of ways to improve their teaching and increase student success, therefore giving themselves a lower rating after examining their strategies.

In addition, the teachers' minimal ratings for both schools reflected the lack of coordination between the support staff and specials teachers who provided services to the students at their schools concerning the goals of the TWBI program. The teachers' lower ratings did not represent their own instructional strategies in the dual language classrooms, but rather the misalignment of special services with the philosophy of the

program, and the limited implementation of technology and multimedia in some grades. The teachers also reported deficiencies in special services at their schools during the interviews and reflections.

The researcher's lower ratings indicated that support staff/specials teachers were not observed working with students during the lesson observations and that some teachers might not have been using technology or multimedia during their observations.

Table 4.7: *Teacher Reflection Forms and Lesson Observation Instrument for Guiding Principle 3: Student-Centered Instruction*

Student-centered instruction	Victory School				Evergreen School			
	M	P	F	E	M	P	F	E
Teacher reflections			63%	37%			50%	44%
Lesson observations			63%	37%	5%	45%	50%	

Principle 3 had the most similar ratings between the teachers and the researcher on the implementation of active learning strategies, use of cooperative learning structures, implementation of learning centers and opportunities for meaningful language use. The teachers and the researcher also believed students benefited from peer models in social and academic settings. Differences between the teacher reflections and the lesson observations at Evergreen School reflected partial (5%) opportunities for meaningful language use by the students in one classroom. In addition, one teacher did

not answer the question on building independence and ownership of the learning process, therefore data only reflected a 94% response rate.

Table 4.8: *Teacher Reflection Forms and Lesson Observation Instrument for Guiding Principle 4: Multilingual and Multicultural*

Multilingual and multicultural	Victory School				Evergreen School			
	M	P	F	E	M	P	F	E
Teacher reflections			42%	58%	8%	17%	58%	
Lesson observations	34%		58%	8%	33%	20%	33%	13%

These results had the widest difference in range between school ratings. Teachers reported having difficulty implementing principle four due to the cultural and linguistic diversity in the classroom and its relationship to the learning environment between ELs and EPs. Teachers attributed this concern to the attitudes of the students, particularly in the upper grades, with use of Spanish in small group discussions. They also attributed lower ratings to lack of multicultural materials that addressed the third goal. Not all teachers at Evergreen School responded to all the questions in this section; therefore, data only represents 83% of the responses. In the lesson observations, the minimal rating of 34% for Victory School and 33% for Evergreen School represents no evidence that instruction captured language varieties into consideration during the visitation days. Therefore, this could be a limitation to the

study, since teachers are making these considerations for language during other instructional times in the year.

Upper-grade teachers at both schools reported in their interviews that peer interactions were the most challenging aspects of the program. The researcher also encountered similar findings during some of the lesson observations when ELs reverted back to the use of English during Spanish group discussions. Evidently, when EP students used English during their cooperative learning interactions, even though the language of instruction was Spanish, ELs succumbed to English as the medium of communication and discontinued speaking in Spanish. Some teachers reminded the students to stay in the language of instruction, but did not enforce or reward the use of Spanish. Other teachers were cognizant of students' code switching during group interactions, and rephrased the student' statements in Spanish or accepted the use of English for group communication. Hence, when students shared out in whole class discussions, the teacher required responses in the language of instruction.

During the interviews, the majority of the teachers admitted being lenient with students' use of code switching in the classroom, even though teachers adhered to instruction only in the target language and avoided concurrent translation. In addition, teachers admitted struggling with the status of Spanish in the classroom and maintaining group discussions in the heritage language, and felt they needed to develop strategies on how to address this phenomenon during cooperative learning structures.

In the review of the literature of the Guiding Principles (Howard et al., 2007), the need to optimize student interactions and share work experiences to facilitate communication between English proficient and ELs has been highly recommended for TWBI programs. The Guiding Principles listed effective features of instruction, including the use of extensive interaction among students to develop bilingualism and social equity, but fell short of stating how to achieve these desired goals in the programs. Consequently, the Guiding Principles do not explain *how* educators should address the status and equity of languages or cultures in the classroom, and neither does the corpus of literature review for dual language education. Although the teachers in the study received many years of training in various areas and were considered experts in their field, they expressed the need to continue to create strategies to maintain the integrity and status of the heritage language and culture. Teachers felt this was as an area of much needed critical attention in order to fully achieve multicultural competence.

Summary

All the four principles of dual language education were implemented at the schools at varying degrees according to the evidence among the interviews, photo-journals, teacher reflections, and lesson observations. In general, the teachers and the researcher rated the implementation of the principles at full or exemplary in the rubric scales with few exceptions at partial and minimal, mainly due to the principles not being implemented during the researcher's classroom visitations. Teachers were aware of the tenets of effective dual language education and addressed the frameworks in

their instructional strategies. The area of linguistic and cultural equity continued to be a concern for the teachers in the classroom, particularly with the status of Spanish in the upper grades.

Instructional Strategies for Biliteracy

Biliteracy Development

The case study provided the researcher with a holistic and organic method for examining the data of real-life events in the classroom. The use of multiple sources of evidence on lesson development and implementation of program goals allowed the convergence of data results for triangulation. The photo-elicitation journals and interviews examined the reasons why teachers selected particular strategies to develop the program goals of bilingualism, biliteracy, and biculturalism, and how they performed the strategies to elicit student interaction. The following research question is addressed in this section: How do TWBI teachers describe successes and challenges in their instructional strategies to develop biliteracy and cross-cultural competence with program participants, including English Learners and English Proficient students?

Photographs depicted the processes that teachers applied for lesson development, student engagement, reading and writing in the heritage language, and English language development strategies. Interviews provided further dialogue about the individual strategies, the language of instruction, and students who benefited most from the instructional practices. Analysis of the teacher interviews, reflections, and questionnaires presented the relationship of the strategies to the Guiding Principles

(Howard et al., 2007) and types of trainings received to implement the strategies. Furthermore, the researcher observed 50% of the strategies described in the photo-elicitation journals and interviews as additional evidence of their implementation. Triangulation of multiple data sources such as the photo-elicitation journals, interviews, reflections, questionnaires, and lesson observations confirmed evidence to develop converging lines of inquiry and corroborated the facts. Multiple measures of the same phenomenon provided construct validity to the implementation of the instructional strategies at the schools.

Appendix J, entitled Victory School: Triangulation of Photo-Elicitation Journal Strategies for Biliteracy Development, and Appendix K, called Evergreen School: Triangulation of Photo-Elicitation Journal Strategies for Biliteracy Development, offer details of the triangulation analysis for both schools. In both tables, the first column represents the name of the strategies that teachers used to develop biliteracy skills in their photo-elicitation journals. Appendix J from Victory School listed 29 different strategies that represent an array of approaches to readers' and writers' workshop, story maps, and charts for vocabulary development. Teachers also noted peer engagement activities through cooperative learning strategies. Appendix K from Evergreen School named 26 distinct strategies including thematic approaches to reading and writing, the use of journals and charts for vocabulary development, and graphic organizers for English and Spanish instruction. The second column on Appendixes J and K provides the reason for using the strategy and the language in which the strategy was available to the students. The third and fourth columns

represent the grade levels for the strategies, followed by which students benefited from the strategies (fifth column).

In column six, teachers related the Guiding Principles for Dual Language Education, Strand 3: Instruction (Howard et al., 2007) to their instructional strategies. A code referenced one of the four principles by its number and a letter representing the subheadings of the principles that were correlated to the teacher reflection forms (i.e., code 1E represented Principle 1: subheading E Teachers use a variety of strategies to ensure student comprehension). This column permitted the researcher to cross-reference the research-based practices of the Guiding Principles to the instructional strategies. The seventh column shows if the researcher observed these strategies during the classroom observations by denoting a “yes” or “no” in the column. The eighth column demonstrates if the teachers received training in these strategies at the schools/districts or conferences as evidenced by their questionnaires and interviews. The last column provides the assigned data codes for pattern matching from the interviews conducted at both schools. These last four columns permitted the researcher to triangulate data sources across multiple measures.

Results from Appendix J and Appendix K showed grade-level implementation of strategies for Victory and Evergreen schools across first through sixth grades. While some of the strategies were only implemented at particular grade levels, teachers at Victory School reported in their interviews implementing 45% of the photo-elicitation strategies in more than one grade level span and 31% of the strategies across three or more grade levels. In contrast, interviews from teachers at Evergreen

School indicated implementing common strategies in more than one grade level 19% of the time, and across three or more grade levels 15% of the time. Teachers at Victory School indicated how 100% of the instructional strategies presented in their photo-elicitation journals benefited all students, including struggling students, visual and kinesthetic children, individuals and small groups. Whereas, teachers at Evergreen School reported that 96% of the strategies benefited all students, including struggling students, English Proficient students, and 4% of strategies benefiting only the higher level students. In the area of training, teachers at Victory School stated attending workshops and institutes for 66% of the strategies described in their photo-elicitation journals, in comparison to 58% training of strategies for teachers at Evergreen School. Both schools described 100% of the strategies as being aligned to the instructional strand of the Guiding Principles (Howard et al., 2007).

Table 4.9 lists the strategies used by teachers at Evergreen and Victory Schools to develop biliteracy skills in the areas of reading, writing, vocabulary, and grammar. The majority of these strategies implemented by the teachers were presented in Spanish at the primary and middle elementary grades (K-3), with few of the strategies employed during the English time. In the upper grades (4-6), the teachers' utilization of the strategies was indicative in both languages of instruction. This table also demonstrated how the trainings related to the strategies. Teachers at both schools learned their strategies through school/district in-services, teacher workshops, or grants received by individual teachers. Some of the strategies that are listed in this table were either developed by the teachers and/or constructed together with their

students, such as input charts. In addition to the trainings listed on Table 4.9, teachers also stated that they received training in the following areas: Learning Headquarters, Focused Approach, Writing for Excellence, WRITE Institute Project, Systematic Approach to English Language Development, Specially Designed Academic Instruction in English/Spanish, Write from The Beginning, Spencer Kagan's Cooperative Learning, Marzano's Building Academic Vocabulary, Balanced Literacy/Growing Teachers, Telementor Project (grant), and Cotsen Project (grant).

Table 4.9: *Instructional Strategies for Biliteracy Development at Evergreen and Victory Schools*

Biliteracy strategies	How strategies were acquired by teachers
Reading	
• Readers' workshop	→ Lucy Calkins: Readers' workshop training
• Book discussions	→ Junior Great Books training
• Reading connections	→ Not stated in interviews or questionnaires
• Story maps	→ Nancy Fetzer training
• Cross-age learning buddies	→ Teacher developed across grade levels
• Biography boards	→ Not stated in interviews or questionnaires
• Thematic leveled-readers	→ Reading A-Z, an online resource
• Test taking reading strategies	→ Not stated in interviews or questionnaires
• Focus wall	→ Teacher developed walls; district training
• Interactive graphic organizers	→ Teacher developed; student-created posters
• Summarize and sequence	→ Teacher developed; district training
• Oral presentations	→ Teacher developed project
Writing	
• Writers' workshop	→ Lucy Calkins: Writers' workshop training
• Collaborative writing	→ Attended teacher training
• Story summaries	→ Nancy Fetzer training; Thinking Maps
• Writing about personal experiences	→ Lucy Calkins: Readers' workshop training
• Writing Assessments	→ Not stated in interviews or questionnaires
• Multicultural family country reports	→ Teacher developed project
• Math journals	→ AVID training
Vocabulary	
• Thematic Vocabulary Development	→ Teacher created Integrated Spanish Language Arts (ISLA)
• Academic Vocabulary	→ Step Up to Writing; Nancy Fetzer
• Daily Message	→ Houghton Mifflin's LECTURA Program
• Input Charts	→ GLAD Strategies Training
• Story vocabulary (verbs)	→ Josie Javens's training; teacher created
• Word analysis	→ Josie Javens's training; Teacher created
• Math vocabulary wall	→ Teacher created wall
• Vocabulary charts, banks	→ Teacher-student created; school training
• Spelling picture cards	→ Teacher created cards
• Frontloading	→ Nancy Fetzer's frontloading training
Grammar	
• Language patterns and sentence frames	→ Susana Dutro's training; district training
• Mini-lessons	→ Lucy Calkins: Writers' workshop training
• Journals: Note-taking	→ District training; teacher created
• Grammar journals	→ Josie Javens's training; teacher created
• ELD advanced organizers	→ Teacher created PowerPoint presentations

Successes and Challenges With Strategies Across Schools

Biliteracy Strategies

Teachers at both schools valued bilingualism and demonstrated fidelity to the program design through separation of languages for instruction and adhering to their program design, as evidenced by the teacher interviews and lesson observation instruments. At both schools, lesson delivery remained in the language of instruction without concurrent translation of content. Only one of the teachers at Victory School rated herself as having professional proficiency in Spanish, while all the other teachers in the study rated themselves as demonstrating full professional proficiency or as a native speaker. In English, all teachers at both schools rated their proficiency as full professional or native speaker (see Table 4.2). Teachers at both schools felt that part of their success with separation of languages during lesson delivery was due to their high levels of proficiency in the languages of instruction (Spanish and English).

In the review of the literature, Lindholm-Leary (2001) indicated how teachers maintained the fidelity to the program by avoiding code-switching between languages when delivering instruction. The issue of fidelity to the instructional language can be problematic if the teachers' level of proficiency in the language is less than adequate (Lindholm-Leary), if the pressure from parents or students to use concurrent translation as a medium of communication (Carrigo, 2000; Johnson, 2000), or if teachers lack appropriate preparation of strategies needed to implement the program (Flores, 2001; Howard et al., 2003; Lindholm-Leary). Keeping true to the program design can have affirmative affects on bilingualism (Alanís, 2000).

Teachers at both schools stated in their interviews how they associated high levels of Spanish instruction with the goal to become bilingual and maintain the integrity of the heritage language. Teachers acknowledged more success with student achievement when the heritage language was valued and respected by faculty, parents, and students. One teacher at Evergreen School commented on how the district's push for more English at the expense of their Spanish-language time was having adverse results for biliteracy:

At one time, our scores really dipped a lot and we took a closer look, our Spanish scores had taken a dive, well as Dr. Lindholm-Leary, our program evaluator, explained, "The stronger the Spanish, the stronger your English, you cannot forget about that." With the push to English and the testing, we started to neglect certain things, and it can't be like that. The students, who were excelling, were fully bilingual with mastery in Spanish and English, and I have not seen kids stronger than that who can survive and do both. I truly believe in a program like this. When I was hired by the district, this was the place I wanted to be. I just knew that! (Teacher Interview, Evergreen School, April 9, 2010)

This teacher quote is supported in the literature review (Lindholm-Leary & Genesee, 2010), opposing the addition of more English instruction at the expense of reducing the daily percentage of heritage language in order for ELs to perform better on standardized tests. According to Lindholm-Leary and Genesee, more English "time-on-task" does not expedite the acquisition of English for ELs or improve their test scores. On the contrary, higher level of native language proficiency enhances English performance and facilitates learning in a second language (Lindholm-Leary, 2001, 2005; Thomas & Collier, 2002). Alanís (2000) found similar results when teachers spent more time in English instruction than on the minority language, as students

developed a preference for English due to lack of cultural capital for Spanish at the school.

Major Themes for Successes and Challenges of Strategies

1. *Success with lesson planning.* In the photo-elicitation journals and interviews, teachers at both schools demonstrated planning for teaching strategies, such as modeling lessons for the students in the language of instruction as a successful technique. Teachers at Evergreen School called this strategy as the “I do, we do, and you do” in reference to the process of first modeling the lessons for the students, then providing guided practice, and ultimately having the students work on the standards independently. A teacher at Victory School also explained the process of modeling as:

It begins with the teacher modeling a lesson, very briefly and making connections to what they have previously learned, demonstrating her own writing and inviting the students to come on board with her writing and talk about how to develop it further. (Teacher Interview, Victory School, April 1, 2010)

Teachers at both schools believed in modeling the lesson objectives in an explicit and systematic way to introduce or explain learning processes and expectations for student engagement and products. Lesson planning also included the use of differentiated instruction through a variety of flexible student groupings based on skill development and language needs, as evidenced by the photo-elicitation journals, such as thematic leveled-readers, spelling picture cards, sentence frames, mini lessons, and readers’ and writer’s workshops (see Appendixes J and K). During the interviews, teachers at both schools stated that they used the students’ daily work, benchmarks, or formative assessments to determine instructional needs and grouping

structures for differentiation. In some classrooms, instructional strategies included the use of technology during instruction (i.e., computer lab, teacher laptops, classroom computers, document cameras, and LCD projectors).

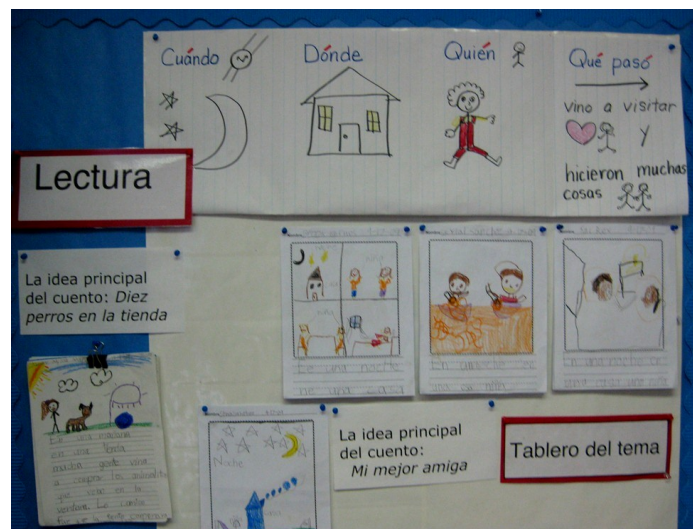
These findings related to instructional planning concurred with Cloud and colleagues (2000) constructs for balanced foundations between implicit and explicit instruction in dual language learning. According to Cloud and colleagues, students should receive explicit content instruction in the target language, and implicitly use the language forms during the class interactions. Therefore, when teachers in the study used the target language as a medium of instruction during modeling, they exposed students to the academic vocabulary and functions of the language that later students explored in meaningful situations, such as engaging and immersing students in vocabulary, creating input charts, and frontloading strategies (see Appendixes J and K). Teachers identified instructional planning as a successful strategy to implement program goals.

Analysis of the interviews, lesson observation instrument, and photo-elicitation journals revealed that teachers at Victory School planned for explicit instruction through the use of various formats for lesson delivery such as whole class, small group instruction, mini-lessons from data collected from student work samples, or guided instruction. Even though teachers at Evergreen School also engaged in the above formats for instruction during classroom observations, their interviews and photo-elicitation journals focused more on the use of strategies to transfer skills between the heritage language and English. Teachers at both schools also connected prior lessons

with the students or frontloaded vocabulary lessons for content instruction. The following quote described one of the approaches:

There are stories in our state adopted materials that are rich in content and we can mine for rich language. So, what I am doing is telling them basic story elements, as I am introducing them kinesthetically by making a gesture that means “setting.” I point to my wrist and say “¿Cuándo? ¿Dónde?” And we dialogue about the setting...I call this engaging, because they need to be on board with you. And I call it immersing, because the children are immersed in the language of the story. It is all around them, and you are using a different modality. I love it. They are speaking, obviously. They are listening. They are writing, because we start making a little story map of what we are doing. And they are reading, because they have to refer back to the map. So, they are engaging in all of those modalities, so I think that this is a powerful strategy. (Teacher Interview, Victory School, April 1, 2010)

Photograph 4.2 demonstrated the how the teacher from Victory frontloaded the story elements prior to the lesson.



Photograph 4.2: *Frontloading of Story Elements*
(Photo-Journal, Victory School, April 2010)

Teachers at both schools approached planning language lessons from different perspectives, as evidenced in their photo-elicitation journals and teacher reflection forms. Teachers indicated teaching language arts in English and at a separate time in the day teaching Spanish. Their approaches differed in that some teachers taught language arts through a thematic-base or literary instruction, while other teachers approached the teaching of reading and language arts through a skill-based or grammar-based approach. Teachers indicated following the theoretical framework of pedagogically sound designs congruent with the theories and practices presented in the Guiding Principles (Howard et al., 2007). They stated that students benefited from a variety of modalities and needed connections between languages for transference of skills. This connection between languages was taught first in Spanish language arts and then the teacher waited until the English block in their schedule (ELD or English language arts) to associate the connections across languages, not taught simultaneously in both languages through a concurrent approach. The following quote explained this approach:

Their journals stay in the classroom, but the binders go home. So when we teach capitalization in Spanish, we say (depending in what it is) everything you just learned in English is also done in Spanish, we teach what is similar in the languages and then we work on the exceptions. We will show them, these are the same, but these are different in Spanish. We always point out the distinction between the languages, and connect their learning to what we did in Spanish that is similar to English. We have a similar PowerPoint in Spanish. (Teacher Interview, Evergreen School, April 8, 2010)

2. *Challenges with lesson planning.* The majority of the teachers at both schools admitted during the interviews that they could not find enough time during the day to plan for instruction. Teachers stated that the demand of well-developed lessons in a TWBI program required time to find or develop the appropriate materials, translate resources, and augment the plans in their teachers' editions. They needed to develop instructional sequences specifically designed to meet the needs of ELs and EPs, which required time. In general, teachers at both schools reported dedicating 2 to 10 hours per week to plan and prepare for instruction, whether time was spent planning together at grade level meetings or individually. In addition, teachers expressed needing time to select the appropriate materials for each lesson and create supplemental resources lacking in their state-adopted materials necessary to augment the scope and sequence of the instructional plan. The photographs (see 4.3) depicted elaborate theme tables to augment the curriculum for the students; on the left side resides The Life Cycle and on the right side is Ancient Egypt.



Photograph 4.3: *Theme Tables to Augment Curriculum*
(Photo-Journals, Evergreen School, April 2010)

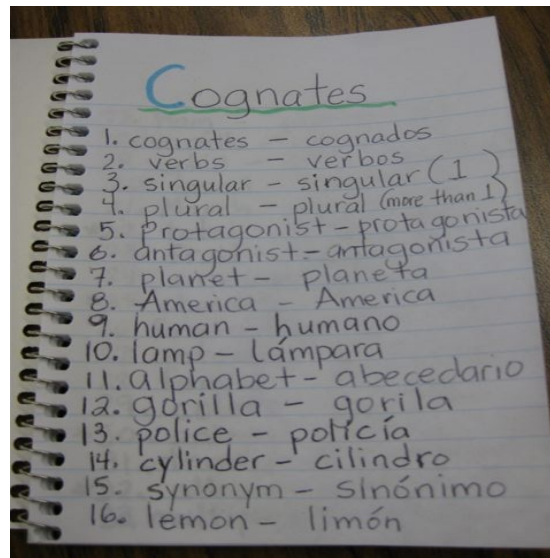
The teachers explained that it also took time to develop skills in their own professional practice on how to determine which lessons can be implemented in a TWBI program without additional supplementary materials and which ones required added resources to ensure success. Teachers felt challenged by the amount of material they needed to cover during the year and the limited time they had in their programs to provide an in-depth curriculum in both languages. At both schools teachers stated that they lacked sufficient time to review and reteach lessons which seemed to be compounded by constraints in adhering to their daily schedules, pacing guides, and benchmark assessment timelines.

3. Success with vocabulary development. Strategies for expanding vocabulary skills described in the interviews and observed during instruction pervaded as prominent features for successful lesson development at both schools. The use of frontloading vocabulary persisted as a vehicle for experiencing new terminology through the use of hand gestures with verbal utterances of key words for both languages (see Appendixes J and K). This strategy included the labeling and description of drawings related to the content vocabulary. Frontloading strategies also connected the transference of skills between languages and knowledge learned in previous lessons. When teachers described successful vocabulary building strategies, they often spoke about including support tools for the students such as graphic organizers, teacher-student created charts, sentence frames, note taking, or the use of technology to assist students in the acquisition of new terminology in either English or

Spanish. During the photo-elicitation interviews, a teacher from Victory School commented on the use of frontloading as a successful scaffolding strategy.

You need to give them access to not just the teacher support, but print support around the room. We build different charts for different types of word usage and have that as an independent resource for them that is available for writing. (Teacher Interview, Victory School, April 1, 2010)

Another teacher at Evergreen School described in her interview the significance of frontloading vocabulary as a way to “even the playing field” for all the students regardless of background experience with the topic, subject of instruction, or home language in order to ensure success for student learning. Teachers at both schools felt the students needed to experience the use of academic vocabulary through a variety of meaningful activities prior to and during the lesson development in order to ensure student success (see Appendixes J and K). Teachers at Evergreen School stated that teaching students the functions of cognates expanded their vocabulary during reading and connected students to the importance of environmental print in their community. One teacher had the students keep a cognate journal (see Appendix K) in class of words they collected from home and their surroundings. Photograph 4.4 confirmed how a student’s English-Spanish cognate journal listed words the child found in his/her environment.



