

**“I speak four languages, how many do you speak?”  
explores how children at the age of 4 and 5 become  
bi-literate writers in a trilingual government KG in  
Abu Dhabi**

“أنا أتحدث أربع لغات. كم لغة تتحدث؟” دراسة حالة عن كيفية إكتساب  
الأطفال في عمر الرابعة والخامسة ثنائية اللغة في مرحلة رياض الأطفال  
في مدرسة رياض أطفال حكومية في إمارة أبوظبي.

by

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of the requirements for the degree of  
PhD in EDUCATION  
at**

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**Dr. John McKenny**

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## **Study Abstract**

“I speak four languages, how many do you speak?” explores how children at the age of 4 and 5 become bi-literate writers in a trilingual government KG in Abu Dhabi, is a case study that explored how children in the Emirate of Abu Dhabi develop bi-literacy skills in Arabic and English. The study focused on understanding how teachers use different pedagogical approaches in both languages to foster the development of student’s language skills. It also looked at how the classroom environment is used as a resource and as a “third teacher” to support development of language. One central question and two sub-questions governed the study.

Main question:

1. How do Emirate children at the age of four or five develop bi-literate writing skills in Arabic and English?

Sub-questions & rationale:

- 1.1 What strategies for teaching writing do teachers who are teaching in an Arabic-English bi-literate environment employ to foster positive development of students’ literacy skills in both languages?
- 1.2 How do teachers use the classroom environment to support students’ development as bi-literate writers?

## ملخص الدراسة

" أتحدث أربع لغات. كم لغة تتحدث؟" دراسة حالة عن كيفية إكتساب الأطفال في عمر الرابعة والخامسة ثنائية اللغة في مرحلة رياض الأطفال في مدرسة حكومية في إمارة أبوظبي.  
الهدف الرئيسي من الدراسة هو تطوير فهم حول كيفية إكتساب الأطفال في عمر الرابعة والخامسة لمهارات القراءة والكتابة عند تعلم لغتين، مثل العربية والإنجليزية التي لا تشترك في نفس الأبجدية أو نظام الكتابة.  
ركزت الدراسة على طرائق التدريس و الاستراتيجيات المتبعة من قبل المعلمين لتدريس الكتابة ووظيفة البيئة الصفية كأداة لدعم تعلم الطلاب. تكونت الدراسة من سؤال مركزي وسؤالين فرعيين. السؤال المركزي: كيف يطور الأطفال في دولة الإمارات في سن الرابعة والخامسة مهارات الكتابة ثنائية اللغة في اللغتين العربية والإنجليزية؟  
الأسئلة الفرعية:

- 1.1 ما هي استراتيجيات تدريس الكتابة التي يستخدمها المعلمون الذين يدرسون في بيئة ثنائية اللغة العربية-الإنجليزية، وذلك لتعزيز التطور الإيجابي لمهارات القراءة والكتابة لدى الطلاب باللغتين؟
- 1.2 كيف يستخدم المعلمون البيئة الصفية لدعم تنمية الطلبة لإكتساب مهارات ثنائية اللغة؟

## **Introduction**

Globally, many countries are in the process of reforming their education system to meet changing economic and social demands. Consistent with this pattern of educational reform, the Abu Dhabi Education Council (ADEC) introduced a comprehensive reform plan termed “The Abu Dhabi School Model” (ADSM). The reform was initiated in 2010, and focuses on the development and improvement of teaching and learning. The reform is best known for its goal of preparing Abu Dhabi students, from a young age, to take their place in a competitive and knowledge-based economy and society. One controversial aspect of the ADSM is the introduction of the English language as early as age four, a provision which aims to produce students who are bi-literate in Arabic and English.

The first few years of a child’s life are considered the most profound years of his/her development. During those years, the social, emotional, cognitive, and academic elements of the child’s development are at their most intense, and children undergo rapid and marked changes in all of these elements. Consequently, early childhood experiences could have a lasting impact on a child’s life. Language is a fascinating area of development that falls under academic development. A large body of research exists documenting the positive outcomes of introducing bilingualism and bi-literacy at an early age. Researchers argue that the main driver behind the popularity of fostering bilingualism and bi-literacy in young children is the associated benefit to the overall development of the child/learner.

There are more than 120,000 students enrolled in the Abu Dhabi public education system. Of that number, approximately 25,000 are enrolled in the kindergarten early-years system. The entire student population in the Abu Dhabi public school system has been impacted by the implementation of the ADSM, which

ADEC started in 2010 to improve students' learning outcomes. Every student enrolled in the system learns two languages simultaneously from the age of four. Because there are few-to-no published studies of the schools of Abu Dhabi, very little is known about those students' abilities as bilingual or bi-literate learners. One of the motives for conducting the present case study is to collect data from this specific population that has not been studied extensively in the past. Children, especially in relation to bi-literate writing skills, have not been extensively studied. Furthermore, the existing literature is dominated by a large body of studies specific to the Spanish-speaking second language learner. This case series of a new population in terms of age and background provides data that could serve as a precursor to future, more structured social sciences research studies on bilingual and bi-literate children.

The research design and methodology for the present study were chosen based on the research questions and phenomenon under study. Exploring and studying children in the context of a classroom is a complex social phenomenon. Data related to the phenomenon of learning are best captured and understood via a case study approach. Further, employing a case study approach allows for the collection of preliminary data that will be available to researchers in the field of early childhood as they design future studies that employ different types of social science research methods.

This qualitative case study was situated in a kindergarten classroom in the city of Abu Dhabi. The school teaches three languages to students simultaneously: Arabic, English, and Chinese. The study explored how children at the ages of four and five become bi-literate writers. The purpose of the study was to explore factors that facilitate students' learning processes as they become bi-literate writers. An outcome of the study was the identification of three main themes related to factors

that had the most impact on students' learning in the bilingual and bi-literate kindergarten classroom.

The study was conducted using a sociolinguistics approach to language and the sociocultural theory framework as a lens through which to view the phenomenon of student learning in the bilingual and bi-literate classroom. Sociocultural theory views learning as a social process, while sociolinguistics looks at the relationship between society and language. The framework and the approach were selected because they allow for the children to be seen holistically. They both acknowledge students' social and cultural backgrounds and view these as primary pillars in students' learning journeys. The sociolinguistic approach to language was chosen to support the framework, as participants of the study come from different backgrounds and different societal groups. These theoretical frameworks supported the research in that language learning is viewed in terms of its relationship to and status in the society.

Five children and four teachers participated in the study. The children are on a positive trajectory towards developing as trilingual learners. They have displayed high levels of thinking, communication, problem solving, and team work. These factors make them unique learners among their peers. Further studies of young bilingual learners would support the ADEC model and other similar models in the development of a more structured and coherent system that serves all children equally, regardless of their backgrounds.

