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A Multiple Case Study on the Implementation of the Bilingual Education Program in Private Schools in Oman

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Concordia University–Portland
College of Education
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A Multiple Case Study on the Implementation of the Bilingual Education Program in Private
Schools in Oman

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Dissertation submitted to the Faculty of the College of Education
in partial fulfillment of the requirements for the degree of
Doctor of Education in
Educational Administration

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Abstract

The purpose of this qualitative multiple embedded case study was to explore the implementation of the Ministry of Education (MoE) bilingual education program in private schools in the Sultanate of Oman in light of the factors that impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context. Data gathered through semistructured interviews and classrooms observations from 26 different bilingual private schools nationally, were analyzed in light of a conceptual framework based on the prism model and on effective international bilingual education implementation approaches, presented through the literature review. The data collected were crosschecked with the available MoE policy documentation, coded, triangulated, and used together through thematic analysis to inform the findings. The results of this multiple qualitative case study underline differences among schools in implementing the program in the bilingual English/Arabic context, in connection with factors such as the bilingual program's design and implementation, MoE regulations and perceived constraints in schools, teaching and learning practices, additional language/pastoral support for students, and in relation with the role of the school-based leadership. The findings underline the essential role of both the private schools and of the MoE in implementing increasingly effective bilingual education models, as to ensure improved long-term achievement for students in dual language programs.

Keywords: bilingual education/program, Arabic/English language learning, prism model, private schools Oman.

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Chapter 1: Introduction

Overview

The increasing spread of the English language medium of learning in international education had an important impact on how countries in the Arabic speaking Middle East designed and implemented K–12 dual language educational programs for additional language learners that balance the needs of all stakeholders involved in the learning process: students, educators, policy makers and the wider community (Raddawi & Meslem, 2015). The Ministry of Education in the Sultanate of Oman's (MoE) policy-related decisions, in addition to choices made at the school level on how to best educate students through the bilingual education program have had enduring effects on the quality of the school-based educational process and the learning outcomes of students enrolled in these private schools. In this dual language educational context, language learners enrolled in bilingual education in private schools in Oman find themselves in the situation where they have to acquire proficiency in the new language of instruction (English), learn complex academic content, and at the same time maintain and develop their mother tongue (generally Arabic).

Shaibany (2016) reported that only 27% of schools in Oman, both public and private, offer English and Arabic education, with a majority of the schools providing their entire curriculum in Arabic. Therefore, from the approximately 600,000 students who receive their basic education in Oman, only around 162,000 of them study through a curriculum taught bilingually. As per the MoE regulations, private schools that offer bilingual education must teach mathematics, sciences (physics, biology, chemistry), and ICT (information and communications technology) through the English language medium of instruction (MoE, 2017).

Additionally, bilingual educational programs have been the focus of intense debate in terms of policy, implementation choices, and impact on additional language student learning globally (Gándara & Contreras, 2009). The purpose of this multiple qualitative case study was to explore how effectively the MoE bilingual education program was implemented in private schools in the Sultanate of Oman and what factors could contribute to the more consistent implementation in terms of quality bilingual education provisions for students. The focus was on the various elements that impact the implementation of the program and how these affect student learning overall in light of the dimensions of the prism model included in the conceptual framework. This first chapter includes a general overview to the study, the background, purpose, significance and rationale of this study, the context and statement of the problem, research questions, definitions of terms, limitations and delimitations in studying the implementation of the MoE bilingual program in schools in Oman, and finally, a summary and further organization for the remainder of the study.

Background and Context

MoE approved an initial request from a private school to implement educational programs in English, in addition to their Arabic language learning provisions for students. Once this request for the implementation of English language-based educational programs and disciplines was granted, a series of similar requests followed from additional private schools and the MoE was compelled to approve them and create a new category of private schools in the Sultanate, titled “bilingual schools” (MoE, 2015). The context of this research study is provided solely through the Ministry of Education (MoE)-managed bilingual education program and its implementation in various bilingual private schools in the Sultanate of Oman.

In addition to bilingual schools, the MoE currently regulates a range of private schools under the following formal categories: monolingual (teaching and learning exclusively in the Arabic language), international, community and global schools. With parents requesting more education in the English language medium of instruction in private schools in Oman, bilingual schools have increased in number exponentially and the MoE program of bilingual education was further developed in order to support bilingual schools in implementing the K–12 dual language program of instruction for students. English language learners enrolled in bilingual education in private schools in Oman have to acquire proficiency in the new language, learn complex academic content at the same time and also maintain and develop their mother tongue.

The literature on the benefits of bilingual education is both rich and controversial, especially in the context of Spanish and English education in the United States. Due to the relatively high volume of research from the U.S. that pertains to learners of English and Spanish, the decision was made to also include literature on a more global nature and impact, especially those studies derived from research in different countries and those published by international organizations such as UNESCO. While drawn from the overall research, the theoretical framework of this study is based primarily on the conceptual prism model of second-language acquisition proposed by Thomas and Collier, who address the language acquisition process of English language learners during their school years (Thomas & Collier, 2007).

The continued interest in bilingual educational programs in educational research resulted in the production of a substantial body of literature that offer essential guidance in understanding the role of decisions made at the school level on how to best educate students through bilingual education programs (Baker, 2001). Research underlines what elements of programs might have

enduring effects on the quality of the educational process and especially on the outcomes of the students enrolled (Collier & Thomas, 2007).

Ramírez, Pasta, Yuen, Ramey, and Billings (1991) published a comprehensive study known in the field as the “Ramirez Report” and drew conclusions on the learning progress of primary Latino students from data collected through an eight-year longitudinal study comparing learning outcomes from three different types of programs. These programs included: (a) English immersion programs with almost exclusive use of English in primary school, (b) early-exit bilingual programs with Spanish being used one third of instructional time in Kindergarten (KG) and first grade with a phase out thereafter, and (c) late-exit bilingual programs with Spanish used intensively in KG and English introduced for one third of the instructional time in first and second grades, half the time in third grade, and 60% thereafter. Cummins (1992) concluded in relation with the previous study,

the findings of the Ramírez Report indicate that Latino students who received sustained L1 instruction throughout elementary school have better academic prospects than those who received most or all of their instruction through English. This pattern of findings refutes the theoretical assumptions underlying opposition to bilingual education while supporting the theory underlying developmental and two-way bilingual programs. (p. 31)

This overall conclusion underlining the benefits of a bilingual education was aligned with the later Gándara and Contreras (2009) findings that made use of the data presented by Thomas and Collier (2002) to claim that well-implemented bilingual programs can provide a moderate advantage over English-immersion instruction.” However, it is Gándara and Contreras (2009) further meta-analyses on bilingual education that asserted that there was more to the issue than

the types of programs and methodology of teaching in a new language that influences the lack of parity between first and second language learners in the Latino context.

Thomas and Collier (2002) used data collected and analysis from longitudinal databases in order to determine the size of the achievement gap as a result of learning in an additional language. As part of this study, Thomas and Collier (2002) measured and analyzed achievement in English, Spanish, and other school subjects in both languages of instruction. They stated that these, coupled with student backgrounds, have shown as a major policy implication that enrichment 90-10 and 50-50 one way and two way developmental bilingual education programs (or dual language, bilingual immersion) are the only programs found to assist students to reach high performance (50 percentile on standardized testing) in both languages of instruction and maintain and further this high level of achievement throughout their schooling. Thomas and Collier (2002) underlined that “bilingually schooled students outperform comparable monolingually schooled students in academic achievement in all subjects, after 4–7 years of dual language schooling” and most importantly, that “the strongest predictor of L2 student achievement is amount of formal L1 schooling. The more L1 grade-level schooling, the higher L2 achievement.”

Jepsen (2010) also compared student outcomes between bilingual education and monolingual programs and reported quite differently on this. Jepsen reported that students in bilingual programs perform at a 0.3 standard deviation lower than their counterparts in first and second grade, with a less than 0.1 difference from data in third through fifth grade. These disagreements about the efficacy of bilingual educational programs as underlined in differences in research outcomes and conclusions from different researchers underlined the need for even further and more rigorous research on and evaluation of the benefits of dual language programs

on students learning. Understanding which aspects of the school policies and curriculum, bilingual educational planning and approaches, teaching practices and pedagogies, student background and other variables can support educators to make better choices related to the education of additional language learners.

There is limited research available on dual language programs in the Gulf area that addressed purposefully the implementation of models of bilingual education for speakers of Arabic in this particular regional and cultural context. Tekin (2014) is the sole researcher who published a study on the impact of dual language education on a small number of Omani students at an experimental kindergarten in Muscat, the capital city of the Sultanate of Oman.

The primary gap explored in this study is that, despite the fact that the MoE mandates general regulations, curriculum and scheduling requirements for its bilingual program of education, schools approaches to the program implementation might differ in light of the addressed components and dimensions of the prism model (Collier & Thomas, 2007), therefore with various effects on improving student learning and on impacting the closing of the achievement gap between first and additional English language learners enrolled. The impact of the MoE regulations and of school leadership on teaching in the area of language and learning is important for how teachers approach the language-learning support for students in the classroom.

Statement of the Problem

The educational policy decisions regarding the bilingual education program in private schools in Oman were taken reactively by the MoE to meet requirements of the newly created category of schools and the early implementation of the dual language program of study for students in K–12 private schools. Decisions were made by MoE regarding the instructional time, curriculum and assessment, and the respective disciplines to be taught in the two languages of

instruction, English and Arabic, in light of the need to encourage more learning through the English language (MoE, 2017). The intention to increase student access to an education in English was laudable, but it has not taken into consideration known successful models of bilingual education and the recommendations of current research on dual language programs, in order for schools and students to reap the most benefits from an educational program in the two languages of instruction.

The problem addressed in this study is that, despite the fact that the MoE mandates general scheduling and curriculum requirements for its bilingual program of education, school approaches to the program implementation might differ in light of the addressed components and dimensions of the prism model (Collier & Thomas, 2007); therefore with various effects on improving student learning and on impacting the closing of the achievement gap between first and additional English language learners enrolled. The impact of school leadership in the area of language and learning is important for how teachers collaborate to offer language learning support and effective balanced learning to students in both languages of instruction.

The long debate in the United States over the efficacy of bilingual education as a feasible methodology of teaching and learning in educational programs for speakers of other languages has fueled the undertaking of extensive research focused on those approaches and learning methodologies that best serve students who learn in an additional language. The proponents and those who opposed bilingual education have produced extensive scientific evidence, conceptual understandings and theories that assist schools and educational systems in making decisions concerning effective ways of supporting students' learning and performance. Furthermore, and according to Cummins (1992), both opposing groups have accepted a few common studies, such as the research outcomes of Ramírez et al. (1991) as methodologically sound. This body of

literature allowed educationists a better understanding of how language learning works and how bilingual education programs can best support the learning of students, aspects that are both important when making policy decisions for dual language programs and when schools plan on how to best support students enrolled in these programs.

This qualitative multiple embedded research case study was based on the current conceptualization in the reviewed literature of the role of language learning in the sociocultural, linguistic, academic, and cognitive development of students. In more recently published research, Thomas and Collier (2007) promoted the design of their previously developed prism model that proactively supports the recognizing and the nurturing of bilingual students' multifaceted development. This model includes elements of the sociocultural theory, which considers language as an essential tool in the development of higher mental processes of learners (Vygotsky, 1986).

Thomas and Collier (2007) provided a theoretical framework in the prism model, rooted in the sociocultural theory and supported by research in language acquisition, that was utilized in this study to better understand the impact that the bilingual program has on the students' development where the four interdependent components influence the student success through both languages of instruction in the bilingual program of education. The conceptual framework of the study supported the exploration of the MoE bilingual education program and its varied implementation in a number of K–12 private schools in the Sultanate of Oman. The focus was on aspects that might influence the application of the bilingual program in schools and ways in which their activities and interactions can have an increasing positive impact on student learning and their success as balanced bilinguals. These were envisioned to be MoE requirements for program implementation, the role of school-based leadership in managing and promoting

bilingual education learning for students, the consistency of learning that includes all the components of the prism model (Collier & Thomas, 2007), the impact that the curriculum and teaching strategies have on additive bilingualism and effective student learning, and on the role that the teaching in both languages of instruction has on students' academic success.

As documented in previous national research, students enrolled in an early childhood bilingual education program in Oman enjoyed both linguistic and cognitive benefits from learning in two languages, English and Arabic (Tekin, 2014). Tekin (2014) confirmed the findings of Cummins (2000) and Cummins (2008) and in addition to the work of Raddawi and Meslem (2015) and Hussien (2014) framed the particularities of the regional and local context of the impact of bilingual education programs on users of Arabic. In light of the bilingual education related literature available (Ball, 2011; Christian, 2016; Collier & Thomas, 2007; Cummins, 1992, 2008; Gándara & Contreras, 2009; Garcia, 2009; Hussien, 2014; Jepsen, 2010; Manterola, 2014; Marian, Shook, & Schroeder, 2013; Raddawi & Meslem, 2015; Ramírez et al., 1991; Tedick & Wesely, 2015; Thomas & Collier, 2003; UNESCO, 2016; Vale, 2013) the researcher set out to explore qualitatively the specific characteristics of implementing a unique bilingual education program nationally, in a local social, cultural and educational environment in private education in the Sultanate of Oman.

Purpose of the Study

The purpose of this qualitative multiple embedded case study is to explore the complex experiences of implementing the bilingual education program in a number of K–12 private schools in the Sultanate of Oman and to identify areas that contribute to the implementation of this education program in K–12 private schools in the Sultanate. More specifically, the inquiry will center around certain aspects of the educational process that might influence the application

of the bilingual program in schools, such as: the MoE requirements for program implementation, the role of school-based leadership in managing and promoting bilingual education learning for students, consistency with components of the prism model (Collier & Thomas, 2007), the impact that the curriculum and teaching strategies have on additive bilingualism and effective student learning, and on the role that the teaching in both languages of instruction has on students' learning.

Research Questions

The two following research questions were used to guide this qualitative multiple case study exploration of how the MoE bilingual education program is implemented in private bilingual schools in the Sultanate of Oman:

RQ1: What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?

RQ2: How does the program implementation impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?

Nature of the Study

The design choice for this study is qualitative, due to the fact that this approach allowed the researcher to explore the perceptions of teachers and administrators as they related to the implementation of the bilingual program in schools, in addition to gathering data from classroom observations on actual teaching practices. A qualitative case study design was used in order to allow the researcher to better explore unclear connections as part of the process of program implementation in the private schools context in Oman. This was consistent with the use of case study approaches in the educational literature, for the purposes where establishing boundaries between phenomena and context is difficult through quantitative approaches (Yin, 2004). A

multiple case study approach will provide sufficient data in order for both the research questions to be addressed and for drawing conclusions that can be generalized, regarding overall effectiveness of the program implementation in schools.

This study is significant because it is the first one of its kind in the country, focusing on the implementation of the MoE bilingual education program in private schools and uses an approach that can enable more detailed and focused research in the future on specific elements of student success in bilingual education programs in the Omani context. The study results can be used to inform policy makers and focus on factors that can contribute to the more effective implementation of the bilingual education program in private schools in the Sultanate of Oman. The study results may also be used in designing training programs to prepare teachers to be increasingly effective with dual language students in the bilingual learning context.

Definition of Terms

Bilingual education: Bilingual education is understood here as a dual language learning approach organized in a variety of types of programs intended to develop bilingual and biliterate students, with additive or subtractive bilingualism outcomes (Baker, 2001).

Bilingual program: Bilingual program is the term used in this study for the MoE-regulated framework of education offered in private schools in Oman aimed at achieving additive bilingualism in students through the teaching of disciplines in both English and Arabic languages (Roberts, 1995).

Bilingualism and multilingualism: These are terms defined here at an individual level and from a holistic perspective, to characterize a person able to use conversationally and/or academically two or more languages with different people, in different contexts and for different purposes (Baker, 2001).

Effective bilingual teaching approaches: These are instructional strategies used by teachers in both English and in Arabic with students that address individually and interdependently the sociocultural, linguistic, academic, and cognitive learning processes of language learning, as to ensure the students' bilingual academic success (Collier & Thomas, 2007).

MoE policy requirements: These are basic scheduling and implementation mandates from the MoE in the form of annual and weekly plans for schools for all disciplines included in the bilingual program, both for the subjects taught in English and those taught in Arabic (MoE, 2017).

The prism model: The prism model defines factors that allow for predictions to be made regarding English learners' degree of second language acquisition success in an academic context and includes four major components for language learning: sociocultural, linguistic, academic, and cognitive processes (Collier & Thomas, 2007).

Assumptions, Delimitations, and Limitations

Assumptions based on the background and previous experience of the researcher could have potentially led to bias in terms of the emerging themes and concepts from the data overall. In order to limit this type of bias, semi-structured items/questions were purposefully developed and verified to include open-ended questions that allowed for extended and detailed responses from the selected participants. The themes from the group interviews were analyzed through a specific, qualitative coding process, initially overall and then for axial codes. Prior to the coding process, peer translator checking was used to safeguard the validity and integrity of the transcribed interview notes and the classroom observations' log. The data was read on multiple occasions to allow for the accurate coding of the text, based on the statements made by

participants and according to the rich and thick descriptions collected from classroom observations. MoE policy documentation was used to triangulate and verify participant perceptions from group interviews and further corroborate the open and axial codes.

The scope of the study to investigate solely the implementation of the MoE official bilingual education program presented clear delimitations for the research conducted. Delimitations were identified for this study in terms of the school sample selection and the data collection methods. Despite the fact that both governmental and private schools in the country implemented certain versions of bilingual education programs by including the studying of English within or through their curriculum, only private schools classified officially as bilingual schools by the national regulator were selected as part of the representative sample of schools nationally. This decision was taken because of the intention to investigate exclusively the implementation of the officially supervised MoE bilingual program in the bilingual schools' category. The study is delimited to the available MoE policy documentation, interviews and observations in terms of instrumentation, which were considered sufficient in gathering the data necessary to explore the implementation of the program through staff perceptions and classroom-based teaching and learning approaches, in light of MoE published policies.

Areas of limitation for the study were determined in light of the data available, the sample of schools and participants, and the methodology. This study's qualitative database was limited to information drawn from the available MoE policy documentation shared with the researcher, rich and thick typed descriptions notes from interviews and classroom observations. The short time available for interviewing during the group open-ended interviews, especially in light of the time necessary for clarification, translation, and interpretation in bigger participant groups, might have had an impact on the quantity and accuracy of the collected data through the

semi-structured interview notes taken by the researcher during the field visits. Due in part to the qualitative design and the particularities of the program itself, the findings cannot be generalized to other bilingual programs of education. However, the study does possess some transferability for the Gulf region in the Arabic and English context of bilingualism. Sufficient descriptive information was provided so educationalists can determine transferability of results to a different specific bilingual education program of education. While this study was carried out in one specific type of schools in the Sultanate, there are many other similar bilingual program education approaches in the Gulf and the wider Middle East and North Africa (MENA) region.

The study is limited in terms of generalizing the findings to other types of schools implementing similar bilingual education programs in the country or elsewhere, due to the fact that the data was solely collected from official private bilingual schools in Oman. The short time available for interviewing during the group open-ended interviews, especially in light of the time necessary for clarification, translation and interpretation in bigger participant groups, might have influenced the quantity and accuracy of the collected data through the semi-structured interview notes taken by the researcher during the field visits.

Another limitation could include the researcher's association with the MoE, the national education regulator. In addition to the role of principal researcher, the author was also a consultant with the national education regulator, the MoE, and this was instrumental in both having access to schools in order to gather the necessary data, and also in risking a conflict of interest perception from some participants in schools. Therefore, efforts were made to continuously underline for participants the independence of this study from the MoE, both in the Consent Form and in the data collection protocols (see Appendix A and B). Also, as an adult English learner and seasoned multilingual education professional, the researcher's personal and

professional thoughts on language acquisition and bilingual education best practices will not be disclosed to participants in order to avoid bias and to enable a more authentic representation in the study of participants' thinking and experiences with the bilingual program under study.

Summary and Organization of the Remainder of the Study

The purpose of this multiple qualitative study is to explore the complex experience of implementing the bilingual education program in a number of K–12 private schools in the Sultanate of Oman and to identify factors that may contribute to the more effective implementation of this education program in a significant and representative number and categories of K–12 private schools in the Sultanate. The results of this multiple case study are envisioned to be significant, and may underline the lack of consistency in implementing the program in schools, the impact of MoE regulations on school implementation, the varied effectiveness of school leadership in guiding teachers to consistently and positively impact student learning in the bilingual context. The comparing of the current observed status of bilingual education in private schools in Oman with best practices and research in bilingual education globally may inform recommendations and future research aimed at improving the implementation of the program in bilingual schools.

The following research questions were used to guide this qualitative exploration of how the MoE bilingual education program is implemented in private bilingual schools in the Sultanate of Oman:

RQ1: What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?

RQ2: How does the program implementation impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?

The Chapter 2, the literature review, includes an extensive review of research available on bilingual education and its benefits for student learning, including studies conducted internationally, in Oman and in the wider Gulf region. Chapter 3 outlines the methodological plan of the study, including research methods and design, sampling, data collection and analysis, ethics, validity and reliability. The final two chapters include descriptions and interpretation of the findings and of the results of this study in light of the analyzed data.

Chapter 2: Literature Review

Introduction to the Literature Review

This multiple embedded qualitative case study is aimed at exploring how the MoE bilingual education program is implemented in private schools in the Sultanate of Oman, with a focus on the factors that impact the implementation of the program and how these affect different facets of student learning. Despite the fact that the MoE mandates general scheduling and curriculum requirements for the bilingual program of education, schools approaches to program implementation may differ in light of the addressed components and dimensions of the prism model (Collier & Thomas, 2007): sociocultural, linguistic, academic, and cognitive, therefore with varied effects on improving student learning.

The search strategy for this study involved a comprehensive electronic search for peer-reviewed journals, published works, and online media. The iterative process of and reading of the relevant literature available coupled with the review of MoE documentation and personal communication with MoE staff supported initial understandings for the researcher. The key word list included the terms bilingualism, bilingual program, ESL, EAL, ELL, Arabic/English language learning, dual language program, prism model, private schools Oman, with the search being conducted in the following library databases: (a) Concordia University–Portland library website (<http://libguides.cu-portland.edu/EdD>), (b) Google Scholar, (c) ERIC, (d) ProQuest and (e) Taylor and Francis, and (f) Wiley Online for peer review journals. Boolean approaches were used to develop further searches through additional combinations of the key search terms and search perimeters were expanded to also include work published more recently.

There is limited research available on dual language programs in the Gulf area that addresses directly the implementation of models of bilingual education for speakers of Arabic in

this regional cultural context. Tekin (2014) is the sole researcher who published a study on the impact of dual language education on a small number of Omani students at an experimental kindergarten in Muscat, the capital city of the Sultanate of Oman. This literature review also includes regional studies on the impact of bilingual education especially from the neighboring United Arab Emirates, in order to better anchor the research in the local, regional and cultural particularities of learning in English and Arabic.

The literature on the benefits of bilingual education is both rich and controversial, especially in the context of Spanish and English education in the United States. Due to the relatively high volume of research from the U.S. that pertains to learners of English and Spanish, the decision was made to also include literature on a more global nature and impact, especially those studies derived from research in different countries and those published by international organizations such as UNESCO. The literature findings, such as Gándara and Contreras (2009), Thomas and Collier (2002), Jepsen (2010), Ramírez et al. (1991), are both rich and controversial in the context of dual language Spanish and English programs in the United States, and offer an important sum of quantitative data from longitudinal studies and a set of policy recommendations found to be essential for bilingual education programs.