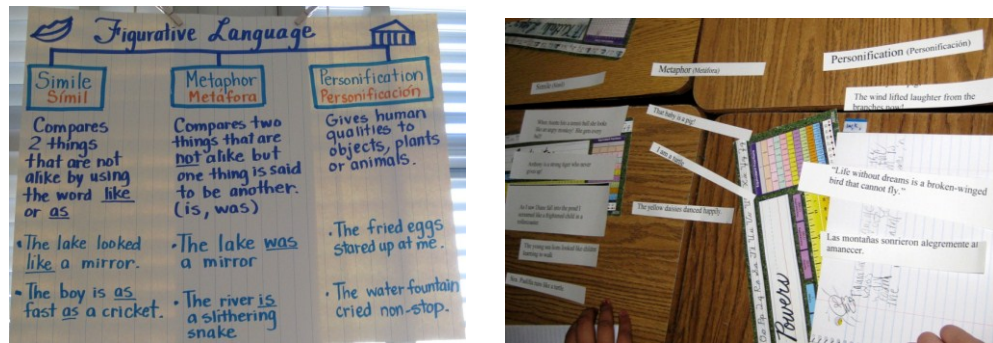
Photograph 4.4: *Student's English-Spanish Cognate Journal*
(Photo-Journal, Evergreen School, April 2010)

The use of vocabulary development (Dutro, 2007; Dutro & Kinsella, 2010; Snow & Katz, 2010; Wong Fillmore & Snow, 2000) is required as an instructional support for ELs to develop complex oral and written communication in English. The literature supports the teaching of explicit language forms and structures as one of the most effective ways to assist the learners to succeed in second language acquisition. As a result, the use of frontloading strategies in this research study promoted the development of biliteracy skills through motivation and authentic use of academic language in the classroom across disciplines and grade levels.

Teachers at both schools implemented vocabulary instruction through an experiential approach as depicted in the photo-elicitation journals and lesson observations. The use of gestures as a kinesthetic approach to introduce and learn new vocabulary with the students was emphasized as a successful strategy by all teachers at Victory School (see Appendix J). Teachers created or allowed the students to develop

their own hand signals to represent actions, descriptions, or definitions of words. Lessons included the use of vocabulary with sentence frames.

Teachers at Evergreen School approached vocabulary development from a constructivist view, where they created teacher-student vocabulary charts during the lessons, used focus/word walls as part of their instruction, and highlighted vocabulary in journals or workbooks during note-taking strategies (see Appendix K). Teachers described successful strategies through lessons that emphasized word analysis with graphic organizers to describe words or synonyms/antonyms and used them in context. At both schools, teachers guided students through the process of completing graphic organizers all together or in small groups during their lesson observations. Teachers at both schools stated that their methods of vocabulary development related to the importance of delivering explicit instruction for language expansion through a structural analysis approach that was meaningful to the students, a strategy that has been advocated in the research literature on bilingualism and/or ELD development (Cloud et al., 2000; Dutro, 2007; Dutro & Kinsella, 2010; Snow & Katz, 2010; Wong Fillmore & Snow, 2000). The photograph on the left side depicts a teacher-created chart to analyze figurative language and the photograph on the right side demonstrates how the students practiced the same skill by categorizing figurative language phrases in cooperative learning groups (see Photograph 4.5).



Photograph 4.5: *Teacher-Created Chart and Figurative Language Cooperative Learning Activity* (Photo-Journal, Victory School, April 2010)

4. *Challenges with vocabulary development.* Teacher interviews reported that complexity in the instructional materials, particularly in upper-grade Spanish content instruction, was extremely challenging for the students in the process of reading comprehension. Students could pronounce and read the words, but unless they had developed strategies on root word knowledge or inferencing/predicting meaning within context-embedded words, students suffered with the intellectual capacity to decipher meaning from the text. Teachers at Evergreen and Victory Schools explained the challenges of utilizing Spanish textbooks in science and social studies, since the readability levels and complexity in vocabulary seemed to be above the students' appropriate grade level. Therefore, Spanish content reading materials seemed more demanding and difficult for students to be able to access information on their own. Various teachers reported reading the text aloud and then summarizing the selection together with the students in class or having the students define vocabulary words in their journals prior to using the textbooks. Other teachers assigned homework with

textbook activities to further engage students with the vocabulary and language of instruction.

5. *Success with reading and writing.* Teachers described successful reading and writing strategies (see Appendixes J and K). as those that included making meaningful connections between the text and the students' prior experiences, creating critical thinking questions about the reading selection, and modeling ways to engage in literature response and analysis through the use of think alouds. Writing activities were integrated with reading fiction and nonfiction.

Teachers at Evergreen and Victory schools reported using the state-adopted and supplementary materials for their language arts instruction in listening, speaking, reading and writing during their interviews. Although districts mandated the use of state-recommended texts, teachers were allowed to supplement their reading and writing instruction with additional resources. Teachers described these supplementary materials as the key to their success in biliteracy development, since state-adopted materials had not been created for TWBI classrooms, particularly when addressing transference of skills between English and Spanish.

6. *Challenges with reading materials.* Teachers at both schools indicated that state-adopted materials lacked appropriate resources to address the linguistic needs of the student population in their TWBI programs. Consequently, in addition to the state-mandated curriculum, teachers' photo-elicitation journals indicated supplementing their programs with readers' and writers' workshop approaches, literature circles, reading fluency strategies, leveled readers, Guided Language Acquisition Design

(GLAD) strategies, grammar journals, thinking maps, or graphic organizers. The following quote provided insight into the critical need to supplement the reading/writing program beyond the state-adopted materials:

These leveled books that are online totally challenge the students. There are supplementary books also that come with the state adopted program, but they are not necessarily related to the theme. The point is to develop more knowledge and more fluency through the theme, because that is where the students recognize the vocabulary. They can read books a lot faster, and I think it is wonderful for their reading fluency. When you look at our fluency rates and compare them to the teachers who are just teaching in English and only using the adopted program, you begin to see that every year our kids' read at 95% or above or 60-70% read at advanced levels. That is not going to happen to those other programs. So, I think this is the key to provide leveled books for fluency practice and augment the program with all these different materials. This is just one, but there are so many other things we are doing that allow them to just access higher vocabulary words in the reading and the practice. Eventually these booklets go home with them for more practice. (Teacher Interview, Evergreen School, April 9, 2010)

According to the literature review, programs must consider high-quality materials for both languages, and must reflect a multicultural curriculum to address the goal of cross-cultural competence (Cloud et al., 2000; Lindholm-Leary, 2001; Sugarman & Howard, 2001). Similarly, in this study, teachers at Evergreen and Victory expressed concerns with the lack of materials addressing the needs of the student population in their programs. During the interviews, teachers at both schools reported creating their own support materials and supplementing the state-adopted programs with additional materials.

Howard and colleagues (2003) reported that teachers perceived teaching in two languages a challenging task since equitable materials may not be readily available to

meet the demands of TWBI programs. Therefore, the complexity of vocabulary increases linguistic demands in which teachers may need additional resources or training on instructional strategies to ensure success. Teachers at Evergreen and Victory stated they understood the multifaceted demands of accessibility to content and tried to equalize this complex issue with an emphasis on activities, projects, and teacher-created support tools (i.e., PowerPoint presentations, handouts, charts, realia, display tables, role playing, and hands-on experiences).

Both schools used the state adopted materials as their primary sources for the instruction of language arts in English and Spanish as measured by interviews and lesson observations. Evergreen School teachers delineated times during the instructional day for the implementation of the state-adopted curriculum with some opportunities to deviate from the adopted programs. The following teacher described the tight instructional schedule as a means to comply with the district mandates:

There is a process you have to follow. You have to open up with the message, and then is the reading – I read, then the students read, and you do the comprehension skills, and you move on to the word attack skills and there is writing at the end. They (administration) wanted us to structure our day and give them our daily schedules and they wanted to see all those things in there. The challenge is How do you arrange your schedule so it reflects all those things? (Teacher Interview, Evergreen School, April 9, 2010)

Teachers also felt they were able to meet the needs of the students by using their creativity whenever possible to augment the basic textbook lessons through techniques they had learned at workshops.

At lot of us have had many trainings and opportunities to attend conferences and workshops that whenever we go and see something we say, “We’ve got to go and take this back.” We know our themes, so we know what literature we need, what books to bring in, and what other resources we need. (Teacher Interview, Evergreen School, April 9, 2010)

In contrast, teachers at Victory School reported in their interviews to have more administrative support for flexibility with their state-adopted curriculum. Consequently, teachers implemented other programs by alternating the use of state-adopted and supplementary materials for as long as every two weeks. One of the teachers explained her reading/writing program in the photo-elicitation interview as follows:

I do the reader’s workshop and the writer’s workshop only in Spanish. Everybody is reading a different book, because in the reader’s workshop model, they all select books at their own level... I do this every other week, I would love to do it every week, but because we have our state adopted series, then I have to cover that too because those are the ways that I can show data for the principal by having them take exams with each unit that we do. And in English, we focused a lot on grammar, you know, verbs and nouns. But we still focus on reading fluency and beginning comprehension. But we use different sources of materials for that. (Teacher Interview, Victory School, April 1, 2010)

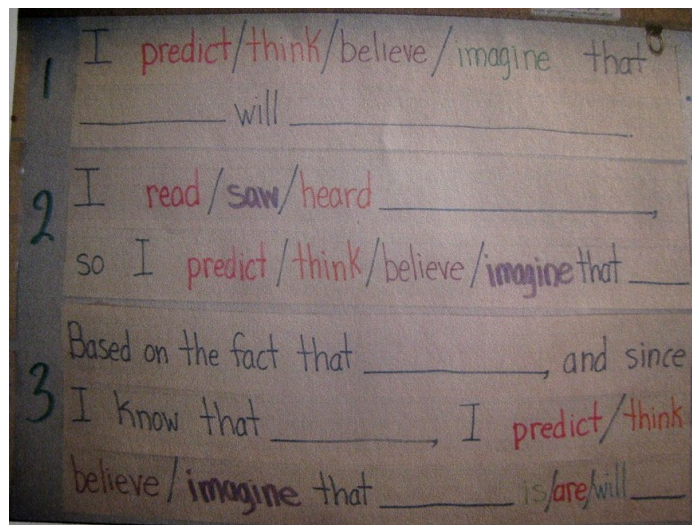
According to the interviews, the flexibility in curriculum at Victory School allowed teachers to implement readers’ and writers’ workshop approaches in their language arts programs across all grade levels, as evidenced through the lesson observations and photo-elicitation journals. Teachers also stated being trained by district funding for these alternative instructional opportunities in their questionnaires, but found that acquiring supplementary materials in Spanish remained a challenge. Victory School

teachers reported using multiple sources of curriculum alignment for standards and assessments.

7. *Success with English language development (ELD)*. During the interviews, teachers at both schools stated they created an English language program that addressed the needs of both populations ELs and EP students. The evidence indicated that both schools used team-teaching approaches to accommodate the needs of the students. During the lesson observations, Victory School teachers maintained their classes together for ELD, while teachers at Evergreen School grouped students for instruction in English with accordance to their California English Language Development Test (CELDT) proficiency levels. Teachers at Victory School discussed in their interviews using higher order-thinking skills methods to teach English through response to literature programs in which teachers and students used questioning strategies and opinions to develop their listening, speaking, reading, and writing skills. Victory School teachers also used Systematic Approach to ELD lessons to teach language forms as evidenced by this quote:

I really like the Systematic Approach to ELD's use of sentence frames for showing differentiation between language functions and language forms and supporting ELD students with language frames that become more progressively complex and build into their area of academic language...They have basics for English, but we need to move them into the areas of academic language in English. It's communicating and showing what you know, so the students would be able to use sentence frames using this chart...like a question and answer between the teacher and students first, and then taking it to partners where they would do it for themselves. (Teacher Interview, Victory School, April 1, 2010)

Teachers at Evergreen School reported during their interviews that they utilized state- adopted programs to teach ELD by proficiency levels. Some grade levels developed differentiated vocabulary and spelling words (see Appendix K) for the various CELDT levels and created word walls for the students to assist with attainment of skills and lesson success. In addition, some teachers developed their own PowerPoint presentations (see Appendix K) for each of the lessons related to parts of speech or grammar as interactive graphic organizers for the students. Other grade levels used cognate or grammar journals, word analysis skills and note-taking with their students (see Appendixes J and K). The teachers' photo-elicitation journals emphasized the development of vocabulary in English with some literary analysis and use of interactive graphic organizers and presentations (see Appendixes J and K). Photograph 4.6 demonstrated how a teacher used sentence frames during ELD time with one of the CELDT-leveled groups.



Photograph 4.6: *ELD Sentence Frames*
(Photo-Journal, Evergreen School, April 2010)

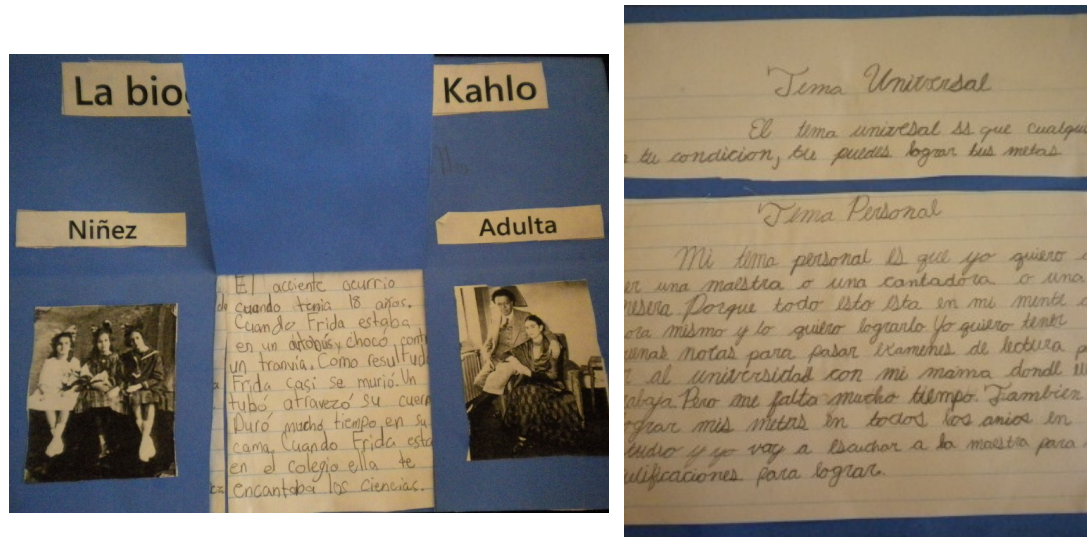
8. *Challenges with ELD.* In general teachers described challenges related to the district's emphasis to expedite the acquisition of ELD standards and increase performance on standardized tests. Some teachers at Evergreen were piloting the grouping of students by ELD proficiencies for instructional purposes across their grade levels, which increased the challenges for teacher articulation, planning, and development of lessons. Teachers reported having to dedicate time to coordinate efforts, but stated seeing results in addressing the students' needs by focusing on levels of acquisition. They felt they were also meeting the needs of English Proficient (EP) students who needed differentiated learning in mastering English. As a result, some of the ELD groups included the participation of EP students.

Based on lesson observations, teachers at Victory addressed English proficiency through whole group instruction. Teachers reported in their interviews differentiating for levels of proficiency when necessary, but admitted being challenged by the overpowering nature of EP students to dominate the conversations in English. The literature review in Chapter 2 addressed this area of concern as TWBI programs must address strong participation from language-minority students by providing a nonthreatening environment and dominance of one group over another (De Jong, 2006; Fitts, 2006; Palmer, 2008; Potowski, 2004).

Instructional Strategies for Cross-Cultural Competence

Third Goal of TWBI: Cross-Cultural Competence

1. Success with student-centered activities. Lesson observations and teacher reflection forms revealed how lesson development capitalized on making personal connections about students' experiences with the content presented in class. Teachers at Evergreen and Victory provided opportunities for students to share personal experiences related to the topic of instruction, including making associations to their home life. Other ways teachers described successful strategies in cross-cultural competence were engaging students in active learning through connections to their historical pasts, reading biographies related to their cultural heritage, writing country reports, and learning dances, proverbs and songs (see Appendixes J and K). Photograph 4.7 demonstrates how a teacher linked the historical past of Frida Kahlo's biography to the student's personal life as a universal theme.



Photograph 4.7: *Frida Kahlo's Biography and Student's Personal Theme Connection* (Photo-Journal, Victory School, April 2010)

Teachers at both schools stated in their interviews that when they addressed the cross-cultural competence goal of TWBI in the classroom, it increased the opportunity to equalize the cultural and linguistic status among the students. Teachers felt successful when students engaged in discussions and dialogued about content with peers during class lessons. In addressing the cross-cultural goal of TWBI, both schools integrated students for instruction in cooperative learning groups as measured by interviews, lesson observations, photo-elicitation journals, teacher reflection forms, and questionnaires. Classroom seating arrangements demonstrated groups of four to five students per cluster. Although there was a focal point for teacher-directed instruction in the front of the classroom as indicated by the lesson observations, the teachers moved about the room environment to facilitate, monitor, or prompt students during class activities.

Evidence from photo-elicitation interviews revealed how Victory School teachers created opportunities for students to engage in small group dialogue during the lessons more often with less teacher talk, while the majority of teachers at Evergreen School designed direct instruction with more teacher talk through modeling and guided practice. Teachers, with guided questions or tasks, closely monitored student-to-student dialogue. For the majority of the time, teachers provided students at both schools with “think time” or “pair/share” opportunities prior to formulating answers to teacher questions in order to increase success. Teachers closely monitored and structured the teacher-student dialogue during content instruction.

2. *Challenges with peer interaction.* Both schools addressed the need to improve their implementation of goal 3 cross-cultural competence particularly in the upper elementary grades where teachers felt friction between the students’ interactions as early as fourth grade at Victory School and by fifth grade at Evergreen School. Teachers admitted difficulties implementing this goal and described it as a challenging aspect of TWBI. Some teachers reported students not getting along during group work due to bickering over group roles and losing respect for one another. The following quote emphasized a teacher’s concern for creating support systems for social justice and equity in the classroom:

I found out that I was not giving them time to communicate in class ... The feeling I wanted in class was one of nurturing within themselves, in a way that they would appreciate each other. Students were really quarreling, not getting along. I was not giving them time to communicate ... I realized that in last two or three weeks because testing and assessments, they were not talking to each other, so they lost sense of who they were. If don’t give them the time, then they become competitive, negative, judgmental, pretty nasty with each

other. Culture standards are important in two-way, if we want them to learn together and appreciate each other. They have to have time to communicate. I need to address this goal to make it all glue together. (Teacher Interview, Victory School, March 31, 2010)

The literature review also demonstrated the struggle teachers faced at times to provide equal status of languages and cultural appreciation during student engagement. Even in an integrated setting, De Jong (2006) found that students still self-selected identity groups by status, whereas Fitts (2006) studied the stigmatization and subordinate roles of bilingual students in dual language classrooms as they became marginalized by other students in the classroom. Palmer (2008) observed how English-dominant students disrespected the academic spaces of ELs during oral discussions. Similarly, upper-grade teachers in this study experienced challenges in maintaining social equity in the classroom, particularly during student engagement in small groups.

Teachers at Evergreen and Victory recognized and named the issues of status noted in their classes, but admitted not knowing how to solve the situations during their interviews. During the focus interviews, primary grade teachers at both sites, predominantly in first through third grades, did not report these issues in their classrooms and were surprised to hear of the upper-grade teachers' concerns on equity and status. Overall, teachers could not identify the source of the issue or explain when and why the students were making these shifts in attitude and perception toward one another. Both schools felt they needed to critically address the cross-cultural competence goal more in-depth in their programs.

Teachers at Evergreen School reported having to follow stricter guidelines of curriculum delivery and materials due to past experiences with the district monitoring the school for Program Improvement, even though low performance of test scores represented the mainstream program at their school site, not the TWBI strand. Teachers commented that despite efforts to disaggregate student achievement data for their TWBI program, the entire school was sanctioned and placed under Program Improvement for four consecutive years. One teacher described the situation as follows:

Some of the things and ideas they want to see and come judging with these checklists they bring with them and look for little things that are so meaningless and they put all that pressure on you. I found some things to be insulting, to be honest, like caring the book around, and saying only what is in the manuals, it was making me feel dumber. I am sorry, I have worked for # years to get to the level that I am at, it just doesn't work that way, but that is how they were simplifying it ... This program is a quality program, because of what we do it is different and you need to allow some autonomy and let this close group of teachers lead that curriculum in how we implement it. We are accountable to the standards and that is what we deliver. (Teacher Interview, Evergreen School, April 9, 2010)

This quote exemplified the teacher's concern to reduce instruction to a checklist of behaviors, rather than allowing the teachers to implement the curriculum through strategies that best fit the needs of the students in a biliteracy program. The teacher sensed a lack of consideration from the district level regarding their expertise and professional discretion to make instructional decisions about biliteracy development. Research on teacher efficacy in two-way bilingual immersion (TWBI) has indicated that teachers with bilingual credentials and teaching experiences have felt more qualified to teach in the programs than teachers lacking appropriate credentials

(Howard et al., 2003; Lindholm-Leary, 2001). The literature review has also indicated that receiving support from the administration with considerations for TWBI programs meant increased satisfaction with their teaching positions. This clearly demonstrated how teacher sentiments regarding self-efficacy have a strong connection to the importance of support systems and teacher fulfillment of expectations.

Summary

The major categories of successful and challenging strategies in this research for the development of biliteracy skills and cross-cultural competence with program participants were lesson planning, vocabulary development, reading and writing in the heritage language, English language development, and student engagement. Even though the schools had similar implementation of strategies, data analysis demonstrated that each school also implemented a variety of distinct instructional strategies to meet the needs of student populations and district guidelines. The area that seemed the most challenging to implement for the teachers at Victory and Evergreen was the cross-cultural competence goal of TWBI, particularly with student attitudes during peer interactions in the upper grades. Teachers also felt challenged by maintaining equal status of linguistic and cultural perspectives in the upper grades. They could recognize the effects of student behaviors, but were unable to explain the causes or ways to ameliorate the situations. Findings from the data analysis demonstrated a relationship between the instructional strategies teachers deemed most successful and challenging in biliteracy development and cross-cultural competence with the studies examined in the review of the literature presented in Chapter 2.

Perspectives and Innovations of Instructional Strategies

Data analysis of interviews, teacher reflections, lesson observations, and questionnaires provided multiple measures to examine the final question of the study: How do the successes and challenges of the teachers' instructional strategies bring about new perspectives or innovations to their practice?

First cycle coding analysis of teacher interviews elicited 58 challenges in the teachers' practices versus 36 topics identified as successful in their programs. First cycle coding analysis is the method of initially coding the data and dividing it into categories. After conducting second cycle coding of the interviews (see Codebook, Appendix L), the process of organizing and merging categories with one another to develop a coherent synthesis of the data corpus (Saldaña, 2009), a record of categories emerged to compile a list of challenges and successes. Further examination of these categories reduced the data to the following evolving themes related to the development of new perspectives and innovations of strategies: (a) implementation of the third goal, cross-cultural competence; (b) balancing the status of languages; (c) decisions on materials, curriculum, and resources; and (d) collaboration with peers. Discussions of these themes occurred during the interviews. The top three categories listed were also evident during lesson observations, teacher reflection forms, and questionnaires. Teachers identified areas they were pursuing further to gain new perspectives and innovations to advance their practice. These strategies were reported as areas in which teachers believed to be achieving success, as well as areas deemed most demanding in their fields. This polarity of categories where teachers explained

the same themes to be successful practices, as well as challenging aspects of their programs was an unexpected phenomenon for the researcher. Figure 4.1 presents the relationship of the strategies to the advancement of new developments in cross-cultural competence, status of languages, curricular decisions, and collaboration with colleagues.