## **Chapter One**

### **1.2 Statement of the Problem**

One of the ADSM's unique features is the implementation of a bi-literate educational system in all grade levels. The students in the government schools of Abu Dhabi study two languages, Arabic and English. The subjects of English, Mathematics, and Science are taught in English, while the remaining subjects—Arabic, Islamic Education, Integrated Social Studies, Music, Art, and Health and Physical Education—are taught in Arabic. Arabic and English are taught to children from the age of four. Two teachers, Arabic and English, co-teach the different subjects in the kindergarten classroom. The present study explores and attempts to understand how children develop as bi-literate writers when the two languages do not share the same alphabet and, thus, have two different writing systems. Published research on this subject is nearly non-existent. Therefore, data from this study lay the foundation for more structured research methods to be employed in the future as the field continues to understand how bi-literate writing skills are developed in the primary classroom.

### **1.3 Purpose of the Study**

The primary objective of the study was to develop an understanding of how children become bi-literate when learning two languages, like Arabic and English that do not share the same alphabet or writing system. The study explored teaching strategies used to teach writing and the function of the classroom environment as a tool to support students' learning. Further, this study highlighted those teaching strategies that were effective. It also focused on the importance of positive relationships between teachers and children, and how these relationships support a positive trajectory for learning.

One central question and two sub-questions governed the study.

Main question & rationale:

2. How do Emirate children at the age of four or five develop bi-literate writing skills in Arabic and English?

Some researchers argue that when children learn to write in a language in addition to their mother tongue, they are likely to confuse the two languages and fail to use either correctly. However, the extant literature underscores the fact that children who learn an additional language have the cognitive capacity to learn two or more languages simultaneously. De Houwer (2009), Genesee et al. (2006) and Meisel (2005) all confirm that children appear to be born with the biological ability to acquire multiple languages at the same time. The performance level in the first language (L1) or the second language (L2) is dependent on many factors, including but not limited to, the status of the language, the learning experience, and the resources available. The significance of the study's central question stems from the need to highlight the importance and benefits of bi-literacy and how each language, regardless of its alphabetical system, supports, rather than hinders, the other language. In addition, the writing of young children has not been extensively studied. Therefore, shedding light on the practices young children engage in as they learn two languages adds value to the existing body of research.

Sub-questions & rationale:

- 2.1 What strategies for teaching writing do teachers who are teaching in an Arabic-English bi-literate environment employ to foster positive development of students' literacy skills in both languages?

This question provided an opportunity for the researcher to identify effective strategies for teaching writing in both English and Arabic. Further, the researcher

explored whether these strategies are unique to the teaching of writing in Arabic and English or if they are universal strategies.

## 2.2 How do teachers use the classroom environment to support students' development as bi-literate writers?

Existing research underscores the role that classroom dynamics can play in the learning of a language (Dworin, Saez, & Moll, 2001). . However, research has not explored whether the resources available in the classroom and the set-up of the room also play a role in the learning process (Dworin, Saez, & Moll, 2001). As part of the current study, the researcher explored the connection between the classroom environment and the development of language skills, specifically writing skills.

### **1.4 Significance of the Study**

The significance of this study stems from the lack of previous case study research in an Arabic context where English is taught as an additional language to young students. This study is unique in its focus on exploring and understanding the processes children use as they develop a writing piece in a bi-literate classroom. Per Gort (2006), studies that have been conducted on children's writing have primarily focused on the analysis of the final product rather than the process taken to develop the product. Understanding the writing processes students use when writing in a bi-literate classroom will be of significance to a wide variety of educators, not only those of students from Arabic backgrounds but also of any second language.

Furthermore, through a focus on the writing process, the present study documents some of the linguistic features that are transferrable between Arabic and English. Denton, Hashbrouck, Weaver, and Riccio (2000) have concluded, through the examination of literacy in dual contexts, that linguistic literacy skills are

transferable from one language to another. It has been shown that skills transfer not only amongst languages that share the same writing system but also amongst languages that do not share the same alphabetic system, such as is the case with Arabic and English (Goldenberg, 2008). Previous research has shown that the development of English and Spanish complement and support one another (Denton, Hasbrouck, Riccio & Weaver, 2000). In other words, the learning of two languages at the same time supports the development of both languages (Denton, Hasbrouck, Riccio & Weaver, 2000).

The current study explored how four Emirate children and one Chinese child developed writing skills in Arabic and English. Moreover, it provides a recount of features in the classroom environment, learning experiences, and opportunities that enhanced the writing development of the subjects. The study offers information about practical and supportive bi-literate pedagogical approaches that enhance the learning of English as a second language during the early years of life. The current study focuses on the skill of writing because past studies have concluded that children have greater chances of becoming competent bi-literates if access to written texts from the two languages is similar (Azuara & Reyes, 2008; Costanzo & Reyes, 2002; Dworin, 2003; Dworin, Moll & Saéz, 2001; Reyes, 2006) however, English texts currently surpass the published texts in Arabic in terms of their quality and quantity, resulting in an asymmetry in their availability. Furthermore, Vygotsky (1978) states that writing is a “critical turning point in the entire cultural development of the child” (p. 106). The statement acknowledges that writing is not only about the development of pencil grip and fine motor skills and is instead is a far more complicated process. Writing in a bi-literate classroom is a process of merging cultures and social experiences. The reason Vygotsky states that writing is one of the most significant

milestones in the development of a child is because literacy is a social and cultural expression. It reiterates the importance of teaching children through their real-life experiences and cultural backgrounds. It is through the development of writing skills in two languages that children truly become not just bilingual but bi-literate.

### **1.5 Theoretical Framework**

Academically, students who study two or more languages tend to perform better than their monolingual peers (August & Shanahan, 2007). Other studies that have explored the topic of bi-literacy have also concluded that bilingual and bi-literate students who are enrolled in a dual language system develop greater intellectual capabilities compared with students who study in a single-language system (Ramirez et al., 1991). The literature on the topic of bi-literacy is limited in regards to understanding the writing process and practices used by bi-literate students. A study conducted by August and Shanahan (2007) highlighted research limitations in documenting and exploring the processes that bilingual and bi-literate students undertake in completing a written task. The current study aims to better understand the processes and strategies that four- and five-year-old bi-literate pupils use while engaged in a writing task in an Arabic-English language classroom.

Two main theoretical frameworks underpin the study: the sociocultural theory of learning and the sociolinguistic approach to language. The sociocultural theory of learning provides a framework for understanding how social aspects of the classroom, or the environment in which the child is immersed, facilitate his or her writing processes and practices. The framework allows learning to be viewed from a social perspective. Further, it provides a cultural context within which to place the writing experience. The cultural context or system in which a child learns could be the school

community, the classroom, or any events that are related to the writing task. The sociolinguistic approach to language provides a lens for investigating how two languages are used in a bi-literate context while the student is engaged in a meaningful social learning experience related to writing. Coulmas (2005) asserts that social factors that influence one's choice of language could be defined by employing a sociolinguistic framework. Understanding how social factors influence the language choices of students in the bi-literate classroom in Abu Dhabi is especially important, given the societal controversy surrounding the teaching of English to Arabic students.