A single empirical study conducted in Oman on a very small sample by Tekin (2014) confirmed the findings of the quantitative meta-studies of Ramírez et al. (1991) and of Thomas and Collier (2002), the Arabic language learning particularities and dual languages influence discovered by Hussien (2014) could be added to the concerns over the loss of Arabic documented by Raddawi and Meslem (2015) to inform an inquiry on how this is implemented in a number of private schools in Oman as managed by the MoE. Cummins (2008) used published quantitative data and stressed the importance of his proposed common underlying proficiency

theory and of the transfer between the two languages of instruction in bilingual programs. While UNESCO (2016) reiterated the evidence presented by the U.S.-based detailed accounts from the English-Spanish models of dual language approaches from Thomas and Collier (2002) and Ramirez et al. (1991), it also underlined the need for mother tongue instruction and a focus on comprehension in terms of language and learning.

Tekin (2014) confirmed the findings of Cummins (2000, 2008), and this, in addition to the work of Raddawi and Meslem (2015) and Hussien (2014), helped frame this study's regional and local context of the impact of bilingual education programs on users of Arabic. The literature overall (Ball, 2011; Christian, 2016; Collier & Thomas, 2007; Cummins, 1992, 2008; Gándara & Contreras, 2009; Garcia, 2009; Hussien, 2014; Jepsen, 2010; Manterola, 2014; Marian, et.al., 2013; Rodríguez, et al., 2014; Tedick & Wesely, 2015; Thomas & Collier, 2003; UNESCO, 2016) supports a qualitative exploration of the sociocultural, linguistic, academic, and cognitive elements of the MoE bilingual education program as implemented in the private school sector in the Sultanate of Oman.

In the next section of this chapter, a conceptual framework is included to provide a theoretical focus for the study, in addition to a brief examination of scholarly literature relevant to this type of research and the methodological approach used for this study, followed by a detailed review and examination of relevant literature.

Study Topic

The continued interest in bilingual educational programs in educational research resulted in the production of a substantial body of literature that offers essential guidance in understanding the role of decisions made at the school level on how to best educate students through bilingual education programs (Baker, 2001). The research underlined what elements of

programs might have enduring effects on the quality of the educational process and especially on the outcomes of the students enrolled (Collier & Thomas, 2007).

What is under research here is the implementation characteristics of the dual language program in K–12 private schools in Oman and the particularities of implementing the MoE-regulated program in these schools in light of the sociocultural, linguistic, academic, and cognitive student learning aspects involved in the instructional process. The contextual boundaries of the literature review for the local implementation of the bilingual program will be expanded through the focus of the present study that endeavors to answer the two main research questions related to the implementation of the program in schools:

RQ1: What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?

RQ2: How does the program implementation impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?

Context

The context of this multiple case study research was provided through the MoE-managed bilingual education program and its varied implementation in private schools in the Sultanate of Oman. In light of exponential growth in numbers of private education providers in the Sultanate of Oman and especially in the bilingual schools category, increasingly greater numbers of students were enrolled in the MoE bilingual education program every year (MoE, 2018). The regional and local societal pressure for more learning in English had a negative impact on the status of the Arabic language, the mother tongue of the majority of students, and its use in schools (Raddawi & Meslem, 2015). With increased demand for an English-medium education, school leadership teams are faced with complex choices in terms of the MoE bilingual program

implementation. Adding disciplines taught in English to the initial program of education in Arabic and managing a bilingual approach with students led to challenges in implementing effective approaches that addressed interdependently the sociocultural, linguistic, academic, and cognitive learning processes as to ensure students' bilingual academic success (Collier & Thomas, 2007).

The educational policy decisions regarding the bilingual education program in private schools in Oman were taken reactively by the MoE to meet requirements of the newly created category of schools and the early implementation of the dual language program of study for students in K–12 private schools. Decisions were made by MoE regarding the instructional time, curriculum and assessment, and the respective disciplines to be taught in the two languages of instruction, English and Arabic, in light of the need to encourage more learning through the English language (MoE, 2017). This was due to the fact that the program developed organically and chronologically, where decisions were made as the program implementation happened in the schools. MoE approved an initial request from a private school to implement educational programs in English, in addition to their Arabic language learning provisions for students. Once this request for the implementation of English language-based educational programs and disciplines was granted, a series of other similar ones followed from additional private schools and the MoE was compelled to approve them and create a new category of private schools in the Sultanate, titled “bilingual schools.” There have been no formal previous evaluations of the program to date and the present qualitative multiple case study can play an essential role in exploring how the different language and learning needs of students are met in the bilingual learning context and what are the factors that most influence the implementation of the program at a national level.

The continued interest in bilingual educational programs in educational research resulted in the production of a substantial body of literature that offer essential guidance in understanding the role of decisions made at the school level on how to best educate students through bilingual education programs (Baker, 2001). Research underlined what elements of programs might have enduring effects on the quality of the educational process and especially on the outcomes of the students enrolled (Collier & Thomas, 2007). There is limited research available on dual language programs in the Gulf area that addressed purposefully the implementation of models of bilingual education for speakers of Arabic in this regional cultural context. Tekin (2014) is the sole researcher who published a study on the impact of dual language education on a small number of Omani students at an experimental kindergarten in Muscat, the capital city of the Sultanate of Oman.

Significance

As documented in previous research, students enrolled in bilingual education programs in Oman enjoyed both linguistic and cognitive benefits from learning in two languages at school (Tekin, 2014). The specialized literature available in this local context is limited in terms of number of participants, gender, and ages of students. The researcher asserted that further research was to be conducted on students enrolled in bilingual programs at different grade levels, in different contexts in private education in Oman, and with more participants in order to gain a more complete picture of this phenomenon. In addition, Gándara and Contreras (2009) concluded, that even if well-implemented bilingual programs can claim a "moderate" advantage over English-immersion instruction, no language intervention has erased the gap between English speakers and English learners.

This qualitative research was intended to extend the existing understandings of factors

that may influence the effective implementation of bilingual education programs in an Arabic-English learning environment in K–12 schools for the benefit of improved student learning. The findings of the study may both inspire further research on more specific aspects of learning on this topic and also help propose successful ways of implementing bilingual programs with students. The data gathered and the findings about the observed status of implementing bilingual education in private schools in Oman may be used to help inform recommendations aimed at improving the implementation of the bilingual program in private schools and also guide wider ministerial policy in terms of K–12 learning in dual language programs around the country and across educational systems.

This study is potentially significant because it is the first one of its kind in the country focusing on the implementation of the MoE bilingual education program in private schools and uses an approach that can enable more detailed and focused research in the future on specific elements of student success in bilingual education programs in the Omani context. The study results can be used to inform policy makers and focus on factors that can contribute to the more effective implementation of the bilingual education program in private schools in the Sultanate of Oman. The study results may also be used in designing training programs to prepare teachers to be more effective with dual language students in the bilingual learning context.

Problem Statement

Through the creation of the bilingual school category, MoE increased student access to an education in English; however, sufficient consideration was not given to using successful models of bilingual education and to the recommendations of current research on the role of the mother tongue in dual language programs, in order for schools and students to reap the most benefits from a dual language education. The problem addressed in this study is that, despite the fact that the MoE mandates general regulations, curriculum and scheduling requirements for its bilingual

program of education, schools approaches to the program implementation might differ in light of the addressed components and dimensions of the prism model (Collier & Thomas, 2007).

Therefore, this is achieved with various effects on improving student learning and on impacting the closing of the achievement gap between first and additional English language learners enrolled. The impact of the MoE regulations and of school leadership on teaching in the area of language and learning is important for how teachers approach language-learning support for students in the classroom.

Organization

This chapter includes a description of the conceptual framework of the study that informed the literature search and review process, followed by a review section of the selected relevant literature. The focus is on the educational strategies and approaches that are conducive to effective language and learning policies and programs that address the needs of students who learn in additional languages. The reviewed body of literature allows for a better understanding of how language learning works and how bilingual education programs can best support the learning of students, which are both important when making policy decisions for dual language programs and when schools plan on how to best support students enrolled in these kinds of programs. This is followed by a discussion of the methodological issues and a critique of prior research, and finally by a summary of the literature review findings.

Conceptual Framework

This qualitative multiple case study was based on the current conceptualization in the reviewed literature of the role of language learning in the sociocultural, linguistic, academic, and cognitive development of students. According to Krashen's (2013) theory of second language acquisition, the second, or additional, language learning process mirrors the native language

acquisition process in an authentic and realistic learning environment. Krashen's (2013) second language acquisition theory underlined the role of comprehensible input and how emotional and cultural factors impact the additional language acquisition process. Affective factors, such as lack of acceptance, unease, or thoughts of discrimination, impede second language learning by blocking comprehensible input. The affective filter can be removed or significantly reduced through positive and encouraging teaching approaches. Therefore, language and content can be simultaneously with the appropriate support and guidance (Krashen, 2013).

In more recently published research, Thomas and Collier (2007) promoted the design of their previously developed prism model that proactively supports the recognizing and the nurturing of bilingual students' multifaceted development. This model includes elements of the sociocultural theory, which considers language as an essential tool in the development of higher mental processes of learners (Vygotsky, 1986). The sociocultural theory provides a functional view of language where linguistic ability is socially constructed and utilized to engage in social and cognitive activities.

The theoretical framework of this study is based on the conceptual prism model of second-language acquisition proposed by Thomas and Collier (2007), who address the language acquisition process of English language learners during their school years. Despite the many types of bilingual education programs the students are enrolled in and the variation of implementation of bilingual education programs in private schools in Oman, this model provides a multidimensional perspective on the English language acquisition of these students who are speakers of other languages. The MoE bilingual program is intended to be a maintenance program by design, where instruction in English is coupled with support and instruction in Arabic. Bilingualism and biliteracy are the goals of this program, where pluralism also supports

the development of additive bilingualism, which is associated with positive cognitive benefits (Cummins, 1981). Thomas and Collier's (2007) prism model described four interdependent components and their representation in this qualitative case study informed the conceptualization of the benefits of the education program and were also related to the two research questions: sociocultural, linguistic, academic, and cognitive processes. The data collected provided the researcher with sufficient evidence in order to explore and provide a complex response to the research questions regarding the impact of the bilingual program implementation on teaching and on student learning.

The sociocultural dimension of the model will be used to observe the social and cultural processes that occur in school contexts of learners' existence and interaction in the classroom environment in terms of confidence and self-esteem. Although students received the same classroom instruction, the affective filter consisting of biased feelings can cause English learners to experience a mental block halting learning (Krashen, 2013). Steinbach (2010) reported, in terms of high anxiety learning environments and the impact that peer pressure and can have on additional language learners, that Afghan immigrants in Quebec's schools perceived learning a new language difficult due also to the lack of confidence and negative attitudes expressed by their peers regarding the low quality of their language and particular accents. Olvera (2015) explained how monolingual educators teachers had difficulties considering, in their teaching and learning processes, the emotional needs of acceptance and the lack of support experienced by students acquiring a second or additional language. In addition, Yoon (2010) found English middle school learners' participation increased when positive connections were encouraged and formed in the peer group and when cultural and social needs were prioritized with an emphasis on oral language development. Yoon (2010) also claimed that the findings regarding class

participation and sustained cultural values could potentially be applied to mainstream education and enhance increase student learning.

The data collection process is envisioned to help record instances of influence of learner affective factors and how these might impact the second-language acquisition process. According to Cummins (1981), students who experience additive bilingualism will show cognitive benefits, while subtractive bilingualism typically has a negative effect on students' educational experience. The linguistic dimension of the prism model involves all aspects of the language development process, including in the Arabic and English oral and written languages acquisition and learning. In addition, Swain (2000) argued, "language use and language learning can co-occur. It is language use mediating language learning. It is cognitive activity and it is social activity" (p. 97). The focus of the study in this linguistic aspect is on the work that schools do with students in all domains of the language and in both languages of instruction, especially in light of sought out high cognitive abilities development for students in their mother tongue, usually Arabic.

Thomas and Collier (2007) stressed that language and cognitive development go hand in hand and influence each other greatly. Particularly significant for this study was the interrelation between cognitive development and Arabic language development, the mother tongue of the majority of learners enrolled in the bilingual education program. The academic dimension of this model includes all schoolwork in language arts, mathematics, the sciences, and social studies for each grade level with an increased attention on instruction that might focus on cognitively simple tasks (often termed "basic skills") that do not support the language development process to the same degree as cognitively complex instruction. Therefore, students may be able to complete

more cognitively demanding tasks in both languages of instruction with the appropriate support of teachers.

This is consistent with the conceptualization of the zone of proximal development (ZPD), another core concept of socio-cultural theory. It is defined as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1987, p. 86). Also, the value of imitation is important for students’ language learning, where internalization through imitation involves an active reasoning process (Lantolf & Thorne, 2006; Tomasello, 2005). The cognitive component of the prism model was used here to further take into consideration the need for schools to focus equally on developing academic proficiency in both languages through the bilingual program. Using the knowledge, skills, and cognitive background of students in their mother tongue as a stepping stone for the acquiring of the additional language of instruction, English, without merely simplifying learning tasks for access, is an important aspect considered here for meeting the cognitive needs of bilingual students and continuously challenging them to closing the achievement gap with the first language speakers.

Bilingual program teachers are arguably the key to educational equity and excellence through both languages of instruction and they must demonstrate the skills and instructional practices necessary to meet the learning needs of their diverse student populations. Vazquez-Montilla, Just, and Triscari (2014) underlined teachers’ perceptions regarding their roles as language teachers. The authors found that 73% of the teachers surveyed considered unreasonable to teach students incapable of speaking English in a mainstream classroom and only nine percent of teachers agreed that modifying and differentiating instruction is part of their role as

mainstream practitioners.

It is possible that due to the cultural diversity of the student populations, the instructional time available and the particularities of the Arabic language program, educational experiences may be designed with limited opportunities to increase higher order thinking skills (Hammond, 2015). Federal U.S. guidelines suggest that three years is the target amount of mother tongue support for bilingual students, while studies generally show that five to seven years is a more appropriate timeframe for English language learners to reach levels comparable to their native English speaking peers (Collier, 1989). Yunus, Osman, and Ishak (2011) showed how academic success is directly related to the teachers' understanding and considering of students' backgrounds and their ability to form relationships with students in order to better motivate them in the acquiring of the new language of instruction. Culturally responsive teaching is about empowering learners by providing them with challenging, relevant opportunities that will stimulate higher levels thinking and processing skills both in subjects in English and those taught in the Arabic language. In culturally responsive teaching, an educator is able to recognize and understand cultural differences in student learning and apply appropriate instructional and socio-emotional strategies to promote effective learning (Hammond, 2015). In addition, Cummins (1991) proposed a model of academic language learning, where it was indicated that the majority of instruction in classrooms consisted of low context and high cognitive demands. These teacher-centered lecture-type approaches limited scaffolding, and reduced the differentiation of instruction in a decontextualized environment of high anxiety for students, where learning is impeded for additional language learners.

Alternative and competing models were also considered for the development of the conceptual framework of the present study. Subtractive language program models such as pull-

out ESL, content ESL, and English submersion, in addition to transitional and maintenance bilingual were not deemed aligned with and in support of the philosophy and the declared intentions of the MoE bilingual education program, and therefore not used for the development of the present study. Therefore, the focus moved instead on additive language programs, also known as dual language models, and these were prioritized in this study in order to inform the inquiry into the characteristics of the national implementation of the bilingual program under study. In particular, the Cummins (2008) linguistic interdependence model that refuted the two solitude assumptions in bilingual education was instrumental for the confirmation and additional support of the chosen prism model. Cummins (2008) designed the linguistic interdependence model for the purpose of achieving academic proficiency with students as part of a biliteracy objective, and as a two-way bridge to English literacy through a bi-directional transference of skills. Enrichment dual language schooling models and their positive effects on closing the academic achievement gap between first and additional language learners of English supported the decision to use the prism model as the base of the study's conceptual framework (Thomas & Collier, 2003).

Thomas and Collier (2007) provided a theoretical framework in the prism model, rooted in the sociocultural theory and supported by research in language acquisition, that was employed in this study to better understand the impact that the bilingual program has on the students' development, where the four interdependent components influence the student success through both languages of instruction in the bilingual program of education. This conceptual framework was focused on the MoE bilingual education program and its varied implementation in a number of K–12 private schools in the Sultanate of Oman. The focus was on aspects that might influence the application of the bilingual program in schools and ways in which their activities and

interactions can have an increasing positive impact on student learning and their success as balanced bilinguals, for example: the MoE requirements for program implementation, the role of school-based leadership in managing and promoting bilingual education learning for students, consistency of learning that includes all the components of the prism model (Collier & Thomas, 2007), the impact that the curriculum and teaching strategies have on additive bilingualism and effective student learning, and on the role that the teaching in both languages of instruction has on students' academic success.

Review of the Research Literature

The literature review process and initial scanning of articles revealed a continued educational and scientific preoccupation in this field of applied linguistics on effective ways of implementing bilingual educational programs. These have been the focus of intense debate in terms of policy, implementation choices, and impact on additional language student learning. The paradigms that are most common in the literature take most often into consideration the impact that bilingual education might have on students' first language and especially the rate at which they are able to acquire the additional language (Gándara & Contreras, 2009, Ramírez et al., 1991). It is clear from the synthesizing of the literature that there is still a gap between achievements, both in English and academically, between students of minority languages and those who come with the background of the language of instruction (Gándara & Contreras, 2009).

The researcher will attempt to expand the understanding of what influences the effective implementation of the bilingual education program for the success of students. The focus was planned to go beyond the common immersion versus bilingualism paradigm that has been used in the debate for or against bilingual education and bilingualism in the United States educational

context. The characteristics of program implementation will be explored through two open research questions to unveil the particularities of student learning.

The initial efforts of the present literature review have unearthed the need for more research on bilingual education in the context of private education in the Sultanate of Oman. While previous studies that deal with Arabic as first or additional language in the bilingual education context are rare, there is only one empirical study on bilingual education sponsored by Sultan Qaboos University that deals with the impact of a bilingual education on Omani students, specifically. The researcher endeavors to unveil, through qualitative methodology, the specifics of implementing bilingual education in an Arabic language-learning context and particularly in private bilingual education in the Sultanate of Oman.

Gándara and Contreras (2009) discussed in detail the research reviews and meta-analyses that were used in the past in order to inform the policy-making about decisions on bilingual education; especially in the Latino context of Californian schools to the extent that

teaching children in two languages so that they can be competent learners and successfully acquire English has become over time such a hot-button issue that many people are reluctant to use the term 'bilingual education' for fear of inciting scorn or stopping a conversation cold. Researchers even counsel each other to avoid the phrase so as not to prejudice readers against their research. (p. 54)

This research argument fits with what Gándara and Contreras (2009) have concluded. The authors concluded that even if well-implemented bilingual programs can claim a "moderate" advantage over English-immersion instruction, no language intervention has erased the gap between English speakers and English learners, or between native-English white children and speakers of other languages. The cultural obsession with whether to pursue English-only versus

bilingual education has obscured the more critical social and pedagogical issues that need to be further studied and understood. Collier (1995) stressed the importance of English learners using their native or other known languages as a point of reference while acquiring a new language to recognize points of similarity and difference and consequently transfer old understandings into the new linguistic context of their learning. This is supported by Marzano (2012) and Tretter et. al (2014), who suggested that vocabulary terms introduced with images, comprehensible definitions, and further contextual knowledge are effective pedagogical strategies for making content comprehensible to students acquiring English.

The rise in popularity of English language programs of education in the Sultanate of Oman was also evidenced by the decision of the MoE to introduce and regulate a category of private schools titled bilingual schools that offer a K–12 program of bilingual education with distinct disciplines taught in English and Arabic (MoE, 2015). While Garcia (2009) regarded monolingual education as being utilized to limit access and legitimate the linguistic practices of those in power, the situation of the Omani educational system in terms of monolingual and bilingual practices has been quite different. The openness toward learning in English in an increasing multi-cultural society based on immigration, the particularities of the Arabic language, and the perceived issues presented by Raddawi and Meslem (2015) regarding the loss of language usage in the bigger socio-cultural environment of the Gulf complement what Garcia (2009) further argued: “that socio historical positioning, geopolitical forces and language ideologies all interact to sustain different kinds of bilingual education policies (and different educational options and practices) in different places throughout the world” (p. 12).

This diversity of approaches in research, coupled with local and regional particularities, had an important impact on the type of specialized literature that is available, relevant, and useful

in terms of methodology when conducting a research study that is aimed at uncovering more details on some elements of an effective K–12 bilingual education program in the context of the private educational system in the Sultanate of Oman. The impact of bilingual educational programs in Oman and neighboring countries, such as the UAE, have been the focus of many debates in the media, but little investigation and few empirical studies have been conducted in this area of the world on this topic. Tekin (2014) used a small sample group of kindergarten students (Arabic as the primary language with 82% Omani nationals, 9% Iraqi, and 9% Jordanian) enrolled in an early education center affiliated with Sultan Qaboos University in the capital, Muscat, to investigate language proficiencies of students and perceptions of their parents in terms of language usage outside of the school environment. Qualitative techniques were used to interpret the “Parent Interview Questionnaires” in addition to using descriptive statistics to analyze the students’ assessment of their English and Arabic language proficiency through a researcher developed instrument adapted and translated from the U.S.-developed “English and Primary Language Screening Tool” (Tekin, 2014). A sample of 11 students and their parents have therefore revealed in this study student gains in expressive and receptive language capabilities in Arabic, their mother tongue, and in English, the additionally learned language. Tekin (2014) agreed in his concluding statements that the study was limited in terms of context, number of participants, and gender and ages of students. He stated that further research should be conducted on students enrolled in bilingual programs at different grade levels, in different contexts such as private education in Oman, and with more participants in order to gain a more holistic picture of this phenomenon (Tekin, 2014).

From a different perspective of understanding what impact learning English has on the student development of the Arabic language skills in the Egyptian education context, Hussien

(2014) used a purposeful sample of 83 students, both bilingual and monolingual, to conduct a comparative study that concluded that learning English significantly and positively influences learning to read and to spell connected script in Arabic. Hussien (2014) employed descriptive statistics to analyze the data recorded through the two tools used with participants: Oral Reading Accuracy Measure (ORAM) and Spelling Accuracy Measures (SAM). These findings confirm, while also comparing student outcomes from the Arabic- English dual language educational programming and the monolingual Arabic education perspective, that the underlying proficiency theory developed by Cummins (2008) and the widely accepted theories in the literature of cross-linguistic transfer of literacy strategies and processes between languages of instruction that are widely different from each other in the various domains.

Cummins (2007) proposed extensively bilingual instruction in L2 classrooms based on his earlier formulation of the language interdependence hypothesis, which posited that languages have a common pool of literacy skills first acquired in L1 that can later be transferred to L2. Cummins (2007) advocated for the use of bi/multilingual instructional strategies ‘to enable transfer’ and allow wider possibilities to develop L1 (first language) and L2 (second or additional language) proficiencies. Research unveiled global concerns on the usefulness of a bilingual education. This is evidenced by the position papers developed as part of the UNESCO (2016) effort to promote educational strategies and approaches that are conducive to effective language and learning policies and programs that address the needs of students who learn in additional languages. This Global Education Monitoring Report used UNESCO testing data in addition to country-based case studies and was intended to be an authoritative reference that aims to inform, influence and sustain genuine commitment towards the global education targets in the new Sustainable Development Goals (SDGs) framework and underlined the importance of mother

tongue instructions for students, especially those living in poverty. Ball (2011) used a literature review and policy recommendations approach to better understand what general bilingual education research and strategies apply to early childhood environments and underline the role of the mother tongue in learning additional languages.