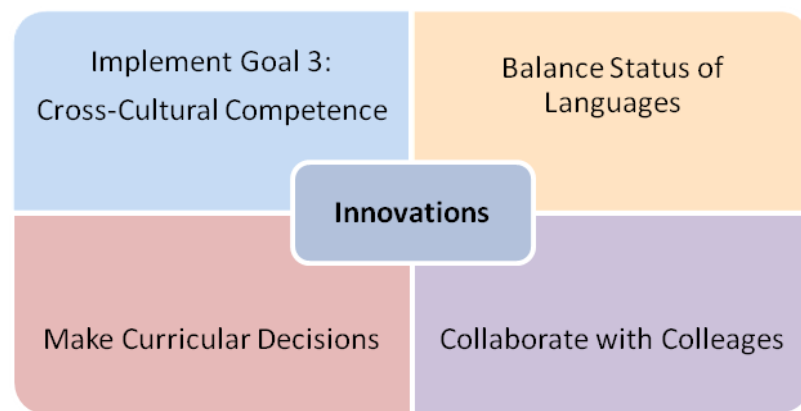


Figure 4.1: *Perspectives and Innovations of Instructional Strategies*

Reflection of Practices

Implement cross-cultural competence. Teachers at Evergreen and Victory stated in their interviews that they were experiencing success with the third goal of TWBI (cross-cultural competence), even though they also reported this goal to be the most challenging one to address in their TWBI programs. Teachers described reaching success with cross-cultural competence when they provided equal opportunities for learning through various modalities that addressed the needs of the students' learning

styles. Daily reflection of practices provided teachers an opportunity to modify or adapt delivery of instruction consistent with student needs. A teacher wrote, “I think about the challenge in a positive light, because I know that students will rise to the expectation if I present it in a meaningful manner” (Teacher Interview, Victory School, March 31, 2010). Other teachers felt they created a learning environment for all students to see, hear, and discuss topics at an even vantage point through the use of innovative ways to present the content, such as building background knowledge prior to the lesson, creating supplementary materials to scaffold instruction, providing more images/visuals, or including the use of technology in class to inform students about a topic. Therefore, it is important to note that teachers described success with cross-cultural competence when they attended to the students’ learning styles, modified/adapted instruction to meet the needs of the students, and created a learning environment that emphasized an “even vantage point” for all students to succeed during lesson delivery. One teacher indicated how the challenges presented new perspectives and innovations for their strategies:

We aren’t even re-inventing the wheel. We are inventing the wheel, because there isn’t anything out there for us. So, we are constantly adapting whatever it is that we do to make it a two-way. So, I think that’s the way we keep things current in our practice. (Teacher Interview, Victory School, April 1, 2010)

Even though teachers believed the third goal to be somewhat overlooked in their programs, in general teachers agreed to be working successfully at improving its implementation through a school wide effort. The following quote exemplified the desire to address this goal at Victory School:

Our principal is going to have a half-day release for us to address our multi-cultural standard that we have been neglecting a little bit. And so we are going to meet to address it across the grade levels. What is it that you think we should be doing? ...And so everybody's saying, "Bring all the resources that you can, whatever you can find out there." And then we'll come up with it. I'm not sure what ideas I'm going to bring to the table. But, yeah, I'll look at my resources and see how we can address those needs. (Teacher Interview, Victory School, April 1, 2010)

Although teachers at Evergreen and Victory considered increasing gains toward the attainment of cross-cultural competence, teachers consistently indicated an aspiration to improve its implementation. Reasons stated by teachers to meet the needs of the third goal included seeking resources to address the incorporation of cross-cultural competence. Teachers at Victory desired to find a program or external resources to understand how to meet the needs of the third goal, cross-cultural competence. Yet, teachers at Evergreen felt they had been trained through the Telementor Project (grant) and already had developed a social justice program to address cross-cultural competence, but lacked the time in their schedule to include this goal consistently. The following quote represented this sentiment from a teacher's perspective:

Every child creates their own PowerPoint about equity, humanity and cultural understanding and that was one of the major goals of the Telementor Project on how to address the third goal. They were encouraging us to address that through technology. Every child created a project. That was an incredible opportunity. I am hoping to do it again this year, but with all the cuts. I did this through professional time, because I can't do that while I am teaching. I would take a sick day, come to school and video tape my students ... This year I don't have any minutes of instructional time. So, I don't know how I would go around and do it. (Teacher Interview, Evergreen School, April 8, 2010)

Another challenge identified by the teachers at Evergreen and Victory included the concern of students getting along during group interactions and learning how to respect one another without becoming competitive, negative, or judgmental during cooperative learning structures. This quote from a primary teacher explained the situation of teachers and students struggling to meet the third goal in the upper grades.

I would wish, for my students, that they (first graders) would continue the mindset that they have right now of working together as a team, of sharing and being concerned for each other, and recognizing diversity and being happy in that diversity. I wish I could keep that mindset for them as they continue into middle school and high school ... I really do, because I think if they did, the world would be different. It is really important for us in our class to have justice, respect, learning in two languages, and being bilingual. If they could carry that as they go on in life, I would be very happy. (Teacher Interview, Victory School, April 1, 2010)

According to the Guiding Principles (Howard et al., 2007), research-based practices suggest that students who are linguistically and culturally diverse become more positive toward one another and improve academic achievement when they work together to solve common tasks. Although the review of the literature recognized the importance of students interacting to create positive relationships, there is scant research on how to address the third goal in a TWBI classroom. This gap in the body of research for TWBI seems to also be a shortcoming of the Guiding Principles. Thus, even the Guiding Principles (Howard et al.) has a limited scope on planning and implementing aspects of the third goal; much of it revolves around multicultural and multilingual education, not on how to address the practice of social justice and equity in a TWBI classroom. Consequently, teachers at Evergreen and Victory schools stated in their interviews that they continued to look for a program that addresses the

constructs of cross-cultural competence and/or build time in the day to implement the third goal.

Balance status of languages. During the interviews, all teachers perceived success with balancing the status of the languages, particularly with the notion of using ELs as role models for literacy strategies during Spanish instruction and modeling cooperative learning structures for the class. A teacher stated the following:

I've found it very beneficial to break up the rotation and pull my EL students and work on a cooperative learning strategy and then have them practice before the whole group learns that strategy. My ELs are the ones demonstrating it. (Teacher Interview, Victory School, April 1, 2010)

This teacher not only noted the importance of elevating the status of the heritage language in the classroom, but considered the native Spanish speakers as leaders in classroom demonstrations. Hence, this strategy not only emphasized linguistic equity for the heritage language, but allowed EL students to be in dominant roles in the classroom to model successful strategies, instead of participating as passive subordinate groups of students without leadership roles. Studies have indicated an overwhelming success for ELs when their primary language was used as a vehicle to bridge the learning of a second language and provided meaningful and engaging equitable opportunities for students with low-socioeconomic levels (August & Shanahan, 2006; DeJong, 2006; Fitts, 2006; Lindholm-Leary & Block, 2010; Palmer, 2008).

The following teacher reflection noted using frontloading strategies to increase the level of language complexity for native language speakers and provide equal

access to academic language through literature and content learning in the second language. This supports the notion that teachers are experiencing success with language status when they address the needs of the student populations during instruction.

I also needed a way to enrich the Spanish speakers' vocabulary. I needed to get academic language to them and I also need to scaffold my English students' acquisition of Spanish. So, we were trained to frontload through a kinesthetic approach by engaging students in literature or content areas like science or social studies, but it's a very real way that students could internalize the language of a particular academic area we are learning. (Teacher Interview, School A, April 1, 2010)

After examining the issues of language status in the classroom, one teacher at Victory School indicated a new perspective for goals concerning the use of Spanish as the medium of communication in the program. This is in response to comments at both schools during the interviews that pertained to the struggle to keep Spanish as a high language status in the classroom. This is how the teacher described a new innovation to address expectations for language use.

That is why I have to have a content objective and the language objective. I am realizing that I have to give them the frames for them to express the language...this is the way that compare and contrast sounds like when you speak about it in Spanish. One modification I would make is to address this goal from the beginning of the year. I would target that as a standard that I would put up on a big poster and everyday refer to it ... You know that they do want to learn Spanish and do want to improve their Spanish. It is just that they are still developing the academic level of Spanish. (Teacher Interview, Victory School, March 31, 2010)

Evidently, this teacher thought about creating a standard for herself and her students as a reminder to continue using Spanish in classroom discussions and providing the

students with sentence frames for language expressions, as the language becomes increasingly difficult in the upper grades. In the reflection, the teacher addressed high regard for the heritage language and described an attempt to improve the instructional practices of attaining high levels of academic Spanish. One of the most difficult challenges in TWBI is to maintain social equity in the classroom, since English is considered the language of power in American society, therefore creating a teacher struggle at times to provide equal status during class interactions (De Jong, 2006; Fitts, 2006; Palmer, 2008; Potowski, 2004).

Teachers at Evergreen and Victory identified problems for maintaining the status of Spanish in the classroom in their interviews and questionnaires. The reasons presented were: (a) district emphasis on English performance rather than Spanish acquisition and transference of skills, (b) students struggling to keep motivated with the complexity of Spanish language materials (increase of difficult in readability and vocabulary) in the upper grades, (c) allowing EPs to use English during Spanish instruction at all grade levels without teachers setting structures or guidelines for expectations, (d) EP students fossilizing incorrect grammar structures in Spanish, and (e) the need for teachers to develop a concise program across grade levels for the teaching of Spanish grammar.

According to the interviews, teachers at both schools reported being concerned with their districts' emphasis on English instruction and results on assessments. A teacher summarized this district push for students to excel in English, not as bilinguals:

The challenge I face is to elevate the status of Spanish. In my grade level district assessments are in English only. The only reading assessments in Spanish are benchmark reading assessments; the pressure to do well in other district and state assessments pull the energy and momentum towards English instruction. This push and pull is exhausting and I wish I could focus on biliteracy and transferability more. (Teacher Questionnaire, Victory School, April 30, 2010)

Even schools and districts with TWBI programs have to follow federal guidelines for No Child Left Behind (NCLB, 2001) and demonstrate gains in English skills through standardized state scores. Federal policies, such as NCLB, encouraged the rapid transition to English over the implementation of bilingual education (Rolstad, Mahoney, & Glass, 2005). Due to these embedded policies in the educational system, Spanish testing has become optional for schools in California, even for schools with dual language education. During the interviews, teachers at Evergreen and Victory demonstrated concern with the emphasis on English performance at their schools/districts over the attainment of Spanish, creating the status of the heritage language as a subordinate tongue in their classrooms. According to Alanís (2000), students can develop a preference for English when the TWBI schools emphasize English instruction and lack appropriate materials in Spanish, even though the school or program may support bilingual education. A teacher from Evergreen commented on the lack of interest some students have to continue learning in Spanish.

Some of the greatest challenges are working with students that have been in our program since kinder and still have no interest in learning Spanish. These students have been in our program because their parents believe in the benefits of the program, but the student never buys into it. Another great challenge is finding authentic literature that captures the students' interest and is highly academic. (Teacher Questionnaire, Evergreen School, April 30, 2010)

This teacher discussed how the parents' perspectives toward bilingualism contradicted their children's loss of interest in learning Spanish, particularly in middle school when the language becomes more complex. According to the teacher, perhaps a reason for the students' lack of "buy-in" to continue their development in bilingualism might be attributed to the effects of using unmotivated materials in Spanish.

Another challenge with status of language is when teachers allowed the use of English as a medium of communication for EP students without delineating parameters for its use throughout the grade levels. Normally, this practice is permitted during the first couple of years in the dual language programs as students develop receptive listening skills and begin to acquire oral proficiency (Howard et al., 2007; Lindholm-Leary, 2001, 2005). However, the teacher noted that some level of expectation to encourage no articulation of English during Spanish instruction is needed as students advance through the grade levels. This was noted as a practice for English speakers during Spanish instruction, but not reported as a concern for language status when ELs are participating in English discussions. The following quote indicated this reaction:

We allow the use of English from early on in the program for them (EPs) to express themselves in class. We don't have a point where we stay stop. I think we always allow it. We need to have this conversation with everyone (students and teachers). The investment of learning Spanish is there. They all feel the pride; they feel the sense that this is something important that they're doing. They don't have a poor attitude toward Spanish, none of them do. They are proud of being bilingual. If you ask them if they are bilingual, they would say, "Yes, I am a bilingual scholar." (Teacher Interview, Victory School, March 31, 2010)

This point of view differed from the previous teacher who felt the students did not have “buy-in” into the bilingual program. Since this quote referred to the role of the teacher in setting expectations for students when conversing in Spanish, rather than allowing the use of English when students do not know how to express themselves orally. The teacher felt the students were proud of their bilingualism, but needed to develop strategies for dealing with the challenges of language complexities in Spanish in the upper grades. The teacher realized they needed ideas on how to maintain student interest and discussions in Spanish during small group interactions without reverting to the use of English.

In the interviews, teachers also felt they needed to implement a systematic program for Spanish grammar across the grade levels with clear objectives. Some teachers had observed students fossilizing incorrect grammatical structures in the primary grades that affected their discourse in Spanish in the upper grades. Grammatical structures were described as the incorrect use of verbs in Spanish and lack of fluidity with language expressions. Teachers expressed the need to target these grammatical deficiencies early in their programs to eliminate incorrect use of grammar and facilitate the oral fluency of students as they participate in small group discussions in Spanish. This finding is consistent with the French immersion studies conducted by Lyster (2007) in which instructional intervention needs to be designed to counterbalance form-focused input (teacher instruction) and form-focused output (student guided practice) with content-based strategies developed in classroom interactions for second language acquisition.

The scholarly literature and research is scant in this area of bilingualism and biliteracy in upper and middle grades as students face more demanding textbooks, literature and complexities in grammar, vocabulary, and expressions in the heritage language. Teachers felt they needed to develop strategies on how to keep the students motivated, engaged and acquiring oral skills at higher levels of Spanish in order to maintain conversations at appropriate academic levels using correct grammar structures.

Make curricular decisions. Teacher interviews indicated trying not to “race through the curriculum” in order to cover the text material, but utilizing instructional time to teach for depth and select only the essential standards. At both schools, teachers mentioned implementing innovative ways to use the state-adopted materials by supplementing lessons with teacher-created materials. One teacher at Evergreen School reported collaborating with colleagues to prepare supplementary resources to scaffold instruction through the use of technology.

Differentiation is very challenging. It is a lot of work to have things prepared for it, for those who struggle and those who need a challenge ... On any given week of the year, we have two PowerPoints per week. Then, we found animation and the kids love it. And here, a song actually comes out (teacher demonstrated the slideshow) ... We have them (PowerPoints) for language arts, grammar, spelling, vocabulary. We have developed these within the last two years. They are totally interactive for the students ... We also have some for science. (Teacher Interview, Evergreen School, April 8, 2010)

Teachers at Evergreen School reported collaborating to develop motivating technology pieces to augment the district/state materials by differentiating instruction to meet the needs of the student populations. Teachers felt they were being successful with

resources for students needing more challenging lessons and for those needing additional scaffolding support.

In addition, teachers reported in their interviews constantly having to perform quick reviews of learned materials during the units. Lesson planning included the use of interweaving new material with the review of previous lessons. The majority of the teachers stated using content journals for note taking and binders with informational worksheets for introducing new content and/or reviewing material, particularly before administering exams to students or preparing students for standardized assessments. A teacher explained the process as follows:

We use journals for everything we do in class. We use journals for reading. We use journals for math and for grammar. And this is a strategy that I use. We have our math groups leveled by ability and have the more struggling students, so one thing that they have to do is we copy down notes and we are talking about notes as we are writing them down. And they discuss the different steps. We don't go too fast, so before we go to the next step, they have to discuss that first step to their partner. At the end, of giving the notes, they have to explain their entire notes to their partner. And the other partner has to listen and so that if partner one is not saying something correctly or misunderstood or gets stuck this helps them out. And then they have to sign in their journals, right here. And they have to take these notes home for review and they have to explain them to their parents. (Teacher Interview, Evergreen School, April 8, 2010)

Other teachers, mainly in upper grades, also referred to the journals and binders as support tools for students in the program when they shared their photo-elicitation journals. The scholarly literature has limited information for teachers with regards to support of curricular materials and resources for dual language programs. Much of the literature review, whether related to research or professional development, is centered

on the needs of ELs learning English and not on bilingual education curriculum for ELs and EP students in TWBI programs.

Teachers found the greatest challenges with state-adopted materials that do not address the needs of the student population in the TWBI programs. They reported in their interviews that they frequently had to create adaptations and innovations to lessons written in the manuals. Many teachers supplemented their standard curriculum with additional resources, mainly teacher-produced materials, translated versions of worksheets, online lessons from other teachers, or other trade books. One teacher referred to the lack of support in state-adopted materials for dual language education as:

Nowhere in the teacher's edition is it going to tell you to talk to your partner. Nowhere is it going to tell you to do a cooperative learning activity. Those are the strategies that make it happen. I think about the child who struggles with certain skills, for ELs more than likely it is going to be the vocabulary, the comprehension. I always have to try to make it more accessible. (Teacher Interview, Evergreen School, March 31, 2010)

Teachers at Evergreen and Victory also commented in their interviews having to be selective of lessons within their state adopted materials, since lessons for TWBI students may require more days to frontload the vocabulary and content than is presented in the teacher's manuals. With regards to planning for instruction, teachers described needing more time to introduce and develop lessons in their programs, which demonstrates that the teachers' editions design lessons for breadth, rather than depth, of content. The majority of teachers indicated that well-constructed lessons in dual language education require more time to develop language and content

objectives, such as frontloading vocabulary and sentence frames. These are not listed as joint objectives in instructional manuals, since the objectives are usually related to the subject area and not to language development. Teachers discussed the continual process to innovate new ways in how to use materials in TWBI contexts.

One teacher stated the importance of modifying instruction to meet the needs of the students, instead of racing through pacing guides to meet the demands of yearly goals. Pacing guides outline the sequential order of yearly standards for teachers. Although pacing guides provide a road map for the instructional tempo, they do not provide a timeframe for the review or reteaching of previously taught material. This teacher referenced the constant need to review learned material in order to reach students' comprehension level of the content demand.

“Slow down! We need to go back and review.” And they are saying we need to keep going ... and that has been a struggle for me because if the students are not getting it, we need to go back and revisit that ... And because we are a team, we follow a certain schedule, program or plan. Like the pacing guides, we need to follow them or everyone is all over the place. It is a challenge. (Teacher Interview, Evergreen School, April 9, 2010)

This teacher felt strongly about meeting the needs of the students and teaching for success. During the interview, the teacher expressed the need to be selective with the lessons on the manuals and the essential standards to allow students maximum exposure to the content in a variety of ways, rather than short superficial instruction within quick intervals.

Collaborate with colleagues. Teachers planned and developed lessons for their program with the collaboration and efforts of their grade-level teams as evidenced by

their interviews and questionnaires. The exchange of ideas at grade-level planning meetings provided teachers with new perspectives for teaching difficult content or developing lessons with assessments. One teacher quoted,

It is really a team effort. You do this, you do that ... In our stated adopted reading series the tests are very simple and are not aligned to our benchmarks. So, for each story we develop our own benchmark stem questions that go with the stories. So, let's say one person takes one story and the following story someone else, so we are really dividing the tasks... These are district math assessments, but they are in English and we have to translate them to Spanish. We do this on our own time, but we have fun. We make a big party out of it ... And we meet before school, during lunch, after school, whenever we find the time. We have TWBI meetings. We are always talking, through the internet or texting. We are always communicating, one way or another. What are you going to do? How do you do this? ... Continuous dialogue informally in the hallways, but we do it also in our formal meeting that we have once a month. (Teacher Interview, Victory School, April 1, 2010)

This quote presented evidence of the critical need for collaboration amongst the TWBI teachers. During the interviews, teachers described how they divided the mundane task of translating materials and assessments within the grade level members. Teachers assisted one another with lesson planning and the development of assessments in Spanish after school and on weekends. In the interviews, teachers confirmed these were additional tasks pertaining to TWBI teachers, and they seemed to acknowledge the fact that teaching in a dual language program required added responsibilities to fulfill the curricular demands.

In accordance to the Guiding Principles (Howard et al., 2007), teachers used multiple measures in both languages to assess students' progress towards meeting bilingual and biliteracy goals. If the district did not have the assessments in Spanish,

teachers in the study translated or borrowed materials from one another. Teachers regularly used assessments to plan for instruction, assess student achievement, and discuss results at grade-level meetings. The main support for curricular development was attributed to their dialogue at grade level meetings; nevertheless, teachers found minimal consideration for assistance at the district level with these efforts. According to the interviews, a majority of teachers at both schools felt their districts lacked the infrastructure to support them with the translation of materials and assessments needed for consistency and systematic alignment of the standards with the curriculum.

Another way teachers found success with collaboration was through their reflection of practices with peers and also through individual reflection. Teachers reported using after-school meetings to converse with one another about lessons they had taught that week or activities they were planning to implement. During the interviews, teachers described dedicating weekly planning time to meet with their grade-level team, and occasionally, stated discussing programmatic issues through vertical articulation at faculty meetings. One teacher said, “I could not implement this program by myself without the help from my colleagues. Being an immersion teacher is a lot of work” (Teacher Interview, Victory School, April 1, 2010). Another teacher new to the grade level declared, “We support each other. Even though we have monthly meetings across grade levels, I need the support from another dual immersion teacher in my grade level in order to do a better job” (Teacher Interview, Victory School, March 31, 2010).

In the interviews, Evergreen School spoke about challenges with collaboration when trying to get the whole grade-level team on board with new ideas on how to implement a lesson or unit. Teachers reported the mix of new and experienced teachers in their grade levels made it difficult at times for the entire team to be consistent with similar thinking and levels of expertise. Teachers reported sharing ideas on curriculum development and later discussing the results with the group. The quote below explained the challenges involved in collaborating new ideas, but demonstrated how the contribution allowed the teacher to experience success and growth in instructional practices through a new perspective.

Sometimes, there isn't that cohesion in the group where everyone wants to do the same thing and people pull from different directions, but I believe our grade level works really well. One teacher will bring things and say, "Look, I came up with this. What do you guys think?" We say, "It is wonderful. Let me try it out." We all say we are going to do that, but we don't, and I do and it turns out to be a wonderful way to facilitate a lesson like inferencing ... And I go back and share this with the group, but I am the only one sharing, because I am the only one who did it! You need to grow and evolve and the only way you are going to do this is to try out new things, and looking out for new things to bring in that just makes everything better. (Teacher Interview, Evergreen School, April 9, 2010)

Even though the teacher felt there was lack of cohesion with the grade level at times, the teacher experienced success in facilitating the lesson in class due to the new innovative way to present the standard with the students. The process of collaboration was seen as both demanding and necessary for teacher success in a dual language setting. One important aspect from this quote is that the teacher spoke about making growth and evolving as a dual language teacher by trying out new ideas from other colleagues.

The idea of building a professional community amongst the TWBI faculty was noted as a critical facet of the program in one of the teacher interviews. The teacher felt the faculty needed to focus on assisting each other on lesson planning and development to meet the demands of the program, rather than investing efforts on preparing students for test-taking strategies and other diversified tasks. In addition, as faculty members decreased or increased in numbers, the teacher believed relationships suffered among them. This quote demonstrated the need for member unity and collaboration in the teaching staff:

I think the biggest challenge that I have felt is that we are trying to do too many things, and we are off into different places. The bigger the program, in relationship to staffing, it becomes a challenge to streamline what we are all trying to do and help one another. The focus is on testing and the staff needs that cohesiveness to assist one another. That is why I think our school has survived, because we had a unity between us. Through staff turnover, there is little training with new teachers. I think we don't have the time to teach those new teachers coming in and becomes a challenge. It needs to be a group that is able to see beyond personality issues and focus on teaching. (Teacher Interview, Evergreen School, April 8, 2010)

Lindholm-Leary (2001) conducted a study in which differences were noted across TWBI schools with various levels of support systems from schools/districts. High efficacy was noted in schools where teachers planned together and felt the students' diverse needs were met. Considerations of these findings suggest that there is a strong connection between teacher efficacy and program satisfaction. Therefore, this teacher's desire to build a stronger professional community in a growing TWBI program that continues to expand can influence positive faculty relationships that support common instructional strategies and bring the focus back to teaching.

Summary of Results

The major themes teachers experienced in developing new perspectives and innovations in relationship to their successes and challenges in their instructional strategies coincided with the reoccurring patterns found at both schools. Instructional successes seemed to also be linked to instructional challenges through a phenomenon of the polarization of overarching themes. Teachers continued to identify the implementation of the cross-cultural competence goal as the most difficult challenge in their practices. This is followed by other areas in which they continue to modify and innovate their strategies: maintaining a high status of the Spanish language, finding appropriate materials that meet the needs of students in the program, and collaborating with colleagues. These areas were noted as program objectives that they continue to incorporate with new strategies as they evolve with common ideas, teacher reflection, and implementation. Hence, teachers continued to balance the challenges in their programs with new perspectives on how to solve the issues according to the needs of their student populations.

The final chapter of this dissertation will address the major findings as they further connect to the theoretical frameworks of two-way bilingual immersion. Conclusions and implications for action in instructional practices will be presented with recommendations for further research in Chapter 5.

CHAPTER 5

Findings and Implications

This chapter presents a summary of the research, statement of the problem, and questions examined in the study. The discussion continues with a review of the methodological procedures and data analysis. Then, major findings related to the literature review and theoretical frameworks will be presented. Conclusions and implications for action concerning theory, research, and practice of instructional strategies will follow. Recommendations for further research will propose new directions for two-way bilingual immersion (TWBI) studies.

Summary of the Study

A significant amount of empirical research on TWBI pertains to outcomes on student achievement for English Learners and English Proficient students (Genesee, 2004, 2009; Howard et al., 2003; Lindholm-Leary, 2001, 2005; Thomas & Collier, 2002), yet scant literature addresses the phenomenon of classroom instructional practices in dual language education (Flores, 2001; Howard et al., 2007). This dissertation study summarized the major findings of a single case study with a sample size of nine teachers in two 90/10 programs. The research examined how teachers planned and implemented instructional strategies to meet the goals of students becoming bilingual, biliterate, and bicultural. The case study also analyzed the knowledge base acquired by the teachers and their support systems.