A holistic overview of bilingualism guides the framework of the study. A comprehensive view of bilingualism facilitates understanding of bilingual childrens' usage of two languages, Arabic and English, simultaneously or separately in response to meeting the needs of the writing task. A holistic view of bilingualism was chosen as a guide rather than a framework to allow the researcher to observe subject experiences from a bilingual perspective. It is the belief of the researcher that neither Arabic nor English dominate one another in terms of their presence and status in the school community. Both languages positively influence each other and the relationship is reciprocal. Per Grosjean (1989), languages do not develop in isolation from one another. In this case study, the researcher employed methodology that facilitated the viewing of languages from a bilingual perspective, which is a methodology endorsed by many scholars, including Dworin (2003), Escamilla (1994), and Grosjean (1989). Research conducted on the development of bi-literacy skills asserts that the transfer between L1 and L2 is bidirectional. In other words, the transfer could be from L1 to L2 or L2 to L1 (Dworin, 2003). Furthermore, a holistic view of bilingualism provides insights into how each learner develops bi-literacy skills. Bi-literacy does not develop the same way for all learners, because the progress

of the development is determined by the experiences of the learner (Dworin, 2003).

Below, the rationale for adopting the sociocultural theory and the sociolinguistic approach to language as the overarching theoretical frameworks for the present case study is discussed.

### **1.5.1 Sociocultural Theory**

Per Lewis, Enciso, and Moje (2007), and Moschkovich (2002); sociocultural theory allows the researcher to view the competencies exhibited by the children while engaged in language activities, as well as the resources used to complete specific tasks, as part of a larger social context. Sociocultural theory stems from Vygotsky's view of children and learning. Vygotsky (1978) argued that children begin to construct knowledge about the world before beginning formal schooling. Moll et al. (2001) states that children's interactions with the environment, their parents, siblings, and the resources around them enrich them with views about the world in which they live. Therefore, children come prepared for formal schooling with different ideas as a result of interacting with others (Vygotsky, 1978). Whitmore, Martens, Goodman, and Owocki (2005) state that children construct knowledge from social interactions. Sociolinguistics looks at the relationship between society and language (Foss & Littlejohn, 2011). The theory examines the various ways that society, through its organisation, institutions, and norms, affects language and its use. Sociolinguistics puts an emphasis on the child's early communicative and social interactions as he or she acquires language. Language functions as a social and communicative tool, and children are always active participants in learning a language. Using sociocultural theory as a theoretical framework allowed the researcher to describe the participation

of the children in different writing activities, and to describe the cultural and social aspects that facilitated engagement in that activity.

Vygotsky's theory of learning and development highlights the importance of social interactions and their impact on children's cognitive development (Vygotsky, 1978). Children have an innate ability to acquire language (Kinnear, Steinman & Swain, 2015) but require appropriate language models and constant feedback on their efforts to communicate. This is in line with sociocultural theory that perceives language development as a complex interaction between the child and his/her environment (Handsfield, 2015). These interactions are influenced by the child's cognitive and social development. Nonetheless, children often actively build a symbol system that assists them in understanding their world. Vygotsky's theory focuses on the significance of communication with one another as a major factor in the development of language and thought in children. Adults in a child's life act as mentors and influence their language development.

Vygotsky (1978) identified three levels of social interaction that could have an influence (positive or negative) on the cognitive evolution of a child. The first level is immediate, which refers to the direct interactions of a child at any given moment. In the current study, the first level indicates interactions the interactions of a child in the classroom with his or her teachers and peers. The second level is the social level, representing the placement of the child in the community, family, or classroom. In this research, data collected through classroom observations and interviews with teachers identify how the child is placed in the class. The third level is the societal level. For this study, the third level is concerned with the relative statuses of English and Arabic languages in the society. In the UAE, English is becoming more dominant, and Arabic is at risk of being lost due to the popularity and widespread use

of English. Based upon Vygotsky's social interaction levels, the thinking processes, and ultimately the writing products, of children are influenced by their interactions with their peers, environment and the society in general. The current research focuses on how different levels of social interaction affect children's writing or learning.

Vygotsky (1978) uses the term "ontogenesis" with reference to how a child internalises the world around him or her to construct knowledge and meaning. Ontogenesis is a personalised process, emphasising that children learn differently depending on their experiences and how they have internalised those experiences. Gutiérrez and Rogoff (2003) have asserted that even learners from the same culture, community, or family are unlikely to bring the same experiences to the learning environment because the ontogenesis of experience differs from one person to another.

Vygotsky explains the Zone of Proximal Development (ZPD) as "the distance between the actual development 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, 1978, p. 86). Sociocultural theory examines the significance of the ZPD in child-adult interactions (Lantolf, 2000). When children are left to handle a problem on their own, they might struggle to do it efficiently, unlike when they receive guidance from adults. The adult's guidance, known as scaffolding, should match the child's developmental level if the child is to be comfortable using adult guidance to transition from one level to the next. Therefore, the ZPD represents knowledge and skills that children cannot yet comprehend or perform on their own but are capable of learning with assistance (Foss & Littlejohn, 2011). The present study explores linguistic skills that are transferrable between Arabic and English by examining how teachers view children's ZPDs and

how they scaffold children's learning. It is important for teachers to facilitate children's learning by guiding them to problem solve errors in their writing, thereby scaffolding learning of the writing process.

The researcher was primarily interested in observing how children use Arabic and English languages to communicate ideas, and how languages are chosen when ideas are expressed. Per Gutiérrez, Baquedano-López, and Turner (1997), language cannot be separated from the sociocultural context. How language is used is very much determined by the interactions and the social experiences of the learner. The child needs to see him/herself as part of a learning community to make sense of the learning that is taking place. Gutiérrez et al, (1997) state that literacy develops when the child has access to a broad range of activities that require different modes of interaction; a child's active participation in various learning activities allows him or her to use different cultural/social tools to interact and express ideas (Lave & Wenger, 1991).

Sociocultural theory provides an opportunity for children's work to be analysed and understood in context. It allows the child to be viewed from a social perspective, accounting for the interactions and experiences he or she has accumulated that have shaped the way he or she responds to tasks. The language choices children make in the classroom shed light on the status of the language in the classroom, as well as each child's home and community environment.

### **1.5.2 Sociolinguistic Approach**

One focus of the present study is understanding how children choose the language in which they want to communicate. Language variation is associated with the sociolinguistic domain (Pawlak, 2012). Sociolinguistic theory endeavours to

understand the way in which the language is used based on societal aspects, such as cultural norms, context, and expectations. It also demonstrates that children can learn through social language interactions. Sociolinguistic theory categorises language into two codes: elaborated and restricted (Handsfield, 2015). The restricted code requires speakers to rely on background knowledge as well as shared knowledge. Therefore, it creates a feeling of inclusiveness and a sense of belonging to a particular group. Conversely, elaborated code allows individuals to comprehend the information being passed through thorough explanation. It works well in circumstances where there is no shared understanding or knowledge (Foss & Littlejohn, 2011).