There are a number of studies in the literature that originate from the Canadian French language immersion programs based on the research and theoretical advances in bilingual education presented by Cummins (2000). Manterola (2014) transferred this theoretical knowledge and applicability to the Basque context to conclude that the goals of bilingual and multilingual education should focus on competencies and positive attitudes toward linguistic diversity. Baker (2001) compiled authoritative definitions and understandings of key concepts related to this field from previous literature reviews and cited data-supported articles.

The political context of learning other languages in the United States and the implications that this had on educational policy have helped produce the most exhaustive studies pertaining to the effectiveness of bilingual education programs and the impact that dual language programs have on student achievement. The vast majority of US-based studies and their conclusions on the efficacy of bilingual education models on students' achievement have shaped what we know about the impact of bilingual education, but from an English-Spanish context of learning. Thomas and Collier (2002) completed the most comprehensive study on bilingual education to date on the long-term achievement of 210,054 (with a total of more than 70 primary languages represented) K–12 language minority students from 16 U.S. sites and during five years of research. Thomas and Collier (2002) used data collection and analysis in five stages and longitudinal databases that record information on students between four to 12 years in order to determine the size of the achievement gap as a result of learning in an additional language.

Gándara and Contreras (2009) made creative use of the data presented by Thomas and Collier (2002) and further meta-analyses on bilingual education and asserted that there is more than the types of programs and methodology of teaching in a new language that influences the lack of parity between first and second language learners in the Latino context. Ramírez et al. (1991) drew conclusions on bilingual education effectiveness from an eight-year longitudinal study comparing the student outcomes from different types of programs and approaches in dual language teaching and learning.

Internal MoE studies have focused on tangential, but potentially relevant topics, where the Department of Supervision and Assessment, Directorate General of Private Schools' study (قرير نتائج مشروع قياس مهارات مادة اللغة العربية لدى طلبة الصف الرابع الأساسي بالمدارس العالمية والمدارس ثنائية) (اللغة المطبقة للبرامج الدولية للعام الدراسي 2010 / 2011 م) assessed the proficiency in Arabic language skills of a sizable sample of students in private bilingual schools in Oman (only those who offer international programs) in addition to students enrolled in global private schools in the Sultanate. The results suggested that the performance of fourth graders in these private schools, as benchmarked to national Omani curriculum standards expectations for grade 4 in Arabic language, is comparable between males and females and generally weak, with an overall 59% achievement, highest in punctuation/spelling and lowest in knowledge of grammar. Additionally, MoE commissioned Vale (2013) to review the teaching of bilingual literacy, language and communication through a sample of ten bilingual and international private schools in Oman. Vale (2013) used school visits and interviewing techniques to underline the disconnect between the teaching of literacy in Arabic and English, the differences in status of the two languages of instruction, and the need to review MoE curricula and resources, while integrating the teaching and learning in English and Arabic to ensure better bilingual literacy skills for students.

Lindholm (1990) identified some of the prerequisites for effective leadership of two-way bilingual education programs in terms of the impact that school-based leaders can have on the implementation of bilingual education with students. An additive bilingual environment that has full support of school administrators in a context where the focus is on the core academic curriculum rather than on a watered-down version was found to have a positive impact of bilingual student learning. In addition to leading effectively high-quality instructional personnel, school leaders should promote a positive interdependence between teachers and students (Lindholm, 1990). Hopkins et al. (1994) underlined that school leadership was an essential contributing factor in creating a school culture and identity, which influenced greatly the overall success of the institution and its programs of education. In support of this, in the bilingual context of international education, Gallagher (2009) claimed that rigidly monolingual leaders may have good intentions to support language learners, but often they are misinformed and the policies and procedures they support can be detrimental for ELLs. Instead, leaders who hold a pedagogical approach that is inclusive and open to all other cultures were believed to be more effective when implementing bilingual programs of education in international schools.

The research on the role of the leadership in developing and implementing effective bilingual education programs underlines a common thread on how language learners are perceived in terms of the value of their educational and linguistic background. Students who are encouraged to use their language and previous knowledge acquired through their mother tongue, tend to transfer learning more readily and build confidence while learning academic content and skills through an additional language of instruction, usually English in this context. Flynn (2005) mentioned that a positive “can-do” attitude in this regard is absolutely necessary and added:

Those in leadership roles must be able to model the response needed and to take into consideration the fact that the ELL program should be based on sound education theory, that in implementing an ELL program, resources, personnel, and time must be reasonable and adequate to ensure success; and that the ELL program needs to be continually evaluated and revised...to determine if their ELL students are showing adequate progress in English language acquisition, reading, and mathematics. (para. 4)

School leaders need to create an environment that accepts and thrives on diversity in cultural terms and beyond language and the purely linguistic development of students. The entire staff is a resource for language learning that has to be taken into consideration when school leaders design the implementation plans for bilingual education programs, ideally integrated within the mainstream life of the school. Exemplary leadership results in the expectation that ELL students can participate in challenging academic coursework while they are learning English (Flynn, 2005). Christian (2016) recommended the need for further research in dual language to “examine outcomes and impacts beyond achievement reflected in standardized test performance, such as narrative writing development and students’ perceptions of bilingualism. Further studies should look inside classrooms at teacher pedagogy and use of instructional languages by students and teachers” (p. 2).

The single empirical study conducted in Oman by Tekin (2014), coupled with the particularities discovered by Hussien (2014) in the Arabic language learning context in Egypt, discussed the concerns over the loss of Arabic documented by Raddawi and Meslem (2015), the continued presence in the literature of the role of school leadership for effective program implementation in Lindholm (1990) and others in the literature, and the global concern with bilingual education (UNESCO, 2016) and its efficacy in K–12 programs of education. This is

evidenced by the US-based detailed accounts from the English-Spanish models of dual language approaches from Thomas and Collier (2002) and Ramirez et al. (1991) all offer a solid literature background for a first qualitative multiple case study investigation into the effectiveness of English-Arabic dual language education program in a number of K–12 private schools in the Sultanate of Oman, but also substantial methodological opportunities for qualitative research in the field of bilingual education in this particular regional context.

Bilingual Education in Oman

The Sultanate of Oman has a long history of successful cultural and linguistic exchanges that have influenced the overall make-up of the Omani society and have shaped local communities through intercultural exchanges and exposure to different languages. An increasingly prevalent globalized world context and contemporary trends in this society in the Gulf region have recently influenced Omani parents' desire to have their children study English as early as possible during their school and even pre-school years, in the public or in the private educational system. Therefore, learning English and through the English language medium has become increasingly prevalent through diverse bilingual language learning approaches in the overall national educational system (Shaibany, 2016).

Tekin (2014) reported on these accelerated plans to offer early childhood education in two languages, English and Arabic, through the efforts of Sultan Qaboos University, who established a model Child Care Center (CCC) on its campus to pioneer bilingual education in the early years. This type of educational program was reported to also have the potential to positively impact young children's development and acquisition of their primary language, usually Arabic.

The introduction of English lessons in both the primary and secondary governmental

schools in the 1970s marked the initial exposure of students, nationally, to an additional language taught as a separate subject and through a foreign language teaching and learning approach. Al-Jardani (2012) described the English subject as currently being taught as a second language subject in government schools in Oman, with students starting to study it from first grade, along with their dominant language and mother tongue, for the vast majority, Arabic. The overall student contact time through English lessons was reported to be between three to four hours per week.

Since the beginning of its implementation, further developing and of the English curriculum in Oman, the MoE used both commercial publications and in-house developed resources for the use of students and teachers. Two series of commercial textbooks were used first, with five subsequent curricula of in-house developed materials used afterwards in order to deliver the curriculum. The most recent curriculum review was accomplished in 1998 and the outcomes were titled the Basic Education System. Government schools in Oman use only the sole English national course book, an in-house developed resource, called “English for Me” (EfM) for grades 1-10 and “Engage with English” (EWE) for grades 11–12, which was based on the new reform project. Every teacher must deliver the curriculum through this textbook and is required to finish all of the lessons as per MoE deadlines. Therefore the syllabus is seen as the main source of input and many times the resource/textbook is considered the main curriculum source for many practitioners in the field (The English Language Curriculum Section, 2010). MoE is engaged in current efforts to research the current situation of the English language teaching and learning in government schools and to reform the overall system in light of current and future student learning needs.

Shaibany (2016) reported that only 27% of schools in Oman, both public and private,

offer English and Arabic education, with a majority of the schools overall providing their entire curriculum taught in Arabic. Therefore, out of about 600,000 students who receive basic education in Oman, only around 162,000 study through a curriculum taught bilingually. As per MoE regulations, private schools that offer bilingual education must teach mathematics, sciences (physics, biology, chemistry) and ICT (information and communications technology) in English.

In the educational environment of private schools, the MoE approved an initial request in the 1980s from a prominent private school to also implement educational programs in the English language, in addition to their Arabic language learning provisions for students. Once this request for the implementation of English language-based educational programs and disciplines was granted, a series of other similar requests followed from additional private schools and the MoE was compelled to approve them and create a new category of private schools in the Sultanate, titled “bilingual schools.” MoE regulates some of the educational aspects of teaching and learning in bilingual schools and has supervisors who travel to schools and evaluate the work of teachers and administrators. At the present time, there is little to no data on the overall quality of teaching and learning in private schools, including in the bilingual schools category, due to the fact that MoE does not employ a schools' evaluation or accreditation process within the educational institutions it supervises (Al-Jardani, 2012).

Review of the Methodological Issues

The paradigms that are most common in the researched literature take often into consideration the impact that bilingual education has on students' first language and especially the rate at which they are able to acquire the additional language in an academic context (Hussien, 2014). The majority of the researched literature uses a quantitative approach and compares the academic outcomes of first and additional learners of English with those of

additional English learners (Thomas & Collier, 2002). It is clear from a synthesis of the literature that there is a gap between achievements, both in English and academically, between students of minority languages and that a quantitative research approach was only partially able to elucidate why this is the case (Gándara & Contreras, 2009).

The literature includes authoritative and widely accepted quantitative analyses, such as that from Ramírez et al. (1991), who drew conclusions on bilingual education effectiveness from an eight year longitudinal study on comparing the student outcomes from different types of programs and approaches in dual language teaching and learning in the English/Spanish bilingual context. Many studies, such as Ramírez et al. (1991), gathered data from longitudinal databases of student outcomes and fewer use a qualitative approach, with research tools such as surveys and interviews. UNESCO (2016) used testing data in addition to country-based case studies to inform, influence and sustain genuine commitment towards the global education targets in the new Sustainable Development Goals (SDGs) framework and underlined the importance of mother tongue instructions for students, especially those living in poverty. Ball (2011) utilized a literature review and policy recommendations approach to better understand what general bilingual education research and strategies apply to early childhood environments and underline the role of the mother tongue in learning additional languages.

The one empirical study on bilingual education in Oman dealt with the impact of a bilingual education on Omani students and used a combination and quantitative and qualitative methodology and descriptive statistics to analyze the students' assessment of their English and Arabic language proficiency and parent questionnaires (Tekin, 2014). Hussien (2014) employed descriptive statistics to analyze the data recorded through the two tools used with participants: Oral Reading Accuracy Measure (ORAM) and Spelling Accuracy Measures (SAM). The impact

of bilingual educational programs in Oman and neighboring countries, such as the UAE, have been the focus of many debates in the media, but little investigation and few empirical studies have been conducted in this area of the world on this topic.

This diversity of research instrumentation approaches, coupled with local and regional particularities, had an important impact on the type of specialized literature that is available, relevant, and useful in terms of methodology when conducting a research study that is aimed at uncovering more details on some elements of an effective K–12 bilingual education program in the context of the private educational system in the Sultanate of Oman. Our cultural obsession with whether to pursue English-only versus bilingual education has obscured the more critical social and pedagogical issues that need to be further studied and understood through qualitative approaches. The present study will endeavor to unveil, through qualitative methodology, the specifics of implementing bilingual education in an Arabic language-learning context and particularly in the private education sector in the Sultanate of Oman.

Synthesis of Research Findings

The long debate in the United States over the efficacy of bilingual education as a feasible methodology of teaching and learning in educational programs for speakers of other languages fueled the undertaking of extensive research focused on those approaches and learning methodologies that best serve students who learn in an additional language. The proponents and those who opposed bilingual education have produced scientific evidence, conceptual understandings, and theories that assist schools and educational systems in making decisions concerning effective ways of supporting students' learning and performance. Furthermore, according to Cummins (1992), both opposing groups have accepted a few common studies, such as the research outcomes of Ramírez et al. (1991) as methodologically sound. This body of

literature allowed educationists a better understanding of how language learning works and how bilingual education programs can best support the learning of students, aspects that are both important when making policy decisions for dual language programs and when schools plan on how to best support students enrolled in these programs.

Ramírez et al. (1991) published a comprehensive study that has since been known in the field as the “Ramírez Report” and drew conclusions on the learning progress of primary Latino students from data collected through an eight year longitudinal study and by comparing learning outcomes from three different types of programs. These programs were English immersion programs with almost exclusive use of English in primary school, early-exit bilingual programs with Spanish being used one third of instructional time in KG and first grade with a phase out thereafter, and late-exit bilingual programs with Spanish used intensively in KG and English introduced for one third of the instructional time in first and second grades, half the time in third grade and 60% thereafter. Cummins (1992) concluded,

the findings of the Ramírez Report indicate that Latino students who received sustained L1 instruction throughout elementary school have better academic prospects than those who received most or all of their instruction through English. This pattern of findings refutes the theoretical assumptions underlying opposition to bilingual education while supporting the theory underlying developmental and two-way bilingual programs. (p. 8)

This overall conclusion underlined the benefits of a bilingual education and was well aligned with the later Gándara and Contreras (2009) findings that made use of the data presented by Thomas and Collier (2002) to claim that well-implemented bilingual programs can claim a moderate advantage over English-immersion instruction. However, it is Gándara and Contreras’ (2009) meta-analyses on bilingual education that asserted that there was more to the issue than

the types of programs and methodology of teaching in a new language that influences the lack of parity between first and second language learners in the Latino context. Cummins (2007) proposed extensive bilingual instruction in L2 classrooms, based on his earlier formulation of language interdependence hypothesis, which posited that languages have a common pool of literacy skills first acquired in L1 that can later be transferred to L2. Cummins (2007) advocated the use of bi/multilingual instructional strategies ‘to enable transfer’ and allow wider possibilities to develop L1 and L2 proficiencies. This approach was supported by Marzano (2012) and Tretter et al. (2014), who suggested that vocabulary terms introduced with images, comprehensible definitions, and further contextual knowledge are effective pedagogical strategies for making content comprehensible to students acquiring English.

Thomas and Collier (2002) used data collection and analysis from longitudinal databases in order to determine the size of the achievement gap as a result of learning in an additional language. As part of this study, Thomas and Collier (2002) measured and analyzed achievement in English, Spanish, and other school subjects in both languages of instruction. Coupled with student backgrounds, studies have shown that as a major policy implication that enrichment 90-10 and 50-50 one way and two way developmental bilingual education programs (or dual language, bilingual immersion) are the only programs found to assist students to reach high performance (50 percentile on standardized testing) in both languages of instruction, maintain, and further this high level of achievement throughout their schooling. Thomas and Collier (2002) underlined that bilingually schooled students outperform monolingually schooled students in academic achievement in all subjects, after 4-7 years of dual language schooling and that the strongest predictor of L2 student achievement is amount of formal L1 schooling. Jepsen (2010) also compared student outcomes between bilingual education and monolingual programs and

reported quite differently on this. Jepson stated that students in bilingual programs performed at a 0.3 standard deviation lower than their counterparts in first and second grade, with a less than 0.1 difference from data in third through fifth grade. These disagreements about the efficacy of bilingual educational programs as underlined in differences in research outcomes and conclusions from different researchers underlined the need for even further and more rigorous assessments of the benefits of dual language programs on students learning. Understanding which aspects of the school policies and curriculum, bilingual educational planning and approaches, teaching practices and pedagogies, student background and other variables can support educators to make better choices related to the education of additional language learners.

Hussien (2014) confirmed the positive influence of additionally learning English on the Arabic language skills of students and therefore confirming the underlying proficiency theory developed by Cummins (2008) about the cross-linguistic transfer of literacy strategies and processes between languages of instruction through a study conducted in an Egyptian bilingual and monolingual context. These findings supported Raddawi and Meslem's (2015) assertion regarding the increasing supremacy of English language education and the perceived loss of language usage in the bigger socio-cultural environment of the Gulf. Tekin (2014) focused directly on researching student learning outcomes in English and Arabic in a small sample group of early childhood students, in mainly Omani nationals and concluded that there are significant gains in learning for students enrolled in a local bilingual program. Gándara and Contreras (2009) concluded that even if well-implemented bilingual programs can claim a "moderate" advantage over English-immersion instruction, no language intervention has erased the gap between English speakers and English learners or between native-English white children and speakers of other languages. The cultural obsession with whether to pursue English-only versus

bilingual education has obscured the more critical social and pedagogical issues that need to be further studied and understood.

Hopkins et al. (1994) underlined that school leadership was an essential contributing factor in creating a school culture and identity, which influenced greatly the overall success of the institution and its programs of education. In the bilingual education context, Lindholm (1990) identified some of the prerequisites of effective leadership of two-way bilingual education programs in terms of the impact that school-based leaders can have on the implementation of bilingual education with students as an additive bilingualism environment supported by highly capable instructors, a focus on core academic curriculum without watering down the content, an inclusive pedagogical approach supported by appropriate resources, personnel and time, and a positive interdependence between teachers and students where the mother tongue is used for transfer to allow students to participate in challenging academic work while learning the new language of instruction. Flynn (2005) mentioned that a positive “can-do” attitude of school leaders in implementing bilingual education programs is absolutely necessary.

UNESCO (2016) has long endeavored to promote educational strategies and approaches that are conducive to effective language learning policies to meet the needs of students who learn in additional languages or in dual language programs. Ball (2011) agreed with the organization’s conclusions related to the essential role of the mother tongue in learning additional languages. Manterola (2014) transferred theoretical knowledge and researched aspects of bilingual education theory to the Basque context and conclude that the goals of bilingual and multilingual education should focus on competencies and positive attitudes toward linguistic diversity.

Critique of Previous Research

The above-mentioned 20-year debate in the United States over the efficacy of bilingual education as a feasible methodology of teaching and learning in educational programs for speakers of other languages had been based on different research outcomes and on various approaches in the literature (Cummins, 1992). National and political aspects have long influenced approaches to English language education and educational products, resources and services from English speaking countries have long changed the ways in which dual language programs are approached in the local environment of the study, the Sultanate of Oman as part of the regional realities of the Gulf and the Gulf Cooperation Council (GCC) countries (Tekin, 2014). The extensive global research focused on bilingual education approaches and learning methodologies for students who learn in an additional language was based on various research approaches, sampling techniques and sizes, outcomes focus and methodologies that have greatly influenced the validity and authority of outcomes (Thomas & Collier, 2002).

As previously mentioned, proponents and opponents of bilingual education practices used different research findings from various studies in order to support their agendas. A multitude of theories have been therefore developed and utilized to inform policy makers and educational programs developers at all levels and around the world (Gándara & Contreras, 2009). Knowing which research is most methodologically valid and unbiased is an effective tool in assisting with the selection of appropriate type of programs for diverse populations of students.

Ramírez et al. (1991) managed to publish one of the most authoritative studies based on extensive quantitative data on this topic and gain acceptance for its findings from both sides of the debate. It was also Thomas and Collier (2002) who used data collection and analysis from longitudinal databases to draw general well-accepted conclusions and policy implications for

bilingual education and those aspects that will most importantly impact bilingual teaching and learning. In order to underline the time and effort needed for implementation of bilingual education programs, Christian (2016) stated, “unlike other bilingual education models, dual language programs take a long-term view to developing high levels of proficiency in both languages of instruction” (p. 4).

There has been little research accomplished nationally in Oman on this topic and this was championed by Tekin’s (2014) attempt to quantify and qualify the impact of a bilingual program on early childhood student outcomes. Tekin (2014) recognized that the study was limited in terms of context, number of participants, gender and ages of students and that further research should be conducted on students enrolled in bilingual programs at different grade levels, in different contexts, such as private education in Oman. The further lack of clarity on why learners of other languages fail to close the achievement gap in bilingual programs have motivated Gándara and Contreras (2009) to claim that there are other factors beyond the types of programs and methodologies of teaching and learning in a new language that influences the lack of parity between first and second language learners in the Latino context. This is therefore a further opportunity to investigate qualitatively the situation of bilingual education and its efficacy in private schools in Oman. An indication of the role of the mother tongue in learning a new language was suggested by Collier (1995) who stressed the importance of English learners using their native or other known languages as a point of reference while acquiring a new language to recognize points of similarity and difference and consequently transfer old understandings into the new linguistic context of their learning.

With a single empirical study conducted in Oman on a small sample, Tekin (2014) confirmed the findings of the quantitative meta-studies of Ramírez et al. (1991) and of Thomas

and Collier (2002). Ramírez et al. (1991) and of Thomas and Collier (2002) stated that the Arabic language learning particularities and dual languages influence discovered by Hussien (2014) could be added to the concerns over the loss of Arabic documented by Raddawi and Meslem (2015) to inform an inquiry on how this is implemented in a number of private schools in Oman as managed by MoE. Cummins (2008) utilized the published quantitative data and stressed the importance of his proposed common underlying proficiency theory and of the transfer between the two languages of instruction in bilingual programs. While UNESCO (2016) reiterated the evidence presented by the US-based detailed accounts from the English-Spanish models of dual language approaches from Thomas and Collier (2002) and Ramirez et al. (1991), it also underlined the need for mother tongue instruction and a focus on comprehension in terms of language and learning.

Summary of the Literature Review

MoE manages a bilingual education program in K–12 private schools and regulates the instructional time, curriculum and assessment practices, and supervises the teaching and learning through its staff. In addition to these ministerial stipulations, choices made at the school level on how to best educate students through the bilingual education program had enduring effects on the quality of the educational process and the outcomes of students enrolled in these programs. The review of the literature on effective bilingual approaches globally, regionally and locally provided evidence on student achievement and effective models of bilingual education, while Thomas and Collier (2007) provided a theoretical framework in the prism model that was utilized here to better understand the impact that the bilingual program had on the students academic development, where the four interdependent components influence the students success through both languages of instruction in the bilingual program of education. This

conceptual framework was used to formulate the research questions about the MoE bilingual education program and its varied implementation in K–12 private schools in the Sultanate of Oman.

The literature, such as the body of research studies on the benefits of bilingual education from Gándara and Contreras (2009), Thomas and Collier (2002), Jepsen (2010), and Ramírez et al. (1991) is both rich and controversial in the context of dual language Spanish and English programs in the United States and it offers an important sum of quantitative data from longitudinal studies and a set of policy recommendations found to be essential for bilingual education programs. According to Krashen’s (2013) theory of second language acquisition, the second or additional language learning process mirrors the native language acquisition process in an authentic and realistic learning environment. Krashen’s (2013) second language acquisition theory underlined the role of comprehensible input and how emotional and cultural factors impact the additional language acquisition process. Affective factors, such as lack of acceptance, unease, or thoughts of discrimination, impede second language learning by blocking comprehensible input. The affective filter can be removed or significantly reduced through positive and encouraging teaching approaches. Therefore, language and content can be acquired simultaneously with the appropriate support and guidance (Krashen, 2013).