Statement of the Problem

According to the Center for Applied Linguistics (2009), the directory of dual language programs demonstrated a growing interest to implement TWBI as a program of choice for communities serving ELs at the national level. The goal of TWBI is to provide an enrichment program that values the students' heritage language and culture, and provides instruction through the additive process of primary and second language development while adding a second language (Genesee et al., 2006). The main goals are for students to acquire communication and literacy skills in both languages while they also develop cross-cultural competence (Howard et al., 2007; Lindholm-Leary, 2001, 2005). Therefore, there is a need to examine empirical studies in classroom instructional practices in TWBI. New studies can inform program level decision-making, strategies for lesson development, positive cross-cultural relationships, and additional program benefits to the students and communities, such as becoming global citizens (Lindholm-Leary & Genesee, 2010). The following research questions are examined in this chapter's discussion:

1. How have TWBI teachers gained their knowledge base and professional support to implement the strategies they use in class?
2. How are the Guiding Principles for Dual Language Education assisting teachers in the implementation of their instructional strategies?
3. How do TWBI teachers describe successes and challenges in their instructional strategies to develop biliteracy and cross-cultural competence with program participants, including English Learners and English Proficient students?

4. How do the successes and challenges of their instructional strategies bring about new perspectives or innovations in their practice?

Review of the Methodology

The research study examined the instructional strategies in TWBI classrooms through a constructivist approach. This term is associated with the understanding or meaning of a phenomenon formed by socially constructed interactions with others and their own personal interpretations, histories, and narratives (Creswell & Plano Clark, 2007), such as the teachers' personal experiences. Through this methodology the level of assumption made by the researcher as reality was socially constructed with the participants to avoid the perils of overgeneralization and universality (Mir & Watson, 2000). This method assisted the researcher to understand the foundations of the strategies used within the context of teaching and learning in TWBI programs. This also allowed the researcher to formulate assumptions about practices through a theoretical perspective of "organizational-environmental dichotomy" (Smircich & Stubbart as cited in Mir & Watson, 2000) in which the researcher needs to recognize how the experience was enacted or socially constructed in the organizational setting, rather than interpreting a perceived notion of the practice.

This single-case study approach for "typical or representative" research (Yin, 2009) examined the instructional strategies implemented in TWBI programs. The population sample for the study was representative of TWBI programs for 90/10 model designs. The objective of the case study was to understand the circumstances

and conditions of the teachers' everyday situations in the TWBI classroom. The explanatory nature of the case study was revealed through photo-elicitation journals, appreciative inquiry interviews, lesson observations, teacher reflections, and a questionnaire that enabled data analysis through a revelatory approach of the teachers' typical day-to-day classroom practices.

Photo-elicitation is a research interview conducted with photographs as a projective stimulus or probe (Harper, 2002; Heisley & Levy, 1991). The premise of photo-elicitation (see Appendixes A & B) is that "images evoke deeper elements of human consciousness than do words" (Harper p. 13). The teachers participated in individual and focus group interviews at each school site through an appreciative inquiry protocol approach to elicit conversations about the strategies in the photographs (see Appendix C). Appreciative Inquiry (Preskill & Catsambas, 2006) is a group process that allows individuals to recognize best practices, affirm strengths, successes, assets, and potentials by developing an inquiry around the phenomenon, issues, challenges or changes that energize the members of an organization. It is a constructivist approach related to the perceptions and shared understandings of the organization.

For the purpose of this study, the researcher used the Guiding Principles for Dual Language Education, Strand 3: Instruction for the formal lesson observations of biliteracy and cross-cultural competence strategies. The researcher observed lessons that addressed the following principles of dual language instruction: (a) Principle 1 instructional strategies derived from research-based principles, (b) Principle 2

strategies that enhanced the development of biliteracy, (c) Principle 3 instruction was student-centered, and (d) Principle 4 creation of a multilingual/multicultural learning environment. After the formal observation was conducted by the researcher, the teachers submitted a reflection form (see Appendix D) of their implementation of the Guiding Principles.

During the last phase (see Table 3.1) of the research study, the teachers completed a questionnaire (see Appendix E) related to their demographic information, background knowledge, and support systems at their school or district. The use of a questionnaire provided the researcher with additional data sources to compare and contrast with other documents gathered during the study. The researcher was able to merge, integrate, link, and/or embed the data sources in a triangulation analysis. The analysis provided opportunities to examine the emerging themes and use of similar strategies to determine if there was evidence for generalizability of the instructional strategies within and across each of the teachers/schools in the study.

During first cycle coding, the method of initially coding the data and dividing it into categories, the researcher implemented structural coding techniques to gather major topic lists related to the research questions. Structural coding is the process of labeling or indexing chunks of data framed by specific research questions or topics (Saldaña, 2009). In addition, the use of descriptive coding allowed the researcher to summarize in short phrases the basic topics found in the segmentation or categorization of the data. This process provided the basic vocabulary of the coded data that later allowed the researcher to organize a codebook with overarching themes

(see Codebook, Appendix L). During second cycle coding methods, the process of returning to the data corpus to reorganize and reanalyze the data coded through the first cycle methods, the researcher combined or reduced data into smaller sets of constructs in which major themes developed from the analysis of pattern coding “a more meaningful and parsimonious unit of analysis” (Saldaña, 2009, p. 152).

Summary and Discussion of Results

Major Findings of Knowledge-Base and Professional Support

The first question in the study addressed the background knowledge and support levels TWBI teachers encountered in their educational environments. The question explored the following: How have TWBI teachers gained their knowledgebase and professional support to implement the strategies they use in class?

Knowledge base. In general, teachers at both schools declared being very knowledgeable about theoretical frameworks and instructional strategies related to TWBI in their questionnaires. Overall, the findings indicated that teachers implemented practices aligned to dual language theoretical frameworks 96% of the time. Teachers attributed gaining much of their knowledge base while teaching in their dual language program, and reported learning their strategies through the day-to-day practices in their classrooms and the conversations with colleagues at their grade levels. They reported acquiring new skills or improving strategies when they implemented ideas from other immersion teachers or by analyzing the students’ academic performance and products.

Support systems. Data analysis indicated teachers received professional support at various levels. The most important instructional support to all teachers was the ability to collaborate with one another and create a community of practice within their program. Community of Practice is defined (Wenger et al., 2002) as groups of people who share a passion about a topic and deepen their expertise by often collaborating with peers. It was evident in the findings that TWBI teachers embraced mutual beliefs about their instructional strategies and inquired about their teaching methods through conversations about their shared knowledge. These findings suggest that teachers in this study demonstrated high efficacy about their beliefs, attitudes, and practices.

Although some teachers disagreed with the level of support from their district administration; in general, teachers felt supported by their site administrators and acknowledged their leadership skills in the program. According to the Guiding Principles (Howard et al., 2007), in order for programs to thrive and be successful in their implementation, it is imperative to exhibit effective leadership at all administrative levels, including the leading role of the principal as an advocate.

One final element for professional support included the recognition of parents in the program as supporters of the strategies implemented by the teachers. Shannon and Milian (2002) explained how parents became the strongest allies of well-implemented TWBI programs and expressed their desire to expand these programs into other communities. High participation of parents of low-socioeconomic status was associated with TWBI programs, which was not the case in programs emphasizing English-only instruction for ELs (Lindholm-Leary, 2001).

The results in this section for knowledge base and support systems are consistent with Lindholm-Leary's (2001) findings on teacher efficacy and classroom effectiveness. According to Lindholm-Leary, TWBI teachers with considerable training, teaching experience, and certification in bilingual and multicultural education tend to have the greatest success educating diverse groups of students. These findings are in alignment with the teachers' knowledge base, since all teachers had an average of 13 years teaching experience in TWBI, and generally rated themselves as very knowledgeable in dual language strategies. In addition, six of the nine teachers in the study held master's degrees. Lindholm-Leary documented that teachers with the highest efficacy ratings tended to be supported by their principals, parents, and colleagues even though support levels varied by schools. These support systems were also found in this study with teachers from Evergreen and Victory. Finally, teachers in Lindholm-Leary's study perceived more attention to multicultural equity concerns with more years of experience and involvement in 90/10 programs. These findings also suggest that teachers at Evergreen and Victory are feeling success with cross-cultural competence, but admit they still need to develop this goal further.

Major Findings Between the Guiding Principles and Instructional Strategies

The second question of the research examined the theory, research, and practice of TWBI strategies through the following inquiry: How are the Guiding Principles for Dual Language Education assisting teachers in the implementation of their instructional strategies?

Principle 1: Research-based instruction. Examination of the findings indicated that teachers at Evergreen and Victory schools used strategies aligned to the Guiding Principles for Dual Language Education (Howard et al., 2007). In second language acquisition strategies, teachers contextualized new language structures and vocabulary development with gestures and they used scaffolding techniques for meaningful lesson delivery for all students. The results indicated how teachers planned instruction to ensure student access to the curriculum using the separation of languages for instruction. Overall, teachers at both schools appeared to be implementing research-based instructional strategies in accordance to Principle 1 at full and exemplary ratings based on the results of the teacher reflections forms and lesson observation instruments. It is important to note that the teachers and the researcher perceived that the strategies incorporated in TWBI lessons in this study provided a concrete understanding of the conceptual framework of dual language education.

Research in second language acquisition demonstrates the critical aspects of developing language structures with sentence frames and explicit vocabulary instruction (Dutro & Kinsella, 2010; Lyster, 2008; Snow & Katz, 2010). Current research contradicts the notion that second language acquisition is learned incidentally through implicit instruction; rather, students should receive explanations about the use of the second language through explicit instruction, practice of new language skills, and supportive feedback on errors (Snow & Katz). Therefore, teachers at Evergreen and Victory schools planned lessons with explicit instruction that was consistent to research-based practices, such as the use of language frames, frontloading academic

vocabulary, scaffolding instruction, and connecting language and content objectives to the grade-level standards. Saunders and O'Brien (2006) suggest that ELs are most likely to use the language modeled and used during instruction in their academic engagement with peers and teachers. Therefore, explicit instruction not only involves the explanation of content, but it also "explicitly focuses students' attention on the targeted language element or form, produces higher levels of second language learning that instruction that does not" (Saunders & Goldenberg, 2010, p.40).

Principle 2: Strategies enhance development of program goals. Evidence showed that teachers at Evergreen and Victory integrated language and content objectives in their lessons. Instructional strategies for both schools built on prior knowledge and connected lessons across curricular strands. Teachers discussed establishing instructional routines and classroom structures that built upon the complexities of languages throughout the year. Based on these findings, it appeared that the daily use of sheltered instructional practices allowed the content and academic vocabulary to be delivered through comprehensible and meaningful messages. Teachers sheltered instruction using visuals, realia, charts, interactive media/technology, demonstrations, graphic organizers, and illustrations. Teachers at both schools maintained the rigor of the content standards without watering down the curriculum by presenting activities and delivering content through different mediums (i.e., hands-on, experiential, concrete, visual and performing arts, technology, and learning centers). In general, the teachers' lower ratings at minimal and partial implementation of Principle 2 did not represent their own instructional strategies in the

classrooms, but rather the misalignment of special services with the philosophy of the program, and the limited implementation of technology and multimedia in some classrooms.

The literature review on development of TWBI program goals (bilingualism, biliteracy, and biculturalism) is consistent with the findings at Evergreen and Victory schools. The use of building prior knowledge and connecting personal experiences to curricular goals have been identified as important considerations in lesson development in TWBI, including the use of sheltered techniques during instruction (Howard et al., 2007). According to Saunders and Goldenberg (2010), delivering instruction through meaningful communication plays a central role in language use as it helps students' motivation to understand and learn languages. This idea to connect meaningful communication with explicit teaching is congruent with the strategies teachers implemented in this study. However, direction on how to align and incorporate special services/specials with their TWBI programs was an area identified by teachers at Evergreen and Victory of misalignment at their schools, mainly related to personnel who lack bilingual abilities or understanding of how special education students function in bilingual programs. Although some studies on dual language disorders are currently being published, such as the work of Genesee, Paradis and Crago (2006), concerning diagnosis of language impairment and clinical/educational interventions, the issue of special services continues to be an area of needed research for TWBI programs.

Principle 3: Student-centered instruction. At both schools, teachers used active learning strategies as evidenced by the use of cooperative learning structures to meet the needs of the diverse learners in the classrooms. Evidence revealed through photo-elicitation journals, teacher interviews, and lesson observations that teachers at Victory implemented more student-centered instruction, in contrast to the more teacher-directed techniques documented at Evergreen School. A difference in instructional approaches showed more opportunities to explore with curricular decisions at Victory; whereas, teachers at Evergreen reported following stricter schedules and more rigidity with curricular mandates. This divergence in curriculum and instruction between the two schools could account for the differences in the implementation outcomes for student-centered instructional practices. One teacher at Evergreen had alluded to persons coming into their classrooms with checklists. This could explain the possible distinction in teacher classroom behaviors concerning student-centered versus teacher-centered paradigms. Principle 3 had the most similar ratings at full and exemplary marks on the rubrics between the teachers and the researcher for the implementation of active learning strategies, use of cooperative learning structures, implementation of learning centers, and opportunities for meaningful language use.

According to Riches and Genesee (2006) interaction between teachers, peers and more competent students is a mechanism to adapt and accommodate the needs of the students about literacy, academic content and meaningful messages. Riches and Genesee proposed that learning environments must go beyond exposing students to

literacy-rich experiences, but also include focused and explicit instruction in particular skills for students to become “efficient and effective readers and writers” (p. 140) in both languages, particularly for ELs. Therefore, active learning strategies, meaningful language use, and cooperative learning are essential elements to lesson development for student-centered activities. At the same time, Saunders and O’Brien (2006) argued that there must be necessary conditions established when designing the task for student interaction, if the outcome is to achieve higher levels of proficiency using academic language. Similarly, Lyster (2007) supported the incorporation of meaningful and communicative language-learning context with explicit language teaching that counterbalance content and form without compromising content-based instruction.

Principle 4: Multilingual/multicultural learning environment. Teachers at Evergreen and Victory reported the need and desire to create a learning environment where all linguistic and cultural groups were equally valued. All students had access to the same materials and lessons in class. Guided instruction and support tools were available to all students in the program. However, teachers stated in their interviews that they felt pressured to postpone the implementation of the third goal (cross-cultural competence) until after completing the state standardized exams, which happened nearly at the end of the school year. Teachers felt required to spend the time on the academic goals of the program, rather than on the multicultural learning environment. In addition, the teaching of language varieties in the classroom was not clearly understood by all teachers during the interviews and seemed to happen spontaneously

in class. Results of Principle 4 had the widest difference in range between schools ratings, the teacher reflection forms and the lesson observations. Teachers attributed these discrepancies to the attitudes of the students, particularly in the upper grades, with use of Spanish in small group discussions. They also attributed lower ratings to lack of multicultural materials that addressed the third goal. Teachers felt Principle 4 was an area of much needed critical attention in order to fully achieve multicultural competence.

This teacher's quote represented a call for action on current teaching practices and reflected on the importance of building a community of learners to address the multicultural goals of the program related to Principle 4.

I think that comes from ourselves as teachers, because we haven't been doing all the activities we used to do before to build the unity between the kids. We are so drawn to the test, test, test, teach, teach, teach that we haven't taken the time to build the group. (Teacher Interview, Evergreen School, April 8, 2010)

This teacher appeared to understand the need for culturally responsive teaching by engaging students in caring relationships of mutual support. The teacher stated that she had promoted the development of interpersonal relationships previously in her program, but now attended to a new focus on academic building. According to Gay (2010), developing a sense of community is not a skill taught as a separate entity, but is an expectation tied together through an integrated curriculum. Gay stated "Educational excellence included academic success as well as cultural competence, critical social consciousness, political activism, and responsible community membership" (p. 33). Teachers' understanding of their discrepancy between academic

and cultural goals is the beginning to an open dialogue about establishing multilingual and multicultural learning environments in TWBI programs.

Major Findings of Strategies for Biliteracy Development

Examination of results from data analysis of photo-elicitation journals, interviews, teacher reflections, lesson observations, and questionnaires concerning the successful and challenging aspects in developing strategies for biliteracy skills for all program participants presented the following major findings in which the third question of the research was addressed: How are TWBI teachers implementing instructional strategies to develop biliteracy skills with program participants, including English Learners and English Proficient students?

Successes in strategies. The results from the research confirmed that teachers at Evergreen and Victory schools seemed to be implementing an array of strategies for the development of biliteracy skills that are congruent with the Guiding Principles for Dual Language Education, Strand 3: Instruction (Howard et al., 2007). Teachers at both schools implemented strategies with the purpose of keeping fidelity to the program model design of 90/10 instruction in English and Spanish without concurrent translation of material presented and maintained separation of languages in the subject areas. The findings suggested that lesson development was regarded by the teachers as the primary step to develop appropriate lesson sequences with process-oriented teaching. Therefore, lesson planning included implicit and explicit instructional procedures with modeling structures and expectations that elicited clear language and

content objectives, promoted differentiation of instruction through flexible groupings, provided opportunities for student engagement, and used assessments to inform teacher practice. Results indicated that teachers also identified having some autonomy in selecting curriculum and materials to augment their state adopted programs. However, teachers at Victory reported more allowed flexibility with scheduling, selection of materials, and strategies than teachers at Evergreen School, which seemed to follow a more structured learning environment that was closely monitored for its implementation.

Second, teachers identified functioning successfully in the development of biliteracy through the emphasis of vocabulary building strategies. Convergence of multiple data sources revealed prominence in the use of frontloading strategies, knowledge of cognates, extension of background knowledge, and expansion of language opportunities through literature and content instruction in reading and writing through individual and group projects (i.e., presentations, buddy readers, research reports, investigations, and literature circles). These findings correlated with the utilization of vocabulary development as an instructional support for ELs in order to develop complex oral and written communication skills. The literature review has supported the teaching of explicit language forms and structures as one of the most effective ways to assist the learners to succeed in second language acquisition (Dutro, 2007; Dutro & Kinsella, 2010; Snow & Katz, 2010; Wong Fillmore & Snow, 2000).

Third, teachers at Evergreen and Victory reported success in their implementation of English Language Development (ELD) strategies, even though it

appeared that both schools structured their ELD blocks differently. Teachers at Evergreen School grouped students according to their California English Language Development Test (CEDLT) levels and designed lessons according to ELD proficiency groups across each grade level, while teachers at Victory indicated that they implemented a literature-based program with whole class instruction, rather than grouping students by CELDT level skills across grade levels. As mentioned in Chapter 4, teachers at Evergreen followed a stricter guideline for implementation of practices than teachers at Victory, who appeared to have had fewer limitations from their administration concerning the incorporation of curriculum and strategies. These findings suggest teachers are using strategies to address the needs of students in their second language, as well as their native tongue, in order to build biliteracy skills.

The findings on strategies for biliteracy development suggest that teachers at both schools implemented effective lessons congruent to the theoretical tenets of TWBI presented in Chapter 2. Instructional strategies confirmed a linkage between the conceptual underpinnings of second language acquisition (Krashen, 1994) and practices related to additive bilingualism, the process of building on one's primary language skills by adding one or more languages without the detriment of losing their native tongue (Cummins, 1994). Krashen's theories ascertain that proper bilingual education assists EL students in gaining proficiency in their second language, while learning subject matter and developing cognitive skills in the primary language. Teachers at Evergreen also appeared to be expanding on Krashen's authentic communicative approaches by designing lessons in accordance to the students' second

language proficiency levels (beginning, early intermediate, intermediate, early advanced and advanced). At both schools, teachers also augmented Krashen's theory of second language acquisition by providing explicit second language instructional strategies to develop complex structures of language in both English and Spanish (Dutro, 2007; Dutro & Kinsella, 2010; Snow & Katz, 2010; Wong Fillmore & Snow, 2000). In addition, all teachers appeared to understand and demonstrate knowledge of the common underlying proficiency theory (Cummins), in which the learning of one language facilitates the acquisition of the second language. Teachers seemed to understand the notions of basic interpersonal communicative skills (BICS), or conversational abilities, and cognitive academic language proficiency (CALP), in which the development of academic functions require five to seven years to develop (Cummins). The study confirmed that teachers implemented strategies across grade levels for biliteracy development that were supported by the theoretical frameworks of TWBI.

Challenges in strategies. A major theme found across teachers at Evergreen and Victory Schools was the constraint of time to plan for lessons appropriately designed for TWBI goals (bilingualism, biliteracy, and biculturalism). Teachers revealed that state-adopted curriculum did not meet the needs of their student populations, and they needed to augment the lessons with supplementary materials or teacher-created resources. In the findings, the teachers' sensed the lack of support for biliteracy goals in state-adopted materials for their programs. As a result, they dedicated vast amounts of time, on a weekly basis (2 to 10 hours), to plan with their

grade-level teams, gather appropriate instructional materials, find leveled readers and trade books for literacy themes, and translate resources and/or assessments across subject areas.

Second, teachers at Evergreen and Victory reported facing rigorous challenges in finding adequate materials in Spanish that were linguistically appropriate for upper-grade students and had a motivating content to entice their interest to read. Results indicated that teachers spent considerable time in class making high-level textbook content in Spanish meaningful and comprehensible to the students, particularly in social studies and science, due to the challenging terminology and complexity in language. To defuse this challenge, teachers developed graphic organizers, journals, note taking, and charts to mediate the content through teacher-created resources, which required time to develop and implement. The literature review presented in Chapter 2 concurred with this finding related to instructional materials in TWBI programs. Howard and colleagues (2003) reported that teachers perceived teaching in two languages a challenging task since equitable materials might not be readily available to meet the demands of TWBI programs. Therefore, Howard and colleagues noticed that the complexity of vocabulary increases linguistic demands, in which teachers may need additional resources or training on instructional strategies to ensure success.

The findings indicated that teachers at Evergreen and Victory implemented a generic curriculum designed for the multitude of students across California that lacks suitability for second language learners in TWBI programs. Therefore, it became

difficult for the teachers to apply the prescriptive curriculum from state-adopted textbooks, not inclusive of TWBI students, in their programs. This forced teachers to discover more relevant ways to make the core materials meet the needs of their student populations in language arts and across other content areas. Once teachers examined the materials for applicability to the TWBI program, they made curricular decisions to revamp the lessons, augment the instruction with additional resources, or translate/create appropriate materials for Spanish. This challenge was a consistent and recurrent finding across grade levels and schools, which teachers identified as being an exhausting aspect of their practice.

Third, teachers also reported being challenged during English instruction in getting EL students to be more verbal and assume leading roles, since EP students had the tendency to overpower ELs in oral expression and dominate conversations during English time. Lesson observations seemed congruent with this perception and noted that teachers urged ELs to participate even when students were in their ELD production levels without the influence of EP students. The literature review in Chapter 2 presented this concern for TWBI programs by advising strong participation from language-minority students in the classroom. Research has suggested providing ELs an environment that supports a low affective filter (Krashen, 1994) and to monitor dominant EP students during class discussions (De Jong, 2006; Fitts, 2006; Palmer, 2008). According to Krashen's (1994) theoretical framework, students with lower affective filters are more highly motivated, have more positive self-confidence, and exhibit lower anxiety toward their new language.

In addition, findings indicated the issues of social justice and equity converging at Evergreen and Victory for students in the upper grades, as the teachers perceived loss of cohesiveness and community between ELs and EP students when working in small groups. That is, teachers in fourth, fifth and sixth grades reported a dissonance and undermining of equity within their community of learners. This significant issue seemed perplexing to the core values and beliefs of teachers about the goals of fostering a socially just environment in their TWBI programs, especially since the same groups of upper-grade students had not exhibited this behavior when they were at lower grade levels.

These confounding findings make one wonder whether students who have been instructed in TWBI classrooms, which are intentionally designed to meet their linguistic and cultural diversity, struggle for equitable learning spaces. The explanation to this phenomenon is still largely unknown as some studies are only beginning to address this issue; so far, research has identified similar findings concerning problems of social justice and equity in TWBI programs. Palmer's study (2008) at an elementary TWBI school in Northern California (see Chapter 2) may suggest a possible explanation to this occurrence. Palmer indicated that even in successful TWBI programs "inequity in discourse will persist" (p. 98) unless the teacher manages the academic discourse between student-to-student interactions, so as to "build on the words and ideas of others, rather than silencing them" (p. 114). Palmer's insight on equitable distribution of linguistic and cultural capital indicated that in order to avoid positioning EP students at center stage, there may be advantages

in teaching EL students what Freeman (as cited in Palmer) called alternative educational discourse. These instructional strategies assist students in viewing their classmates in new, more powerful ways. Some ideas implemented in Palmer's study were turn-taking management, re-voicing and careful listening, and carefully crafting questions to increase EL students' participation in academic lessons. Inviting teachers to experiment with alternative educational discourse strategies in their TWBI classrooms might ameliorate the challenges of linguistic and cultural capital by teaching students new dispositions that allow them to use alternative dialogue techniques with their peers. This concern about equitable spaces in TWBI settings continues to be explored by teachers and requires further research.