A sociolinguistic framework is appropriate for the present study because it provides valuable information toward a better understanding of why and how children use Arabic, English, or both languages when engaged in writing activities and experiences. Baker and García (2001) affirm that language choice is a conscious decision by the learner. Coulmas (2005) adds that a bilingual speaker chooses the language he or she uses to communicate with others based on several factors, including the interlocutor, status of the language in the environment or community, attitude, preference, and topic. Coulmas (2005) also states that a sociolinguistic approach provides a lens through which one can explain and understand language choice based on the social factors that have influenced the bilingual speaker. Sociolinguistics is concerned with language in the context of society and culture. It considers how individuals with alternative social identities speak and how speech changes under different circumstances. In short, a sociolinguistic perspective allows for a holistic understanding of when and how a language is used.

Sociolinguistic theory proposes that language learning in children takes place through interacting social processes (Foss & Littlejohn, 2011). As they grow, children

interact and relate to people and acquire a means of communication. Language acquisition begins with simple forms of communication, including cries, gestures, and babbles, which represent the first attempts of a child to speak. As children grow, their linguistic abilities also improve. Sociolinguistic theory indicates that language learning begins with phonology between the ages of one and two years (Edwards & Zampini, 2008). A child makes sounds that resemble speech, such as cooing and babbling. He or she associates sounds with common syllable sounds to simplify word pronunciation. Communication subsequently develops through semantics, where vocabulary and concepts are expressed through words (Edwards & Zampini, 2008). Children frequently use phrases incorrectly at first, but improve with time and experience. Sociolinguistic theory thus highlights the significance of a child's early communication, as well as social relations in language acquisition. The theory indicates that the primary functions of language are social and communicative; children communicate or interact socially prior to acquiring any linguistic forms (Coulmas, 2005).

The sociolinguistic approach views all languages as equal. No language has more power over the others, regardless of how long it has been in existence (Coulmas, 2005; MacSwan, 2000). This apolitical view of languages makes a sociolinguistic approach applicable to the present study of how students in Abu Dhabi become bi-literate in Arabic and English. Further, this approach was chosen because it allowed the researcher to identify the language the children chose for self-expression, which offers insight into the status of the dominant language in that environment (Coulmas, 2005). Valdés and Figueroa (1994) state that bilingualism in linguistics is not about spoken-language proficiency. Many sociolinguists believe that for bilingual speakers the level of proficiency in each language will not be equal. Therefore, the focus

should be on how and why the language is used in each social interaction.

The present study focused on the learning environment and how it influences children's language development. Escamilla (1994) and Grosjean (1989) argue that a speaker's language proficiency level can be affected by the environment or through placement in an environment where one language has a higher status than the other. Hence, a sociolinguistic framework allows for the exploration of the social environment as a factor in the language choices of bi-literate students.

Sociocultural and sociolinguistic theories are useful in describing how children acquire language. Sociocultural theory stresses the fundamental role of social interaction in cognitive development. Therefore, the environment in which the child is brought up influences his/her thinking and language learning. The tools of intellectual adaptation affect cognitive function and often vary from one culture to another. Sociolinguistic theory examines the link between society and language. It demonstrates that children acquire the ability to communicate with others through interactions with their parents or caregivers. Nonetheless, they often have means of interacting socially with their peers before practical language use is learned.

## **1.6 The Research Approach**

A current study is a qualitative case series study, which allows for a deeper understanding of the processes children undergo when writing in two languages (Arabic and English). Many scholars (Denzin & Lincoln, 2003; Henning, Rensburg, Smit & Van, 2004) argue that human learning is best studied using qualitative methods that permit a deeper understanding of the phenomenon being explored. In case study research, it is preferable to use several methods of data collection rather than one specific methodology (Merriam, 2009). Data collection in the present study was

triangulated to minimize research bias. In his book, "*The Art of Case Study Research*," Stake (1995) sheds light on the importance of data triangulation for the purposes of validation. Stake argues that the phenomenon under study is better understood if the data are not collected from one source. Validation of the research findings is critical; triangulation allows for the data to be compared across various sources.

Development of a "thick description" of the phenomenon of the writing process of bi-literate students was one of the goals of the study. Merriam (2009) asserts that multiple data-collection methods aid the development of a "thick description." This study included a broad range of qualitative data collection methods, including classroom observations, interviews with teachers, and collection of samples of student work.

Classroom observations, which have been repeatedly used in published studies of bi-literacy, were used as a data collection method (Azura & Reyes, 2008; Bauer & Gort, 2011; Dworin, Moll & Saez, 2001; Gentil, 2005; Kenner et al., 2004; Leikin, Moin & Schwartz, 2011; Reyes, 2006). Classroom observations were recorded using an observation record sheet and are explained in detail as part of the findings of the study. Conversations and dialogues between different interlocutors were documented. The environment in which the students learned was described in detail. Further, various elements in the environment that might be hindering or enhancing the learning of Arabic and English writing were explained. The validity of the data collection methods used here is supported by Stake (1995), Glesne (2011), Denzin and Lincoln (2003), and Merriam (2009); these researchers recommend that a detailed observational record is maintained by the researcher.

Further, unstructured interviews were held with the teachers of the selected

cases to better understand how they interpreted their students' writing processes and products. Informal interviews have been used by other researchers who have studied bi-literacy (Chapman, 2002; Gentil, 2005; Kenner et al., 2004; Leikin, , Moin & Schwartz, 2011; Tsai & Yaden, 2012). Students' written work was also collected and analysed. Some of the researchers who have collected data in the form of documents include Kenner et al. (2004); Gentil (2005); Moll, Saez, and Dworin (2001); and Chapman (2002).

In this paper, the term literacy is defined using the work of Vygotsky (1978). Literacy refers to the meaning the learner makes when processing an event. Bi-literacy is defined in this paper using definitions from Dworin (2003) and Reyes (2006). Dworin states, "Bi-literacy amplifies the intellectual possibilities for children by providing them with access to a broader range of social and cultural resources" (Dworin, 2003, p. 171). Reyes (2006) states that bi-literacy is "the on-going dynamic development of concepts and expertise for thinking, listening, reading, and writing in two languages" (p. 269). The researchers and scholars who study bilingualism have not agreed upon a definition for bilingualism (Baker & García, 2001; Dewaele et. al 2003; Figueroa & Valdés, 1994). The term is defined differently depending on the context. Some researchers, like Mackey (1999), define bilingualism as "the alternate use of two or more languages by the same individual" (p. 27), while others like Valdés and Figueroa (1994) argue it is "the condition of knowing two languages rather than one" (p. 7). It can be argued that bilingualism is the act of speaking two languages with varying proficiency, and is dependent on the level of interaction, the topic, the environment, the relevance of the discussion, and the confidence level of the speaker (Grosjean, 1989; Figueroa & Valdés, 1994).

## 1.7 Summary

In this chapter, the study background, statement of the problem, purpose and significance of the study were discussed and explained. The study's theoretical framework and methods was also outlined.