Moreover, there is limited research available on dual language programs in the Gulf area that deals directly with models of bilingual education for speakers of Arabic in this regional context. Tekin (2014) was the sole researcher who has looked into and published a study on the impact on dual language education on a small number of Omani students at an experimental kindergarten in Muscat. Tekin (2014) confirmed the findings of Cummins (2000) and Cummins (2008), and this, in addition to the work of Raddawi and Meslem (2015) and Hussien (2014),

helped frame this study's regional and local context of the impact of bilingual education programs on users of Arabic. Due to the relatively high volume of research from the U.S. that pertains to learners of English and Spanish, the decision was made to also include literature on a more global nature and impact, especially those studies derived from research in many countries and published by international organizations such as in Ball (2011) and UNESCO (2016).

The interest in bilingual educational programs in international research has produced a substantial body of research that can offer essential guidance in understanding the role of decisions made at the school level on how to best educate students through bilingual education programs and what elements of these programs might have enduring effects on the quality of the educational process and especially on the outcomes of students enrolled in these programs. What is researched in this multiple case study is the dual language program in K–12 schools in Oman and the particularities of implementing this MoE-developed program in private schools. The contextual boundaries of the literature review for the local implementation of the bilingual program will be expanded through the focus of the present study that endeavors to answer two main research questions.

The following research questions were used to guide this qualitative exploration on how the MoE bilingual education program is implemented in private bilingual schools in the Sultanate of Oman:

RQ1: What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?

RQ2: How does the program implementation impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?

Based on this review of literatures which developed a unique conceptual framework using researched models of bilingual education, the role of mother tongue in learning additional languages, and the role of educational decision making at ministry and school level to understand what factors positively influence the learning outcomes of students enrolled in bilingual education programs, there is sufficient reason for thinking that an investigation examining the impact of private school-based factors on the bilingual education program in the Sultanate of Oman would yield socially significant findings. The literature review has provided strong support for pursuing a research project to answer the above main research questions on the nature of the influences of MoE and private school-based factors on the implementation of the bilingual education program and the effects that these factors have on student learning.

Chapter 3: Methodology

Introduction to the Methodology

Bilingual education and its impact on student learning has been studied through the use of both qualitative and quantitative methodology, with a wider focus in the researched literature on using quantitative approaches. Quantitative research is geared toward observing and collecting numerical data and statistical analysis to agree or disagree with predetermined research hypotheses, such as in the longitudinal analyses from Hussien (2014), Gándara and Contreras (2009), Thomas and Collier (2002) and Ramírez et al. (1991). Qualitative research, on the other hand, endeavors to answer ‘how’ and ‘why’ questions about contemporary issues that do not require manipulation of behavior-based events (Yin, 2014), such as the implementation of the bilingual education program in private schools in the Sultanate of Oman. While quantitative studies provide measurable data using statistical analysis, qualitative designs are useful for exploration of a phenomenon within a real-life context and over a longer period of time (Baxter & Jack, 2008). This qualitative descriptive multiple embedded case study investigated the phenomenon of implementing the bilingual education program in K–12 private schools through data collected from semistructured interviews, classroom observation, and MoE policy documentation. Regarding the time necessary to effectively implement certain types of bilingual education programs, Christian (2016) stated, “unlike other bilingual education models, dual language programs take a long-term view to developing high levels of proficiency in both languages of instruction” (p. 4).

The impact of bilingual education in Oman has become increasingly important, with a growing number of private K–12 schools that offer programs of education in two languages of instruction, generally English and Arabic. The researcher used a multiple case study research

design to explore the effectiveness in the implementation of the current bilingual education provisions in the private school sector in the Sultanate of Oman, as managed by MoE through its Directorate General of Private Schools. The data were gathered from visiting 26 different bilingual private schools located in Muscat, Seeb, Barqa, Nizwa, and Al Buraimi and cross-referenced, triangulated, analyzed, and compared to the most effective methods of implementing bilingual education from internationally-researched models presented here through the literature review, based on the prism model included in the conceptual framework of the study and anchored in the regional and linguistic educational context of Oman.

The nature of the present study is in part explorative through the choice of the two wide-ranging and open research questions that allowed the researcher to guide the inquiry in light of the unique context of implementing bilingual programs of education in the Arabic-English context in private schools. Qualitative studies, such as this one, are therefore more likely to yield useful data to answer more complex research questions when the purpose of research is to express the views and perspectives of individuals in real-world contextual situations, with minimal intrusion of artificial research procedures (Yin, 2016). Therefore, qualitative studies propose research questions that are complex and broad, in order to best learn from participants' experiences (Creswell, 2012). Christian (2016) recommended the need for further research in dual language to “examine outcomes and impacts beyond achievement reflected in standardized test performance, such as narrative writing development and students' perceptions of bilingualism. Further studies should look inside classrooms at teacher pedagogy and use of instructional languages by students and teachers” (p. 2).

The purpose of qualitative research study is to explain social behavior and in light of existing or emerging realities, where the use of multiple sources of evidence ensures the reliability of a qualitative study (Yin, 2016). Yin (2014) determined that how and why research

questions allow researchers to unveil further and more detailed explanations of events and behaviors in qualitative studies. Yin (2016) also found that qualitative research involves investigating the meaning of people's lives, viewpoints, cultural, environmental, and social conditions as experienced in real-world conditions, while carefully reporting the views and perspectives of the study participants. Qualitative research provides an in-depth look into the lives, perspectives, experiences and environment of those studied with a desire to explain a phenomenon, theory, or social condition.

The choice of a qualitative approach became evident for this situation where the complexity and specificity of the bilingual education program implementation would be difficult to ascertain through a quantitative approach. However, the rigor of the study is guaranteed through the main characteristics of the qualitative research that require transparency, attention to detail and organization, and adherence to carefully collected evidence (Yin, 2016). As a word of caution, a proposed limitation of qualitative studies is in the number of study participants. The Tekin (2014) study gathered data from only 11 participants, with limited transferability and this made it difficult to make systematic comparisons between students enrolled in monolingual and bilingual education programs. Measures have been taken for the present study to allow a wide-ranging and unprecedentedly sizable number of participants from 26 different schools, to allow for more data gathering from the local context and further opportunities for the generalization of the study results. In addition to this, Patton (2002) submitted there are no rules for sampling size in qualitative studies as long as data saturation, or sampling to the point of redundancy, is achieved.

The intention of the researcher in this study is to use a qualitative research methodology and a multiple embedded case study research design for the purpose of exploring the complex experiences of implementing the bilingual education program in K–12 private schools in Oman.

The focus was on the sociocultural, linguistic, academic, and cognitive learning factors included in the prism model that can contribute to the more effective implementation of this education program for student academic success in a representative number of private bilingual schools in the Sultanate (Thomas & Collier, 2007). The findings of the study were envisioned to be significant due to the limited amount of specialized literature about the role and impact of bilingual education in schools in the Omani context.

Research Questions

The following research questions were used to guide this qualitative exploration of how the MoE bilingual education program is implemented in private bilingual schools in the Sultanate of Oman:

RQ1: What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?

RQ2: How does the program implementation impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?

The exploration of current approaches observed in schools that implement the program and the comparison of these findings with the best practices presented through the literature review may give an indication of what approaches are beneficial to learning and what areas of the program can be improved further in the future. Knowing what aspects schools need to focus on will ensure that the program of bilingual education in the Sultanate of Oman has a sustainable future ahead and an important role in improving students' academic capabilities through both languages of instruction.

Purpose of the Study

The purpose of this qualitative multiple case study is to explore the complex experience

of implementing the bilingual education program in a number of K–12 private schools in the Sultanate of Oman and to identify factors that contribute to the implementation of this education program in K–12 private schools in the Sultanate, and their impact on student learning. A qualitative research methodology and a multiple embedded case study research design were used to explore the complex experiences of implementing the bilingual education program in K–12 private schools in Oman. The focus was also on the sociocultural, linguistic, academic, and cognitive learning factors included in the prism model that can contribute to the more effective implementation of this education program for student academic success in a representative number of private bilingual schools in the Sultanate (Thomas & Collier, 2007). More specifically, the inquiry centered around certain aspects of the educational process that might influence the implementation of the bilingual program in schools, such as: the MoE planning requirements for program implementation, the role of school-based leadership in implementing bilingual education learning for students, consistency of teaching and learning with all components of the prism model, the impact that the curriculum and teaching strategies have on additive bilingualism and effective student learning, and on the role that the teaching in both languages of instruction has on students' academic success.

Design of the Study

The MoE offers a bilingual education program in Arabic and English (and a bilingual General Education Diploma [GED] as a high school qualification for students) in K–12 private schools in the country, by regulating student instructional times, prescribing assessment practices/tools and supervising the teaching and learning through its private schools' directorate staff (MoE, 2015). In addition to these ministerial stipulations, various choices made at the school level on how to best educate students through the bilingual education program have

enduring effects on the quality of the educational process and the outcomes of students enrolled in these programs. Understanding what impact the program implementation has on student learning and academic success in schools will allow the MoE to design approaches that will in turn develop the capacity of development of this program. Christian (2016) recommended the need for further research in dual language to “examine outcomes and impacts beyond achievement reflected in standardized test performance, such as narrative writing development and students’ perceptions of bilingualism. Further studies should look inside classrooms at teacher pedagogy and use of instructional languages by students and teachers” (p. 2).

According to Yin (2014), case study research generally answers how and why questions about contemporary issues that do not require manipulation of behavioral events and this was a close match with the two chosen research questions of the present multiple case study on the implementation of the bilingual program in private schools in Oman. Yin (2014) further identified five components that are essential to all case studies including the study’s questions and propositions, analysis components, logic linking data to the propositions, and criteria for interpreting the findings. For this study about the bilingual program implementation in schools and the factors that might affect this, a qualitative methodology provided an in-depth inquiry into stakeholders’ experiences, derived from data collected from MoE documentation, semistructured interviews with participants and classroom observations. A qualitative case study framework was chosen to allow for a more in-depth understanding of the implementation phenomenon (Yin, 2014).

Researchers have produced internationally a substantial body of literature that offered essential guidance in understanding the role of decisions made at the school level on how to best educate students through bilingual education programs and what elements of these programs

might have enduring effects on the quality of the educational process and especially on the outcomes of students enrolled in these programs (Christian, 2016; Collier & Thomas, 2007; Cummins, 2008; Gándara & Contreras, 2009; Garcia, 2009; Hussien, 2014; Jepsen, 2010; Manterola, 2014; Marian, et.al., 2013; Raddawi & Meslem, 2015; Ramírez et al., 1991; Rodríguez, et al., 2014; Tedick & Wesely, 2015; Thomas & Collier, 2003; Vale, 2013). However, these studies and meta-analyses presented in the literature review chapter are based on contexts of learning that are quite different from the English-Arabic dual learning program in private schools in Oman. Therefore, a qualitative multiple embedded case study design that includes visits to schools for data gathering through classroom observations and open-ended interviewing with stakeholders in this overall case study design, would yield further understanding of what the nature of the influences of MoE and private school-based factors on the bilingual education program in the Sultanate of Oman and how these influence the effective implementation of the program for student learning.

This study was focused on the factors that influenced the bilingual program in schools, and specifically how these factors impacted students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context. Qualitative research is conducted to investigate the everyday lives of different types of people and perspectives under different circumstances and in different situations (Yin, 2016). According to Creswell (2013), there are five approaches to qualitative research: narrative research, ethnographic research, phenomenological research, grounded theory research, and case study. Narrative research designs intend to describe the lives of individuals by collecting stories about people's lives, while grounded theory research adds narration and description to generate theories based on common, shared experiences of a certain population (Creswell, 2013). Phenomenological

research usually describes the common understanding of lived experiences of a group of individuals in light of an overall idea or phenomenon (Creswell, 2013). Ethnographic research design targets an entire culture-sharing group and focuses on patterns of beliefs, and behaviors in a certain time frame (Creswell, 2012).

Creswell (2013) also identified the main role of a case study to explore a real-life system over time through extensive, comprehensive data collection and this type of designed was deemed to be most closely aligned with the purpose and research questions of the current study on the implementation of the bilingual program. A case study may be explanatory or exploratory and may be utilized in both qualitative and quantitative studies (Creswell, 2013). This was especially useful to the present study, where the first research question is exploratory in terms of understanding which factors might affect the program implementation, and where the second research question is explanatory and intended to ascertain how these identified factors impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context.

Yin (2014) asserted that case study research is used to understand phenomena associated with individuals and groups from a holistic perspective, over which the researcher has minimal control, where there is clear "logic of design, data collection techniques, and specific approaches to data analysis" (Yin, 2014, p. 17). Case study research must incorporate procedures to guard against threats to validity, preserve a chain of evidence, and investigate and test variant conclusions (Yin, 2014). Additionally, Patton (2002) disagreed that observational data may constrain data due to observer bias or ability. According to Yin (2014), case studies should include multiple data sources to be triangulated for in-depth analysis and understanding of the issue to be researched. It was reported by Maxwell (2003) that this would be feasible in the case

where it is necessary to extend the implications based on the “development of a theory of the processes operating in the case studied” (Maxwell, 2012, p. 138). The rationale for selecting a multiple case study with embedded units allowed for the examination of multiple units/ various teachers and administrators from 26 different schools within the single context of implementing the MoE bilingual education program nationally and is closely aligned with Yin (2014) and Yazan (2015) rationales for multiple embedded case study design.

The case study methodology proposed here was used to explore the diversity in the implementation experiences found in the schools. It allowed the researcher to develop two research questions and employ a fluid and flexible methodology while narrowing the study’s focus to phenomena of program implementation in the particular private school context (Yin, 2014). The construct validity was ensured through the use of multiple sources of evidence gathered from the 26 schools in the overall sample and by establishing a reliable chain of evidence through the development and maintenance of a case study database developed for the unique local environment where the private bilingual schools are located. This is consistent with Guba (as cited in Gay, Mills, & Airasian, 2012) who recommended that data and context are to be described in detail so that readers are able to “see the setting for themselves” (p. 393). Internal and external validity of the research case study research design was achieved through a time series analysis and a replication of logic through a multiple case study approach. The qualitative approach allowed the exploration of stakeholder perceptions vis-à-vis classroom teaching behaviors for the implementation of the bilingual education program in schools, and was coupled with researcher-observations of teaching and learning to provide sufficient data and address the research questions.

Research Population and Sampling Method

In addition to the role of principal researcher, the study's author was also a consultant with the national education regulator at the time of implementing the data collection protocols, and while this was instrumental in both having access to schools in order to gather the necessary data, it also risked a possible conflict of interest perceptions from participants recruited in schools. Also, as an adult English learner and seasoned multilingual education professional, the researcher's personal and professional thoughts on language acquisition and bilingual education best practices were not disclosed to participants in order to avoid bias and to enable a more authentic representation in the study of participants' thinking and experiences with the bilingual program under study. Communication with the schools underlined that the data collection would be de-identified, the fact that the visits are nonevaluative from a ministerial point of view and these aspects are also further discussed in the ethical issues section in Chapter 3.

The population for this study was chosen in light of the ability of the researcher to secure access to all the research sites, a wide selection of private bilingual schools around the country, due to the researcher's association with the MoE, the national education regulator. In addition to the role of principal researcher, the author was also a consultant, at the time of the study implementation, with the national education regulator, the MoE. This was instrumental in both having access to schools in order to gather the necessary data, but also in risking conflict of interest perceptions from participants in schools. Therefore, efforts were made to continuously underline for participants the independence of this study from the MoE, both in the Consent Form (see Appendix A) and in the data collection protocols (see Appendix B).

Twenty-six bilingual schools from various governorates in the country were deemed to be a representative sample of private schools from the total of 163 that offer the bilingual program

in the Sultanate. An effort was made to also include schools in the sample from geographical areas farther from the capital, where most of the private schools in the country are concentrated. The intention was to allow for convenience and easy access to school sites around the country, but at the same time to provide a representative number and types of schools in order to provide a feasible sample of approaches in the bilingual program that will help in addressing the two research questions of the study. The greatest concentration of private schools that offer the bilingual program is found in the capital, Muscat, and specifically at the outskirts of the city, in the Seeb area. Zoning and municipality regulations determined a higher concentration of private bilingual schools in this area of the city, so this had to be taken into consideration when making decisions on the school sample selection.

Schools were chosen based on the purposeful sampling concept, in order to allow the researcher to be able to gather sufficient relevant data and therefore address the study research questions effectively (Patton, 2015). Two main categories of schools were identified for the purpose of recruitment in the sample from the KG-12 overall school list provided by MoE: private bilingual schools that offer the bilingual program exclusively at all levels/grades on offer and private bilingual schools that offer the bilingual program in addition to the national program in Arabic or in combination with various international programs of education. There was a variety of school sizes represented in the sample in terms of student enrollment, from the smallest with only 38 students, to the largest, with 2,600 students of reported students enrolled on multiple campuses. When schools had multiple campuses, only one of these was used for data collection purposes, and the campus visited was considered representative for the whole school. The majority of the private bilingual schools included in the sample offer education for students in all K–12 classes, with some schools included primary and middle school levels, while very

few offered only primary classes.

Instrumentation

Open-ended interviewing, classroom observations and MoE policy documentation were used to gather the data for this study. A variety of school sizes were represented in the sample in terms of student enrollment, from the smallest with fewer than 50 students, to the largest, with over 1,500 reported students enrolled. When schools operated on multiple campuses, only one of these was used for data collection purposes. The majority of the private bilingual schools included in the sample offer education for students in all K–12 classes, with some schools included primary and middle school levels, while very few offered only primary classes. An effort was made to observe at least one class period in Arabic and one in English at all levels where the bilingual program is offered in the school. Simultaneous translation when taking detailed classroom visit notes was used. Detailed descriptions (rich and thick descriptions) of observed classroom behaviors were included in the running log-type of instrument. Coding was used to reduce, synthesize and analyze the running log gathered data on the context of the classroom activity, the types of teacher-initiated interactions, types of students' responses and the various instructional aspects present from the four domains of the prism model, as they relate to the conceptual framework and the research questions. The interviewing protocol (see Appendix B) includes five items and was used in English or through direct Arabic interpretation and translation with the participants. The introductory question on the context provided data used to add details in addressing both research questions of the study. Clarifications were offered about the questions when participants request this, and answers provided through both languages were recorded in the database of notes through the help of a bilingual interpreter. The interviews lasted around 40 minutes, and all responses were recorded/typed in the study notes database.

Classroom observations of five to 10 minutes per class period were used for this study, using the running log instrument titled “Data Collection Protocol-Running Log for Classroom Observations” (see Appendix C). Running logs were deemed to be useful in qualitative case studies when the researcher needed to determine the nature and quality of events, interactions or behaviors, with a time and event sampling strategy in order to provide a body of data that can be reanalyzed through extensive coding and a focus on quality control (Chesterfield, 1997). In addition to that, MoE published documentation with stipulations for private schools implementing the bilingual program, such as the *Annual Study Plan for Grades (1-10) and (11-12) Private School (Bilingual)*. Directorate General of Private Schools (Ministry of Education, 2015), and *Weekly Plan Scheduling Requirements for the Bilingual Program. Academic year 2017-2018 and onward*. Directorate General of Private Schools (Ministry of Education, 2017). These were reviewed and analyzed for data gathering, pertaining to MoE policies, regulations and procedures related to the bilingual program in order to compare and triangulate the data gathered with the other two instruments.

Data Collection

Data were collected in the form of written notes, later transcribed, from semistructured interviews and typed detailed descriptions in the form of running logs of the behaviors of students and teachers from the classroom activities observed. Recording participants’ voices during interviews/discussions was considered, in order to accurately and effectively collect all the information from participants during these meetings. However, this approach was found not to be acceptable for a diversity of participants, especially for conservative female participants, due to the local traditional faith-based concerns expressed to the researcher. Instead of recording the interviews, it was decided that the researcher would take notes during the interviews and

transcribe them immediately afterwards, a practice that would be more acceptable for participants.

Classroom observations of lessons taught in Arabic and in English at all levels where the bilingual program was offered in the school were used to gather the data. Simultaneous translation when taking detailed classroom visit notes was used. Detailed descriptions (rich and thick descriptions) of observed classroom behaviors will be included in the running log-type of instrument. Coding was used to reduce, synthesize, and analyze the running log gathered data on the context of the classroom activity, the types of teacher-initiated interactions, types of students' responses, and the various instructional aspects present from the four domains of the prism model, as they relate to the conceptual framework and the research questions.

The researcher-made interviewing instrument were checked in terms of reliability and validity and used to support the interviewing data collection approach, in addition to the information gathered during the classroom visits/observations. The choice was made to use open-ended interviews and gather participants' perceptions in order to better understand the relationship between dual language teaching and potential student academic success in the context of implementing the MoE bilingual education program. Interviewing is a preferred method for gathering data to be used in qualitative research (Yin, 2014). The open-ended semistructured interviews covered areas linked to the two research questions and focused on the implementation of the bilingual program in terms of the overall context of the school, the leadership for language learning, language support services available, and collaboration for the implementation of the bilingual education program. The classroom observations were unannounced and lasted no more than 10 minutes per class period. Observing an equal number of lessons in Arabic and English was not consistently possible due to the scheduling of visits and

the availability of teachers who agreed to participate by signing the consent form. The available MoE policy documentation provided the data necessary for comparisons and triangulation for the program policies and regulations.

The choice of these instruments also stemmed from the nature of the cultural context of private schools in this region and from the desire to involve participants in the study both through the English and Arabic languages used for instruction in the bilingual education program. Translation services to and from Arabic were made available to the participants throughout the school visits. In preparation for the school visits, there was communication from the researcher announcing each school visit and this format stayed consistent throughout the school sample, in order to allow consistency in approaches and more validity for the gathered data. The objectives of the school visits for data gathering were shared with the schools ahead of time, in order to announce the visit, inform potential participants, and motivate them to volunteer to participate. The shared objectives included:

- Gauge different approaches and variations in the MoE standard required implementation of the bilingual program.
- Compare teaching and learning approaches between subjects taught in English and those in Arabic across school sections/ages.
- Gather qualitative data on the value-added to students' learning by the bilingual approach in the schools.
- Observe teaching and learning practices as they pertain to the teaching of language and through language in all disciplines.
- Engage school leaders and teachers in sharing their perceptions about the bilingual program implementation.

Data collection was accomplished through the use of the instruments and approaches described above. The researcher traveled to schools and facilitated an approximately 40-minute group-based semistructured interview with administrators and teachers working with any age group level of the bilingual program in the school, either teaching in the Arabic side of the bilingual program or teaching a subject in English. Classroom observation data were gathered by visiting bilingual program classrooms unannounced and observe authentic learning for no more than 10 minutes per class period. The teachers were informed before signing the consent form and agreeing to participate in the study, that these classroom visits were non-evaluative in nature for them and that they should not modify the existing learning of the students in order to maintain a more authentic classroom experience of the learners.

Identification of Attributes

Multiple case study designs require the identification, connection and measurement of well-defined attributes that run through each case included in the multiple case study, to support the understanding of how the system in the overall study is bounded (Yin, 2016). The attributes identified for the current study are the sociocultural focus, linguistic focus, and cognitive and academic learning focus. The main attributes stem from Thomas and Collier (2007) prism model interdependent components and their use in this qualitative case study inform the conceptualization of the learning benefits of the MoE bilingual education program, related to the two main research questions.

The problem addressed in this study is that, despite the fact that the MoE mandates general regulations, curriculum and scheduling requirements for its bilingual program of education, schools' approaches to the program implementation might differ in light of the addressed components and dimensions of the prism model (Collier & Thomas, 2007), therefore

with various effects on improving student learning. The data collected provide the researcher with evidence in order to explore and provide a complex response to the two research questions regarding the impact of the bilingual program implementation on teaching and student learning. Despite the many particularities in implementing the bilingual education program in schools, the conceptual framework and the identified attributes provide a multidimensional perspective on the English language acquisition for these students, who are speakers of other languages.