Major Findings of Strategies for Cross-Cultural Competence

Successes with cross-cultural competence strategies. The findings confirmed that teachers at Evergreen and Victory experienced success when they connected lessons to the students' personal lives and associated what they learned in class to their communities. Teachers reported that they expanded the students' cultural knowledge by learning about their historical pasts, reading biographies, and learning about traditions, celebrations and customs in their culture, as well as that of other students' heritage backgrounds represented in their classrooms. Teachers arranged seating by mixing groups of students to balance ethnic and cultural backgrounds and diversity in academic levels. For the majority of the time, classroom activities incorporated the use of cooperative learning strategies for all subject areas. Student engagement also

included the use of “think, pair, share” strategies for peer dialogue. Teachers reported implementing strategies and ideas they had received at workshops or discussed with their grade-level teams. According to results of the study, teachers intended to structure outcomes that fostered equitable opportunities for learning through building background information, personalizing, lessons and incorporating cooperative learning strategies to mix linguistic varieties in peer groups.

Vygotsky’s (1978, 1986) theoretical framework of social interactions presented in Chapter 2 stems from the constructs of sociocultural approaches to cognitive development, in which individual mental processes are assisted with a skillful tutor (more knowledgeable other) through social and cultural contexts embedded in the learning. The theory of social development stresses the fundamental role of social interaction in cognitive thought through a cooperative or collaborative dialogue, which promotes cognitive development. Vygotsky placed an emphasis on “culture” affecting and shaping human psychological function and the role of language, in which social constructs precede the learning. Therefore, findings indicated that teachers at Evergreen and Victory were applying the theory of social development into practice by involving students in peer interactions to promote the development of language.

Challenges with cross-cultural competence strategies. Teachers at both schools discussed the need to address the third goal of cross-cultural competence more in depth across all grade levels, but particularly at the upper grades where teachers had noticed tensions developing during student interactions in group dynamics. The challenges with peer interactions were noticed by teachers as early as fourth grade, but

teachers could not identify the causes for the sudden changes in peer dynamics that were beginning to surface with students who had been together in the same program since kindergarten. Upper grade teachers noticed instances where the spaces of EL students were being disrespected by English-dominant students during small group activities, to the point where teachers had to intervene to clarify the purpose of being bilingual and bicultural to the students. Teachers at Evergreen and Victory discussed concerns of students not getting along during group interactions and disrespecting one another in competitive, negative, or judgmental situations during cooperative learning structures.

The research studies reviewed in the literature for this dissertation on cross-cultural competence demonstrated that students still self-selected identity groups by status during lunch and recess (De Jong, 2006). This study calls for schoolwide efforts in the understanding of social status and relationships of students in an integrated setting. According to De Jong, ELs appeared less confident in the integrated setting and were unable to demonstrate their academic knowledge due to the low language status and identity issues when mixed with native English speakers, even in small groups. De Jong stated,

Successful student integration requires system-wide support, resources, careful planning, sustained teacher collaboration, and conscious attention to group status differences. Only when these variables are purposely addressed ... can the integration of native English speakers and bilingual students have positive social, linguistic, and programmatic outcomes.” (pp. 39-40)

The significant findings in group dynamics identified by teachers at Evergreen and Victory are a reminder to TWBI teachers of the importance of establishing

protocols during group interactions. Perhaps, just balancing numbers of ELs and EP students for cooperative learning and assigning roles to structure the participation management does not represent conscious attention to group status differences. The findings point to the teacher's role of creating expectations and monitoring dialogue.

Fitts (2006) also reminded educators of the stigmatization and subordinate roles of bilingual students in dual language classrooms as they became marginalized by other dominant students. These findings suggest that creating democratic and equitable classrooms can reconstruct the status quo of marginalized groups when students ally themselves in linguistic interactions and strengthen identities (Fitts; Palmer, 2008). Evidence presented by teachers at Evergreen and Victory schools concerning their challenges with the cross-cultural competence goal resembled the results of student marginalization found in other TWBI studies (see Chapter 2).

According to the Baker (2006), a language community is least likely to use two languages in the same manner; thus, each language is used for different purposes and functions in society. Therefore, the majority language might be distinguished as a high variety, used in business, commerce, mass media, and politics, while the minority language might be referred to as a low variety predominantly used informally in the home, for religious activities, or for social and cultural community liaisons (Ferguson as cited in Baker). Ferguson described *diglossia* as a term meaning that the focus of two languages used in the same geographical region change and impact the sociolinguistic purpose of each language or dialect in society. This affects the status and power of languages, making one language dominant and more prestigious than the

other (Baker; Potowski, 2004). This more eminent language is often identified with educational and economic success.

This perceived notion related to the functions of languages in society permeates into the school systems that exist within the broader context of society. Diglossia can affect various factors that influence the importance of each language within cross-cultural and linguistic context of TWBI classrooms, including peer interactions (Potowski, 2004). These factors may include the overall emphasis on education in the majority language (i.e., English standardized assessments, benchmarks, redesignation of ELs), political agendas and sanctions on schools to perform in the dominant language (i.e., NCLB, Program Improvement, test scores), and the societal portrayal of cultural identity within the popular American mass media. According to Potowski, these societal factors can “leak” into TWBI classrooms and affect the manner in which students view the purposes of each language for their educational or personal investments. Therefore, the status of language in TWBI settings may be influenced by older ELs and EP students desiring to conform to the dominant language that is associated with prestige and power in their schools and society (Baker, 2006).

Evidently, there is scant research on how to address the third goal in TWBI classrooms. Even though the Guiding Principles’ (Howard et al., 2007) research-based practices suggest that students who are linguistically and culturally diverse become more positive toward one another and improve academic achievement when they work together to solve common tasks, group dynamics require intervention strategies that

promote democratic approaches and linguistic equity for all students (De Jong, 2006; Fitts, 2006; Palmer, 2008). The Guiding Principles (Howard et al.) used by teachers as the template to implement their TWBI goals provides a limited scope on the planning and implementation of the cross-cultural competence goal; much of it revolves around multicultural and multilingual education, not on how to address the practice of social justice and equity in a TWBI classroom. This is an area for further research and a necessity for staff development opportunities at schools implementing TWBI programs.

Major Findings on Perspectives and Innovations of Instructional Strategies

The results in this section addressed the final question in the research study: How do the successes and challenges in their strategies bring about new perspectives or innovations in their practice? Identification of evolving themes related to the development of new perspectives and innovations of strategies by teachers at Evergreen and Victory included the following: (a) implementation of the third goal cross-cultural competence; (b) balance of language status; (c) decisions on materials, curriculum, and resources; and (d) collaboration with colleagues.

Perspectives and innovations on cross-cultural competence. Even though teachers believed the third goal of TWBI (cross-cultural competence) to be somewhat overlooked in their programs, teachers generally agreed to be working successfully at improving its implementation. Evergreen and Victory teachers admitted in their interviews that they were experiencing success, even though they also reported this

goal to be the most challenging one to implement in their programs. Teachers described reaching success with cross-cultural competence when they provided equal opportunities for learning through various modalities that addressed the students' learning styles (i.e., dance, poetry, multimedia presentations, songs, tactile/realia, sensory/food, and celebrations). The mission at both schools was to seek resources, including professional development opportunities, to address the incorporation of cross-cultural competence. Teachers at Victory planned to meet with their administrator to discuss the implementation of the goal and had a desired outcome to find a program or external resources to assist them with cross-cultural competence. In contrast, teachers at Evergreen felt they had been trained through a grant on how to implement a social justice program that included a lesson on cross-cultural competence with the use of literature and technology, but reported lacking the time in their schedule to include this goal consistently throughout the year across all grades. Results from teachers' perspectives indicated they spent a considerable amount of time on academic/curricular development in English and Spanish, administering and evaluating benchmarks, as well as preparing students for standardized tests, leaving little time in the day for anything else.

The findings confirmed that teachers from Evergreen and Victory perceived cross-cultural competence as a separate component to their TWBI programs. Teachers described biliteracy and bilingualism as goals interrelated through listening, speaking, reading and writing in their curriculum. These goals seemed tangible through student products and assessments. Student outcomes were measurable and were monitored by

the state and district. Conversely, the implementation of the cross-cultural competence goal seemed more abstract, difficult to incorporate, and not measurable by any type of assessments. Teachers seemed to view the development of the third goal as an addition to the progression of biliteracy strategies, not an interwoven goal taught within their curriculum. Therefore, the findings suggested that the goal was perceived as a third entity that needed to be implemented, but was left at teachers' discretion on how and when to incorporate the goal without much accountability.

This was a similar finding related to the results of the pilot study conducted at a district in Southern California across three schools representing grades K-6 in 2009. The pilot teachers either described the implementation of the cross-cultural competence goal as an "add-on" to the program in which they did not have time to teach or preferred to incorporate the goal mainly through additional activities, generally related to the visual and performing arts. This statement from a teacher in the pilot study expressed the sentiments toward the third goal.

I rarely integrate cross-cultural experiences. We share personal experiences, but I found that there are a few parents who would rather we skip certain cultural experiences. Besides, our days are so full of expectations, that I do not have the time. (Teacher 11, Pilot Study, May 7, 2009)

While another pilot teacher interpreted the goal of cross-cultural competence as pertaining to holiday celebrations and inviting parents as guest speakers to share individual interests in hobbies.

Celebration or study of a variety of holidays. Invite parents/community members as guest speakers. Students read a story about a seal and a boy who surfs. We invited a "surfer" to the class who shared about surfing, showed his wetsuit and board. (Teacher 4, Pilot Study, May 3, 2009)

These examples of teacher perception toward cross-cultural competence provide profound implications for the need to further examine this area in TWBI classrooms. It is apparent that the goal is interpreted in various ways without a common definition, lacks an appropriate place in the curriculum, and persists unnoticed by monitoring systems or program administrators. Teachers seem to implement their individual interpretations of cross-cultural competence without substantial training in this area or understanding of its purpose. The results conclude that teachers have multiple perspectives of the goal, and need common knowledge of the fundamentals of social justice and equity to clearly implement innovative strategies.

Perspectives and innovations on the balance of language status. Teachers at both schools reported using ELs as role models in class to raise the status of culture and language in the classroom and defuse the overwhelming presence of English as the preferred language of communication in their environment. This allowed EL students to become dominant roles models that exhibited the use of Spanish in the classroom. Another motive for using ELs as role models was to actively engage the students as leaders and increase the social status in the classroom. Studies have indicated an overwhelming success for ELs when their primary language was used as a vehicle to bridge the learning of a second language and provided meaningful and engaging equitable opportunities for students with low-socioeconomic levels (August & Shanahan, 2006; DeJong, 2006; Fitts, 2006; Lindholm-Leary & Block, 2010; Palmer, 2008).

Second, some teachers admitted to struggling to keep Spanish as a language of status in their classrooms with the current emphasis on teaching more English in their programs, placing importance on English standardized exams, and allowing students to use English in small group discussions during Spanish time. An observation made by one teacher at Victory was to create restrictions in their program for the use of English during Spanish instruction by determining a time in the students' education when code-switching should not be permitted in class.

Teachers at Evergreen and Victory also identified as difficult the maintenance of the status of Spanish when they struggled to keep students motivated with the complexity of Spanish language materials in the upper grades. Another teacher observed students fossilizing incorrect grammatical structures in Spanish and attributing that to the lack of a comprehensive program across grade levels for teaching of Spanish language grammar and vocabulary. Teachers felt they needed to develop strategies on how to keep the students motivated, engaged, and acquiring oral skills at higher levels of Spanish in order to maintain conversations at appropriate academic levels using correct grammatical structures.

According to Alanís (2000), students can develop a preference for English when the TWBI schools emphasize English instruction and lack appropriate materials in Spanish, even though the school or program may support bilingual education. Alanís reported how minority-language students developed a preference for English, which was influenced by societal factors (i.e., language of commerce in the United States, pressures from dominant society, media, parents, school environment and

English assessments). More importantly, Alanís' study (see Chapter 2) documented how ELs participated in a language "shift" even at the expense of their native language, which suggests that students may have believed that Spanish carried less cultural capital despite their participation in a bilingual program near the border region of Texas and Mexico. Alanís's findings converge with the results of student preference for English during small group interactions at Evergreen and Victory schools.

The role of interaction is central to TWBI programs. However, combining ELs and EP students in the same classroom does not affirm that they will maintain the communication in the language of instruction for the duration of the period or group conversation. Findings from the classroom observations at Evergreen and Victory indicated that, in general, students began their conversations in Spanish during the language of instruction, but when the teacher began to assist other students or became occupied with other aspects, the groups shifted languages to converse in English, including the minority-language students. The study once again confirms the need for teachers to continue innovating ways to raise the status of Spanish in the classroom. Teachers need an increased knowledge in the influence of English on the cultural and linguistic capital of social language and development, as well as in ways to monitor which students undermine the use of the heritage language. This need continues to indicate the importance of conducting more scientific research on the status of languages in TWBI programs.

The results of this study are consistent with Potowski's (2004) research of fifth- grade students in a dual language program who preferred to converse in English

during Spanish time when it went unchecked by the teacher. Potowski found that in talk amongst four focal students, Spanish was used for academic reasons during instruction and when students addressed the teacher, but English was the language of preference when students engaged in peer-to-peer social interactions in class. Norton (as cited in Potowski) also noted that students are motivated to speak another language only when they have “investments that are intimately connected to the ongoing production of the learners’ identities and their desires for the future” (p. 77). These investments can be representations that are either symbolic or materialistic, such as friendship, popularity, education, and monetary. Potowski also mentioned that there are influences that added increased importance to English and eroded valuable connections to the heritage language at schools. These influences include the emphasis of English on standardized tests, electives, assemblies, competitions, sports, fairs, and other schoolwide practices conducted in English that clearly send subtle messages to students, as they begin to associate the status of power in the dominant language. According to Potowski, ELs can have a tendency to conform to the language of their classmates to assert their status and competence in English, even with students who are recent arrivals and know very little English. During the Spanish language instructional time, Potowski discovered that 68% of the time student conversations resulted in English and only 32% were in Spanish.

These findings suggest that there are lessons to learn from the teachers’ challenges in maintaining the status of Spanish in the classroom and the similarities documented in Potowski’s study. Given that language production is a central element to

language development in TWBI settings, this dissertation suggests that teachers need to continue creating innovative opportunities for the use of Spanish in class that can be sustained in small group conversations without the language shift to English. Therefore, giving students tasks to perform in Spanish (i.e., cooperative learning and literature circles) does not ensure student communication in Spanish, especially as contrasted to class participation during teacher-directed lessons in Spanish. The new challenge is for teachers to shape these paradigms in their classrooms to motivate students through alternative discourses (Palmer, 2008), monitoring of language use (De Jong, 2006), building allies for Spanish use in peer group activities (Fitts, 2006), and placing symbolic value to the “investments in identity” that motivate the use of Spanish (Norton as cited in Potowski, 2004).

Perspectives and innovations in materials, curriculum, and resources.

Teachers at Evergreen and Victory believed in teaching for depth and meaning rather than racing through the curriculum in order to follow district pacing guides. The results demonstrated that teachers were using state-adopted materials, but were selective in how they presented the lessons and in how they supplemented with additional resources. In general, teachers innovated with the use of technology and other strategies to expose students beyond the state-adopted textbooks. They also reviewed lessons by interweaving previously learned material in subsequential lessons through the use of journals, subject binders, and activities. Teachers discussed the continual process to invent new ways to use materials in TWBI contexts to provide students with the maximum exposure to the content and in a variety of ways.

These findings indicated the recurrent theme throughout the multiple data sources of teachers having to adjust, fix, or reinvent the curriculum that they were responsible to teach in their TWBI programs. Teachers reported having to spend their own time to review materials, produce new innovations to present content in more meaningful ways, and develop new lessons without the necessary resources from their districts. Although teachers found their site administrators as supportive individuals and understanding of the complexities of their jobs, they felt their districts could assist more with human capital and resources to alleviate the responsibilities related to creating curricular decisions and materials. The results of this study pose significant considerations to urge publishers, state agencies, and textbook adoption committees to approve materials that are inclusive of students in TWBI education who are receiving bilingual and biliteracy instruction.

Perspectives and innovations in collaboration with colleagues. The exchange of ideas at grade-level planning meetings provided teachers with new perspectives for teaching difficult content or developing lessons with assessments. Teachers at Evergreen and Victory described how they divided the tasks of translating materials and assessments within the grade-level members. Results showed how teachers assisted each other with lesson planning and the development of assessments in Spanish and confirmed that these were additional tasks pertaining to TWBI teachers. They seemed to acknowledge the fact that teaching in TWBI contexts required added responsibilities to fulfill the curricular demands. Consequently, teachers attributed the

main support for curricular development to their dialogue at grade-level meetings and school sites, but receiving minimal considerations for assistance at the district level.

Another way teachers found success with collaboration was through the practice of reflection. Teachers reported meeting after school to converse with one another about lessons they had taught that week or activities they were planning to implement. Although teachers admitted the mix of new and experienced teachers at their grade levels made it difficult at times for the entire team to be consistent with similar thinking and levels of expertise, the collective knowledge and sense of community allowed teachers to experience success and growth in instructional strategies through exposure to new perspectives. The process of collaboration was seen as both demanding and necessary for teacher success in a dual language setting. In the review of the literature, Lindholm-Leary (2001) found that teachers who collaborated at their schools exhibited high efficacy and experienced success with diverse groups of students. Lindholm-Leary also discovered a strong connection between teacher efficacy and program satisfaction.

Conclusions and Implications for Action

Synthesizing the theory, research, and practices in two-way bilingual immersion classrooms deepened my understanding about the strategies teachers considered to be successful to implement and allowed me to examine the areas deemed most challenging in their day-to-day routines in teaching and learning. Opportunities for teachers to capture their strategies through photo-elicitation journals presented the evidence through authentic perspectives derived from the inside core of

the classroom as teachers told their stories and reflected on their practices. Findings revealed the complex processes of teaching in TWBI settings through the teachers' own realities with respect to curricular adaptations, lesson planning and development in English and Spanish, intricacies with student interactions, and collegiality. Teachers gracefully opened their classrooms for lesson observations, and allowed me to collect evidence of their strategies for biliteracy development and cross-cultural competence. I found that the teachers at Evergreen and Victory demonstrated passion about their work, a caring attitude about their students, a willingness to contribute their knowledge to the field, and a genuine desire to learn from this study.

New Directions: Theoretical Perspectives for TWBI

Based on the data collected and the results of the findings this study validates the research-based strategies teachers implemented to develop biliteracy and cross-cultural competence. In addition, I would like to propose a new direction for consideration in theoretical frameworks concerning the goals for TWBI: bilingualism, biliteracy and biculturalism. Through this experience, I have come to the conclusion that in two-way immersion programs three distinct theoretical underpinnings merge in order to advance the linguistic and cultural goals of dual language education in the classroom. Figure 5.1 demonstrates the relationship among three frameworks and how these theories interrelate to TWBI instructional strategies. The three theoretical underpinnings that I am suggesting for the foundation of TWBI strategies include: (a) Theories of Second Language Acquisition, (b) Theory of Social Development, and (c) Theory of Culturally Relevant Teaching.

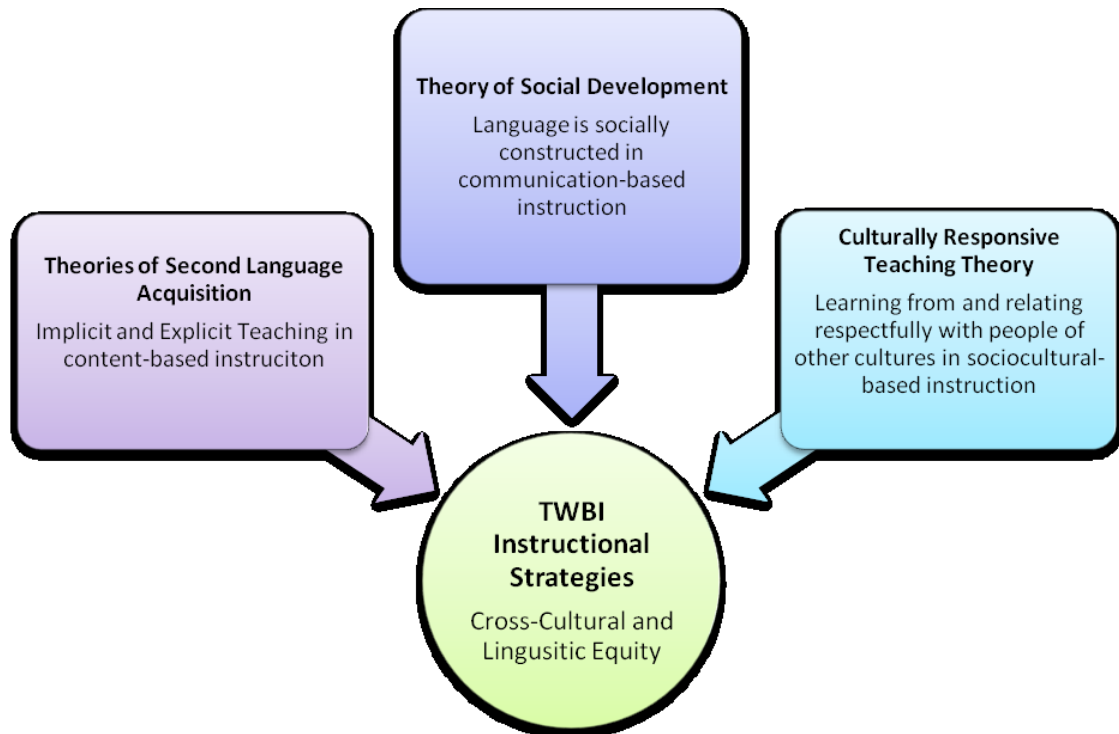


Figure 5.1: *Converging Theoretical Frameworks for TWBI Instructional Strategies*

Second language acquisition theories. Current research in second language acquisition has advanced strategies for teaching and learning in the classroom. Early behaviorist theory thought that acquiring a second language included imitation of sounds, practice through drills, and memorization of language patterns, in which strategies for second language acquisition involved audiolingual methods (Lightbown & Spada, 2006). Dissatisfaction with the behaviorist method, Krashen (1994) became influenced by Chomsky's theory of first language acquisition, in which children acquire language through an innate universal grammar present in their environment during their development (Lightbown & Spada). Thus, Krashen's acquisition-learning

theory, (Krashen) is thought to be similar to the way that children acquire their first language by feeling or picking up a language subconsciously, and by learning from presentation of rules and error correction. Krashen's ideas promoted the development of second language acquisition strategies as authentic communicative approaches in which students understand meaningful messages while acquiring second language competence (August & Hakuta, 1997; Cloud et al., 2000; Collier, 1992; Lindholm-Leary, 2001; Peregoy & Boyle, 2006). In response to Krashen's comprehensible input hypothesis, Swain (1985) proposed the comprehensible output hypothesis in which learners engage in verbal production through spoken and written language (output), rather than just receiving meaningful messages (input).

Cognitive theories of bilingualism provided the theoretical framework of additive bilingualism (Cummins, 1994) to guide the immersion of language-majority students in one or more languages without a threat to their primary language. The conceptual construct for language-majority students stems from successful results of Canadian one-way immersion programs where subject matter was taught in French, while students received primary language instruction in language arts. Cummins concluded that English language-majority students immersed in the French language during their schooling years gained second language literacy in reading, writing, speaking, and listening without any loss (subtractive bilingualism) to their native tongue. The results of the study conducted with teachers from Evergreen and Victory demonstrate how instructional strategies for biliteracy development stemmed from

research-based practices for language-minority and language-majority students to learn through an additive process rather than subtractive.

Current research has challenged the theories of implicit language instruction and has insisted on explicit second language instruction for the development of complex oral and written communication through syntax analysis and vocabulary development (Dutro, 2007; Dutro & Kinsella, 2010; Wong Fillmore & Snow, 2000). Explicit language instruction in which students receive clear explanations, learn language functions, have opportunities for practice, and receive supportive feedback on errors are considered new strategies in developing language acquisition (Genesee et al., 2006; Saunders & Goldenberg, 2010; Saunders & O'Brien, 2006; Snow & Katz, 2010). New research supports feedback corrections that are explicit and provides clarification to the learner on language forms, rather than implicitly recasting a student's utterance, which students may not notice as an implied correction (Lyster, 2007; Saunders & Goldenberg; Snow & Katz, 2010). This new movement toward an enhanced balance between content and form suggests instructional strategies need to attend to language structures, but maintain meaningful connections to subject matter instruction.

Documented in this study is the evidence from teachers at Evergreen and Victory schools concerning the inclusion of various language acquisition strategies that include a natural language approach and the incorporation of explicit instruction. It is clear from the results of the study that both implicit and explicit teaching of

language objectives through content-based instruction has produced what teachers perceived to be successful biliteracy strategies for their TWBI programs.

Social development theory. Teaching *about* and *in* the language of instruction is not enough to meet the needs of the goals to TWBI: bilingualism, biliteracy, and biculturalism. Therefore, a second theoretical framework defines how language is developed through social interactions. The theory of social development (Vygostky, 1978) nurtures cognitive development by assisting the mental processes of an individual with a skillful tutor (more knowledgeable other). This social interaction among peers fosters language development by internalizing what others say to them and what they articulate with others. The learner is able to perform at higher levels of language development, because the student coconstructs knowledge and receives support from the skillful tutor. Findings in the data analysis from teachers at Evergreen and Victory demonstrated how lessons embedded strategies for students to socially construct language in a variety of ways, such as in cooperative learning, literature circles, input charts, buddy readers, and reader's and writer's workshop. These socially constructed contexts provided students with communication-based instruction that was supported by peer social interactions.