The ADEC education reform is one of the most thoroughly discussed and controversial reforms in the region. The reform has introduced many significant changes to pedagogical practices, assessment techniques, textbooks, resources, and most importantly, policy pertaining to the introduction of English as a mandatory additional language for students beginning from the age of four. The subjects of English, Mathematics, and Science are taught in English and the remaining subjects are taught in Arabic. In kindergarten, two teachers co-teach students. This study focuses on exploring and understanding how five children in Abu Dhabi have developed as bi-literate writers (Arabic and English). The nature of this study and its focus on process is significant because many prior studies in this area have focused on product. Further, the preliminary data from this study lay the foundation for more structured research in social science on this topic.

Holistic bilingualism is the overarching perspective from which the study's governing framework and approach were developed. The conceptual constructs explained in this chapter facilitate understanding of how the pupils involved in this study develop as bilingual writers in Arabic and English. The sociocultural framework provides insights into the social experiences, concepts, and ideas the students have brought with them from their home environments and how they use those factors in their new social and learning experiences. By contrast, the sociolinguistic approach to language facilitates understanding of language choice in

interactions and discourse between teachers and children and amongst the children themselves.

In Chapter 2, the extant literature related to education in the Emirate of Abu Dhabi, bilingual and bi-literate education, social-emotional development, classroom environment, and play-based education is reviewed and discussed.

## **Chapter Two**

### **Literature Review**

#### **2.1 Introduction**

Countries around the world have realised that economic development in the 21<sup>st</sup> century will not occur without significant shifts in the education system. To prepare students for the workforce, teaching and learning must shift from a focus on knowledge acquisition to a focus on 21<sup>st</sup>-century skills and competencies that go beyond knowledge to application. Most education systems in developed countries have made this shift.

Abu Dhabi, in the United Arab Emirates (UAE), is among the countries that have recognised the need for education reform. In 2007, the Abu Dhabi government published its long-term economic plan, "The Abu Dhabi Economic Vision 2030." The plan highlights the Emirate's aim to establish a knowledge-based economy that is internationally competitive. The government states in its plan that the goal will be achieved partly through education reform based on highly competitive international standards. The Abu Dhabi government envisions an education system that will produce young people who possess the relevant skills and knowledge to contribute to the Emirate's growth and an internationally competitive economy.

Because of the prominence of the English language, and its status in the global economy, bilingual and bi-literate education is a primary and compulsory part of many education systems around the world, including Abu Dhabi's reformed education system. Bilingualism is behaviour that the learner develops over the course of learning two different languages. It is more than just the ability to speak or use two languages (Hakuta & Herlinda, 1997; Mohanty & Perragaux, 1977). Mackey (1999) states that bilingualism is a choice the speaker makes depending on his/her need for

that language. Many nations recognize that to compete in an increasingly global economy, children must become bilingual, using both English and their native tongues as the situation demands.

The present study seeks to develop an understanding of how children become bi-literate when learning two languages, like Arabic and English, that do not share the same alphabet or writing system. The research questions focus on how children develop as bi-literate writers, as well as on the teaching strategies and factors in the classroom environment that aid this development. The purpose of this literature review is to outline the extant literature related to bilingual and bi-literate education, the social-emotional development of young children as literate beings, and the importance of factors in the classroom environment that influence literacy development, including the use of play-based education. A brief discussion of the Abu Dhabi School Model (ADSM) reform in the Emirate of Abu Dhabi precedes the review of literature.

## **2.2 The Education System in the Emirate of Abu Dhabi**

The introduction of the ADSM in the Abu Dhabi Education Council (ADEC) public school system has been a key feature of the education reform agenda in the Emirate of Abu Dhabi since mid-2010. The term ADSM has taken on various meanings, depending on the perspectives and knowledge base of those involved. For senior system administrators, ADSM refers to almost everything “new” that is being introduced into the ADEC schooling system. For instance, new buildings; new staff, including importation of native English speaking teachers from overseas; new school development policies; new curricula; new leadership roles; and new assessment practices are all seen as part of the ADSM reform. For school-based personnel,

ADSM represents a major reform to teaching practice, with a focus on early childhood (kindergarten to grade 5) curricular, pedagogical, and assessment practices. For many educators and community members, the ADSM represents a cultural threat, as it raises some concern that learning additional languages will come at the expense of the Arabic language (Gallager, 2011).

The ADSM Kindergarten English Curriculum is a two-year program that consists of a set of learning outcomes, indicators, and performance measures. In addition, bi-literacy is required, as young children are introduced to English in addition to their native tongue, Arabic<sup>1</sup>. The curriculum requires pupils, in both Arabic and English, to relate sounds to their letters, blend letters to form words, and segment and decode to read words. Students are encouraged to read words present in the classroom environment, like charts, labels, other student works and books. In addition to the learning of Arabic and English, the curriculum includes specific learning outcomes for Islamic Education, Mathematics and Science. At present, there are no specific Art, Music or Health and Physical Education learning outcomes. However, specialised teachers teach these subjects.

As previously noted, the ADSM reform has not been without controversy. Many citizens feel that introducing English to very young children threatens the status of the Arabic language in the country. Gallagher (2011) asserts that while teaching English at the expense of Arabic is a valid concern, ADEC has yet to address or propose solutions to the issue. Saiegh-Haddad and Geva's (2007) research at the college level in Saudi Arabia indicate a growing preference for English as the

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<sup>1</sup> While all schools in Abu Dhabi provide instruction in both English and Arabic, the case study school also provides instruction in Chinese. This is not due to a requirement in ADSM, but due to a local decision made by the school.

language of instruction over Arabic, especially in the critical fields of science and engineering.

## **2.3 Review of Literature**

The purpose of the present study is to examine how students in a primary classroom in Abu Dhabi develop as bi-literate writers. Thus, the literature related to bilingualism and bi-literacy, the social-emotional development of young children as literate beings, and the importance of factors in the classroom environment, including the use of play-based education, was reviewed in preparation for the study. Further, limitations of the extant research will be discussed, along with specific concerns, both structural and political, related to bi-literacy in Arabic and English

### **2.3.1 Bilingualism and Bi-literacy**

Extensive research has been conducted in the areas of bilingualism and bi-literacy (Mackey, 1999). However, there are discrepancies in the literature about the meaning of these terms. As discussed in Chapter 1, bi-literacy is defined here using definitions from Dworin (2003) and Reyes (2006). Briefly, bi-literacy is the ability to think, listen, read, and write in two languages (Reyes, 2006). This definition fits with that of Perez (2004), who defines bi-literacy as the ability to read and write in two languages. Bilingualism, however, is a little more ambiguous, referring at the very least to the ability to speak two or more languages, and in its broadest sense, referring to the “condition of knowing two languages” (Figueroa & Valdés, 1994, p. 7). The review of extant literature related to bilingualism and bi-literacy focuses on prior research that informs the present study.