The sociocultural focus was used in the study to support an inquiry in the social and cultural processes that occur in school contexts, connected to the learners' existence and interaction with educators and peers in the classroom environment, in terms of confidence and self-esteem. The data collection processes, especially the classroom observation protocols, were used to record instances of various influences of learner affective factors and how these might impact the second-language acquisition process.

The linguistic focus involved the understanding of all aspects of the language development process, including the Arabic and English oral and written language acquisition and learning. The focus of the study in this linguistic aspect was on the work that schools do with students in all domains of the language and in both languages of instruction, especially in light of sought out high cognitive abilities development for students in their mother tongue, usually Arabic.

The cognitive and academic learning focus was used in this study in order to further take into consideration the need for schools to focus equally on developing academic proficiency in both languages of instruction through the bilingual program, and include the academic dimension, understood as the sum of schoolwork in all school subjects for each grade level in terms of cognitive learning tasks that influence the language development process.

The main identified attributes were to be measured consistently through the data collected in order to answer the two research questions of the study. The first research question that asked: “What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman”? was used to synthesize and confirm the attributes as the main themes within the most important factors involved in the implementation of the bilingual program in schools. The five axial codes derived from open-ended interviews and classroom observations informed main themes and patterns from the analysis and were directly connected with the identified attributes.

The second research question asked: “How does the program implementation impact students’ sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?” and refer specifically to how the different language dimensions included in the prism model (Collier & Thomas, 2007) were used as the basis of the study’s conceptual framework and the essence of the identified attributes, for both languages of instruction, English and Arabic. The specific open codes and the associated axial codes from the overall data are presented separately in Appendix D, for each prism model dimension of language learning in terms of both languages of instruction and in connection with the identified attributes: socio-cultural focus, linguistic focus and academic/cognitive focus.

Data Analysis

The process of data analysis commenced as early as the data collection process started in the first school visited. The data gathered from school visits was first synthesized individually for each school under a Visit Key Findings Summary section in the study database, in order to effectively start the researcher’s familiarization with the data for initial organization and further facilitation of the analysis. The familiarization with the data was be the first stage in using

thematic analysis, followed by theme searching and coding, reviewing, and defining and titling found themes before putting the report of data analysis together (Braun & Clarke, 2006). This manual procedure of synthesizing the gathered data from school visits, after transcribing it, allowed for an initial focus on individual units of analysis, the individual schools, and later data were coded and evaluated in the context of the group of schools in the sample. In the case study approach of research, there is no clear and definite distinction between the data collection and analysis stages, and these two can be combined as necessary in order to inform future modifications of the instruments (Merriam, 1998).

Data were cross-referenced and thematically analyzed to find similarities and points of generalization. Both data from the open-ended interviews and data gathered from the classroom observations were crosschecked, triangulated, and used together to inform findings. This was achieved through the use of thematic analysis, a method that allows for the use of data from different sources and that is also easily adaptable to a variety of conceptual approaches of the research design (Braun & Clarke, 2006).

Limitations of the Research Design

Since data were only collected from private bilingual schools, the study was limited in terms of generalizing the findings to other types of schools implementing similar bilingual education programs in the country or elsewhere. The short time available for group interviewing, especially in the light of the time necessary for clarification, translation and interpretation might have influenced the quantity and accuracy of the collected data through the semistructured interview notes taken by the researcher during the field visits. The data collecting instruments were researcher made and not field-tested in other contexts besides the private bilingual schools in Oman.

The researcher's association with the MoE in schools may have been potentially difficult to manage in terms of the information that participants in the study were willing to share in terms of their implementation of the bilingual education program. Therefore, the communication with the schools underlined the de-identification of the data collection and the fact that the visits were nonevaluative from a ministerial point of view. School sampling was restricted to the geographical areas that are more easily accessible from the capital, Muscat, and did not include remote mountain areas or the very far distances, such as the Dhofar region, in the south. Therefore, efforts were made to select a sample of schools that are diverse in order to best represent the different type of schools that implement the program nationally.

Validation

The credibility of this study was ensured through the use of established qualitative research methods widely present in the literature and through the triangulation of data gathered through the two instruments chosen by the researcher. Merriam (1998) referred to credibility in terms of consistency between the findings and the reality observable in the field. The relative high number of schools to be visited and the amount of data to be gathered ensured that the reported realities were in line with what practically was happening in schools in terms of the implementation of the bilingual program. The data from group interviews were corroborated with the data from observations in order to check on the credibility of the information provided by participants (Yin, 2014). The data to be included in the study database provided chronological evidence of school visits based on the agreed protocols provided in the appendices, in order to track and confirm the quality of the case study research.

The study is dependable due to the steps taken in collecting and recording the data during the data collection process in the database for the study. The issue of translation and

interpretation, due to the bilingual background of the participants, proved to be beneficial for the study because the same translator provided support throughout the study and also provided peer debriefing for the researcher. The translator also confirmed details of the data from notes when necessary. Peer debriefing with MoE personnel was used in order to ensure that the credibility and dependability of the collected data would be strengthened. Researcher reflection during the transcribing, synthesizing, and analyzing of the data, and further triangulation with data in the form of rich and thick descriptions from classroom observations, was used in order to ensure that the data is credible and dependable (Yin, 2014).

Expected Findings

In terms of the characteristics of the current Omani bilingual education program in private bilingual schools, it was envisioned that most similarities would be found with the maintenance model of a bilingual education program. The majority of the schools would be focused, as per MoE regulations for the bilingual program, on providing instruction in academic subjects areas in Arabic (in Islamic studies, Arabic language, social studies and possibly life skills), while students also learn in English (in English language, mathematics, science, ICT, physical education, fine arts, music and possibly life skills) for a specific amount of time during the school day (MoE, 2017). It was also expected that the Arabic language program and students' learning of and through their mother tongue would not be a priority generally in the schools and that lessons taught in Arabic would be generally of less quality and impact on students than the instruction in English, that is also vastly majoritarian in the timetable. Collier (1995) stressed the importance of English learners using their native or other known languages as a point of reference while acquiring a new language to recognize points of similarity and difference and consequently transfer old understandings into the new linguistic context of their

learning. In addition to the local societal belief that favors learning in English, the status of math and science as important subjects in parents' perceptions seems to have been transferred indirectly through the language of instruction in the bilingual program, helping make English a higher language status than Arabic, due also to the nature of the subjects in English. It was envisioned that not sufficient, in terms of input, nor varied enough academic language would be taught through the subjects in the Arabic Language, and more focus on Classical Standard Arabic in a diversity of school subjects would potentially level the field and bridge interdisciplinary understanding of concepts bilingually, through both languages of instruction.

The researcher expected to gather data that would be indicative of difficulties with integrating two different programs of education in two languages of instruction that were widely spread across the bilingual schools in Oman due to the fact that philosophies, standards, programs, and resources were not aligned among the disciplines taught in English and those taught in Arabic. The curriculum for the subjects in English is in majority closely modeled (around 80% of student outcomes are directly those of CIE published documentation) after programs of education developed by Cambridge International Examinations (CIE) in the United Kingdom, while the curriculum for the disciplines taught in Arabic are developed locally by the MoE for public education and schools in the country. This was expected to be an important characteristic in terms of the diversity of implementation of the bilingual program in schools.

It is also possible that some schools would not completely follow the MoE regulations concerning the bilingual program and have developed alternative ways to adapt the program to their own context and student population needs. The researcher's experience in international education implementing programs of bilingual education will be both useful in understanding approaches in Omani schools, but also problematic in terms of expectations of the quality of

teaching observed in schools. Previous knowledge of schools performance through MoE work needed to be closely monitored in terms of the influences this could have had on the process of data analysis, for example.

Ethical Issues

The association of the researcher with the MoE was an important factor in both having access to schools in order to gather the necessary data, but also in risking a conflict of interest perception from study participants in schools. Efforts were made to continuously underline for participants the independence of this study from the MoE, both in the Consent Form (see Appendix A) and in the data collection protocols (see Appendix B). The researcher explained the purpose, benefits, and risks of the research to participants and assured the strict confidentiality of the data provided when obtaining informed consent (Patton, 2015). These aspects were reiterated to participants during schools visits and clarifications were made when participants solicited more information about the connection between the researcher and the MoE and of the confidentiality of the data they would provide as part of the study. Participants made their decisions to be part of the study without pressure or coercion, and they understood they could leave the study at any time without repercussions. Translation and peer debriefing will be provided by the same colleague who productively challenged assumptions, uncovered idiomatic meanings and helped the researcher understand the cultural norms of communication with the participants in this study. These aspects were part of the approved IRB consent form used with all participants, and confidentiality was maintained as per the university regulations, including keeping all records locked and confidential for up to three years after the study's completion.

Summary of the Methodology

This multiple qualitative embedded case study was used to explore the implementation

characteristics of the current bilingual education provisions in the private school sector in the Sultanate of Oman, as managed by the Ministry of Education in bilingual schools, through the Directorate General of Private Schools. Qualitative research methodology and a multiple case study research design were used for the purpose of exploring the complex experiences of implementing the bilingual education program in K–12 private schools in Oman. The focus was on the sociocultural, linguistic, academic, and cognitive learning factors included in the prism model that could contribute to the more effective implementation of this education program for student academic success in a representative number of private bilingual schools in the Sultanate.

The data from semistructured interviews and classroom observations were gathered from visits to 26 different bilingual private schools located in Muscat, Seeb, Barqa, Nizwa, and Al Buraimi. The process of data analysis commenced as early as the data collection started in the first school visited. The data gathered from school visits were first synthesized individually for each school under a Visit Key Findings Summary section in the study database, in order to effectively start the familiarization with the data for initial organization and further facilitation of the analysis.

Data were cross-referenced and thematically analyzed to find similarities and points of generalization. Both data from the open-ended interviews and data gathered from the classroom observation were crosschecked, coded, triangulated and utilized together to inform the findings. Available MoE published policy documentation was reviewed and compared with the data from the other instrumentation, in order to triangulate and ensure further validity for findings. This was achieved through the use of thematic analysis, a method that allows for the use of data from different sources and that is also easily adaptable to a variety of conceptual approaches of the research design (Braun & Clarke, 2006).

Chapter 4: Data Analysis and Results

Introduction to Data Analysis and Results

This multiple embedded qualitative case study was aimed at exploring how the MoE bilingual education program is implemented in private schools in the Sultanate of Oman, with a focus on the factors that impact the implementation of the program and how the program affects different facets of student learning. Despite the fact that the MoE mandates general scheduling and curriculum requirements for the bilingual program of education, schools' approaches to program implementation differ in light of the addressed components and dimensions of the prism model (Collier & Thomas, 2007): sociocultural, linguistic, academic, and cognitive, therefore with varied effects on improving student learning.

This fourth chapter builds upon the previous methodology and on the literature review and includes an introduction with the focus of the study and the position of the researcher, a description of the sample, how the data analysis was applied in relation to the chosen case study methodology, a summary of the initial findings, a presentation of the data and results in relation to the two main research questions, and a chapter summary.

In addition to the role of principal researcher, the author was also a consultant with the national education regulator, the MoE, and this was instrumental in both having access to schools in order to gather the necessary data, and also in risking conflict of interest perceptions from participants in schools. Therefore, efforts were made to continuously underline for participants the independence of this study from the MoE, both in the Consent Form (see Appendix A) and in the data collection protocols (see Appendix B). The researcher explained the purpose, benefits and risks of the research to participants and assured the strict confidentiality of the data provided when obtaining informed consent (Patton, 2015). This was reiterated to all during schools visits,

so the recruited volunteer participants made their decision to be part of the study and share information without any pressure or coercion.

A qualitative case study design was used in order to allow the researcher to better explore unclear connections as part of the process of program implementation in the private schools context in Oman, and the following research questions were used to guide this qualitative exploration of how the MoE bilingual education program is implemented in schools:

RQ1: What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?

RQ2: How does the program implementation impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?

Description of the Sample

A number of twenty-six bilingual schools, from the total of 163 in different governorates in the country, provided a representative sample of institutions that offer the MoE bilingual program in the Sultanate and where the participants for the study were recruited. Schools were chosen based on the purposeful sampling concept, in order to allow the researcher to be able to gather sufficient relevant data and address the study research questions effectively (Patton, 2015). An effort was made to also include schools in the sample from geographical areas farther away from the capital, Muscat, where most of the private schools in the country are concentrated. The intention was to allow for convenience and easy access to school sites around the country, but at the same time to ensure a representative number and types of schools in order to provide sufficient data for addressing the two research questions of the study.

From the total of 296 overall recruited participants (192 females and 104 males), 268 teachers and 28 administrators were part of the study and provided data to the researcher during

the group open-ended interviews. Observational data was collected in the form of rich and thick descriptions of teaching and learning behaviors from 268 short classroom observations conducted during the 26 school sites visits. In close relation with the size of the school and the number of teaching staff available, the lowest number of recruited participants in a school was four and the highest 21, with an average of 11.3 participants per school in the sample. To protect the identities of teachers and administrators who participated in the study, schools were assigned letter codes (A–Z) and participants were referred to using numbers (1–296). For enhanced confidentiality purposes, the participants are referred to in this study as “A participant from School” rather than using the specific number attributed to the participant. A variety of school sizes was represented in the sample in terms of student enrollment, from the smallest with only 38 students, to the largest, with 2,600 reported students enrolled on multiple campuses. When schools operated on multiple campuses, only one of these was used for data collection purposes. The majority of the private bilingual schools included in the sample offer education for students in all K–12 classes, with some schools included primary and middle school levels, while very few offered only primary classes.

The data collection process resulted in a study database exceeding 100 pages of typed notes from the open-ended interviews conducted and the rich and thick descriptions of student and teacher behaviors observed during the 268 short classroom observations. For the familiarization with the data overall, the text was read multiple times and a key data summary written for each school immediately after the visit in order to assist with the initial brainstorm of themes for the open coding process. This provided the researcher with an initial familiarization with the main characteristics of the data and themes to be explored further.

Research Methodology and Data Analysis

The explorative nature of this qualitative multiple embedded case study is evident in the choice of the two wide-ranging and open research questions that allowed the researcher to guide the inquiry in light of the conceptual framework based on the prism model (Collier & Thomas, 2007) and in the unique context of implementing bilingual programs of education in the Arabic-English learning environment in private schools in the Sultanate. Qualitative studies propose research questions that are complex and broad in order to best learn from participants' experiences (Creswell, 2012). The focus here was on the sociocultural, linguistic, academic, and cognitive learning factors included in the prism model and presented through the conceptual framework, that can contribute to the more effective implementation of this education program for student academic success in private bilingual schools (Thomas & Collier, 2007). Qualitative studies, such as this, are likely to yield useful data to answer more complex research questions when the purpose of the research is to express the views and perspectives of individuals in real-world contextual situations, with minimal intrusion of artificial research procedures (Yin, 2016).

A qualitative research methodology and a multiple case study research design was used to explore the complex experiences of implementing the bilingual education program in K-12 private schools in Oman. Open-ended interviewing, classroom observations, and MoE documentation was used to gather the data for this study. The interviewer/principal researcher and the translator were introduced to the group and an overview of the interviewing process was shared with participants, in addition to reminders of the overall responsibilities and protections for participants included in the consent form. The following statements type questions were used with participants to guide the conversations in the 26 group open-ended interviews that lasted between 40 and 60 minutes, according to the size of the group and the time needed for

participants to provide their input based on the researcher's questions: (a) Describe your school in general terms - tell us about your students, teachers, programs of education and anything else you think is relevant; (b) Tell us how the leadership for learning and the leadership for language learning work in your school- describe those roles, responsibilities and work procedures; (c) Tell us about how you use the MoE requirements and regulations in the implementation of the bilingual program with your students; (d) Describe how you support students learning in both English and in Arabic- tell us about your own experiences with students; (e) Tell us how you determine at a school level that your students are academically successful in both languages of instruction, English and Arabic; and (f) Add anything else you think is relevant to your discussion today, that we have not had a chance to mention yet. Additional clarifying questions were asked to the participants when necessary and more clarification was offered following the translation of questions, when participants requested further information about the questions, especially in the Arabic language.

Classroom observations of five to 10 minutes per class were used for further data collection in this study. Classroom behaviors and observed exchanges between stakeholders were translated for the researcher as they were occurring in situ in the Arabic language and rich and thick descriptions of these were typed at the same time in the study database. An effort was made to observe at least one class period in Arabic and one in English at all levels where the bilingual program is offered in the school, but this was not always possible due to the number of volunteer participants who agreed to sign the informed consent forms prior to the open-ended interviews and classroom observations. A total number of 268 classroom observations were completed and used for this study. Simultaneous translation was used throughout and unobtrusively for the taking of detailed classroom visit notes. Detailed descriptions of observed classroom behaviors

constituted the data gathered with this instrument and these were recorded in a running log for classroom observations, using a consistent template (see Appendix C). The MoE policy documents used for data gathering about the bilingual program of education and for triangulation were: *The Annual Study Plan for Grades (1–10) and (11–12) Private School (Bilingual)*. Directorate General of Private Schools (Ministry of Education, 2015), and *Weekly Plan Scheduling Requirements for the Bilingual Program. Academic year 2017–2018 and onward*. Directorate General of Private Schools (Ministry of Education, 2017).

Data were collected in a study database in the form of typed notes from the group semistructured interviews and detailed descriptions of students' and teachers' behaviors during the lessons observed. Coding was utilized to reduce, synthesize, and analyze the data gathered in the study database, related to the conceptual framework and the two research questions. Paper copies of all the study notes were used for the data analysis process and open coding was the first step that accompanied the reading and re-reading of the data from interviews and classroom observations.

This process was used by the researcher for the familiarization with the data for thematic analysis and afterwards, for theme searching and further coding, reviewing, defining and titling found themes, as part of the development of this data analysis report (Braun & Clarke, 2006). This manual procedure of synthesizing the gathered data from school visits allowed for an initial focus on individual units of analysis, the individual schools, and later data was coded and evaluated in the context of the group of schools in the sample. According to Creswell (2013) and Merriam (2015) the strategy of open coding is characterized by the finding inside the text of similar ideas and concepts that can be marked in order to underline shared or similar experiences of participants. Numbered open codes (1-26) were used to code and mark the data gathered both

from semistructured interviews and classroom observations. These codes emerged through the repeated reading of the data and these were later added to an electronic table, according to the overall themes and their relevance to the two research questions (see Appendix D).

Axial coding was the next step employed by the researcher for the data analysis process. Creswell (2013) described axial coding as a procedure that allows the researcher to consolidate meaning of found open codes by organizing these into main themes, based on common characteristics of meaning. A process of continued (re)reading of data and noting of similarities between the 26 open codes resulted in the determination of a total of five core themes expressed into axial codes, related to the two main research questions (see Appendix D). These five main axial codes were synthesized as: (a) bilingual program design and implementation, (b) MoE regulations and constraints, (c) teaching and learning practices, (d) additional language/pastoral support for students, and (e) leadership and management practices.

The axial codes provided the researcher with the main themes used to address the first research question, a general exploratory inventory of the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman. A review of the MoE documentation listed above was used to compare and triangulate the data provided by participants during the open-ended interviews and the data gathered from classroom observations. The researcher used selective coding to connect the common themes from the data through the axial codes and by using descriptive details from the data in order to address the two main research questions of the study.

Summary of the Findings

The coding process of the responses from the semistructured group interviews open questions and the data gathered from classroom observations resulted in 26 open codes that were

synthesized in five axial codes as follows: (a) bilingual program design and implementation, (b) MoE regulations and constraints, (c) teaching and learning practices, (d) additional language/pastoral support for students, and (e) leadership and management practices. The more frequent open codes in the data overall included those related to the lack of connections between learning in the two languages of instruction; the poor quality of the Arabic language used with students (informal/non-academic dialect); the vast majority of observed teacher-led and textbook-based instruction in the context of constraints related to MoE regulations in an environment where English is dominant in the curriculum and where instruction in English is more effective than in Arabic, a lower status language in schools; relatively high student engagement in generally low anxiety learning environments characterized by the relative high self esteem of students; less Arabic language support compared to ESL offerings; school environments that evidenced frequent ineffective teaching practices and where the leadership lacked in providing extensive opportunities for collaboration between teachers (see Appendix D).

The data referring to the bilingual program design and implementation is closely connected with the findings about the MoE regulations for schools and their associated perceived constraints by the study participants. These MoE regulations and requirements have an important impact both on participants' perceptions and on student learning. Along these lines, a participant from School B shared:

The Arabic curriculum is specific to certain topics in the textbook, so there is no room for creativity. So while our Arabic teachers, who generally do not speak English, are being supported to use different approaches, there are still the restrictions of the Ministry curriculum. So we try to have teachers enhance the curriculum through pedagogy.

This was evident in the data gathered from classroom observations, where most of the instruction is teacher-led and textbook based, as exemplified by a grade 8 Social Studies in Arabic lesson observed in School P:

Grade 8–15 students with teacher centered discussion on the causes of water salinity and its impact on the quality of available fresh water. Students use their textbooks (government texts) to complete the puzzle activity. Teacher provides the definition when necessary, so students can come up with the technical term that is needed in the puzzle.

Another participant from School I expressed similar perceptions regarding the impact of the prescriptive MoE curriculum for the subjects taught in Arabic:

There is a lack of proficiency in Arabic due to the fact that the Ministry curriculum is lacunar, so we are copying the writing zones and treasure book also in the Arabic side of the program, so every term students are required to write on their own, in Arabic and in English.

As per the MoE regulations included in the referenced documentation released for the implementation of the bilingual program, instruction is provided in academic subjects in Arabic in Islamic studies, Arabic language, social studies and possibly life skills, while students learn in English through the following disciplines: English language, mathematics, science, ICT, physical education, fine arts, music and possibly life skills, for a specific amount of time during the school day. The amount of time that students in the bilingual program spend learning in the two languages of instruction is expressed in percentages, for comparative purposes, in Table 1.

Table 1

Instructional Time in the Bilingual Program

Grade	in Arabic (%)	in English (%)
1st /2nd	40	60
3rd	40	60
4th	35	65
5th/6th	37.5	62.5
7th/8th	35	65
9th/10th	30	70
11th/12th	28.7	71.3

Note. Percentages calculated as per the number of class periods in all disciplines included in the scheduling requirements for the bilingual program (MoE, 2017).

In terms of the dual language teaching and learning practices and in line with the information retrieved above from the MoE documentation on instructional time, there is a clear focus in these bilingual schools, evidenced by the semistructured interviews and classroom observational data, on learning in English in an environment where English is dominant in the curriculum, both in terms of instructional time and through the importance given to the subjects taught through the English language. Participants in School C, for example, shared in the open-ended interviews that the Arabic language program and students' learning of and through their mother tongue has not been a priority in the school; lessons taught in Arabic are generally of less quality and impact on students than the instruction in English, that is also vastly majoritarian in the timetable. In this school students are more proficient in the English language and subjects and the vast majority continue to study in English at university level.

At the other end of the spectrum and despite serving a similar category of students, School I offers a fully integrated KG program with 50/50 time-wise approach between the two languages of instruction, English and Arabic. Additionally, the Omani culture is prevalent in the school and represented in philosophies and approaches, from the board of directors (e.g., they

have requested more focus on instruction on public speaking skills in both languages), to parents (e.g., asked for segregated classes by gender) and students (e.g., can choose to use preferred languages for socialization and for learning). In School L, the English side of the bilingual program is dominating the students' learning in the program and subtractive bilingualism is a reality for students who go through the secondary program there, and participants in this school shared: "the MoE curriculum for the Arabic language does not have the flexibility to create engaging and interesting lessons for students and there is too much to cover in terms of the written required curriculum." In support of that, a participant from School B shared:

Programs are not completely balanced due to the linguistic background of the students- bilingual students are at an advantage. English speakers are at an advantage compared to Arabic only speakers due to the majority of subjects being delivered in English.