Culturally relevant teaching theory. The third theory builds on second language acquisition and social development underpinnings by including progressive teaching strategies in which learning is structured to assist students to become academically successful, culturally competent, and socioculturally conscious. Through a culturally relevant pedagogy (Ladson-Billings, 1995) teacher beliefs and ideologies

assist to reform and restructure the processes to “mine” the students’ intellectual potential through social relations that build a community of learners. Teachers consciously create social interactions to build relationships, build connectedness, and teach students to collaborate and become responsible for one another. “Culturally relevant teachers encourage a community of learners rather than competitive, individual achievement” (Ladson-Billings, p. 480); therefore, teachers build a caring, family atmosphere with buddy systems, develop arrangements for formal and informal peer collaborations, and build relationships that are equitable and reciprocal. Conceptions of knowledge are about doing, not static it is shared expertise, recycled through lessons, constructed by students, and viewed through critical analysis. According to Ladson-Billings, culturally relevant teaching must meet three criteria: (a) ability to teach for academic development, (b) willingness to nurture and support cultural competence, and (c) promote development of sociopolitical or critical consciousness.

Teachers at Evergreen and Victory stated making gains toward the attainment of the cross-cultural competence goal by providing opportunities for student engagement, creating units about personal histories, reading about other cultures/biographies, writing country reports, incorporating the visual and performing arts, and yet they felt more could be done at their schools to accomplish this goal. Various teachers indicated a need to explore more opportunities to develop stronger student relationships between ELs and EP students, particularly when working together in small group structures in the upper grades. Teachers also seemed

concerned about the status of Spanish being perceived by the students as subordinate to English. I suggest teachers examine possibilities in considering strategies that foster a culturally relevant pedagogy that may have a positive impact on the development of a community of learners.

I believe these three theoretical frameworks can serve as important foundations for instructional strategies that develop biliteracy and cross-cultural competence in TWBI programs. Teachers that understand these conceptual frameworks can put theory into practice for primary and second language academic development, for cross-cultural competence, and can raise the critical consciousness to address the issues of linguistic and cultural equity that possibly undermine social justice in TWBI programs, such as revealed in this research study. The convergence of the three theories can present a new direction for TWBI instructional strategies (see Figure 5.1) for the sociocultural and linguistic equity of all students represented in the program. This would require that teachers incorporate objectives for language, content, and culture in their daily curriculum based on the three goals of TWBI: bilingualism, biliteracy, and biculturalism. These theoretical frameworks would be represented as one central construct for lesson planning, curricular development, and student interaction. This new dimension in theoretical thinking, to develop the inclusion of culturally relevant pedagogy to second language acquisition theories, will require a transformational leadership approach to create and present new ideas for instructional strategies with team members at their schools (see Figure 5.2).

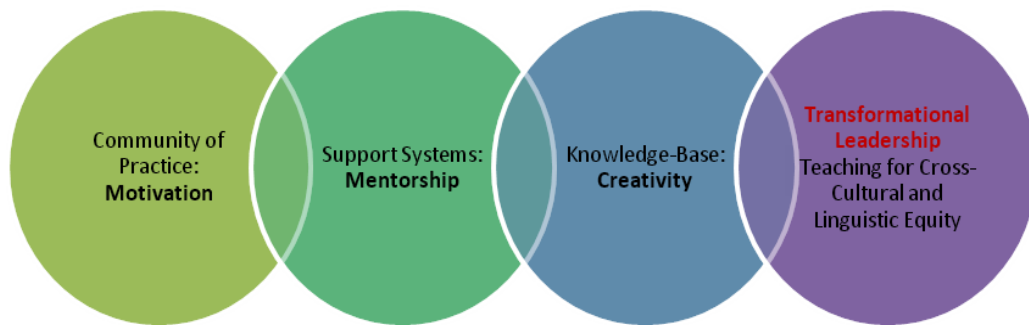


Figure 5.2: *Teacher Leadership for Cross-Cultural and Linguistic Equity in TWBI*

Transformational Leadership: Implications for Action

Findings in this study suggest that teachers have developed a strong sense of community at their schools for planning lessons on a weekly basis and for reflection of their daily practices. Figure 5.2 demonstrates how teachers could use their *Community of Practice* (Wenger et al., 2002) to discuss new ideas about instructional strategies that are culturally relevant during team planning to provide motivation for change. Then *Support Systems* at their schools can provide the mentorship required to take new risks in implementing new strategies in the classroom. This can be accomplished by teachers coaching one another or site administrators providing release days for planning and observation of instructional strategies. Ultimately, the teachers would gain the *Knowledge Base* necessary to implement creative strategies into their daily curriculum in order to achieve cross-cultural and linguistic equity in the classroom. These three areas of Motivation, Mentorship and Creativity develop the concept of

Transformational Leadership in an organization. Transformational leadership (Burns, 1978) is defined as what “occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (p. 20). This lens for teacher leadership provides reflective practitioners who see themselves at the center of the action for transformational change (Rost, 1991). What better way to inform practice in TWBI programs than through conceptual frameworks that make instructional sense and inform the advancement of strategies that support the goals of bilingualism, biliteracy, and biculturalism.

Teacher training programs. Transformational leadership can also occur at institutions of higher learning that provide credential programs, opportunities for preservice, and advanced degrees for teachers interested in TWBI education. University level courses can offer in-depth educational endeavors in promoting content, language, and cross-cultural objectives in lesson development and practicum in the field. Teachers would have the opportunity to receive training in cross-cultural competence and linguistic equity prior to working with students at TWBI schools. This impact in instructional practice could bring about a transformative change in positive peer interactions, multicultural perspectives, and in addressing the issues of language status.

Recommendations for Practice and Future Research

Recommendations for Practice in TWBI

The purpose of this dissertation is to inform the field on successful and challenging strategies implemented by TWBI teachers in two 90/10 program models. My hope is to disseminate this information with a call for action to practitioners, administrators, researchers, and policymakers involved in instructional decisions pertaining to dual language education to examine the manner in which TWBI programs address the third goal of cross-cultural competence. For practitioners, this dissertation provides an “inside look” into the daily workings of teachers implementing instructional strategies to meet the goals of the program, particularly biliteracy and cross-cultural competence. This research provides an examination of what teachers considered successful and challenging aspects of their instructional strategies, which can provide pertinent information to administrators and program directors. These research findings can assist schools/districts as they plan and implement staff development, TWBI meetings, and grade-level articulation at their schools. Researchers can further study instructional strategies challenging to TWBI teachers. Lastly, given the large number of ELs and EP students currently being served by TWBI programs nationwide, policy makers can provide more guidance to the development of curricular frameworks and textbooks that incorporate lessons aligned to the tenets of TWBI programs. In addition, policymakers can allocate focused funding to further examine successful and challenging instructional strategies in these programs.

It is possible to predict that results from this study, on the implementation of strategies pertaining to the third goal of cross-cultural competence, can be generalizable across other TWBI programs for the following reasons: (a) results of the study documented challenges with the third goal across multiple measures, (b) relationships found between the research results and the literature review, (c) results of the pilot study showed concerns with the third goal, and (d) my personal experiences in implementing the goal. All the reasons stated above can be triangulated to show possible generalizability across other TWBI programs even though the small sample size of participants for the dissertation study is a delimitation of the research. However, both schools in the study presented similar successes and challenges with the implementation of cross-cultural competence strategies. The literature review supported similar findings concerning issues of social justice and equity across other studies with comparable populations of students in TWBI programs (Alanís, 2000; De Jong, 2006; Fitts, 2006; Palmer, 2008; Potowski, 2004). In addition, the results of the pilot study surveys demonstrated that not all teachers implemented the third goal or understood how to address cross-cultural competence with their students; in general, teachers in the pilot study associated the meaning of the goal with holidays or the visual and performing arts. Lastly, due to my positionality as a TWBI teacher and consultant for 18 years, former co-project director for TWBI programs, and member of the Two-Way CAFE Executive Board, I feel that teachers from Evergreen and Victory have identified common issues that generally pertain to the implementation of the third goal in TWBI programs. I have also struggled with defining and

implementing the goal in my classroom, as well as heard from other educators about the difficulties they face realizing cross-cultural competence in their TWBI classrooms and schools. Overall, I feel teacher training programs, district inservices and educational conferences have not adequately addressed *how* to implement cross-cultural competence in TWBI settings. It seems as if theory, in this area, is still a long ways from practice.

My recommendations to educators in TWBI programs are to examine the areas concerning how the status of the minority language is perceived in the classroom and throughout the school. This would constitute analyzing the types of investments (Potowski, 2004) that motivate students in learning and maintaining the use of the minority language. In addition, schools need to evaluate the influences causing the English language to quickly seep into students' attitude as the language of power and preference (Alanís, 2000; Potowski) by becoming more conscious about the way the school environment conveys messages about language and culture.

The second recommendation is to develop professional knowledge and skills pertaining to cross-cultural competence for teachers and students. Developing strong foundations for social interactions and critical consciousness (Ladson-Billings, 1995) can possibly allow teachers to implement effective strategies for student engagement without disrespecting personal spaces (Fitts, 2006) or devaluing the minority language through language shifts (Alanís, 2000) in English during peer dialogue.

Both of these recommendations for educators in the field of TWBI revolve around the proposed notion of converging theoretical frameworks of second language

acquisition, social development, and culturally relevant pedagogy to properly address the goals of TWBI.

Limitations of Study

The delimitations of the research included the small sample size of nine teacher participants at only two TWBI schools in southern California. The sampling and demographic information of the teachers in the study may not be representative of other teachers in TWBI programs in the state or nation. Second, the window for data collection posed a possible constraint since most schools in California begin to prepare students for standardized exam routines during the second semester of school. The data collection process was limited to a few weeks of “real-life” situational teaching opportunities before the commencement of the California assessment system. The third potential problem was that I am a classroom teacher and the amount of time I spent collecting data at the schools was limited to three or four visitations during the data collection phase.

Future Research Recommendations

Because the findings pertained to instructional strategies for the development of biliteracy and cross-cultural competence, it appears that more research is needed in the area where teachers seemed most challenged to implement cross-cultural competence. Areas in need of more scientific research are: equitable spaces and language status.

Equitable spaces. In the area of cross-cultural competence it is evident that more research is needed in the upper elementary grades and middle school pertaining

to the implementation of discourse strategies to ameliorate the challenges of linguistic and cultural capital. Teachers at Evergreen and Victory discussed concerns of students not getting along during group interactions and disrespecting one another in competitive, negative, or judgmental situations during cooperative learning structures. Why do students who have been in TWBI classrooms that are intentionally designed to meet their linguistic and cultural diversity struggle for equitable learning spaces? What can teachers do? Research could inform practice on how students can use new dispositions that allow them to use alternative dialogue techniques with their peers. This concern about equitable spaces in TWBI settings continues to be explored by teachers, but needs to be further studied in scientific research to provide directions that are research based.

Language status. A significant finding in this study was how ELs participated in language shift at the expense of their native language in order to continue conversation with their English-dominant peers during Spanish time. The results also indicated that teachers did not know how to successfully redirect students into Spanish dialogue or set structures to combat the situation in class. Teachers attributed these discrepancies to the attitudes of the students, particularly in the upper grades, with use of Spanish in small group discussions. This phenomenon may suggest that students may believe Spanish carries less cultural capital (Alanís, 2000). Therefore, more research in this area of language shift, particularly for ELs who seem to disregard their own native language for English preference, is an area of further research. What strategies can teachers use to create language status balance in TWBI settings? How

can they implement these strategies? What responsibility/accountability do TWBI students have toward their role in cross-cultural competence? More investigation is needed on how students view linguistic and cultural capital in TWBI classrooms.

This research study provided opportunities to view the workings of the classroom from an inside perspective through teacher voices, reflections, and discussions about their most successful and challenging strategies in TWBI. I was honored to be invited by the teachers to view their lessons and interactions with their students. I hope the knowledge I gained from their interviews and the inspiration they demonstrated about teaching and learning in a diverse setting are well-represented in this dissertation in order to carry their messages forth to other educators. In closing, I have chosen a motivational quote from one of the teachers that truly made me think differently about how to interpret the goals of TWBI. I hope this quote also inspires those who read this dissertation.

I would wish my students would continue the mindset that they have right now of working together as a team, of sharing and being concerned for each other, recognizing diversity, and being happy in that diversity...because I think if they did, the world would be different.
(First grade teacher, April 1, 2010)

APPENDIX A

Photo-Elicitation Protocol

Purpose: This method will allow teachers to document their instructional strategies in TWBI programs by photographing their student interactions, grouping structures, learning environment, student products, bulletin boards, and other evidence related to the development of biliteracy skills.

Procedures:

1. Site teachers will meet as a group with researcher to discuss purpose of the study and protocols. Researcher will explain purpose of photo-journal and how to record information. This will be conducted during the first school visit in one of the teachers' classroom. Meeting will last approximately 30 minutes.
2. Teachers and parents of students will sign consent forms prior to beginning the process.
3. Teachers will photograph strategies during the span of an instructional unit (2-3 weeks) where students are developing biliteracy strategies. Teachers will take approximately 20-25 photographs during this phase of the study.
4. Teachers will select 5-10 photographs to include in their photo-journal and write descriptions of the strategies.
5. Photo-journal will be shared at the Appreciative Inquiry interview for a photo-elicitation session regarding their instructional practices.
6. Schedule the Appreciative Inquiry: Photo-Elicitation Interview with teachers.
7. At the photo-elicitation interview, teachers will examine the photographs and describe their practices. Teachers will also classify photos into themes while discussing and telling their stories. Researcher will not preview photos taken by participants until this interview, in order for participants to make for initial reactions within the process.
8. Photo-elicitation discussions will be audio-taped and transcribed by the researcher in order to analyze the data. There will be a total of 3 photo-elicitation focus interviews (one per school site). See Appendix C for Appreciative Inquiry: Photo-Elicitation Interview Protocol.
9. Photo-journals will be collected by the researcher to further study the data and themes.
10. At the end of the study, the researcher will share findings with the teachers and return all their photo-journals.

APPENDIX B

Photo-Journal for Photo-Elicitation

Directions: On this page glue, tape or download one of your selected photos to discuss at our photo-elicitation interview. Then, answer the following questions. You may use the back of this page to complete answers, attach a separate paper or type on the electronic form. You include this page in your Photo-Journal. You will bring the photo-journal to our photo-elicitation interview.

Title this photo: _____

- 1) **What** strategy is represented in this photograph?
- 2) **Why** do you use this strategy? How is the strategy related to the *Guiding Principles*?
- 3) **When** do you use this strategy? **How** often do you use this strategy?
- 4) **Who** are the students who benefit from the strategy?
- 5) Name any challenges in implementing this strategy.
- 5) What else would want us to know about this photo or strategy?
- 6) Feel free to express other comments...

APPENDIX C

Appreciative Inquiry: Photo-Elicitation Individual and Focus Group Interview Protocol

Agenda

- Celebration
- Purpose and Overview of meeting
- Review of Appreciative Inquiry
- Protocol for Photo-Elicitation

Phase 1: Discovery/Inquire: Sharing Stories (20 minutes)

In pairs, interview each other for 10 minutes without interrupting one another using the following questions and taking notes:

1. Take a moment to think about your instructional practices during the last few weeks in your dual language classroom. Which strategy produced a significant impact on your students' learning and the goal to become biliterate. Describe this peak experience. Where were you? What were you and your students doing? What was the context? What was the language? What were the materials? Why did you feel or think this way? Were you able to capture this peak experience in one of your photographs?
2. Share your photo-journal. Discuss what you see in the photographs and the reasons you selected them.
3. Revisit the photo-journal. Describe the strategies and how they impacted your teaching and your student's learning. Which ones would you consider as peak experiences?

Group shares highlights of partner photo-journals and stories **What big ideas emerged from your conversations? How would you group them and what would you call your themes?** Group charts themes heard across the narratives and classifies photographs into categories. Researcher observes interactions and body language of participants **(20 minutes)**.

Phase 2: Dream/Imagine (10 minutes) Brainstorm ways to recreate the positive and energizing teaching experiences by describing the key elements of your most successful instructional strategies for biliteracy development. You can refer to the group's photographs.

Phase 3: Design/Innovate (10 minutes) How did this process validate your teaching strategies and students' learning? Elaborate on new conceptual understandings gained regarding biliteracy development. You may reference any strategies to the Guiding Principles.

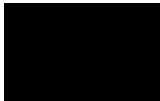
Phase 4: Destiny/Implement (10 minutes) Discuss new ideas gained from the photo-elicitation process and ways to innovate, adapt, add, keep, change or incorporate new strategies into your instructional practices. What is your next step?

Note: Appreciative Inquiry Interviews adapted from samples in Preskill, H. & Catsambas, T.T. (2006). *Reframing evaluation through appreciative inquiry*. Thousand Oaks, CA: SAGE Publications, Inc

APPENDIX D

Teacher Reflection Form
Guiding Principles Rating Scale

Directions: The following rating scale will be used by the TWBI teachers to reflect on their instructional practices based on the *Guiding Principles for Dual Language Education* (Howard, Sugarman, Christian, Lindholm-Leary, & Rogers 2007, Second Edition). Supported by the National Clearinghouse for English Language Acquisition at The George Washington University. This tool is available online as a free PDF at www.cal.org/twi/guidingprinciples.htm.



Instruction: Guiding Principles for Dual Language Education

STRAND 3

Principle 1: Instructional methods are derived from research-based principles of dual language education and from research on the development of bilingualism and biliteracy in children.

	MIN.	PART.	FULL	EXEMP.
A Explicit language arts instruction is provided in both program languages.				
<i>Evidence:</i>				
B Academic content instruction is provided in both program languages.				
<i>Evidence:</i>				
C The program design and curriculum are faithfully implemented in the classroom.				
<i>Evidence:</i>				
D Instruction incorporates appropriate separation of languages according to program design.				
<i>Evidence:</i>				
E Teachers use a variety of strategies to ensure student comprehension.				
<i>Evidence:</i>				
F Instruction promotes metalinguistic awareness and metacognitive skills.				
<i>Evidence:</i>				
Please respond to these question:				
1. How do the Guiding Principles assist your implementation of instructional strategies?				
2. How have successes and challenges in your instructional practices brought about new perspectives about the biliteracy development for all your students?				

Principle 2: Instructional strategies enhance the development of bilingualism, biliteracy, and academic achievement.

	MIN.	PART.	FULL	EXEMP.
A Teachers integrate language and content instruction.				
<i>Evidence:</i>				
B Teachers use sheltered instruction strategies such as building on prior knowledge and using routines and structures to facilitate comprehension and promote second language development.				
<i>Evidence:</i>				
C Instruction is geared toward the needs of both native speakers and second language learners when they are integrated for instruction.				
<i>Evidence:</i>				
D Instructional staff incorporate technology such as multimedia presentations and the Internet into their instruction.				
<i>Evidence:</i>				
E Support staff and specials teachers coordinate their instruction with the dual language model and approaches.				
<i>Evidence:</i>				
Please respond to this question:				
3. Describe your instructional strategies and how the strategies enhance the development of biliteracy with ELs and native EPs.				

Principle 3: Instruction is student-centered

	MIN.	PART.	FULL	EXEMP.
A Teachers use active learning strategies such as thematic instruction, cooperative learning, and learning centers in order to meet the needs of diverse learners.				
<i>Evidence:</i>				
B Teachers create opportunities for meaningful language use.				
<i>Evidence:</i>				
C Student grouping maximizes opportunities for students to benefit from peer models.				
<i>Evidence:</i>				
D Instructional strategies build independence and ownership of the learning process.				
<i>Evidence:</i>				
Please respond to this question:				
4. How do you instructional strategies maximize opportunities for meaningful student engagement?				

Principle 4: Teachers create a multilingual and multicultural learning environment.

	MIN.	PART.	FULL	EXEMP.
A There is cultural and linguistic equity in the classroom.				
<i>Evidence:</i>				
B Instruction takes language varieties into consideration.				
<i>Evidence:</i>				
C Instructional materials in both languages reflect the student population in the program and encourage cross-cultural appreciation.				
<i>Evidence:</i>				
<i>Please respond to this question:</i>				
5. How do you create a multilingual and multicultural learning environment through your instructional strategies?				

*Elizabeth R. Howard, Julie Sugarman, Donna Christian, Kathryn J. Lindholm-Leary,
& David Rogers*

2007, Second Edition

Supported by the National Clearinghouse for English Language Acquisition at

The George Washington University

Note: The *Guiding Principles for Dual Language Education* is a tool to help dual language programs (two-way immersion, heritage language, foreign language immersion, or developmental bilingual programs) with planning and ongoing implementation. It is a free online resource to the public at www.cal.org/twi/guidingprinciples.htm

Based on the New Mexico Dual Language Program Standards and grounded in research on effective schools, the publication was developed by the Center for Applied Linguistics in 2005 with an expert panel of researchers and practitioners from across the United States, and revised in 2007.

APPENDIX E

QUESTIONNAIRE FOR TWO-WAY BILINGUAL IMMERSION TEACHERS

This questionnaire asks for information about your educational & professional background, as well as teaching practices and beliefs. Responses will not be reported individually and kept confidential. Submit your response electronically to researcher.

Part 1: Demographic Information about the Participant

Directions: Please, select the appropriate answers to the questions.

1. In which two-way immersion program do you teach?
 - a. ___ 90/10 model
 - b. ___ 50/50 model
 - c. ___ other _____

2. How many years have you been teaching?
 - a. _____ years in two-way immersion
 - b. _____ total number of years teaching regardless of program

3. In which language(s) do you teach?
 - a. ___ in Spanish only
 - b. ___ in English only
 - c. ___ in both languages
 - d. _____

4. Using the categories below, what is your proficiency in the two languages of the students in this TWBI program?

<u>English</u>	<u>Spanish</u>	
a. ___	___	No practical proficiency: Proficiency is not adequate for even most elemental communicative needs
b. ___	___	Minimal communicative proficiency: Conversation with native speakers is possible to a limited degree for brief and simple interactions. No sustained conversation on school-related topics is possible.
c. ___	___	Basic communicative proficiency: Sustained conversation on school issues is possible with students and parents. Proficiency is not adequate to handle more than limited subject matter instruction.
d. ___	___	Professional proficiency: With some preparation, usually minor in nature, proficiency is adequate to provide a wide range of classroom instruction.
e. ___	___	Full professional proficiency or Native Speaker: Proficiency is adequate to provide a wide range of educational services without need for special preparation.

5. Which, if any, certificates or endorsements do you have? (Check all that apply.)
 - a. ___ Administration
 - b. ___ Bilingual
 - c. ___ ELD/ESL
 - d. ___ LDS/CLAD
 - e. ___ Other _____

6. What is the highest degree you have received?
- ___ Bachelor
 - ___ Masters
 - ___ Doctorate

Part 2: Background knowledge of Participant

Directions: Please, complete the following chart. FOR THE AREAS BELOW, RATE YOUR TRAINING/KNOWLEDGE EXPERIENCE AND HOW FREQUENTLY YOU USE THIS KNOWLEDGE

Descriptors for training/knowledge rating:

- NEED training, no understanding/knowledge
- No training, but some understanding/knowledge
- Training, but still don't quite understand
- Training, and somewhat knowledgeable
- Training, and very knowledgeable

Frequency of use rating

(enter a number in the chart):

- Never, rarely
- Occasionally
- Frequently
- Daily

Teacher Training/Knowledge	Need training Don't Know	No training Some Know	Training Don't Know	Training Some Know	Training Very Know	Frequency of Use
Two-way immersion theory and model	1	2	3	4	5	
Theory of second language development	1	2	3	4	5	
Instructional strategies language arts English	1	2	3	4	5	
Instructional strategies language arts Spanish	1	2	3	4	5	
Cooperative activities mixed ability groups	1	2	3	4	5	
Differentiated instruction for all learners	1	2	3	4	5	
Thematic instruction across content areas	1	2	3	4	5	
Sheltered instruction in both languages	1	2	3	4	5	
Graphic organizers (e.g., story/thinking maps, word webs)	1	2	3	4	5	
Metalinguistic & metacognitive skills	1	2	3	4	5	
Academic language development in L1/L2	1	2	3	4	5	
Use of multimedia and technology in the classroom.	1	2	3	4	5	
Transferability of skills for both program languages	1	2	3	4	5	

Directions: Please answer the two questions related to your knowledge/training as a TWBI teacher. If you need more room to write, please attach a paper to this survey to continue your responses.

1. List other types of training you have received that have been helpful in implementing strategies in your TWBI program.
2. What other type(s) of training do you think would help you to better implement the program or gain more strategies?

Part 3: Support Systems for Participant

Directions: Please, complete the following chart. Please circle the extent to which you agree or disagree with the following statements. Answer as carefully and truthfully as you can, as there is not a particular right or wrong answer, since responses may vary by grade level or seniority in the program/district. Make one choice per item.

For the areas below, rate the systems of support you receive at your school or district.