Some studies of English language learners’ (ELL) bi-literacy development

have relied on a comparison model, whereby the writing work of ELLs is examined and compared to the work of monolingual students rather than to a comparable group of ELLs. This is especially evident in the majority of studies conducted on bi-literate learners in English/Spanish environments (Beeman & Carlisle, 2000; Carlo & Royer, 1999; Dworin, 2003; Escamilla, 1994). This type of comparative model of ELL writing to monolingual writing has been questioned, as it privileges the first language, or L1. Per Escamilla (1994); and Wong-Fillmore and Snow (2005), most studies of bilingualism have implemented a first-language framework in their methodological design. Dworin (2006) and Escamilla (1994) highlight the gaps in many of the existing studies, which tend to focus on identifying language errors made by the learners and labelling them as deficiencies rather than attempting to understand why and how the errors were made.

Other researchers, who have examined the process of bi-literacy rather than the products, focus on how literacy skills are transferred between L1 and L2. In 1979, Cummins asserted that linguistic skills are transferable between languages. Some transfers are positive; others are negative. Positive transfers are the commonalities between the two languages; negative transfers are the uncommon features between two languages. The Linguistic Interdependence Theory of Cummins (Cummins, 1979) claims that the development of L1 has a positive impact on the development of L2. Per Baker and García (2001), Cummins's theory applies only to sequential bilinguals, learners who learn a second language after they have fully developed the first. Today, most education systems around the world introduce two or more languages at the same time. In Abu Dhabi, English and Arabic are introduced from the age of four in all kindergarten schools.

At first glance, Cummins's theory of linguistic interdependence does not fit

most of the educational systems today, as students are expected to acquire L1 and L2 simultaneously. However, Edelsky (1982) also explored the relationship between the development of first and second language writing. Writing samples from a Spanish classroom were compared to samples from a class that received instruction in Spanish and English. A total of 477 Spanish writing samples and 49 English writing samples were collected at different times of the year. The samples were analysed for code switching, spelling inventions, non-spelling conventions, structural features and other content features. Edelsky's (1982) findings were in tandem with Cummins's (1979) hypothesis of bilingual interdependence. Simultaneous development of writing skills in L1 and L2 did not interfere with one another. The subjects in Edelsky's study applied their knowledge of Spanish to their English writing, regardless of proficiency. The ability to transfer skills from L1 to L2 has been documented in other studies, as well as with young learners (Beeman, Carlisle & Davis, 1999). Hu and Commeyras (2008) carried out a case study of emergent bi-literacy in Chinese and English involving five-year-old Chinese students and the use of a text-free picture manual. Using this main resource of wordless, visual material, they examined the cognitive improvement of a young child's verbal communication and literacy expansion in Chinese and English for approximately two and a half months. Ran is a volunteer who worked with children in a kindergarten setting; during the work, Ran met Chaochao (a pseudonym), a young girl of five years, and just been in China for a month. Ran observed that the girl was unsettled and dormant during class work since all children spoke in English. She talked to her in Chinese, and she reacted with a smile and a nod. However, in a short while, Chaochao murmured of not getting what Ran had said. The teacher offered to tutor her after school, and Chaochao's parents accepted the offer. The personal tutoring opportunity gave the teacher a chance to explore how

Chao's Chinese and English verbal communication skills developed concomitantly. Ran examined the application of text free picture resources to encourage developing biliteracy (Commeyras & Hu, 2008).

The data collected, through observations and work samples, allowed the researchers to scrutinize the children's improvement in character and alphabet identification, reading, oral vocabulary, and directionality in Chinese and English. They also observed that the students engaged in practices such as narrating the pictures in Chinese and English, making sentences, labelling pictures, and using invented spellings (Commeyras & Hu, 2008). They found that the use of image-based reading materials, incorporated with comprehensive literacy practices, supported the development of children's knowledge of the two languages simultaneously (Commeyras & Hu, 2008).

Commeyras and Hu (2008) surmise that the text-free resources allowed children to make sense of the image, and communicate about it, without struggling to first make sense of language from L1 or L2. While the subjects' verbal communication may not follow rules for correct syntax, the communication offered researchers the opportunity to observe the process of language development in English and Chinese. In addition, the use of comprehensive literacy practices like invented writing, labelling, and word identification demonstrated that young children who communicate in English as L2 can develop bi-literacy skills using inventive narratives for text-free picture resources.

Commeyras's and Hu (2008) findings support that carefully selected books of pictures without texts can support non-English-speaking learners as they build expressive language skills in English. The findings are significant, as they shed light on how the bi-literacy skills of young learners emerge.

Additional studies of emergent bi-literacy in young children have focused on writing. Beeman and Carlisle (2000) are among many researchers who believe that writing instruction provides a better platform for the transfer of linguistic skills than reading. Buckwalter and Gloria Lo (2002) examined emergent bi-literacy in English and Chinese. The objective of their study was to "provide insights into the debate within the field of bilingual education as to whether the literacy in languages with two different writing systems helps or hinders development in both languages" (p.269). Buckwalter and Gloria Lo (2002) conducted a case study using an interpretive, qualitative approach. Their study was based on two assumptions: Children acquire knowledge about print from their environment; and literacy development is influenced by different attitudinal, social and environmental factors.

Buckwalter and Gloria Lo's (2002) findings are supported by a previous study that concluded that bilingual children usually develop high academic proficiency in both languages and that they are likely to experience cognitive benefits over monolinguals (Dworin, Moll & Saez, 2001). The case is even better if the languages are learnt through mediums other than subjects in schools.

The study by Buckwalter and Gloria Lo, like the study by Commeyras and Hu (2008), addresses the emergent nature of bi-literacy and children learning languages with different alphabetical systems, like English and Chinese. Studies like this are more applicable to the present study of bi-literacy in Abu Dhabi than studies that look at English and Spanish learning; the former provide more insight into how students acquire two languages that have very different writing systems<sup>2</sup>.

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<sup>2</sup> In addition, because the school where the case study was conducted in Abu Dhabi has also made the choice to include instruction in Chinese, these studies of Chinese ELLs are particularly applicable.

While not many studies of bi-literacy development in languages with different writing systems have been published, a plethora of studies exist related to the development of bi-literacy through writing for ELLs learning Spanish and/or English. Gort (2006) conducted a qualitative study exploring the writing procedures used by second-language learners as they created narratives in a writing workshop (workshop) using two languages. The study involved two grades of students, some native English speakers and some native Spanish speakers. Gort was not only interested in the English literacy development of the Spanish speakers, but also of the English-speaking children's literacy development as they learned English and Spanish. Gort's objective was to assess bilingual development based on bi-literacy, cross-cultural understanding, and academic achievement, which was defined as an understanding of the essentials of writing, speaking, and reading in two different language systems. Researchers monitored learners in English and Spanish workshops, conducted interviews concerning writing products and comprehension, and compiled data from every phase of the workshop process. The authors assessed the individuals' bi-literacy skills based on writing capabilities, which revealed comparisons and diversities in participants' cross-language capabilities and patterns of conveyance. Per Gort (2006), the sequence of bilingual writing associated with bi-literacy knowledge involves tactical literacy, constructive literacy transfer, and code switching. The two categories of participants, native English speakers and native Spanish speakers, showed varied sequences in their verbal application of premeditated code switching based on different factors.