These difficulties with integrating two programs of education in two different languages of instruction are widely spread across the bilingual schools in Oman due to the fact that philosophies, standards, programs and educational resources are not aligned between the disciplines taught in English and those taught in the Arabic language. Some schools were planning to further integrate the curriculum, as exemplified by what a participant from school K said: "We have two separate systems of education that run in the primary school in the two languages—we hope the new curriculum will improve the situation." The curriculum for the subjects taught in English are in majority closely modeled after programs of education developed by Cambridge Assessment International Examinations (CAIE) in the UK for the international school market, while the disciplines taught in Arabic are developed locally for public education/schools in the country (Participant in School A). Moreover, a participant in School Y shared:

Students without background in Arabic are not offered an Arabic course at the school and they spend their time in classes studying for their other subjects in English; so the Arabic subjects teachers are merely there to supervise them and ensure their safety and positive behavior...our school is well-established and is focused on increasing students' proficiency in English through a subtractive bilingual approach for users of Arabic. Non-speakers of Arabic receive only an English medium education here.

The data showed some preoccupation in schools about the provision of additional language/ and/or pastoral support for students, and the leadership and management staff practices had an impact on how these programs were implemented with students. In some schools, this was minimal and a participant from School G stated:

Students are accepted in the bilingual program as late as grade 8 with no language background in the language of instruction and no programs are practically in place or support teachers to help these students succeed-it is a sink or swim situation in the additional language.

Situations where students have little background in the language of instructions and are unable to access the curriculum proved frustrating to teachers during instructional time, as evidenced through lesson observation. A participant in School F shared:

I use some simple instructions in Arabic, but students do use Arabic in class and this is frustrating because I cannot communicate freely with students in their language. So I use translators in class to understand simple instructions, like going to the toilet and a lot of visual aids to help students understand more language.

Some other schools have incipient or more established targeted support language programs, especially for the English language. A participant in School R shared:

We have language and learning pathways in the school; she helps with learning disabilities. I was brought in as EAL (English as an additional language) specialist to work with boarders (students from the government schools are given scholarships to study in the school). But no EAL support is available in the non-boarding part of the school.

Additionally, a participant in School N shared: “Language support programs are not provided for students in any language- student remedial programs are offered for half hour classes during assemblies in the morning.”

In addition to societal perceptions and developments, the MoE bilingual program design with the main school subjects taught in English and the status of Mathematics and Science as important subjects in participants’ perceptions, support English as a higher language status than the Arabic language. The criticism of the mandated Arabic Curriculum also has an impact on language status, as evidenced in what a participant from School M voiced: “The current curriculum in Arabic is in classical Arabic and is not usable in daily life for students and not contemporary. Most input in academic language is for students in English and the Arabic input is not rich enough.” A participant in School J supported this idea of a perceived imbalance between the two languages of instruction and claimed:

Students prefer English lessons; students think Arabic is not important for the future life, for example knowing the difficult parts of the grammar. Parent pressure is on learning in English for the students. The majority of learning happens in English and there is not enough input in Arabic, so we try to attract students to Arabic lessons by using discussions with the students, using religious motivation.

This is also consistent with data recorded through classroom observations.

Presentation of Data and Results

The data from the semistructured interviews, classroom observations, and published MoE documentation was analyzed in close relation with the two main research questions of the study that were designed to ascertain influencing factors for the implementation of the program in schools and the impact that these factors had on different aspects of student learning in direct connection with the conceptual framework based on the prism model (Collier & Thomas, 2007).

Research Question 1. This question asked: “What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman.” Given the exploratory nature of this question, data gathered overall for the study was used to synthesize the themes and main ideas to prioritize and address the most important factors involved in the implementation of the program nationally in schools. The five axial codes derived from open-ended interviews and classroom observations were: (a) bilingual program design and implementation, (b) MoE regulations and constraints, (c) teaching and learning practices, (d) additional language/pastoral support for students, and (e) leadership and management practices and were indicative of the most important factors to be considered. Policy documentation data available from MoE was reviewed to confirm, compare and triangulate findings, especially in the area of program design, regulations and perceived constraints of the bilingual education program by the participants.

The bilingual program design and implementation emerged as an important factor in the way schools use the program in schools with students. The data showed a diversity of approaches in understanding and applying the MoE requirements for the program. Some schools implement the prescriptive curricula as instructed, while some allow for a certain degree of flexibility, as evidenced by what a participant in School I shared: “For Arabic we use the ministry books—we

teach the students the ministry books-overall in instruction, I think that 80% of content is from the books and 20% from teacher-developed activities.” This flexibility in the current implementation of the MoE program in some schools is in contrast with the call for even more prescriptiveness that a participant in School T called for

once we have a program, such as the bilingual program, we would need clear requirements and specifications in order to implement the program. In our case, in the bilingual program is in the lower section (e.g., three classes of science for students are not sufficient for our students so we offer more classes in our schedule). We want, as a school, proper books to teach them from so the teachers can implement these.

The MoE regulations and perceived constraints by participants became evident as an influencing factor in the data gathered and were indicative on the various level of consistency in implementing the program in schools. This is evidenced by what a participant in School C had to say: “We would like kids to be prepared in science in Arabic-there is now little crossover between subjects due to requirements of the ministry of education—this is stifling.”

Some private bilingual schools have the capacity, resources, and student numbers to meet the regulations and manage the perceived constraints associated with the MoE regulations and some schools resort to adapting the regulations to their needs by not meeting some of the stipulations. For example, classroom observations in School X evidenced that that school does not follow MoE scheduling regulations, with their lessons in Arabic (Arabic Language, Islamic Studies and Social Studies) including both students from the bilingual and the monolingual streams together in the same classroom for scheduling and teaching loads planning purposes.

The teaching and learning practices are yet another area of great impact on the implementation of the bilingual program in schools. In light of a lack of clear detailed

instructions from MoE, the educational regulator, schools developed personalized solutions for the way they integrate the learning of students in the bilingual program. This is evident in the data collected from classroom observations and semistructured interviews with participants, where in the same school, or even the same department, approaches to language learning are different from one teacher to another. In School C, a participant working in the Mathematics department shared: “I have an English-only approach in mathematics and ask my students to please communicate in English. I need to know what is going on from a classroom management point of view.” At the same school, a participant from the same Mathematics department said: “I allow Arabic behind closed doors because kids learn faster and better.” The requirement for English-only approaches in English language subjects was also evidenced by classroom observations, where teachers insist that the background knowledge of students in the subject is only valued if available in English, the language of instruction. A Grade 4 science class in English observed at School N on types of soils showed good engaging conversation with the teacher about size of particles and space between them:

students make mistakes and do not have good comprehension of the material- teacher rushes through with explanations and moves on quickly without checking that students understood. When students offer answers in Arabic she responds- “In English!” One male student copies the teacher behavior and asks classmates to speak in English when they attempt Arabic answers.

This had an impact on student engagement, overall anxiety in the lessons and the amount of time it takes students to participate confidently in their learning.

The additional language/pastoral support for students was an area of strength in a small number of schools. The majority of support programs encountered in the data were interventions

based on students not being able to cope or access the curriculum in either of the languages of instruction. The low levels of support available for students in English in some schools had an impact on student learning progress and overall in the offering of the bilingual program at all. A participant in School K shared:

the level of students who join the bilingual program in the present are not prepared to learn in English due to their background, so we are planning to offer the monolingual program in Arabic from next year. The results of students and the reports from teachers indicated that the level in English is low.

Some schools offer the bilingual education program to Arabic language speaking local students without additional language support in addition to mainstream teaching and learning like in School L, where it was reported by a participant: “No specialist language support is offered in the school.”

The leadership and management practices observed in schools had an impact on the general lack of collaboration across the school between teachers, especially between the two languages of instruction. Decisions made at the school level showed an important impact on student learning and the status of the languages of instruction. A participant in School M said:

due to the fact that the bilingual program is not available at all grade levels, the school has streamed students indirectly- those with enough English proficiency move on to other schools when the program not available here, or are kept in the monolingual program in Arabic- this has created academically strong classes in the bilingual program and weaker ones in the Arabic-only program.

This data was indicative of one of the main factors involved in the implementation of the program in schools.

Research Question 2. This question asked: “How does the program implementation impact students’ sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?” and was used to inquire how the different language dimensions included in the prism model (Collier & Thomas, 2007), used as the basis of the study’s conceptual framework, were addressed in the data referring to the student learning in the dual language program, in both languages of instruction, English and Arabic. The specific open codes and the associated axial codes from the overall data are presented separately in Appendix D, for each prism model dimension of language learning in terms of both languages of instruction: socio-cultural, linguistic, academic, and cognitive.

The data evidenced that the socio-cultural aspect of language learning is addressed differently among schools, and especially that this dimension of language learning has evolved and changed in time within the same school. This dimension was present in the data in terms of the confidence and self-esteem of the learners, their level of anxiety in the learning process, the status of the languages of instruction and the opportunities for the development of additive bilingualism. The open codes associated with this language learning dimension were: constraints of mandatory curriculum in Arabic, no connections between EN and AR learning, teacher-led and textbook-based instruction, attempted connections in learning between EN and AR, student engagement, ESL support, status of AR, level of anxiety, self-esteem, language transfer, pastoral support, classroom management- effective 11 and ineffective and EN only learning environments.

In connection with the socio-cultural dimension of language learning, participants in School I shared:

In the past students enjoyed to learn more in English, so the Arabic department developed

a plan where students were motivated further about the Arabic language... every lesson starts with a ten minute reading of interesting/ motivating story; competitions are used with students; workshops were developed for teachers to make learning more interesting; collaboration between Arabic teachers; using technology with students... We are working to create a balance in language experience for students in the school.

This had an impact on student morale and the status of the mother tongue in this school. In some other schools, this process of student language use and meeting students socio-cultural needs also affects the teachers, who feel overwhelmed with the way in which students use language, such as shared by a participant who teaches Arabic in School R: I am disappointed when students use English in my class to explain concepts in Arabic. Most time is used learning in English so students are more proficient in English.”

The linguistic aspect of language learning was evident in the overall data in terms of the domains of the written and oral English and Arabic, the usage of the languages and the general lack of focus in the school for the maintenance and development of the mother tongue, generally Arabic, for transfer of knowledge, concepts and skills between disciplines in the dual language program. The open codes associated with this language-learning dimension were: no connections between EN and AR learning, poor quality of the AR language used- informal/non-academic dialect, poor quality of the EN language used- informal/non-academic, teacher-led and textbook-based instruction, attempted connections in learning between EN and AR, effectiveness of teaching in EN, teaching through both EN and AR, effectiveness of teaching in AR, EN dominant in the curriculum, ESL support; Status of AR 52, level of content in AR and EN, language transfer, AR support, knowledge of language learning theory, EN only learning environments, and quality of EN for teaching.

Open-ended interviews and classroom observations evidenced that the quality of Arabic used for social communication between students is generally not sufficient for the development of proficient classical Arabic for academic purposes. Participants in School I shared their planning and actions to remediate this situation and better meet the learning needs of students:

We developed our continuum of education for all students in both languages. In the PYP (Primary Years Program) Units of inquiry, there is collaborative planning between English and Arabic staff but Units of Inquiry are driven by the English homeroom teachers- we are planning to further this integration through reviewing the units of inquiry.

Other schools are at different levels of meeting students' linguistic needs. A classroom observation at School F evidenced lacunar language learning approaches based on the low proficiency of the teacher in the language of instruction and on poor pedagogical choices:

the teacher reads must and mustn't sentences and students repeat. Some pronunciation is not correct and students acquire the language inaccurately, as modeled by the teacher. Students are asked to look at the song in the book and read with teacher's help- students cannot read the words-you and we without teacher support. Teacher reads out loud the whole song at high pace and unclearly for students, who are not able to read alone.

The academic dimension of student language learning was characterized in the data by the subject-specific schoolwork in various disciplines, by the simple and more advanced tasks students have to achieve with or without teacher support or modeling. The open codes associated with this language-learning dimension were: constraints of mandatory curriculum in Arabic, teacher-led and textbook-based instruction, EN dominant in the curriculum, AR dominant in the curriculum, level of content in AR and EN, AR support, and classroom management and

teaching effectiveness. A Grade 1 classroom observation in School E exemplified effective management of simple language learning tasks by the teacher, and this was generally consistent across the primary level in schools:

Grade 1- Arabic- Teacher reads text to the students that she wrote on the board- showing differences in pronunciation between specific sounds making up the words. Students repeat along with teacher as a whole group. Volunteer student is able to read correctly with support from the teacher.

Another example of effective teaching of simple language tasks in Arabic in the primary school came from a classroom observation in School Q:

Grade 1 boys Arabic- Students write down words of plants and animals in Arabic on their worksheets. Singular/ plural version of words is the focus- teacher and assistant walk around the room, check on students' writing and make corrections for the correct form of the words and the spelling in classical Arabic (e.g., banatum).

There was almost no evidence in the data of consistent and planned-for bilingual teaching through both languages of instruction across subjects, due in part to the design and regulations associated with the program and also to the fact that different teachers are employed to teach in different languages for different subjects. One single instance was found in the data in School P, where the same teacher teaches the same subject in both Arabic, for students enrolled in the monolingual program and in English for students enrolled in the bilingual program. This participant shared and defended his position with colleagues participants in the open-ended interviews: "I use both languages for teaching my subject in the program when necessary, with more Arabic used for technical language when I teach Arabic speaking students in English."

The cognitive dimension of student language learning was prevalent in the data in terms of the academic language used for learning in both languages of instruction, language tasks including those in the mother tongue, an equal approach to teaching in English and Arabic in a learning context where students are required to develop their higher order thinking skills with cultural-responsive teacher support. The open codes associated with this language-learning dimension were: no connections between EN and AR learning, quality of the AR and EN language used - informal/non-academic dialect, attempted connections in learning between EN and AR, teaching through both EN and AR, language dominant in the curriculum, ESL support, Level of content in AR and EN, language transfer, knowledge of language learning theory, and EN only learning environments.

In general, due to the nature of the subjects taught in English and the resources that the internationally-based and more updated the MoE is requiring the schools to use for the subjects in English, the data showcased greater amount of higher order thinking tasks and better use of academic language in English subjects, rather than those in Arabic. A participant in School S spoke about the exemptions that the MoE grants to students from studying in the Arabic language: “Some students without background of the language in the bilingual program have exceptions from studying in Arabic.” This is indicative of the unequal approach in planning for a balanced approach in language learning for the bilingual program of education. In support of this, a participant from School C, said: “From 5th grade up no students are accepted in the bilingual program who come from Arabic-only programs of education. Parents want students in the bilingual program due to the high status of the English language.”

Nevertheless, classroom observations such as one in School O evidenced a high level of cognitive demand from students during language tasks and effective culturally responsive teaching:

Grade 3 Arabic Language- mixed gender segregated with seating- teaching speaks classical Arabic throughout and engages students with questioning about plural and singular nouns. Resources are colorful and engaging and students respond very well to this by volunteering enthusiastically to answer teacher questions and use the rules of singular/plural correctly.

Summary of Data Analysis and Results

The context of the study, the nation-wide sample of schools and participants, the analysis of data and coding processes based on the chosen research methodology, and the results and findings connected to the research questions were presented in this chapter. This study revealed from the collected and analyzed data that the factors that have the most significant impact on the implementation of the bilingual program in schools are the: (a) bilingual program design and implementation, (b) MoE regulations and constraints, (c) teaching and learning practices, (d) additional language/pastoral support for students, and the (e) school-based leadership and management practices. There was a diversity of approaches observed in terms of schools handling the MoE requirements with different repercussions on the teaching and learning process led by the school-based administrators. The data also evidenced that the prism model's (Collier & Thomas, 2007) four dimensions of language learning were addressed and part of teaching and learning to different extents among schools, who are overall planning for improvements in the area of further meeting the evolving language learning needs of their students.

In Chapter 5, the researcher will further establish connections found in the data and

explore the understanding of how the bilingual program meets the diverse needs of students in private schools in Oman, while offering detailed explanations and a rationale for further research in this particular context.

Chapter 5: Discussion and Conclusions

Introduction to Discussion and Conclusions

This multiple embedded qualitative case study was aimed at exploring how the MoE bilingual education program is implemented in private schools in the Sultanate of Oman, with a focus on the factors that impact the implementation of the program and how these affect different facets of student learning. The case study methodology employed here supported the exploration of the diversity in implementation experiences found in schools. This allowed the researcher to develop two research questions and use a qualitative methodology to narrow the study's focus to phenomena and factors of program implementation in this particular national bilingual private school context. The two following research questions were used to guide this qualitative exploration of how the MoE bilingual education program was implemented in private bilingual schools in the Sultanate of Oman:

RQ1: What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?

RQ2: How does the program implementation impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?

A qualitative research methodology and a multiple embedded case study research design were used to explore the complex experiences of implementing the MoE-regulated bilingual education program in K–12 private schools in the Sultanate of Oman. The focus of the study was on the sociocultural, linguistic, academic, and cognitive learning factors included in the prism model that can contribute to the more effective implementation of this education program for student academic success in a representative number of private bilingual schools in the Sultanate (Thomas & Collier, 2007). Open-ended interviewing, classroom observations and MoE policy

documentation was used to gather the data for this study and these were collected in the form of written notes, later transcribed, from semistructured interviews and typed detailed descriptions in the form of running logs of the behaviors of students and teachers from the classroom activities observed. Data was cross-referenced and thematically analyzed to find similarities and points of generalization, in order to crosscheck, triangulate and inform the findings. Open and axial coding was utilized to reduce, synthesize and analyze the data gathered in the study database, related to the conceptual framework and the two research questions (Yin, 2014).

The sole empirical study conducted in Oman by Tekin (2014), coupled with the language learning particularities discovered by Hussien (2014) in the Egyptian Arabic-English language learning context, in addition to the concerns over the loss of Arabic documented by Raddawi and Meslem (2015) underlined some of the particularities of the impact of bilingual education and learning. The continued presence in the literature of the role of school leadership for effective program implementation in Lindholm (1990) and others in the literature, and the UNESCO's (2016) global concern with bilingual education and its efficacy in K–12 programs of education as evidenced by the US-based detailed accounts from the English-Spanish models of dual language approaches from Thomas and Collier (2002) and Ramirez et al. (1991) added to the body of knowledge available in this particular field. These findings from the reviewed research offered a solid literature background for this first qualitative multiple case study investigation into the effectiveness of English-Arabic bilingual education program in a representative number of K–12 private schools in the Sultanate of Oman.

The open codes included those related to the lack of connections between learning in the two languages of instruction; the poor quality of the Arabic language used with students (informal, non-academic dialects), the majority of observed teacher-led and textbook-based

instruction in the context of constraints related to MoE regulations in an environment where English is dominant in the curriculum and where instruction in English is more effective than in Arabic (a lower status language in schools), relatively high student engagement in generally low anxiety learning environments characterized by the relative high self-esteem of students, less Arabic language support compared to ESL support offerings, school environments that overall exhibited frequent ineffective teaching practices, and where the leadership lacked in the provision of extensive opportunities for collaboration among teachers (see Appendix D).

Chapter 5 includes an introduction, a restatement of the purpose, methodology and design of the study, followed by an overall discussion of the results presented in Chapter 4, in light of the literature discussed in Chapter 2. Limitations of the study findings are included, as well as implications of the results for practice, policy, and alignment with theory. Finally, recommendations for further research on bilingual education programs in this local context were made based on the study's findings.

Summary of the Results

The MoE offers a bilingual education program in Arabic and English in K–12 private schools nationally and regulates student instructional time, prescribes assessment, and supervises the teaching and learning in schools through its staff. Choices made at the school level on how to implement the bilingual education program have had enduring effects on the quality of the educational process and the outcomes for students enrolled in these programs. Despite the fact that the MoE mandates general scheduling and curriculum requirements for the bilingual program of education, schools approaches to program implementation differ in light of the addressed components and dimensions of the prism model (Collier & Thomas, 2007): sociocultural, linguistic, academic, and cognitive, therefore with varied effects on student

learning. This qualitative research was intended to extend the existing understandings of factors that may influence the effective implementation of bilingual education programs in an Arabic-English learning environment in K–12 schools for the benefit of improved student learning.

A qualitative research methodology and a multiple embedded case study research design were used to explore the experiences of implementing the bilingual education program in private schools in Oman. Open-ended interviewing, classroom observations and available MoE policy documentation were used to gather the data for this study. Data were collected in a study database, in the form of typed notes from the group semistructured interviews and detailed descriptions of students' and teachers' behaviors during the lessons observed. Open and axial coding was used to reduce, synthesize and analyze the data gathered in the study database, as this related to the conceptual framework of the study and to the two research questions.

The five main axial codes synthesized from the overall data as main influencing factors for the program implementations were: (a) bilingual program design and implementation, (b) MoE regulations and constraints, (c) teaching and learning practices, (d) additional language/pastoral support for students, and (e) leadership and management practices. These five axial codes provided the researcher with the main themes used to address the first research question, an overall exploratory inventory of the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman. A review of the available MoE policy documentation was used to compare and triangulate the data provided by participants during the open-ended interviews and the data gathered by the researcher from classroom observations. The researcher used selective coding to connect the common themes from the data through axial codes and added descriptive details from the data in order to address the two main research questions of the study.

The main findings were drawn from the more frequent open codes found in the data overall and the open codes include those related to the lack of connections between learning in the two languages of instruction, the poor quality of the Arabic language used with students (informal/non-academic dialect), the majority of observed teacher-led and textbook-based instruction in the context of constraints related to MoE regulations in an environment where English is dominant in the curriculum and where instruction in English is more effective than in Arabic (a lower status language in schools). There was relatively high student engagement evident in generally low anxiety learning environments characterized by the relative high self-esteem of students. Less Arabic language support compared was evident in comparison with the ESL support offerings, school environments that overall exhibited frequent ineffective teaching practices, and where the leadership lacked in the provision of extensive opportunities for collaboration among teachers (see Appendix D).

The findings from the data referring to the bilingual program design and implementation are closely connected with those about the MoE regulations for schools and their associated perceived constraints by the participants. The data showed a diversity of approaches in understanding and applying the MoE requirements for the program in schools. Some schools implement the prescriptive curricula and requirements as instructed, while some allow a certain degree of flexibility. These MoE regulations and requirements have had an important impact both on participants' perceptions and on student learning. In support of this, a participant from School B stated:

The Arabic curriculum is specific to certain topics in the textbook, so there is no room for creativity. So while our Arabic teachers, who generally do not speak English, are being supported to use different approaches, there are still the restrictions of the Ministry

curriculum. So we try to have teachers enhance the curriculum through pedagogy. This indication of a lacunar curriculum in Arabic was also evident in the data gathered from classroom observations, where the majority of the Arabic language instruction observed was teacher-led and textbook-based.

There is a clear focus in these private bilingual schools, as evidenced by the semistructured interviews and classroom observational data, on learning in and through the English language, in an environment where English is dominant in the curriculum, both in terms of the amount of instructional time (see Table 1) and through the importance given to the subjects taught through the English language medium. This had an impact on participant perceptions about the different status of the two language of instruction. In addition to societal perceptions and developments, the MoE bilingual program design with the main school subjects taught in English and the status of mathematics and science as important subjects in participants' perceptions, supported English as a higher language status compared with the Arabic language, which is taught solely through the Arabic language, social studies, and Islamic studies disciplines. The findings also underline difficulties that schools had with integrating two different programs of education in two different languages of instruction, where philosophies, standards, assessment, programs, and educational resources are not aligned between the disciplines taught in English and those taught in the Arabic language. Therefore students are not consistently provided with a cohesive dual language learning experience in a bilingual context, where language and conceptual knowledge is transferred effectively between the two languages of instruction.