Teacher Support Systems	Strongly		Strongly	
	Agree	Agree	Disagree	Disagree
All teachers, including new teachers to the program, are trained to adhere to the model design, program features, and curriculum.	1	2	3	4
While teachers have received training in biliteracy skills, follow through is needed to correctly implement these strategies in the classroom.	1	2	3	4
Professional development is supported or provided through conferences, institutes, trainings, before/after school, meetings, etc.)	1	2	3	4
Time is allocated at school site/district for articulation, teacher collaboration, and planning.	1	2	3	4
Two-way teachers work together in teams or as a group to plan for instruction and develop linguistic skills in both languages.	1	2	3	4
Routinely, two-way teachers use assessment data for instructional decision-making on biliteracy.	1	2	3	4
Both languages are equally valued throughout the program, and particular consideration is given to elevating the status of the minority language.	1	2	3	4
Teachers have appropriate access to resources at school/district in both languages (e.g. core & supplementary materials, state adopted textbooks, supplies, materials, technology, equipment, etc.) needed for their instructional program.	1	2	3	4
I feel supported by school/district to implement the dual language program to the best of my abilities.	1	2	3	4

APPENDIX F
Teacher Observation Protocol

Purpose: This method will allow the researcher to document the teachers' instructional strategies in TWBI programs by observing their instructional practices to develop biliteracy skills and student interactions in a multi-cultural learning environment. See Appendix G for the Lesson Observation Instrument based on the *Guiding Principles for Dual Language Education* (Howard, Sugarman, Christian, Lindholm-Leary, & Rogers 2007, Second Edition).

1. **Location**

Participating School Sites

2. **Dates of Observations**

February 2010 through May 2010; perhaps (if needed) Dec. 2010

3. **Frequencies of Observations**

- a. An initial casual/walk-thru visitation (20-30 minutes per class) of the participant's classrooms to orient researcher with instructional environment and culture of class.
- b. One formal lesson observation (1 hour) will be conducted per teacher participant with the use of the observation instrument (see Appendix G).

4. **Timing of Observations**

Observation sessions (one per teacher) will be conducted during the regular school day in the spring semester of 2010. Researcher will explain process to teachers and schedule the visitation day and time in accordance with the participants' schedule of activities.

5. **Recording of Observations and Instruments**

Lesson Observation Instrument (Appendix G based on the *Guiding Principles*, Howard et al., 2007)

6. **Access to Sites**

Consent from site principals to visit classrooms of participating teachers

7. **Security of Documents**

Observation documents will be kept by the researcher in file folders stored at the researcher's home or secured password protected files on researcher's laptop computer.

APPENDIX G

Lesson Observation Instrument

Directions: The following rating scale will be used by the TWBI teachers to reflect on their instructional practices based on the *Guiding Principles for Dual Language Education* (Howard, Sugarman, Christian, Lindholm-Leary, & Rogers 2007, Second Edition). Supported by the National Clearinghouse for English Language Acquisition at The George Washington University. This tool is available online as a free PDF at www.cal.org/twi/guidingprinciples.htm.

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<i>Evidence:</i>				
B Academic content instruction is provided in both program languages.				
<i>Evidence:</i>				
C The program design and curriculum are faithfully implemented in the classroom.				
<i>Evidence:</i>				
D Instruction incorporates appropriate separation of languages according to program design.				
<i>Evidence:</i>				
E Teachers use a variety of strategies to ensure student comprehension.				
<i>Evidence:</i>				
F Instruction promotes metalinguistic awareness and metacognitive skills.				
<i>Evidence:</i>				

Principle 2: Instructional strategies enhance the development of bilingualism, biliteracy, and academic achievement.

	MIN.	PART.	FULL	EXEMP.
A Teachers integrate language and content instruction.				
<i>Evidence:</i>				
B Teachers use sheltered instruction strategies such as building on prior knowledge and using routines and structures to facilitate comprehension and promote second language development.				
<i>Evidence:</i>				
C Instruction is geared toward the needs of both native speakers and second language learners when they are integrated for instruction.				
<i>Evidence:</i>				
D Instructional staff incorporate technology such as multimedia presentations and the Internet into their instruction.				
<i>Evidence:</i>				
E Support staff and specials teachers coordinate their instruction with the dual language model and approaches.				
<i>Evidence:</i>				

Principle 3: Instruction is student-centered

	MIN.	PART.	FULL	EXEMP.
A Teachers use active learning strategies such as thematic instruction, cooperative learning, and learning centers in order to meet the needs of diverse learners.				
<i>Evidence:</i>				
B Teachers create opportunities for meaningful language use.				
<i>Evidence:</i>				
C Student grouping maximizes opportunities for students to benefit from peer models.				
<i>Evidence:</i>				
D Instructional strategies build independence and ownership of the learning process.				
<i>Evidence:</i>				

Principle 4: Teachers create a multilingual and multicultural learning environment.

	MIN.	PART.	FULL	EXEMP.
A There is cultural and linguistic equity in the classroom.				
<i>Evidence:</i>				
B Instruction takes language varieties into consideration.				
<i>Evidence:</i>				
C Instructional materials in both languages reflect the student population in the program and encourage cross-cultural appreciation.				
<i>Evidence:</i>				

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Based on the New Mexico Dual Language Program Standards and grounded in research on effective schools, the publication was developed by the Center for Applied Linguistics in 2005 with an expert panel of researchers and practitioners from across the United States, and revised in 2007.

APPENDIX H



TEACHER CONSENT TO PARTICIPATE IN RESEARCH

Invitation to Participate

Ana M. Hernández, a researcher graduate student at California State University San Marcos is conducting a study on strategies used by dual language teachers to develop biliteracy skills. You are invited to participate in this study because you are a dual language teacher and have been recommended by your principal or site resource teacher.

Purpose

The study objectives will examine the instructional strategies dual language teachers implement to develop biliteracy skills, as well as how and why teachers utilize these instructional practices.

Description of Procedures

You will be interviewed in a focus group. The interview will take approximately one hour and, with your permission, will be audiotaped. The conversations will be prompted through photo-elicitations of your instructional strategies. You will have the opportunity to photograph your instructional practices during a 2-3 week period and select 5-10 photos for the interview. The interview will take place in a private conference room located in your campus. In addition, you will be asked to complete a reflection about your instructional practices (30 minutes) and a questionnaire related to your background knowledge, educational experiences, and professional training (30 minutes). You may choose to complete the reflection and/or questionnaire electronically or manually and submit the completed documents to the researcher.

Risks, Inconveniences, and Safeguards

There are some potential risks attached to this study. Teachers may feel intimidated if participating in focus group interviews, since they may feel restricted to speak freely. Administrators will not attend the interviews. Interviews and information from questionnaire will be kept confidential and will remain in the researcher's sole possession during the entire process. Transcriptions of audio data will be completed by a company that specializes on those services. The analysis and reporting of the results will not identify participants by name. The main risk to confidentiality is if the researcher's computer is lost or stolen, there is the potential that unauthorized individuals may access data. To protect against this possibility, the computer will remain in the researcher's possession at all times with password protected files.

Photos will only be used for eliciting conversations about your instructional practices with the researcher during the interview. You will take photographs of your own instructional practices. Any students represented in the photos must have a parental consent on file (under the age of 18). After the collection and analysis of data is

completed, all photographs will be returned to you or destroyed by the researcher. The potential risk includes photographing students without a consent form, in which case, teacher and researcher will need to make sure that all students have a signed permission to participate. Also, students not wanting to participate should be excluded from any photographic opportunities. To protect against photographing students who have no consent forms or students not wanting to participate, a list of participants will be on file in a confidential folder locked in a safe place and cross-referenced by teacher when photographing students in the classroom.

Confidentiality

Your interview, photo-elicitation, reflection and questionnaire responses will be kept confidential; available only to the researcher for analysis purposes. Interview audiotapes will be locked in a safe place. Only the researcher will listen to audio tapes and transcribed information. Interview responses will not be linked to your name or address, and there will be no follow-up sessions after the study is completed. The identity/background of students on the photographs will be kept confidential during the interview. The conversations will be about the strategies, not about the students.

Voluntary Participation

Participation is voluntary. You do not have to participate in this study. If you agree to be in this study, but later change your mind, you may withdraw at any time. If the length of the interview or documents is inconvenient, you may terminate your participation at any time without any consequences to you.

Benefits

You will make a contribution to the field of education by informing the practice of teaching and learning in dual language contexts. The study will allow teachers to have a greater understanding of the behaviors and strategies deemed important to the development of biliteracy. Knowing “how” and “why” teachers employ certain practices can inform various educational levels, from classrooms to teacher training programs at universities. The purpose is to hear “teacher voices” and view instruction through the performance of their everyday tasks.

Economic Considerations/Incentives

For participating in this study, you will receive a small gift certificate for classroom supplies or books for your classroom.

Questions

If you have any questions about this study I will be happy to answer them now or in the future. You may direct questions to Ana M. Hernández at 760.500.9665 or ahernand@csusm.edu. You may also contact the researcher’s advisor/professor, Dr. Annette Daoud 760.750.8519. If you have any questions about your rights as a research participant, you may contact our Institutional Review Board (IRB) at 760.750.4029 or irb@csusm.edu. This study has been approved by the IRB at CSUSM.

____ I agree to participate in this research study.

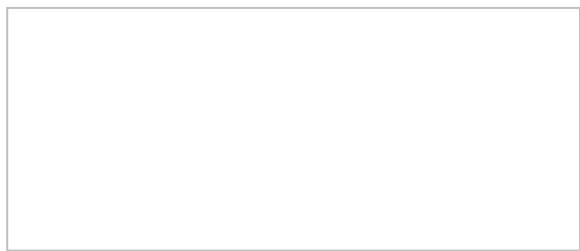
____ I agree to be audiotaped and/or videotaped.

Participant's Name

Date

Participant's Signature

Ana M. Hernández, Researcher
1.760.500-9665
ahernand@csusm.edu



APPENDIX I



PARENT/STUDENT CONSENT TO PARTICIPATE IN RESEARCH

Dear Parents/Caretakers,

Invitation to Participate and Purpose of Research

Ana M. Hernández, a doctoral student at California State University San Marcos, is conducting a research study on instructional practices implemented in dual language programs during spring 2010. Your child is being asked to participate in this study because he/she is in one of the dual language classrooms at _____ School.

Procedure

If you and your child agree to participate in this study, your child may be asked to be photographed individually or in a group during class activities to document teacher strategies implemented to develop biliteracy. The student's work sample may also be photographed as documentation of practices. The classroom teacher will be photographing the activities in the classroom during a unit of study. Photos will only be used for a photo-elicitation interview with the teacher and researcher in order to discuss instructional practices, *not* the student. Photos will not be released to the public.

Risk and Inconveniences/Benefits

Photos will only be used for eliciting conversations with teachers about instructional strategies with the researcher. Any student represented in the photos must have a parental consent on file (under the age of 18). After the collection and analysis of data is completed, all photographs will be returned to the teacher or destroyed by the researcher. The potential risk includes photographing a student without a consent form, in which case, teacher and researchers will need to make sure that all students have a signed permission to participate. Also, students not wanting to participate should be excluded from any photographic opportunities. To protect against photographing students who have no consent forms or students not wanting to participate, a list of participants will be on file in a confidential folder locked in a safe place and cross-referenced by teacher when photographing students in the classroom.

The potential benefits to your child are that he/she has the opportunity to assist the teacher document successful strategies for developing biliteracy. Student participation will also help the teacher to better understand individual student needs and how to best teach to those needs in a dual language setting. Student participation

contributes to the field of education by informing the practice of teaching and learning in a second language to other educators and teacher training programs at the university level.

Safeguards, Confidentiality, Voluntary Participation

Participation in this study is voluntary, and your child may withdraw from the study at any time without any effect on their academic standing. If your child does not participate in this study, his/her performance and grades at school will not be affected in any way. Your child will still receive his/her regular instruction in class. Any personal identification will be omitted so that your child will not be identifiable in the written analysis of the study. Photographs will be stored in a locked cabinet and destroyed after the research is conducted.

Questions

This study has been approved by the Cal State San Marcos Institutional Review Board (IRB). If you have any questions about this study, you may direct questions to Ana M. Hernández at 760.500.9665 or ahernand@csusm.edu. You may also contact the researcher's advisor/professor, Dr. Annette Daoud 760.750.8519. If you have any questions about your child's rights as a research participant, you may contact the Institutional Review Board (IRB) at 760.750.4029 or irb@csusm.edu. This study has been approved by the IRB at CSUSM. You will be given a copy of this form to keep for your records.

Check one:

Yes, my child may participate in this research study.

No, I would prefer my child not participate in this research study.

Participant's name (printed)

Participant's signature (student)

Parent/Legal Guardian's signature

Date

Ana M. Hernández, Researcher
1.760.500-9665
ahernand@csusm.edu

APPENDIX J

Victory School: Triangulation of Photo-Elicitation Journal Strategies for Bilingual Development

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
1. Learning Together	Building an environment together through Spanish collaborative writing .	1	All	1E, 1F, 2A, 2C, 3B, 3D, 4A, 4C	Yes	Yes	G3EQ-Tsupport G3EQ-StTalk WCON-Write
2. Reader's Workshop	Reading strategically in a reader's workshop model in Spanish. Differentiated instruction.	1	All	1A, 1D, 1E, 1F, 2A, 2C, 3B, 3C, 4A	Yes	Yes	G3EQ-Tsupport RPROG-RW LPDI-Group LPEI-Format
3. Engaging and Immersing	Introduce academic/story vocabulary in Spanish. Students engaged by using gestures, sounds, & new words.	1-2	All	1A, 1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4B	Yes	Yes	G3EQ-Invite RSTR-Front VOCEX-Front VOCEX-Gesture
4. Mapping My Understanding	Students use graphic organizer to build Spanish vocabulary & story schema through drawings, labels & sequential order.	1	All; also struggling students	1B, 1E, 1F, 2A, 2C, 3B	Yes	Yes	G3EQ-Invite RSTR-Front VOCEX-Front LPSUPMAT-GO
5. Story Summaries	Students write a summary of their created stories in Spanish.	1	All, particularly L2 learner	1E, 2A, 2B, 2C, 3A, 4C	No	Yes	G3CCC-PersCon WCON-Tool LPDI-Monitor
6. Writing About My Life	Students write about their own personal stories "I Have Stories to Write" in Spanish.	1	All	1A, 1E, 1F, 2A, 2C, 3A, 3B, 3C, 3D, 4A, 4C	No	Yes	G3CCC-PersCon WCON-Write VOCEX-RichLang LPOB-Standards

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
7. Retelling Story Chart	Students make connections visually to retell story through “Who, What, Where, When, How, Why” in English/ELD.	1	All	1A, 1E, 1F, 2A, 2C, 3A, 3B, 3C, 3D, 4A, 4C	No	Yes	RSTR-Connect LPSUPMAT-Chart LPEI-Model LPDI-Scaffold
8. Story Sequencing Map	Students illustrate, label & write sentences on thinking map to retell story in English/ELD.	1	All	1B, 1E, 1F, 2A, 2C, 3B	Yes	Yes	LPSUPMAT-GO LPDI-Scaffold RSTR-Front VOCEX-Gesture
9. Chart: Accessing Academic Language	Explain, model & practice language patterns using sentence frames in English/ELD.	1	All	1B, 1E, 1F, 2A, 2C, 3B, 3D	Yes	Yes	G3EQ-Tsupport VOCLES-Frames VOCLES-Content RENV-PrintRich
10. Mini-Lessons for Reader’s & Writer’s Workshop	7-10 minute mini-lesson on a specific teaching point for either reading or writing in Spanish.	1-4	All	1A, 1B, 1C, 1D, 1E, 1F, 2A, 2B, 2C, 3B, 3D, 4B	No	Yes	LPEI-Format RPROG-RW WCON-Write LPDI-Group
11. Reader’s Workshop Conference	Differentiated instruction to help with individual needs during reading time. Teacher meets with 4-5 students per session.	2-4	All; individual students & small groups at table	1E, 1F, 2A, 2B, 2C, 3B, 3C, 3D, 4A	No	Yes	LPEI-Format RPROG-RW LPDI-Group LPDI-Monitor
12. Book Discussions	To assist students get into depth about stories they read, express opinions & illustrate. Teacher as facilitator of Jr. Great Books during English.	2	All; ELLs benefit from read aloud & frontloading	1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4A	Yes	Yes	LPEI-Model G3EQ-Invite G3EQ-StTalk RSTR-Connect ELD-HOT

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
13. Writer's Workshop Conference	Students improve Spanish writing through a conference approach with 4-5 peers per group. Approach addresses one writing point per student for differentiated instruction.	2-4	All	1E, 1F, 2A, 2B, 2C, 3B, 3C, 3D, 4A	No	Yes	LPEI-Format LPDI-Group LPDI-Monitor WCON-Write
14. Making Connections	Students make connections during independent reading . Students use prior schema to write connections on post-its in Spanish.	2	All	1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4A	Yes	Not stated in questionnaire or interview	RSTR-Connect RSTR-Predict G3CCC-PersCon
15. Frontloading Notes	Teacher frontloads to preview story & vocabulary students will encounter in Spanish anthology.	1, 2, 4	All	1A, 1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4B	No	Yes	RSTR-Front VOCEX-Front RSTR-Predict G3EQ-Tsupport
16. Vocabulary Building	Students use context clues or dictionary skills to build word banks (posters) in English & Spanish. Students select own words to present to class with definition, drawings, sentences.	3	All	1A, 1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4B	Yes	Yes	VOCEX-Hilght VOCEX-Wwall VOCLES-Content VOCSELECT-Student
17. Biography Boards	Students work in team projects related to historical figures. They share decision-making during research (fact v. opinion) and present findings in Spanish.	3-4	All	1B, 1E, 1F, 2A, 2C, 3B, 3C, 3D, 4A, 4C	No	Not stated in questionnaire or interview	G3CCC-XternCon RPROG-RW G3CL-Bloom G3EQ-StTalk

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
18. Cross-Age Learning Buddies	Students prepare lessons in Spanish for cross-age buddies related to reading & writing .	1-4	All	1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4A	No	Not stated in questionnaire or interview	RSTR-Buddy G3EQ-StfTalk LPEI-Model
19. Writer's Workshop for Revision & Editing	Students use writing process & classroom resources to edit/revise their own writing (English or Spanish).	1-4	All	1A, 1E, 1F, 2A, 2C, 3A, 3B, 3C, 3D, 4A	Yes	Yes	WCON-Tool G3EQ-Invite VOCSELECT-Student
20. Hands-on Math	Students use active learning in cooperative structure & centers to acquire mathematical concepts.	1-3	All; particularly visual & kinesthetic learners	1E, 1F, 2A, 2B, 2C, 3B, 3C, 3D, 4A	No	Not stated in questionnaire or interview	G3CL-Bloom G3EQ-StfTalk LPDI-Monitor
21. Note Taking	Students learn to take notes in class on content instruction in English & Spanish.	3-4	All	1A, 1B, 1E, 1F, 2A, 2C, 3C, 3D	Yes	Not stated in questionnaire or interview	LPEI-Model WCON-Tool LPOB-Standards
22. Writing Assessment	Assessment of writing skills and strategies where students monitor their own growth in English/Spanish.	4	All	1F, 2A, 3A, 3B, 3D	No	Not stated in questionnaire or interview	WCON-Tool LPOB-Standards LPTMPL-DDDM
23. Cooperative Learning	Students use <i>Heads Together</i> to identify whether statements are fact or opinion. Collective knowledge as a higher level of learning in Eng/Spanish.	1-4	All	1E, 1F, 2A, 2B, 2C, 3B, 3C, 3D, 4A	Yes	Yes	G3CL-Bloom G3EQ-StfTalk LPDI-Monitor

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
24. Writing Celebration	Students celebrate the publishing of a writing project by giving each other feedback on their accomplishments in English/Spanish.	1-4	All	1D, 1F, 2A, 2C, 3B, 3C, 3D, 4A, 4C	Yes	Yes	WCON-Write WCON-Oral G3CCC-PersCon
25. Portfolio: Self-Assessment	Students self-evaluate work in portfolios & reflect on achievement. They complete a T-Chart: what they are doing well & what to improve in Eng/Spanish.	4	All	1F, 2A, 3A, 3B, 3D	Yes	Not stated in questionnaire or interview	WCON-Tool LPOB-Standards LPTMPL-DDDM
26. Early California History PowerPoint	Students present a variety of data, using technology (PowerPoint) to share research findings with an oral presentation. Technology lab English or Spanish.	3	All	1D, 1E, 1F, 1A, 2C, 2D, 2E, 3B, 3D, 4A, 4C	Yes	Yes	LPSUPMAT-Tech LPDI-Modality WCON-Write RPROG-RW
27. Self-Seal	Students describe who they are, what they stand for, and goals in life through process writing. Connect their backgrounds to the learning experience.		All	1D, 1F, 2A, 2C, 3B, 3C, 3D, 4A, 4C	No	Not stated in questionnaire or interview	G3CCC-PersCon WCON-Write LPDI-Modality LPEI-Motivation
28. Writing for CABE Contest	Students write about their experiences on becoming bilingual and writing for purpose. Stories shared in class in Spanish & English.		All	1A, 1D, 1F, 2A, 2C, 3A, 3B, 3C, 3D, 4A, 4C	No	Not stated in questionnaire	G3CCC-PersCon WCON-Write LPEI-Motivation LPOB-Standards

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
29. Frida Khalo y yo	Students read & organize in chronological order using graphic organizers about universal themes & personal connections in Spanish.	3	All	1B, 1E, 1F, 2A, 2C, 3B, 3C, 3D, 4A, 4C	Yes	Not stated in questionnaire	G3CCC- XternCon RPROG-RW G3CL-Bloom LPSUPMAT-GO

- **100%** of the photo-elicitation strategies benefited all students.
- **100%** of the strategies were aligned to the Guiding Principles, Strand 3: Instruction.
- Teachers stated receiving training for **66%** of the strategies described in their photo-elicitation interviews and photo-journals during their interviews and also in their questionnaires.
- **52%** of the strategies were observed by the researcher during lessons in class.
- **45%** of the strategies were implemented in more than one grade level span.
- **31%** of the strategies were implemented across 3 or more grade levels.