The results suggest that enhancing bilingual learners' cross-linguistic approaches and conduct entails emergent literacy skills and procedures associated with interpretation, capitalization, spelling, editing, punctuation, revising, and

monitoring (Gort 2006). Most of the proficiencies demonstrated by the developing bilingual narrators were used cross-linguistically, and different processes and skills monitored within this setting showed somewhat diverse transfer sequences. The developing bilingual authors employed their full linguistic range when generating texts, used developmentally suitable skills and procedures cross-linguistically in text creation, and provisionally used linguistic components and writing concepts of one associated language. The patterns noted by Gort (2006) resulted in the development of a basic framework of bi-literacy development for Spanish-based and English-based bilingual students. The framework presents concepts exclusive to writers of bilingual capacity, and suggests the predictable development of the concepts for enhancing Spanish/English-dominant bilingual authors (Gort 2006).

In the same vein as Gort (2006), Kenner, Kress, Al-Khatib, Kam, and Tsai (2004), in a case study of six ELL children living in the United Kingdom, explored how bilingual children interpret the differences between the writing systems of their native tongue and English. The children all spoke either English and Chinese or English and Arabic or English and Spanish. They were given the task of teaching a peer how to write in a language other than English. They were asked to complete the work in five 45-minute lessons. Researchers found that the children had a high level of cognitive ability related to knowing the linguistic differences between English and their native tongue. It must be noted that the children in this study received more instruction in English than they did in their native languages. However, they exhibited a high level of understanding of how their native languages were structured.

Many researchers postulate that speakers of multiple languages have high metalinguistic awareness, as was exhibited by the children in this study. Kenner et. al. (2004) highlight the importance of having teachers who understand how the

language of instruction differs from the language that their students are bringing into the classroom.

In summary, the extant literature on the development of bilingualism and bi-literacy supports the idea that the development of L1 and L2 can occur simultaneously rather than sequentially. In addition, skills learned in L1 do appear to transfer to L2, and vice versa. Bilingual children also appear to develop a high level of metacognitive awareness of how their languages work, especially when teachers support their understanding of the differences between the two languages. The production of writing in both L1 and L2, while not extensively studied, has been proven a means to highlight the bi-literacy skills of young learners. Most of the studies conducted on bi-literacy development of young children do recognize that learning does not occur in a vacuum, and researchers underscore the importance of the social nature of literacy learning.

### **2.3.2 Social-Emotional Development**

Bilingualism and bi-literacy in young children are skills that do not develop in isolation. Attempting to understand bi-literacy practices in an early-years setting without understanding the child's overall development cannot provide a holistic picture of the learning process. Because of the importance of the child's overall development to the learning process, a vast number of researchers have studied children's social development and how the adults around them can hinder or enhance the learning experience (Hamer & Pianta, 2005; Pianta, 2003). Early childhood researchers assert that relationships between children and adults are a primary factor in the success or failure of a child's education (Maughan & Rutter, 2002; Morrison & McDonald Connor, 2002). Nearly as important as interactions with adults are a

child's interactions with peers, as language learning is a social activity (Vygotsky, 1978). Thus, a basic understanding of the social-emotional development of children is necessary to understanding how children develop bi-literacy skills. Further, a review of what the extant research has discovered about the nature of, and need for, social interactions in the development of bi-literacy is warranted.

The study and research of early childhood have been long dominated by psychologists and sociologists, who viewed children primarily as objects. The primary focus of the studies conducted by psychologists was on understanding how children grow and develop. Under the auspices of family sociology, sociologists studied children to learn how they socialise and the processes they follow in a social context. The study of early childhood has expanded significantly since the early days of research, as children have come to be viewed as viable research subjects who have an active role in the setting of a study. The change in how children are viewed has resulted in rapid growth in studies that aim at understanding children as consumers and creators of knowledge.

As outlined in the discussion of the theoretical framework for the current study (Chapter 1), learning is a sociocultural phenomenon (Vygotsky, 1978). As children interact with those in their environment—parents, siblings, and community members—they develop views about the world in which they live. Further, they use those people around them as language models when developing early literacy skills (Vygotsky, 1978). Children construct knowledge of how language works from social interactions (Goodman, Martens, Owocki & Whitmore, 2005). Thus, even learners from the same family, community, or culture bring very different experiences and competencies to the classroom (Gutiérrez & Ragoff, 2003). Language and how it is used cannot be separated from the sociocultural context, and a child develops literacy

when the activities he is engaged in require various means of interacting with others (Baquedano-López, Gutiérrez & Turner, 1997). Further, a child's language proficiency, either in L1 or L2, is affected by the environment, and the social and cultural factors that affect language and literacy development (Escamilla, 1994; Grosjean, 1989). In the sociolinguistics approach to language, a speaker of multiple languages always makes an informed decision about their choice of the language and the words when speaking with others. Usually, the decision is based who the interlocutor is, the status the language holds in the community, surroundings, attitudes associated with the language and the topic (Coulmas, 2005).

Language, in this sociocultural view, develops from a very early age because it is the most significant means of communication. Vygotsky considered language to play two crucial roles in cognitive development (Handsfield, 2015). First, adults pass information to children through language. Second, language is a very powerful tool of intellectual adaptation. Moreover, sociocultural theory distinguishes among three forms of language that are developed by children, including social speech, private speech, and silent inner speech. Social speech entails external communication use to talk to others. Social speech develops from or before the age of two years. Private speech, on the other hand, is directed to self and serves an intellectual role (Lantolf, 2000). It is typical from the age of three years onward. Private speech, as children grow, diminishes in audibility and transforms into a self-regulating function. This silent inner speech becomes common from the age of about seven years.

At infancy, thought and language are distinct systems but they merge around the age of three years (Handsfield, 2015). At this stage, thought and speech become interdependent as speech represents thought in a verbal form. As this occurs, children

internalize their monologue as necessary and generate inner speech. Language internalization is significant because it drives cognitive development. Private speech is thus the transition point between inner and social speeches. It is the point in development where thought and language unite to form verbal thinking. Private speech is addressed to self, but not to others, for self-regulation purposes. Additionally, private speech helps children to plan their activities and strategies, which aid in development (Lantolf, 2000). Therefore, children engaging in private speech more often tend to be socially competent. Vygotsky posits that private speech acts as a tool utilized by children to facilitate cognitive processes such as overcoming task obstacles or enhancing their thinking, imagination, and conscious awareness.

Vygotsky believes that cognitive development differs across cultures (Kinnear, Swain & Steinman, 2015). Nonetheless, adults have a role to play in the cognitive development of children. Adults transmit cultural tools, which children internalise (Handsfield, 2015). Vygotsky demonstrated that the tools of intellectual adaptation allow children to use basic mental functions more adaptively, and these are determined by the culture in which the child is immersed.