The current study revealed that in the absence of MoE-mandated language and learning support programs, schools have designed their own provisions for additional language (for one or

both languages of instruction, as per the students' specific needs) and/or pastoral support for students, involving a diversity of approaches of the school leadership on how these programs were implemented with students. Some private bilingual schools have the capacity, resources and student numbers to meet all the regulations and manage the perceived constraints associated with the MoE regulations, while some other schools resort to adapting the regulations to their particular students' needs by making alternative choices concerning the MoE regulations and, in certain cases, by not meeting some of the policy stipulations.

Discussion of the Results

The nature of the present study was explorative overall, due to the choice of the two wide-ranging and open research questions that allowed the researcher to guide the inquiry in light of the unique context of implementing bilingual programs of education in the Arabic-English context in private schools in the country. The two main following research questions were used to guide this qualitative exploration of how the MoE bilingual education program was implemented in schools:

RQ1: What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?

RQ2: How does the program implementation impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context?

The data for this study was collected as part of a study database exceeding 100 pages of typed notes from the open-ended interviews conducted with 296 participants and the rich and thick descriptions of student and teacher behaviors observed during the 268 short classroom observations. Policy documentation available from the MoE was reviewed to confirm, compare and triangulate findings, especially in the area of program design, regulations for implementation

and of perceived constraints of the bilingual education program by the participants. The qualitative case study yielded useful data to contribute to the answering of the two open research questions, where the purpose of the research was to express the views and perspectives of individuals in real-world contextual situations, with minimal intrusion of artificial research procedures (Yin, 2016). The qualitative multiple embedded case study design that included visits to 26 schools for data gathering through classroom observations and open-ended interviewing with educators allowed for further understanding of what was the nature of the influences of MoE and private school-based factors on the bilingual education program in the Sultanate of Oman and how these impact the effective implementation of the program for student learning.

The researcher revealed from the collected and analyzed data for this study that the factors that had the most significant impact on the implementation of the bilingual program in schools were the: (a) bilingual program design and implementation, (b) MoE regulations and constraints, (c) teaching and learning practices, (d) additional language/pastoral support for students, and (e) leadership and management practices. The data evidenced a diversity of approaches in terms of schools handling the MoE policy regulations with different impact of the school-based leadership on teaching and learning and on students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context. A discussion of the study results related to the two research questions follows.

Research Question 1. This first research question was designed to support an open exploration of what internal and external factors relevant to the bilingual program were the essential drivers for the program's implementation in schools nationally. The data overall indicated five main themes, synthesized in factors that were found to have most impacted the implementation of the MoE program in bilingual private schools in Oman. These findings,

specific to the five main themes, are discussed in more detail below.

The bilingual program design was found to have an important impact on how schools manage the learning of their own enrolled students. While at first glance, the MoE centralized program design offered a certain degree of consistency across the private schools in terms of general philosophy and approaches for timetabling, set instructional time (see Table 1), split between the two languages of instruction through prescribed disciplines through the required bilingual teaching approach, overall assessment and MoE supervision, it also introduced an element of perceived over-prescriptiveness, where some school communities proved not to be fully able to meet their students' diverse needs due to the limitations of the program design.

The MoE curricular design determined and mandated the type of the bilingual program on offer for all schools regardless of the student population, with a majority of student contact time (Table 1) in the main school subjects in English (between approximately 60% and 70% of the total instructional time) and the remainder in Arabic (between approximately 30% and 40% of the total instructional time). Therefore, the MoE bilingual program was intended to be a maintenance program by design, where instruction in English is coupled with support and instruction in Arabic. In terms of the implementation of the program, and due to the prescriptiveness of the design mentioned above, the data showed a variety of choices made at school level, where some schools implemented the prescriptive MoE curricula as instructed, while some other schools decided to allow for a certain degree of flexibility in order to better meet varied language and learning student needs.

The MoE regulations and their associated perceived constraints shared by the study participants in the data were indicative on the various level of consistency in implementing the program in schools, in terms of following the MoE required policies and procedures, and of the

choices schools would welcome in terms of adapting the program to the needs of their students. This was evidenced by a participant in School C, who shared: “We would like kids to be prepared in science in Arabic-there is now little crossover between subjects due to requirements of the Ministry of Education- this is stifling.”

The teaching and learning practices in the classrooms showed a diversity of approaches, where schools and at times individual teachers developed personalized solutions for the way they integrate the learning of students in the bilingual program. This is evident in the data collected from classroom observations and semistructured interviews with participants, where in the same school, or even the same department, approaches to language learning differ greatly from one teacher to another. The majoritarian requirement for English-only classrooms and instruction in the English language subjects was also evidenced by classroom observations, where teachers insisted that the background knowledge of students in the subject is only valued if available in English, the language of instruction. This was observed to have an impact on student engagement, overall anxiety in the lessons and the amount of time and effort it takes students to participate confidently in their learning. Limited evidence was gathered of effective bilingual teaching approaches in terms of instructional strategies used by teachers in both English and in Arabic with students that address individually and interdependently the sociocultural, linguistic, academic, and cognitive learning processes of language learning, as to ensure the students’ bilingual academic success (Collier & Thomas, 2007). This was limited to the larger and more established internationally accredited schools with a history of excellence in providing quality language and academic programs to students.

The additional language and pastoral support provisions for students was an area that was evidenced to be lacking in the majority of the 26 schools included in the sample. The majority of

support programs encountered in the data were interventions based on students not being able to cope or access the curriculum in the languages of instruction, mostly through ESL support programs. The low levels of support available for students in English in some schools had an impact on student learning progress and overall in the offering of the bilingual program at all. Some schools offer the bilingual education program to Arabic language speaking local students without additional language support in addition to mainstream teaching and learning like in School L, where it was reported by a participant: “no specialist language support is offered in the school.”

The school-based leadership and management practices observed for the collection of the data for this study influenced the general lack of collaboration across the schools between teachers, especially among teachers from the two different languages of instruction. The reality of two separate programs of education running in parallel in the same school, one in English and the other in the Arabic language was observed relatively often in the schools visited. Leadership decisions on language and learning made at the school level showed an important impact on student learning and on the differences in the perceived status of the two languages of instruction.

Research Question 2. This second research question was framed in close relation with the four dimensions of the prism model and in order to better understand how these components of language learning were represented in the implementation of the bilingual education program in private schools in Oman. The researcher’s intention was to uncover whether the gathered data showed that the bilingual program of education overall addressed the sociocultural, linguistic, academic, and cognitive learning dimensions of language learning and how the bilingual program overall impacted students’ learning in light of the four dimensions.

The prism model defines factors that allow for predictions to be made regarding English learners' degree of second language acquisition success in an academic context and includes four major components for language learning: sociocultural, linguistic, academic, and cognitive processes (Collier & Thomas, 2007). When all these language-learning components are addressed in an interconnected way through the taught curriculum, students have a better opportunity to be academically successful in a dual language model of bilingual instruction. This model includes elements of the sociocultural theory, which considers language as an essential tool in the development of higher mental processes of learners (Vygotsky, 1986). The sociocultural theory provides a functional view of language where linguistic ability is socially constructed and utilized to engage in social and cognitive activities. Regardless of the variations of implementation of bilingual education programs in private schools in Oman, this model provides a multidimensional perspective on the English language acquisition for these students who are speakers of other languages.

The sociocultural dimension of the model was used to help observe the social and cultural processes that occur in different school contexts of learners' existence and interaction in the classroom environment in terms of confidence and self-esteem. The focus was also on noticing instances of negative influences on learner affective factors and whether these could hinder the second-language acquisition process. The data evidenced that the socio-cultural aspect of language learning is addressed to various extents and differently among schools, and especially that the implementation of this dimension of language learning has evolved and changed in time, sometimes within the same school. This dimension was present in the data in terms of the observed confidence and self-esteem of the learners, their level of anxiety in the learning process, the status of the languages of instruction and the opportunities for the development of

additive bilingualism. The data showed a continued interest in developing balanced educational offerings through both languages of instruction, and this had an impact on student morale and the status of the mother tongue, Arabic, in some schools. In some other schools, this process of student language use and meeting students' socio-cultural needs also affects the teachers, who felt at times overwhelmed with the way in which students use conversational and academic language.

The linguistic dimension of the prism model involves all aspects of the language development process, including in the Arabic and English oral and written languages acquisition and learning. The focus of the study in this linguistic aspect was on the work that schools achieved with students in all domains of the language and in both languages of instruction, especially in light of sought out high cognitive abilities development for students in their mother tongue, usually Arabic. Open-ended interviews and classroom observations evidenced that the quality of the Arabic language used for social communication between students is generally not sufficient for the further development of proficient classical Arabic for academic purposes, where the majority of in-class teacher-talk and discussions with students is mainly in local dialects of Arabic, and not the classical Arabic for academic purposes.

The academic dimension of student language learning was characterized in the data by the subject-specific schoolwork in various disciplines, by the simple and more advanced tasks students have to achieve with or without teacher support or modeling. Particularly significant for this study was the interrelation between cognitive development and Arabic language development, the mother tongue of the majority of learners enrolled in the bilingual education program. The academic dimension of this model includes all schoolwork in language arts, mathematics, the sciences and social studies for each grade level with an increased attention on

instruction that might focus on cognitively simple tasks (often termed "basic skills") that do not support the language development process to the same degree as cognitively complex instruction. There is almost no evidence in the data of consistent and planned bilingual teaching through both languages of instruction across subjects, due both to the design and regulations associated with the program and with the fact that different teachers are employed to teach in different languages for different subjects.

The cognitive component of the prism model was used here to further take into consideration the balanced development of academic proficiency in both languages of instruction through the bilingual MoE program. Using the knowledge, skills, and cognitive background of students in their mother tongue as a stepping stone for the acquiring of the additional language of instruction, English, without merely simplifying learning tasks for access, is an important aspect considered here for meeting the cognitive needs of bilingual students and continuously challenging them to closing the achievement gap with the first language speakers. The cognitive dimension of student language learning was prevalent in the data in terms of the academic language used for learning in both languages of instruction, language tasks including those in the mother tongue, an equal approach to teaching in English and Arabic in a learning context where students are required to develop their higher order thinking skills with cultural-responsive teacher support. In general and due to the nature of the subjects taught in English and the resources that are more up to date and internationally-based for the school subjects in English, the data showcased greater amount of higher order thinking and better use of academic language in English subjects, rather than those in the Arabic language. This is indicative of the unequal approach in planning for a balanced approach in language learning for the MoE bilingual program of education. There were exceptional instances in the data where a high level of

cognitive demand for students was employed during language tasks and effective culturally responsive teaching was observed. The explorative nature of the study and the choice of the two open research questions, pertaining to the influencing factors and their impact on student learning, allowed the researcher to address and answer the research questions as part of this inquiry, in light of the unique context of implementing this bilingual program of education in the Arabic-English context in private schools in the country.

Interpretations of the Results in Relation to the Literature

With increased demand for an English-medium education for speakers of Arabic as a mother tongue, school leadership teams in private schools in the Sultanate were increasingly faced with complex choices in terms of the implementation of the MoE regulated bilingual program. Adding disciplines taught in English to the initial program of education in Arabic and managing a bilingual approach with students led to challenges in implementing effective approaches that addressed interdependently the sociocultural, linguistic, academic, and cognitive learning processes as to ensure students' bilingual academic success (Collier & Thomas, 2007).

The researcher explored how the MoE bilingual education program is implemented in private schools in the Sultanate of Oman, with a focus on the varied factors that impact the implementation of the program and how these affect different facets of student learning. This qualitative study yielded sufficient useful data to answer two complex research questions, where part of the purpose of the research was to express the views and perspectives of bilingual program educators in the real-world contextual situation of implementing the program with students in private bilingual schools in Oman, with minimal intrusion of artificial research procedures (Yin, 2016). The main factors found to have the most influence on the implementation of the bilingual program in schools were: (a) bilingual program design and

implementation, (b) MoE regulations and constraints, (c) teaching and learning practices, (d) additional language/pastoral support for students, and (e) leadership and management practices. The study used two research questions that were complex and broad, in order to most effectively learn from participants' experiences in the implementation of the bilingual program (Creswell, 2012).

The main findings were drawn from the more frequent open codes found in the data overall. The open codes included those related to the lack of connections between learning in the two languages of instruction; the poor quality of the Arabic language used with students (informal, non-academic dialects), the majority of observed teacher-led and textbook-based instruction in the context of constraints related to MoE regulations in an environment where English is dominant in the curriculum and where instruction in English is more effective than in Arabic (a lower status language in schools), relatively high student engagement in generally low anxiety learning environments characterized by the relative high self-esteem of students, less Arabic language support compared to ESL support offerings, school environments that overall exhibited frequent ineffective teaching practices, and where the leadership lacked in the provision of extensive opportunities for collaboration among teachers (see Appendix D). The results of this study's findings relating to the many facets of the bilingual program implementation exhibited many common themes with the literature findings presented in Chapter 2 (Ball, 2011; Christian, 2016; Collier & Thomas, 2007; Cummins, 2008; Gándara & Contreras, 2009; Garcia, 2009; Hussien, 2014; Jepsen, 2010; Manterola, 2014; Marian, et.al., 2013; Ramírez et al., 1991; Rodríguez, et al., 2014; Thomas & Collier, 2003; Vale, 2013; UNESCO, 2016).

The researcher found that the MoE bilingual program design and the localized individual

choices for implementation had an impact on schools usually implementing two separate education programs in English and Arabic, where the lack of connections between learning in the two languages of instruction and the generally poor quality of the Arabic language used with students were represented widely in the data. This is relatively consistent in the literature with the two-solitude assumption (Cummins, 2007). A lack of an effective and cohesive approach to Arabic as a mother tongue maintenance and development education through the bilingual program can have detrimental effects on student learning according to the literature. Research showed that the value of imitation is important for students' language learning, where internalization through imitation involves an active reasoning process (Lantolf & Thorne, 2006; Tomasello, 2005). This indication of a lacunar curriculum in Arabic was also evident in the data gathered from classroom observations, where the majority of the Arabic language instruction observed was teacher-led and textbook-based. Federal U.S. guidelines suggest that three years is the target amount of mother tongue support for bilingual students, while studies generally show that five to seven years is a more appropriate timeframe for English language learners to reach levels comparable to their native English speaking peers (Collier, 1989; Krashen et al., 1982). Additionally, UNESCO (2016) has long endeavored to promote educational strategies and approaches that are conducive to effective language learning policies to meet the needs of students who learn in additional languages or in dual language programs. Ball (2011) concurred with the organization's conclusions related to the essential role of the mother tongue in learning additional languages. Manterola (2014) concluded that the goals of bilingual and multilingual education should focus on competencies and positive attitudes toward linguistic diversity.

The data showed a diversity of approaches in understanding and applying the MoE requirements for the bilingual program in schools. Some schools implement the prescriptive

curricula and requirements as instructed, while some allow a certain degree of flexibility. The lack of solid research-based decision making both at the MoE and school level influenced the learning gains students can make in the bilingual program. Jepsen (2010) compared student outcomes between bilingual education and monolingual programs and reported that students in bilingual programs perform at a 0.3 standard deviation lower than their counterparts in first and second grade, with a less than 0.1 difference from data in third through fifth grade. Collier (1995) also stressed the importance of English learners use their mother tongues as a point of reference when acquiring a new language by recognizing similarities and differences and connect those areas to transfer knowledge and skills and further access learning through the additional language. Understanding which aspects of the school policies and curriculum, bilingual educational planning and approaches, teaching practices and pedagogies, student background and other variables can support both educators and the MoE to make better choices related to the education of additional language learners. Thomas and Collier's (2007) prism model involves four interdependent components: sociocultural, linguistic, academic, and cognitive that could be potentially used by the educational regulators for the bilingual program review and curriculum planning.

The MoE bilingual program design with the main school subjects taught in English and the status of mathematics and science as important subjects in participants' perceptions, supported English as a higher language status compared with the Arabic language, which is taught solely through the Arabic language, social studies and Islamic studies disciplines. These findings supported Raddawi and Meslem (2015) assertion regarding the increasing supremacy of English language education and the perceived loss of language usage in the bigger socio-cultural environment of the Gulf. However, Hussien (2014) confirmed the positive influence of

additionally learning English on the Arabic language skills of students and therefore confirming the underlying proficiency theory developed by Cummins (2008) about the cross-linguistic transfer of literacy strategies and processes between languages of instruction through a study conducted in an Egyptian bilingual and monolingual context. Thomas and Collier (2002) underlined that bilingually schooled students outperform comparable monolingually schooled students in academic achievement in all subjects, after 4–7 years of dual language schooling and most importantly, that the strongest predictor of L2 student achievement is the amount of formal L1 schooling. Gándara and Contreras (2009) concluded that even if well-implemented bilingual programs can claim a "moderate" advantage over English-immersion instruction, no language intervention has erased the gap between English speakers and English learners, or between native-English children and speakers of other languages.

The study also revealed that the MoE regulations and the related perceived constraints by participants influenced a traditional approach to the delivery of the curriculum, where the majority of observed classes were teacher-led and characterized by textbook-based approaches of instruction, in the context of constraints related to MoE regulations. These MoE regulations and requirements had an important impact both on participants' perceptions and on student learning. Vale (2013) underlined the disconnect between the teaching of literacy in Arabic and English, the differences in status of the two languages of instruction and the need to review MoE curricula and resources, while integrating the teaching and learning in English and Arabic to ensure better bilingual literacy skills for students.

The findings also underline difficulties that schools had with integrating two different programs of education in two different languages of instruction, where philosophies, standards, assessment, programs and educational resources are not aligned between the disciplines taught in

English and those taught in the Arabic language. In support of the need for sustained planning, Christian (2016) stated, “unlike other bilingual education models, dual language programs take a long-term view to developing high levels of proficiency in both languages of instruction” (p. 4). Therefore, and in the absence of a long-term sustained planning for the program, students are not consistently provided with a cohesive dual language learning experience in a bilingual context, where language and conceptual knowledge is transferred effectively between the two languages of instruction. As documented in previous national research, students enrolled in an early childhood bilingual education program in Oman enjoyed both linguistic and cognitive benefits from learning in two languages, English and Arabic (Tekin, 2014). Tekin (2014) confirmed the findings of Cummins (2000) and Cummins (2008) and in addition to the work of Raddawi and Meslem (2015) and Hussien (2014) framed this the particularities regional and local context of the impact of bilingual education programs on users of Arabic.

Another important finding of the study was that the teaching and learning practices had an impact on high student engagement in generally low anxiety learning environments, characterized by the relative high self esteem of students. Bilingualism and biliteracy were reported in the literature to be the goals of maintenance bilingual programs, where pluralism could support the development of additive bilingualism, which is associated in literature with positive cognitive benefits (Cummins, 1981). There is a clear focus in these private bilingual schools on learning in and through the English language, in an environment where English is dominant in the curriculum, both in terms of the amount of instructional time and through the importance given to the subjects taught through the English language medium. This had an impact on participant perceptions about the different status of the two language of instruction. According to Cummins (1981), students who experience additive bilingualism will show

cognitive benefits, while subtractive bilingualism typically has a negative effect on students' educational experience. The linguistic dimension of the prism model involves all aspects of the language development process, including in the Arabic and English oral and written languages acquisition and learning. In addition, Swain (2000) argued, "language use and language learning can cooccur. It is language use mediating language learning. It is cognitive activity and it is social activity" (p. 97). In support of more effective dual language education planning, Cummins (1992) concluded,

the findings of the Ramírez Report indicate that Latino students who received sustained L1 instruction throughout elementary school have better academic prospects than those who received most or all of their instruction through English. This pattern of findings refutes the theoretical assumptions underlying opposition to bilingual education while supporting the theory underlying developmental and two-way bilingual programs. (p. 38)

This is indicative of the need for more culturally responsive teaching in order to empower learners by providing them with challenging, relevant opportunities that will stimulate higher levels thinking and processing skills both in subjects in English and those taught in the Arabic language. In culturally responsive teaching, an educator is able to recognize and understand cultural differences in student learning and apply appropriate instructional and socio-emotional strategies to promote effective learning (Hammond, 2015). Additionally, Hussien (2014) confirmed the validity of the underlying proficiency theory developed by Cummins (2008) in the Arabic-English learning context and the widely accepted theories in the literature about cross-linguistic transfer of literacy strategies and processes between languages of instruction, even of they are widely different from each other in the various linguistic domains.

In terms of additional language and pastoral support for students, it was found that less

Arabic language support was offered compared to the ESL support offerings. This is connected to another important finding that the English language education was dominant in the curriculum and the instruction in English was in general more effective than in Arabic, a lower status language in schools. The current study also revealed that in the absence of MoE-mandated language and learning support programs, schools have designed their own provisions for additional language (mostly English) and/or pastoral support for students, involving a diversity of approaches of the school leadership.

The findings about the school-based leadership and management practices were connected with school environments that overall exhibited frequent ineffective teaching practices and where the leadership lacked in the provision of extensive opportunities for collaboration among teachers. Some private bilingual schools have the capacity, resources and student numbers to meet all the regulations and manage the perceived constraints associated with the MoE regulations, while some other schools resort to adapting the regulations to their particular students' needs by making alternative choices concerning the MoE regulations and, in certain cases, by not meeting some of the policy stipulations. In the bilingual education context, Lindholm (1990) identified some of the prerequisites of effective leadership of two-way bilingual education programs, in terms of the impact that school-based leaders can have on the implementation of bilingual education with students: an additive bilingualism environment supported by highly capable instructors; a focus on core academic curriculum without watering down the content; an inclusive pedagogical approach supported by appropriate resources, personnel and time; and a positive interdependence between teachers and students where the mother tongue is used for transfer to allow students to participate in challenging academic work while learning the new language of instruction. Flynn (2005) mentioned that a positive "can-do"

attitude of school leaders in implementing bilingual education programs is absolutely necessary. This study brought to light the need for increased focus on professional development, instructional coaching, and educational leaders to further plan for rigorous bilingual classroom instruction.

Limitations of the Study and the Results

This study's qualitative database was limited to information drawn from the available MoE policy documentation shared with the researcher, descriptive detailed notes from semistructured interviews and classroom observations. However, these were deemed sufficient in gathering the data necessary in order to effectively explore the implementation of the program through staff perceptions and classroom-based teaching and learning approaches, in addition to some of the MoE published policies. More classroom observations would have perhaps increased even further the reliability of the data collected by providing more practical approaches of participants than those already recorded in the study database, while audio recordings of the group interview meetings would have potentially also increased the accuracy of the data collected.

Due in part to the qualitative design and the particularities of the program itself, the findings cannot be generalized to other bilingual programs of education. However, the study does possess some transferability for the Gulf region in the Arabic and English context of bilingualism. Sufficient descriptive information was provided so educationalists can determine transferability of results to a different specific bilingual education program of education. While this study was carried out in one specific type of schools in the Sultanate, there are many other similar bilingual program education approaches in the Gulf and the wider Middle East and North Africa (MENA) region. This study can contribute further by inspiring similar studies in other

neighboring countries with learning programs in Arabic and English, particularly where there are still concerns raised in the literature about the effectiveness of dual language education in this region and worldwide.