APPENDIX K

Evergreen School: Triangulation of Photo-Elicitation Journal Strategies for Bilingual Development

Photo-elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-6	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
30. Multicultural Family Country Report	Develop understanding of other cultures . Parental involvement.	1	All	1D, 1E, 2A, 2C, 3A, 3D, 4A, 4C	No	Not stated in questionnaire or interview	G3CCC-PersCon WCON-Write VOCEX- RichLang LPOB-Standards
31. Thematic Vocabulary Development	Write & illustrate Spanish vocabulary for theme.	1	All; also L2 learners & struggling students	1A, 1B, 1E, 1F, 2A, 2C, 3A	No	Yes	VOCLES- Content LPOB-Thematic VOCEX-Charts
32. Step Up to Writing Vocabulary Development	Introduce academic vocabulary across curriculum in Spanish.	1	All	1B, 1E, 1F, 2A, 2C, 3B	No	Yes	VOCLES- Content G3EQ-Tsupport WCON-Tool
33. Daily Message for Word & Phonetic Skills	Review Spanish word attack skills and phonetic patterns by engaging students.	1	All; also struggling students	1A, 1D, 1E, 2B, 2C	Yes	Not stated in questionnaire or interview	WCONV- Message VOCLES- Analysis G3EQ-Tsupport
34. GLAD Input Chart	Develop & maintain knowledge of theme & voc. in Spanish. Reference for writing.	1	All, particularly L2 learner	1A, 1B, 1E, 1F, 2A, 2B, 2C, 3A, 3B, 3D, 4A,	Yes	Yes	LPSUPMAT- Chart LPOB-Thematic WCON-Tool

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
35. Thematic Leveled Readers	Draw & maintain interest in reading fluency practice in Spanish. Differentiated instruction.	1	All, since it is differentiated reading	1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4A,	Yes	Yes	RPROG-LV LPOB-Thematic RSTR-Fluency LPDI-Group
36. Thematic Writing	Use newly acquired Spanish vocabulary to express knowledge in writing . Evaluate progress.	1	All, since it is differentiated writing	1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4A	Yes	Yes	VOCLES-Content LPOB-Thematic WCON-Tool LPDI-Group
37. Hands-on Thematic Assessment	Students create models of human body to review and label key thematic vocabulary in Spanish used for assessment.	1	All	1B, 1E, 1F, 2A, 2B, 2C, 3A, 3B, 3C, 3D, 4A	No	Not stated in questionnaire or interview	WCON-Tool LPOB-Standards LPTMPL-DDDM VOCLES-Process
38. Story Vocabulary	Introduce story vocabulary (verbs) with flashcards in Spanish.	2	All	1B, 1E, 1F, 2A, 2C, 3B	No	Yes	VOCEX-Front VOCEX-Gesture RPROG-HM VOCLES-Content
39. Cognate Journal	Students collect cognates from their environment and share vocabulary in class.	2	All; especially EO students learning Spanish	1A, 1B, 1D, 1E, 1F, 2A, 2C, 3B, 3C, 3D, 4A, 4D	Yes	Not stated in questionnaire or interview	VOCLES-Cognate LPEI-Transfer WCON-Tool G3CCC-PersCon VOCSELECT-Student

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
40. Word Analysis	Word study of synonyms, antonyms, homophones & compound words in Spanish.	2	All	1B, 1E, 1F, 2A, 2C, 3B, 3C, 3D, 4D	Yes	Not stated in questionnaire or interview	VOCLES-Analysis G3EQ-Tsupport VOCEX-Front VOCEX-Wwall WCONV-Symbols
41. Verb Hunt	Students practice looking for verbs after reading a selection in Spanish.	2	All	1E, 1F, 2A, 2C, 3B, 3C, 3D	No	Not stated in questionnaire or interview	VOCEX-Hilght VOCLES-Content G3EQ-Tsupport RSTR-Connect WCONV-Symbols
42. Grammar Journal	Students write and study about grammar in Spanish from lesson in class.	2	All	1B, 1E, 1F, 2A, 2C, 3B	Yes	Not stated in questionnaire or interview	WCON-Tool G3EQ-Tsupport VOCLES-Analysis WCONV-Symbols
43. Math Wall	Visuals, vocabulary, student samples & concepts related to Spanish math instruction that students can reference anytime.	3	All	1E, 1F, 2A, 2B, 2C, 3B, 3C, 3D, 4A	Yes	Not stated in questionnaire or interview	LPOB-Standards LPEI-Model VOCEX-Hilght VOCLES-Accountable
44. Advanced Organizers for ELD	Students follow grammar lesson & write key points in English through PowerPoint notes.	3	All	1A, 1E, 2A, 2C, 2D, 3C, 3D	No	Yes	ELD-GR LPSUPMAT-Tech LPSUPMAT-Notes LPDI-Scaffold

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
45. Charts & Note Taking	Concept charts create during math instruction, so students can reference during or after lesson with definition, drawings, vocabulary in Spanish.	1-3	All	1A, 1E, 2A, 2C, 3C, 3D	Yes	Not stated in questionnaire or interview	WCON-Tool LPSUPMAT-Chart LPEI-Model LPDI-Scaffold
46. Cartel de Acentuación (Accent Chart)	Teacher created material for the instruction of accent marks in Spanish.	1-6	All	1E, 2C, 3C, 3D	Yes	Not stated in questionnaire or interview	LPSUPMAT-Chart LPDI-Scaffold LPSUPMAT-Create G3EQ-Tsupport
47. Spelling Picture Cards	Students use visual representation of spelling patterns/skills with word & picture for ELD levels.	3	All	1B, 1E, 1F, 2B, 2C, 3C	Yes	Yes	ELD-Voc LPDI-Group VOCSELECT-GL
48. Vocabulary Map	Students build vocabulary through drawings, definitions & connections in Spanish.	1-3, 6	All	1B, 1E, 1F, 2A, 2C, 3B	No	Yes	VOCEX-Front RSTR-Predict G3EQ-Tsupport G3CCC-PersCon
49. Math Journal & Partner Coaching	Students take notes in class and then review notes with a peer . Peers coach each other during English.	3, 6	All	1E, 1F, 2A, 2B, 2C, 3B, 3C, 3D, 4A	No	Yes	LPEI-Model WCON-Tool LPOB-Standards G3CL-Bloom
50. Test Taking Strategies	Students learn to highlight & take notes on key reading passages related to different genres in English.	6	All	1A, 1B, 1E, 1F, 2A, 2C, 3C, 3D	No	Not stated in questionnaire or interview	WCON-Tool LPOB-Standards VOCEX-Hilight RSTR-Front

Photo-Elicitation Journal Strategies	Reason for strategy & language of instruction	Grades 1-4	Students who benefited from strategy	Relation to Guiding Principles: Instruction	Observed in Lessons	Questionnaires & Interviews: Training Received	Interview Data Codes for Pattern Matching
51. Sentence Frames	Differentiated sentence frames for different levels of production (ELD).	6	All	1A, 1D, 1E, 1F, 2A, 2B, 2C, 3D	Yes	Yes	ELD-Voc LPDI-Group ELD-Group WCONV-Frames
52. Focus Wall	Use of visuals, vocabulary & props to present every theme reading selection in English or Spanish. Support biliteracy.	1-6	All	1A, 1B, 1D, 1E, 1F, 2A, 2B, 2C, 3A, 4C	Yes	Yes	VOCLES-Content RENV-PrintRich LPDI-Scaffold TRSTR-Front
53. Interactive Graphic Organizers	Students create graphic organizers to support their learning about the reading selections in English or Spanish. Supports biliteracy. PowerPoint.	6	All	1A, 1B, 1D, 1E, 1F, 2A, 2B, 2C, 3A, 3B, 3D, 4C	No	Yes	LPSUPMAT-Tech LPSUPMAT-Notes LPDI-Scaffold LPSUPMAT-GO
54. Summarize and Sequence	Students summarize & sequence chapter books instead of reader selection.	6	Higher level students	1A, 1B, 1D, 1E, 1F, 2A, 2B, 2C, 3A, 4C	No	Yes	RSTR-Connect LPSUPMAT-Chart LPDI-Scaffold WCON-Write
55. Oral Presentations	Students present a variety of data, using multiple measures.	1, 6	All	1E, 1F, 1A, 2C, 3D, 4A	No	Yes	LPSUPMAT-Chart LPDI-Modality WCON-Write RPROG-RW

Evergreen School: Triangulation of Photo-Elicitation Journal Strategies
for Biliteracy Development

- **96%** of the photo-elicitation strategies benefited all students; **4%** benefited only higher level students
- **100%** of the strategies were aligned to the Guiding Principles, Strand 3: Instruction
- Teachers stated receiving training for **58%** of the strategies described in their photo-elicitation interviews and photo-journals during their interviews and also in their questionnaires.
- **50%** of the strategies were observed by the researcher during lessons in class
- **19%** of the strategies were implemented in more than one grade level span
- **15%** of the strategies were implemented across 3 or more grade levels

APPENDIX L

Codebook for Teacher Interviews at Evergreen and Victory Schools With Descriptive Codes, Categories, and Definitions

1. How do teachers implement *instructional strategies* to develop biliteracy skills with program participants?

LESSON PLANNING - Descriptive Codes, Categories, & Definitions	
LPTMPL: Lesson Planning - Weekly Team Planning	
LPTMPL – Ideas	Exchange ideas
LPTMPL – Reflect	Reflect on practices
LPTMPL – DDDM	Instructional planning through Date-Driven Decision-Making
LPTMPL – Frameworks	Research-based practices/theoretical frameworks guide practices
LPMAT: Lesson Planning - Materials	
MAT - Core	Use state adopted material as resource, but may use other additional materials for literacy
MAT - CoreAdapt	Adapt or translate core/supplemental materials
LPSUPMAT: Lesson Planning - Support Materials	
LPSUPMAT – Chart	Concept /input charts & timelines
LPSUPMAT – GO	Graphic Org./Thinking Maps, interactive graphic organizers
LPSUPMAT – Notes	Pre-typed notes & content journals
LPSUPMAT - Tech	Technology lab/class; PowerPoint’s, computer programs, Internet
LPSUPMAT – Create	Create own resources
LPOB: Lesson Planning - Clear Objectives	
LPOB – Standards	Standards and/or interdisciplinary
LPOB – Thematic	Thematic instruction
LPOB – Fidelity	Fidelity to language of instruction/program
LPEI: Lesson Planning - Explicit Instruction	
LPEI – Motivation	Lesson motivation
LPEI – Model	Modeling by teacher/students
LPEI – Format	Format: whole class; small group; mini-lesson; guided inst.
LPEI – Transfer	Transfer of skills
LPEI - Test	Test taking strategies
LPDI: Lesson Planning - Differentiated Instruction	
LPDI – Scaffold	Scaffold lessons step by step
LPDI – Modality	Use different modalities during teaching
LPDI – Group	Differentiate through strategy groups; based on assessments
LPDI – Monitor	Walk around and monitor learning

2. How do teachers implement *vocabulary strategies* to develop biliteracy skills with program participants?

VOCABULARY - Descriptive Codes, Categories & Definitions

VOCEX: Vocabulary - Experience

VOCEX - Charts	Chart weekly vocabulary
VOCEX - Front	Frontload: Graphic Org/Flash cards
VOCEX - Hilight	Find & highlight vocabulary
VOCEX – Wwall	Word wall - accessible to students/interactive – used as a tool
VOCEX - Gesture	Gestures with oral to learn key vocabulary
VOCEX - RichLang	Rich language, not restricting language to sentence patterns

VOC-LES: Vocabulary - Lesson Types

VOCLES - Analysis	Word analysis
VOCLES - Content	Content/Academic vocabulary
VOCLES - Cognates	Cognate lessons
VOCLES - Frames	Sentence frames with vocabulary
VOCLES – Process	Process voc. in small group activities; take risks using new voc.
VOCLES – Accountable	Student accountability to learn & develop vocabulary

VOCSELECT: Vocabulary - Selection

VOCSELECT – Beyond	Select vocabulary beyond TE; adapt voc. lists
VOCSELECT – Student	Students select additional words to learn during lesson
VOCSELECT – GL	Grade level common vocabulary

3. How do teachers implement *writing strategies* to develop biliteracy skills with program participants?

WRITING - Descriptive Codes, Categories, & Definitions

WCON: Writing - Content

WCON – Write	Writer’s Workshop; collaborative writing/charts; writing process
WCON – Tool	Tools for writers (personal dictionaries, journals, writer’s notebooks, binders, portfolios, technology, etc.)
WCON – Oral	Presentations & celebrations

WCONV: Writing - Conventions

WCONV - Message	<i>Mensaje del día</i> – Daily message (Warm-up exercises); phonics
WCONV – Frames	Sentence frames, can be at different levels of production
WCONV - Structure	Expand students’ sentence structures from simple to complex
WCONV – Symbols	Use of symbols for grammar (parts of speech) or frontloading

4. How do teachers implement *reading strategies* to develop biliteracy skills with program participants?

TARGET/HERITAGE LANG. READING - Descriptive Codes, Categories, & Definitions

RENV - Reading - Environment

RENV – PrintRich	Print rich support around the room; focus wall for reading theme/story
RENV – GO	Display of formats for graphic organizers

RPROG: Reading - Programs

RPROG – HM	HM LECTURA week/block, may alternate schedule with different strategies or materials
RPROG – RW	Reader’s Workshop/Conferences; literature circles; research
RPROG – LV	Leveled reading books - <i>Libritos de bolsa</i> for fluency & vocabulary
RPROG – LAEX	Language experience books

RSTR: Reading - Strategies

RSTR – Predict	Predict text/books
RSTR – Front	Frontload vocabulary, lecture notes, outline of story schema
RSTR – Connect	Meaningful connections, creating questions, thinking aloud
RSTR – Buddy	Buddy readers – students model read & write in a systematic/strategic approach
RSTR – Aloud	Read aloud text/passages to get main idea & vocabulary
RSTR – GO	Create tree maps (graphic org.) to summarize information
RSTR – Fluency	Reading fluency packets/readers

5. How do teachers implement ELD *strategies* to develop biliteracy skills with program participants?

English Language Development - Descriptive Codes, Categories, & Definitions

ELD: English Language Development

ELD – GR	Grammar skills & fluency/beginning comprehension
ELD – HOT	Higher order thinking skills/questions, opinions
ELD – LA	Listen, speak, read, write, response to literature
ELD - Group	Group by grade level teams groups
ELD – Voc	Differentiated voc/spell words for CELDT levels

6. How do teachers implement *cross-cultural competence strategies* with program participants?

Goal 3 - PEER INTERACTION - Descriptive Codes, Categories, & Definitions

G3CL: Goal 3 - Cooperative Learning

G3CL – Bloom	Cooperative learning - students apply/analyze/explain content or work on projects, brings it to another level (Bloom’s Taxonomy)
G3EQ – Invite	Invite students to participate in discussion; building background knowledge; visuals; PPT (“even the playing field”)
G3EQ – StTalk	Student engagement in lesson, less teacher talk
G3EQ – WaitTime	Quickwrite first and then group talk – gives all students time to think, compose language, before sharing
G3EQ – TSupport	Teacher supports students, students support students: “I do, We do, You do.” Modeling; collaboration

G3CCC: Goal 3 - Cross-Cultural Competence

G3CCC – PersCon	Connections to students personal lives; celebrations
G3CCC – XternCon	External connections to culture through biographies; country report charts; folkloric dances/music; dichos/refranes

7. How are the *Guiding Principles for Dual Language Education* assisting teachers in the implementation of their instructional strategies?

Guiding Principles - Descriptive Codes, Categories, & Definitions

GPTHF: Guiding Principles -Theoretical Framework

GPTHF- 2W	2-Way training (Bilingual Ed. Theories)
GPTHF- Other	Conceptual underpinnings from other research and/or training

GPDDDM: Guiding Principles - Date-Driven Decision-Making

GPDDDM – Assessment	Instruction driven by standards/assessments (L1, L2)
GPDDDM – CELDT	Use CELDT results/production levels for L2 instructional groups

8. How do *challenges* of the teachers' instructional strategies bring about new perspectives or innovations in their practice?

CHALLENGES - Descriptive Codes, Categories, & Definitions

CHATIME: Challenged by time

CHATIME – Plan	Time, planning, scheduling, and management difficult to do without support from other IM teachers. Hard to do by yourself.
CHATIME – Mat	Takes time to know how to select/create materials
CHATIME – Pacing	Time to fit the curriculum in both languages, need more time/depth of content; fast pace; need to slow curriculum for students or review
CHATIME – Support	Helping students during recess/before school to complete projects

CHAG3: Challenged by GOAL 3

CHAG3 – Resources	Seeking resources to deal with goal 3
CHAG3 – Respect	Getting along during group work, respect for each other, become competitive, negative, judgmental with each other at 4 th /5 th grades
CHAG3 – Population	Program losing ELs, becoming more of a one-way with bilingual receptive students. Students who hear some Spanish at home, but don't speak it (Victory School)

CHASTALNG: Challenged by Status of Languages

CHASTALNG – English	Allowing EOs to use English during Spanish time – no set limit
CHASTALNG – LangInst	Maintaining students in language of instruction; influence of English environment & media
CHASTALNG – Fossil	EOs fossilizing incorrect grammatical aspects in Spanish (Yo me gusta)
CHASTALNG – Gram	How to address Spanish grammar at grade level
CHASTALNG – Models	Difficult to keep students in language of instruction during Spanish, due to lack of true Spanish language models
CHASTALNG – SpanDif	Difficult to keep students in language of instruction, due to level of difficulty in Spanish in upper grades
CHASTALNG – Revert	Spanish speakers (ELs) revert to English during Spanish time

CHAMACURE: Challenged by Materials/Curriculum/Resources

CHAMACURE – Adapt	Modify/translate/select state adopted/district materials, lessons/assessments
CHAMACURE – Span	Spanish more complex stories/grammar than English; readability levels
CHAMACURE – Create	Years to collect/organize teacher created materials
CHAMACURE - Pacing	Keeping up with benchmark tests (slower group behind)
CHAMACURE - Manip	Need to use more manipulatives in upper grades
CHAMACURE – Funds	No funds - Tutoring on own time, using sick days to teach, lack of district services, lack of computers in class, displacement of TWI teachers due to budget cuts, lack of TAs
CHAMACURE - Diff	Keeping current with differentiation; meeting needs of all students

CHAPA: Challenged by Parents

CHAPA - Training	Getting all parents to participate in school trainings
CHAPA – HW	Getting parents on board with HW

CHACO: Challenged by Collaboration

CHACO – Team	Not getting the whole team on board with new ideas.
CHACO – Faculty	Building a professional community with a large faculty
CHACO – Monitoring	Admin monitoring classroom for HM implementation may not understand other related activities
CHACO – Artic	Lack of articulation across grade levels for instructional planning

9. How do *successes* of the teachers' instructional strategies bring about new perspectives or innovations in their practice?

SUCSESSES - Descriptive Codes, Categories, & Definitions

SUCTIONE: Success Through Time Efficiency

SUCTIONE- English	Added more time to English (20 mins.). Benefiting from it – more teaching time
SUCTIONE – Maximize	Maximizing time during the day for instruction (thematic/ISLA)

SUCELD: Success in English Language Development

SUCELD – Structure	ELD structured differently this year by ELD levels – grade level approach
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SUCG3: Success with GOAL 3

SUCG3 - AllSt	Responsibility for all students at their grade level. It is all our students. Mix students from 3 classes on Fridays.
SUCG3 – XternCon	External Connection for Goal 3 through visual & performing arts (VAPA); using “dichos;” biography boards, dances.
SUCG3 - Improv	Program working at improving goal 3
SUCG3 - Dialect	Addressing dialectical differences (diversity of Hispanics in school)
SUCG3 - Safe	Facilitating discussion about books without interrupting students/giving own opinions in safe environment
SUCG3 - Thematic	Maintaining students' interest in the topic/theme through thematic teaching
SUCG3 - PersCon	Making connection to students' own personal lives with difficult content
SUCG3 - Intel	Providing equal opportunities for learning by presenting material for different intelligences
SUCG3 - BkgKw	Creating a learning environment for all students to see, hear & discuss topics at an even advantage (PPT/images to build background knowledge)
SUCG3 - Register	Treating students with a personal register “palabras cariñosas – mi cielo, mi amor, mi querida, mi niña,” because part of Latin culture

SUCSTALNG: Success with Status of Language

SUCSTALNG - Models	ELs as models for literacy strategies
SUCSTALNG - Reflect	Reflection: Write a standard at beginning of year to stay in language of instruction
SUCSTALNG - Front	Frontloading – equal access to the stories/content

SUCTECH: Success with Technology	
SUCTECH - Interactive	Use of interactive technology for LA lessons
SUCMATCUR: Success with Materials/Curriculum	
SUCMATCUR - Depth	Not racing through the curriculum just to cover the book – teaching for depth and being selective in what we teach
SUCMATCUR - Creativ	Bringing creativity to the adopted curriculum; Teacher created - Interactive posters, charts, PPT for students
SUCMATCUR - Review	Constant/quick review of learned material, interwoven with new material
SUCMATCUR - Test	Preparing students for testing. Transference of test taking strategies between CST & Aprenda. Assessment formats; benchmarks
SUCMATCUR - Gram	Grammar as the base for oral & written language. Continued practice of color coding sentence elements established by grade levels.
SUCMATCUR - Journal	Use of journals for note taking. Use of a cognate journal.
SUCPA: Success with Parents	
SUCPA - Account	Parent Accountability: Math, SCi, Grammar journals require signatures
SUCPA - Involve	Getting all parents involved in their child's education/performance/presentation
SUCPA - Support	“Nothing gets done without the support of the parents – 10 hours yr required.”
SUCPA - Communicate	Communicating with parents – newsletters in both languages
SUCCO: Success with Collaboration	
SUCCO - Ideas	Trying out new ideas, collaborating with colleagues
SUCCO – Reflect	Reflection of practices
SUCADM: Success with Administration/District	
SUCADM - Program	Program seen as model to other programs

10. How have TWBI teachers gained their knowledge-base and professional support to implement the strategies they use in class?

Knowledge-base and Professional Support - Descriptive Codes, Categories, & Definitions	
KPSPL: Knowledge-base/Professional Support in Planning	
KPSPL – Time	Planning time ranges 2-10 hrs. weekly
KPSPL – Inst	Meeting with team to plan/debrief instruction – before school, during school, after school
KPSPL – Prog	Formal meetings monthly with team to plan holiday activities or update on program
KPSPD: Knowledge-base and Professional Support in Professional Development	
KPSPD – Train	Training/institutes to develop expertise
KPSPD – Conf	Conferences CABE, TWBI
KPSPD – Grant	Grant for Telementors, Cotsen

ADM: Knowledge-base and Professional Support in Administration

KPSADM– Support Principal support to adapt strategies & structures & celebrate

KPSADM– Models Principal models (writing) & provides feedback to teachers

KPSADM – Trust Teachers feel principal trusts teachers in making the right decisions for instruction

KPSCC: Knowledge-base and Professional Support in Collaboration/Colleagues

KPSCC Informal – Informal communication with program teams -passing by, hallways, email, texting

KPSCC – Collab Collaboration critical to develop materials, lessons, assessments

KPSCC – Leaders Team leaders; mentors

KPSCC – Artic Articulation of practices

KPSCC – Reflect Reflection: self/ others as critics of instructional practices

KPSPA: Knowledge-base and Professional Support in Parents

KPSPA – Support Parental support for strategies

KPSPA – Involve Parents involvement in writing celebrations

KPSPER: Knowledge-base and Professional Support in Personal Affiliation

KPSPER– Support Family support

KPSPER – Pride Pride in teaching, school, program, biliteracy

KPSPER – Trust Place own kids in trusted program

GLOSSARY

These are terms in the study that can be possibly misunderstood based on the context, numerous interpretations, and experiences of the readers. The terms are organized in alphabetical order.

Achievement gap. The circumstances in which some students of diverse racial, cultural, and linguistic background achieve less than other students.

Acquisition-learning hypothesis. Krashen's theory of how children learn a second language similarly to the way they acquire their first language by feeling or picking up a language subconsciously, and also by learning from explicit presentation of rules and error correction.

Additive bilingualism. Process of building on one's primary language skills by adding proficiency in one or more languages

Affective filter hypothesis. Krashen's theory of how to represent the role of affective variables that relate to the success of second language acquisition. These affective filters or mental blocks prevent students from successfully utilizing input to acquire language. Students with low affective filters are highly motivated, have positive self-confidence, and exhibit low anxiety toward their new language.

Basic interpersonal communicative skills (BICS). Cummins's theory of how conversational abilities easily develop through interpersonal and contextual clues within the span of two to three years.

Cognitive academic language proficiency (CALP). Cummins's theory of how mastery of academic functions of language demand high levels of cognitive association that are decontextualized or lack interpersonal cues, which require five to seven years.

Common underlying proficiency. Cummins's theory of how knowledge in one language is interdependent of the second language, as languages share a common storage place in the brain. The advancement of one language facilitates the learning of the second language.

English as a second language (ESL) or English language development (ELD). The goal of the program is for EL students to acquire English skills in grammar, vocabulary, and communication. Students receive one to five years of English instruction at their assessed level of language proficiency. This program may include a newcomer strand for the duration of one to two years for students who are recent arrivals. The newcomer goal is for basic English acquisition and orientation to the United States culture.

English learners (ELs). Students who have diverse linguistic and cultural backgrounds, a primary language other than English, and are U.S.-born or immigrant.

Heritage language. The native language spoken by indigenous people or immigrant minority groups.

Input hypothesis. Krashen's theory of the notion of acquiring the language by understanding meaningful messages or comprehensible input containing new structures that are somewhat higher than the level of the individual's production level. It is interpreted as $(i + 1)$, meaning the student's current level of competence plus the next stage to be acquired.

Language-majority student. Students who are native speakers of English, equivalent to the term *English-only*.

Language-minority student. Students who have a link to an ethnic minority culture and a home language other than English. The term is synonymous to ELs.

Maintenance bilingual education or "late-exit" bilingual education or developmental bilingual programs (DBE). The goal of the program is for EL students to develop English listening, speaking, reading, and writing proficiency, as well as sustain academic proficiency in their primary language. Students participate in a biliteracy approach program for five to six years, and continue in an English-only education for their subsequent years.

Monitor hypothesis. Krashen's theory of the relationship between acquisition and learning that allows the individual to internalize the structures of the language and communicate fluently by knowing how to use the rules and forms in normal conversations.

Natural order hypothesis. Krashen's theory of how students acquire grammatical structures of the second language in a predictable order, in which some rules are acquired earlier than others.

Newcomer. A recent arrival from a foreign country who has been in the United States for one to two years.

Sheltered instruction (SI) or specially designed academic instruction in English (SDAIE). The goal is for EL students to become proficient in academic English through the use of content instruction. The duration of the program is one to three years of instruction. Instructional strategies through content and language objectives, visuals, modeling, and the use of simplified language allow lessons to be comprehensible and accessible to the students.

Structured English immersion (SEI). The goal of the program is for EL students to attain English proficiency within one school year through a subject matter approach to

ESL/ELD. This program type restricts the use of bilingual instruction by requiring English-only approaches with the students. It is known as the program mandated by state referenda, such as California's Proposition 227.

Subtractive bilingualism. The process of erosion of the primary language by the dominant tongue.

Threshold hypothesis. Cummins's theory of how students who attained high levels of proficiency in their primary and second language demonstrated rapid academic and cognitive development. Conversely, low levels of proficiency in either language negatively affected cognitive growth.

Transitional bilingual education (TBE) or "early-exit" bilingual education. The goal of the program is for EL students to acquire English through an ESL/ELD approach, while they receive academic instruction in their primary language. As the level of English increases, the students are "exited" from the bilingual program and placed in mainstream English-only classes within a two-to-four-year span.

Two-way bilingual education or two-way bilingual immersion (TWBI). The goal of the program is to serve ELs who speak a common primary language along with native speakers of English. Both groups of students attain bilingual and biliteracy skills without the risk of native language loss. Students learn academic content in both languages, as well as cross-cultural awareness. Duration of the bilingual program is 5 to 12 years for both groups of students.

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