There were limitations in terms of generalizing the findings to other types of schools implementing similar bilingual education programs in the country or elsewhere, due to the qualitative nature of the design and also to the fact that the data was solely collected from official private bilingual schools in Oman, a most unique social, cultural and educational environment. The short time available for interviewing during the group open-ended interviews, especially in light of the time necessary for clarification, translation and interpretation in bigger participant groups, might have influenced the quantity and accuracy of the collected data through the semi-structured interview notes taken by the researcher during the field visits. Another limitation could include the researcher's association with the MoE, the national education regulator. In addition to the role of principal researcher, the author was also a consultant with the national education regulator, the MoE, and this was instrumental in both having access to schools in order to gather the necessary data, and also in risking conflict of interest perceptions from participants in schools. Therefore, efforts were made to continuously underline for participants the independence of this study from the MoE, both in the Consent Form and in the data collection protocols (see Appendix A and B). Also, as an adult English learner and seasoned multilingual education professional, the researcher's personal and professional thoughts on language acquisition and bilingual education best practices were not disclosed to participants in order to avoid bias and to enable a more authentic representation in the study of participants thinking and experiences with the bilingual program studied.

Implication of the Results for Practice, Policy and Theory

The results of this multiple case study indicated implications for practice and policy while also confirming theory, and these are presented here as they relate to the research questions, the literature review and the conceptual framework based on the prism model. The researcher managed to gather through the results of the study a broader understanding of the elements that influence the implementation of the bilingual program of education in private schools in the country and how these influence student learning in its various domains. The knowledge gained from this study has the potential to assist education policy makers in the continued process of further development of this, and of similar bilingual programs, in terms of the support and interventions to be implemented to increase students' opportunities to access the curriculum through two languages of instruction and ensure their increased progress and academic success.

The outcomes of this case study also provided insights into how participants perceived their engagement with the implementation of the bilingual program with students. The study was used to uncover overall, yet meaningful understandings regarding how the main found influencing factors: (a) bilingual program design and implementation, (b) MoE regulations and constraints, (c) teaching and learning practices, (d) additional language/pastoral support for students, and (e) leadership and management practices influenced student learning experiences while enrolled in this program. These findings are consistent with aspects of theory presented through the literature review, and have an important potential impact on how the MoE decide to proceed in terms of program implementation and development. The data evidenced a diversity of approaches in terms of schools implementing the MoE bilingual program, with varied impact on students' sociocultural, linguistic, academic, and cognitive learning processes in the bilingual

instructional context and this could have an influence on how MoE understand to seek more consistency in terms of further program implementation.

The researcher found that the MoE bilingual program design and the varied localized individual choices for implementation made at the school level had an impact on institutions generally implementing two separate education programs in two languages, English and Arabic, where there was a lack of clear connections between learning in the two languages of instruction, with generally a more lacunar and teacher-centered curriculum delivered in Arabic. This has an important impact on how schools implemented inconsistently bilingual education learning approaches with students, with various impact on student learning. The MoE bilingual program design with the main school subjects taught in English and the status of mathematics and science as important subjects in participants' perceptions, supported English as a higher language status compared with the Arabic language, which is taught solely through the Arabic language, social studies and Islamic studies disciplines. The lack of an effective and cohesive approach to Arabic as a mother tongue maintenance and development education through the implementation of the bilingual program can have detrimental long-term effects on student learning due to the minimal linguistic and conceptual transfer facilitated through learning between the two languages of instruction.

There is a clear need to work further of the status development of the mother tongue and its more effective use for student learning in the bilingual program. The data also showed difficulties that schools had with integrating two different programs of education in two different languages of instruction in a true bilingual education approach stemmed from the historically organic development of the program, where philosophies, standards, assessment, programs and educational resources were not aligned between the disciplines taught in English and those

taught in the Arabic language. This study's findings brought to light the need for a MoE program review, as to provide a more linguistically and academically balanced, cohesive and fully aligned at all levels, student-centered program of bilingual education, with an enhanced status and function of Arabic as the mother tongue.

The study revealed a diversity of approaches in interpreting and applying the MoE requirements for the bilingual program in schools. Some schools implemented the prescriptive curricula and requirements as instructed, while some allowed for a certain degree of flexibility. The study also revealed that the MoE regulations and the related perceived constraints by participants influenced a traditional approach to the delivery of the curriculum, where the majority of the observed instruction was teacher-led and textbook-based, especially in the subjects delivered in Arabic. This has a potential impact on future planning and possible involvement of schools through the leadership and strategic vision of the MoE in policy development to support the implementation of the program in schools.

It was found through this study that there is a clear focus in the private bilingual schools on learning in and through the English language, in an environment where English is dominant in the curriculum, both in terms of the amount of instructional time and through the importance given to the subjects taught through the English language medium. This had an impact on participant perceptions about the different status of the two languages of instruction. In terms of additional language and pastoral support for students, it was found that less Arabic language support was offered compared to the ESL support offerings. This is indicative of the need to enhance the role of Arabic in the program in order to reap further benefits for students learning in a more balanced dual language instruction model. This aspect is also connected to another important finding that the English language education was dominant and the instruction in

English was in general more effective than in Arabic, a lower status language in schools. The lack of solid research-based decision making both at the MoE and school level influenced the learning gains students can make in the bilingual program and impacted their potential for success while enrolled in the bilingual program. There is a clear need for more current research-based approaches to be used in the further development of the program and its implementation strategies in schools.

Thomas and Collier's (2007) prism model involves four interdependent components: sociocultural, linguistic, academic, and cognitive that could be potentially used by the educational regulators for the bilingual program review and curriculum planning. Implications from this research made clear the need to emphasize that for a more consistent, yet individualized approach to implementing the bilingual program of education, the MoE could engage schools in collaborative research-based decision making for the further development of the program's philosophies, policies and procedures, in order to provide students with further and balanced opportunities for academic progress and achievement through both languages of instruction. When students will be afforded more opportunities to develop in a more balanced way their sociocultural, linguistic, academic, and cognitive aspects of language learning through the bilingual program, they would also reap further academic development benefits.

Other important findings impacting teaching and learning, and related to the school-based leadership and management practices, were connected with school environments that overall exhibited frequent ineffective teaching practices and where the leadership lacked in the provision of extensive opportunities for collaboration among teachers. More effective and consistently applied bilingual education-specific teaching and learning strategies would support students' linguistic and academic development while enrolled in this program of education. However, the

lacunar teaching and learning practices influenced relatively high student engagement in generally low anxiety learning environments, characterized by the general high self-esteem of students. Schools would need to maintain and enhance low anxiety learning environments where students feel free to take risks and learn in a challenging dual language environment. The current study also revealed that in the absence of MoE-mandated language and learning support programs, schools have designed their own provisions for additional language (mostly English) and/or pastoral support for students, involving a diversity of approaches of the school leadership. Therefore, there is a clear need for more effective leadership practices in support of the program implementation through additional language support models in a bilingual teaching and learning supportive environment.

The study results were also clearly indicative of the need for more culturally responsive teaching in order to empower learners by providing them with challenging, relevant opportunities that will stimulate higher levels of thinking and processing skills both in subjects delivered in English and those taught in the Arabic language. Another implication for future practice would be to establish intentional collaboration between English and Arabic teachers regarding language learning and development through a bilingual approach that better supports learning in a more balanced and supportive dual language instruction context.

Recommendations for Future Research

The present study highlighted some important aspects that have influenced the implementation of the MoE bilingual program in schools at a national level and at a certain moment in time, when data was collected from schools. Based on the study's limitations discussed in a previous section, similar studies with different methodologies, an even more diverse and larger sample size, different settings in the MENA regions and in different

educational systems could assist with the generalization of the findings. Future research may attempt to expand on and enhance the qualitative methodology used here to incorporate within the sample more educational approaches to bilingual education, more diverse schools and more participants. This is consistent with Christian's (2016) recommendation for additional research in dual language programs to "examine outcomes and impacts beyond achievement reflected in standardized test performance, such as narrative writing development and students' perceptions of bilingualism. Further studies should look inside classrooms at teacher pedagogy and use of instructional languages by students and teachers" (p. 2). This recommendation for future research can support the quest for explaining the lack of equal student achievement from Gándara and Contreras (2009) who concluded, that even if well-implemented bilingual programs can claim a "moderate" advantage over English-immersion instruction, no language intervention has erased the gap between English speakers and English learners, or between native-English white children and speakers of other languages. The cultural obsession with whether to pursue English-only versus bilingual or dual language education has obscured the more critical social and pedagogical issues that need to be further studied and understood.

For example, a longitudinal study that tracked student progress and achievement in the bilingual program over a period of years, as opposed to the one year snapshot this study provided, might be instrumental in better understanding the impact of the different four components of the prism model on student learning and help further prioritize actions to enhance the learning of students in bilingual education. Longitudinal studies involving students' reading proficiency in both languages, English and Arabic, can be recommended for a clearer picture of factors affecting language acquisition and development in the local bilingual instructional context and perceptions from different countries and geographical locations could be analyzed

for similarities, differences and deviations from previous research findings. These proposed studies could identify areas of success and challenge regarding effective bilingual pedagogical approaches and provide a deeper understanding of the language and learning needs of Arabic speakers who are acquiring English in bilingual education programs.

Conclusion

The purpose of this qualitative multiple embedded case study was to explore the implementation of the MoE bilingual education program in private schools in the Sultanate of Oman in light of the factors that impact students' sociocultural, linguistic, academic, and cognitive learning processes in the dual language instruction context, in correlation with these language learning dimensions of the prism model (Collier & Thomas, 2007).

Observational and open-ended interview data collected from a total of 26 schools and 296 participants, compared and triangulated with available MoE policy documentation, provided insight into factors affecting language learning in K–12 private bilingual education. The results of this study underlined that the factors that had the most significant impact on the implementation of the bilingual program in schools were the program design and implementation, the MoE regulations and constraints, the teaching and learning practices, the additional language/pastoral support for students, and the school-based leadership and management practices.

Results of this study indicated that the prism model (Collier & Thomas, 2007) four dimensions of language learning were addressed as part of teaching and learning to different extents among schools, who were overall planning for improvements in the area of further meeting the evolving language learning needs of their students. The study findings brought to light the need for a MoE program review, as to provide a more linguistically and academically

balanced, cohesive and fully aligned at all levels, student-centered program of bilingual education, with an enhanced status and function of Arabic as the mother tongue. Implications from this research made clear the need to emphasize that for a more consistent, yet individualized approach to implementing the bilingual program of education, the MoE could engage schools in collaborative research-based decision making for the further development of the program's philosophies, policies and procedures, in order to provide students with further and balanced opportunities for academic progress and achievement through both languages of instruction. The results were also indicative of the need for more culturally responsive teaching in order to empower learners by providing them with challenging, relevant opportunities that will stimulate higher levels of thinking and processing skills both in subjects delivered in English and those taught in the Arabic language.

The study findings overall underline the essential role of both the private schools and of the MoE in implementing increasingly effective bilingual education models, as to ensure improved long-term achievement for students in dual language programs. The researcher is forever appreciative of all those who supported the successful completion of the study and has confidence in a bright future for bilingual education in Oman.

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قرير نتائج مشروع قياس مهارات مادة اللغة العربية لدى طلبة الصف الرابع الأساسي بالمدارس العالمية والمدارس ثنائية اللغة المطبقة للبرامج الدولية للعام الدراسي 2010 / 2011 م

Appendix A: Consent Form

Concordia University – Portland

Institutional Review Board Approved: April 23, 2018; will Expire: April 18, 2019

Research Study Title: A MULTIPLE CASE STUDY ON IMPLEMENTING THE BILINGUAL EDUCATION PROGRAM IN PRIVATE SCHOOLS IN OMAN

Principal Researcher: Mr. Florian Ciprian Baciu

Research Institution: Concordia University–Portland

Faculty Advisor: Neil Mathur

To participate in this study, you agree by signing at the bottom of the page to be part as a volunteer in an open-ended interview/discussion about your school’s language and learning programs that will last approximately 40 minutes. Other colleagues of yours will be present during this discussion and English-Arabic translation will be available. You will be able to choose to answer any of the researcher’s questions and share your views and experiences about the teaching and learning that goes on in your classroom and/or your school. Additionally, you also agree to have the researcher observe your teaching in your classroom and take notes unobtrusively for a maximum of 10 minutes.

The information you provide during this short meeting will potentially help policy makers improve the MoE bilingual education program. The benefit for you is to gain a better understanding of how your teaching affects your students’ academic success.

There is no penalty for not participating or for withdrawing at any time from the study.

The risk in participating is in providing information for the study. To protect against this risk, your information will be kept securely only by the principal researcher and will also be coded for this study, so it can never be linked to you or to your school. The researcher will not identify you or your school in any written or oral publication or report. Your information will be kept private and confidential at all times. The recordings will be deleted as soon as possible and all study documents will be destroyed 3 years after the conclusion of the study.

If you have questions you can contact the principal researcher, Mr. Florian Ciprian Baciu at [email redacted] or alternatively, you can write to the director of Concordia University institutional review board, Dr. OraLee Branch at [contact information redacted].

I read the above information and I volunteer my consent for this study.

Investigator Name, Date and Signature

Participant Name, Date and Signature

Appendix B: Data Collection Protocol- Possible Guiding Questions and Class Observations

Guide list of questions for the semistructured interviews with teachers and administrators

(interviews varied slightly according to the diversity of schools and the language proficiency of those involved; translation in Arabic was utilized throughout the study)

1. DATE AND TIMES OF SCHOOL VISIT

Arrival and departure time from the school- includes introductions/farewells, teachers/administrators interviews and classroom visits.

2. VISIT KEY FINDINGS-SUMMARY

These synthesized overview notes were written immediately following the visit or on the same day after the visit has taken place.

3. SEMISTRUCTURED GROUP INTERVIEWS- TRANSCRIBED NOTES

Introductions. Review of goals and remind that everybody signed the consent form.

GUIDING QUESTIONS/STATEMENTS:

A. Describe your school in general terms - tell us about your students, teachers, programs of education and anything else you think is relevant.

B. Tell us how the leadership for learning and the leadership for language learning work in your school- describe those roles, responsibilities and work procedures.

C. Tell us about how you use the MoE requirements and regulations in the implementation of the bilingual program with your students.

D. Describe how you support students learning in both English and in Arabic- tell us about your own experiences with students.

E. Tell us how you determine at a school level that your students are academically successful in both languages of instruction, English and Arabic.

F. Add anything else you think is relevant to your discussion today, that we have not had a chance to mention yet.

4. CLASSROOM VISITS- DETAILED OBSERVATIONS NOTES

Classroom observations of 5-10 minutes per class will be used during this study. An effort will be made to observe at least one class period in Arabic and one in English at all levels where the bilingual program is offered in the school. Simultaneous translation when taking detailed classroom visit notes will be used. Detailed descriptions of observed classroom behaviors will constitute the data gathered with this instrument and these will be recorded in a running log for classroom observations (see Appendix C).

Appendix C: Example—Data Collection Protocol—Running Log for Classroom

Observations

Date: Jan. 10, 2018

Grade: 4

Time: 11-11:10

Observer: Florian Ciprian Baci

School Code: C

Subject: Islamic studies

Description of observed classroom behaviors

Example: Islamic Studies- all in Arabic- topic is praying in Islam when traveling. Organized board and extensive writing in Arabic on lesson objective in questions form, and a Quran sunna (extract) is presented on praying during travel. Teacher model reads extract. Students are able to respond to teacher's questions based on the Quran extract- they repeat text and read from textbook for the teacher with little support and only a few corrections. Back and forth discussion led by teacher follows and teacher introduces the new concept and new terms/words are written on board and explained in Arabic. Students are not required to write the extensive teacher's notes on the board.

Coded: C/ War, NV/RVar, RNV, NR/SChse,SChax/LWar, LRar, LSar, LLar/AMar/CSar

Codes for observed classroom behaviors

1. Context:

A: small group (3-7 students) directed by teacher

B: small group directed by student(s)

C: whole class group directed by teacher

D: individual task at student's desk

E: one-on-one teacher-student interaction

2. Types of teacher-initiated interactions: Ven- Verbal English; War- Verbal Arabic; Wmt- Verbal other mother tongue; NV- Non-verbal.

3. Type of student responses: RVen- Verbal response in English; RVar- Verbal response in Arabic; RVmt- Verbal response in other mother tongue; RNV-non verbal response; NR- no response, either verbal or non-verbal.

4. Prism Domains observed in lessons:

Socio-cultural: SChse- Socio-cultural, high self-esteem; SCHse- Socio-cultural, low self -esteem; SChax- Socio-cultural, high anxiety; SClax- Socio-cultural, low anxiety.

Linguistic: LWar- Linguistic, written Arabic; LSar- Linguistic, spoken Arabic; LRar- Linguistic, reading Arabic; LLar- Linguistic, listening Arabic; LWen- Linguistic, written English; LSen- Linguistic, spoken English; LRen- Linguistic, reading English; LLen- Linguistic, listening English.

Academic: AMar- Academic, meaningful academic content in Arabic; AMen- Academic, meaningful academic content in English; ATaren- Academic, transfer from Arabic to English; ATenar- Academic, transfer from English to Arabic.

Cognitive: CSar- Cognitive, simplified content in Arabic; CSen- Cognitive, simplified content in English; CHar- Cognitive, high cognitive level in Arabic; CHen- Cognitive, high cognitive level in English.

Appendix D: Open and Axial Codes in Relation to the Research Questions

Open Codes—Frequency	Axial Codes	Research Question
<p>Constraints of mandatory curriculum in AR 7</p> <p>No connections between EN and AR learning 80</p> <p>Poor quality of the AR language used-informal/non-academic dialect 103</p> <p>Poor quality of the EN language used-informal/non-academic 15</p> <p>Teacher-led and textbook-based instruction 261</p> <p>Constraints connected to MoE regulations 83</p> <p>Attempted connections in learning between EN and AR 64</p> <p>Effective teaching in EN 81</p> <p>Ineffective learning in English 14</p> <p>Teaching through both EN and AR 19</p> <p>Effective teaching in AR 34</p> <p>Ineffective teaching in AR 15</p> <p>High student engagement 50</p> <p>Low student engagement 33</p> <p>EN dominant in the curriculum 47</p> <p>AR dominant in the curriculum 2</p> <p>ESL support 41</p> <p>Low status AR 52- High status AR 15</p> <p>Anxiety – High 14 and Low 47</p> <p>Self Esteem – High 39 and Low 12</p>	<p>A. Bilingual program design and implementation</p> <p>B. MoE regulations and constraints</p> <p>C. Teaching and learning practices</p> <p>D. Additional language/pastoral support for students</p> <p>E. Leadership and management practices</p>	<p>1. What are the factors that contribute to the implementation of the MoE-regulated bilingual education program in private schools in Oman?</p>

Open Codes—Frequency	Axial Codes	Research Question
<p>Level of content –AR High 21 and Low/Simplified 7 ; EN High 19 and Low/Simplified 16</p> <p>Language Transfer- EN to AR 9 and AR to EN 13</p> <p>Pastoral support 19</p> <p>AR support 27</p> <p>Classroom Management- Effective 11 and Ineffective 21</p> <p>Poor resources for learning 10</p> <p>Teaching quality- Effective 4 and Ineffective 46</p> <p>Leadership Quality- Effective 14 and ineffective 42</p> <p>Knowledge of language learning theory – Poor 23 and Good 7</p> <p>EN only learning environments 18</p> <p>Quality of EN for teaching –High 2 and Low 16</p> <p>Teacher Collaboration – Good 12 and Poor 24</p>		
<p>Constraints of mandatory curriculum in Arabic 7</p> <p>No connections between EN and AR learning 80</p> <p>Teacher-led and textbook-based instruction 261</p> <p>Attempted connections in learning between EN and AR 64</p> <p>High student engagement 50</p> <p>Low student engagement 33</p> <p>ESL support 41</p> <p>Low status AR 52</p> <p>High status AR 15</p>	<p>A. Bilingual program design and implementation</p> <p>C. Teaching and learning practices</p> <p>D. Additional language/pastoral support for students</p>	<p>2. How does the program implementation impact students' sociocultural learning processes in the dual language instruction context?</p>

Open Codes—Frequency	Axial Codes	Research Question
<p>Anxiety – High 14 and Low 47</p> <p>Self Esteem – High 39 and Low 12</p> <p>Language Transfer- EN to AR 9 and AR to EN 13</p> <p>Pastoral support 19</p> <p>Classroom Management- Effective 11 and ineffective 21</p> <p>EN only learning environments 18</p>		
<p>No connections between EN and AR learning 80</p> <p>Poor quality of the AR language used- informal/non-academic dialect 103</p> <p>Poor quality of the EN language used- informal/non-academic 15</p> <p>Teacher-led and textbook-based instruction 261</p> <p>Attempted connections in learning between EN and AR 64</p> <p>Effective teaching in EN 81</p> <p>Ineffective learning in English 14</p> <p>Teaching through both EN and AR 19</p> <p>Effective teaching in AR 34</p> <p>Ineffective teaching in AR 15</p> <p>EN dominant in the curriculum 47 AR dominant in the curriculum 2</p> <p>ESL support 41</p> <p>Low status AR 52; High status AR 15</p>	<p>B. MoE regulations and constraints</p> <p>C. Teaching and learning practices</p> <p>D. Additional language/pastoral support for students learning</p>	<p>2. How does the program implementation impact students’ linguistic learning processes in the dual language instruction context?</p>

Open Codes—Frequency	Axial Codes	Research Question
<p>Level of content –AR High 21 and Low/Simplified 7 ; EN High 19 and Low/Simplified 16</p> <p>Language Transfer- EN to AR 9 and AR to EN 13</p> <p>AR support 27</p> <p>Knowledge of language learning theory – Poor 23 and Good 7</p> <p>EN only learning environments 18</p> <p>Quality of EN for teaching –High 2 and Low 16</p>		
<p>Constraints of mandatory curriculum in Arabic 7 Teacher-led and textbook-based instruction 261</p> <p>EN dominant in the curriculum 47 AR dominant in the curriculum 2</p> <p>Level of content –AR High 21 and Low/Simplified 7; EN High 19 and Low/Simplified 16</p> <p>AR support 27 Classroom Management- Effective 11 and ineffective 21</p> <p>Teaching quality- Effective 4 and Ineffective 46</p>	<p>A. Bilingual program design and implementation</p> <p>C. Teaching and learning practices</p> <p>D. Additional language/pastoral support</p>	<p>2. How does the program implementation impact students' academic learning processes in the dual language instruction context?</p>
<p>No connections between EN and AR learning 80</p> <p>Poor quality of the AR language used- informal/non-academic dialect 103</p> <p>Poor quality of the EN language used- informal/non-academic 15</p> <p>Attempted connections in learning between EN and AR 64</p> <p>Teaching through both EN and AR 19</p>	<p>A. Bilingual program design and implementation</p> <p>C. Teaching and learning practices</p>	<p>2. How does the program implementation impact students' cognitive learning processes in the dual</p>

Open Codes—Frequency	Axial Codes	Research Question
EN dominant in the curriculum 47 AR dominant in the curriculum 2 ESL support 41 Level of content –AR High 21 and Low/Simplified 7 ; EN High 19 and Low/Simplified 16 Language Transfer- EN to AR 9 and AR to EN 13 Knowledge of language learning theory – Poor 23 and Good 7 EN only learning environments 18 Quality of EN for teaching –High 2 and Low 16		language instruction context?

Note. Frequency is expressed after the code name as the number of times a certain open code was encountered in the data. Abbreviations: EN- English language; AR- Arabic language.

Appendix E: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does “fraudulent” mean?

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi- media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

What is “unauthorized” assistance?

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work (Continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*



Digital Signature

Florian Ciprian Baci

Name (Typed)

06/01/2019

Date