Because of the importance of the social context to literacy development, Grosjean and Li (2012) is amongst many researchers who advocate for research studies to view second-language learners through a holistic lens, as social, emotional, and attitudinal factors contribute to the learning of a language. Children who receive adequate early childhood education that focuses on the development of social-emotional skills, in addition to academic skills, are likely to experience stronger academic gains (Blair, 2002; Denham & Weissberg, 2004; Hamre & Pianta, 2001; Pianta, Rollins & Steinberg, 1995; Zins et al., 2004;).

Researchers of bilingual and bi-literate students and their language

development do, overall, recognize the influence of the sociocultural context on students' language acquisition. Reyes and Azura (2008) applied a sociocultural framework to their study of four- and five-year-old Mexican immigrant children in the southwestern United States. Specifically, they explored how social context and environment influence the development of bi-literacy in young children. Consistent with other studies, Reyes and Azura (2008) found that the children simultaneously developed literacy knowledge and metalinguistic skills in both languages. Further, they found that the children's language development was influenced by the communicative practices within their families. They developed an ecological model of emergent bi-literacy, which underscored the complicated dynamics of the different spaces—home, school, community—in which the child exists, and how these affect bi-literacy development.

Other studies have highlighted the importance of meaningful social interaction in the development of bi-literacy skills. Through case study research, Moll, Saez, and Dworin (2001) note the importance of engaging students in meaningful social experiences, as students participated in learning activities involving direct language instruction and expression in the language. Their findings were in line with Reyes and Azuara's (2008) conclusion that for any language to develop well, the learner must interact with others in meaningful ways. Dworin, Moll and Saez (2001) assert that cultural resources and social processes affect children's development of literate competencies, such as creating conceptual constructions, reading the language (the print aspect of a language), gathering and creating new knowledge, and making meaning using the language.

If there is a lack of cultural resources, however, the type of literacy development outlined by Dworin, Moll and Saez (2001) could be hindered.

Dworin, Moll and Saez (2001) study lacks explicit information on the framework used. The absence of a framework is a major weakness in any study conducted. As the framework is what the researcher bases his/her study on (Denzin & Lincoln, 2003; Glesne, 2011; Merriam 2009; Stake, 1995). The study builds on a social/cultural constructivist theory (Vygotsky, 1978). Data collection included classroom observations, field notes and a collection of the participants' work. The researchers' observations are well recorded. Observations are explained in great detail, dialogues between the students and the teacher are included, the physical description of the classroom and the context is provided, the participants are identified, and an interpretation of what is happening as the researchers are observing is included. This is in alignment with Stake's (1995), Glesne's (2011), Denzin and Lincoln's (2003) and Merriam's (2009) descriptions of what observers should be looking for and paying attention to. However, none of the instruments used during the study was attached. Therefore, it is hard to consider the results reliable without being able to analyse the tools or the theoretical framework.

Ethnographic data collection methods in qualitative research include interviewing, document analysis and observations of participants, processes, dynamics and cultures. Participants' observation is a primary data collection tool in the present study. Observation is an organised description of a live situation or a phenomenon including its participants, their behaviours and the setting in where it is happening (De Munck & Sobo, 1998; Marshall & Rossman, 2006). Observation is a systematic process that allows the researcher to understand a situation, an event or a phenomenon as it is happening in its natural environment. Through observations, the researcher becomes involved in the routine in which the participants are placed, however, with objectivity

(Bernard, 1998). It is a process that enables the researcher to become a member of the setting in which the phenomenon is taking place, and therefore it allows him/her to write, explain and describe it as if it was happening to him/herself (Fine, 2003).

The second theoretical framework of the study is the ecology of language adaptation as highlighted by Haugen's work as well as other prominent scholars such as Hornberger and Skilton-Sylvester, (cited in Azuara & Reyes, 2008). The data collection methods, participants, researchers' role and the data analysis in Reyes and Azura's study (2008) are explained in detail, and a rationale is provided for all instruments that were used. A triangulated data collection method was employed in the study. Stake (1995) in his book, *The Art of Case Study Research*, highlights the importance of data triangulation for validity purposes. The "data source triangulation protocol" (Stake, 1995, p. 112) is what Azuara & Reyes (2008) have used in their study. According to Stake (1995), data source triangulation protocol is used when researchers aim to "see if the phenomenon or case remains the same at other times, in other spaces, or as persons interact differently" (p.112). The researchers have attached some of their instruments including a "list of items used for the environmental print task", a "Coding scheme for the environmental print task" and the "Domains of activity related to literacy" (Azuara & Reyes, 2008, p.396-398).

Godwin and Perkins (2002) state that children come to school ready to learn and with a broad range of ideas and experiences from their homes and surroundings. They assert that for children's ideas and experiences to be fostered, schools should provide access to appropriate resources and opportunities to express their learning. Access to resources should not be limited to cultural resources or resources in the second language; students need to see that there are resources in their mother tongue.

Some believe that students who do not have access to proper resources in their first language tend to experience delays in acquiring the additional language they are learning.

From the research of Azuara and Reyes (2008) and Dworin, Moll and Saez (2001), one can ascertain that early literacy development is unique for every child, and despite the amount of print exposure, the age of language awareness and the development processes differ considerably. Because children bring their personal experiences and environments to the interpretation, acquisition and use of language, it is impossible for a comparative assessment of children's language abilities to be carried out (Dworin, Moll & Saez, 2001). Essentially, the development of early literacy skills is not predetermined, and it might differ from one learner to another (Burke, Harste & Woodward, 1984; Lonigan & Whitehurst, 2001).

Ashdown and Bernard (2011) examined whether explicit inclusion of social and emotional learning as part of the curriculum would promote academic achievement, social-emotional improvement, and the well-being of children. The research examined the implications of a social emotional curriculum, based on the promotional slogan "You Can Do It!" (YCDI). The program was designed to increase the bi-literacy development of 99 preliminary grade one learners in a missionary school in Melbourne.

Previous research has shown that a combination of social-emotional competence and cognitive competence is a significant determinant of educational accomplishment. However, there are some disagreements in the literature concerning early childhood learning environments and the most developmentally suitable approaches to instruction on social and emotional skills. Previous studies have also explored the efficiency of social and emotional learning systems, including

recognised courses and classwork starting at the kindergarten level (Ashdown & Bernard, 2011).

Ashdown and Bernard (2011) specifically looked at how explicit, direct instruction related to social and emotional skills would affect participants. The purpose of YCDI was for participants to attain constructive emotional, social, conduct, and academic achievements. One pre-school participant and one grade one learner were arbitrarily selected to go through prearranged classes in YCDI. The YDCI lessons were scripted to target specific skills: perseverance, confidence, organization and emotional buoyancy. The instruction involved scripted lessons grounded in the YCDI syllabus offered three times weekly. The lessons were facilitated by many additional emotional and social teaching activities (Ashdown & Bernard, 2011).

The researchers found that the YDCI program had a statistically significant positive effect on emotional and social proficiency and welfare for young children. Problems such as hyperactivity, and internalizing and externalizing challenges were reduced, and reading achievement improved. Learners in the YCDI course showed considerably greater social-emotional fitness following the system than the learners undertaking the non-YCDI lessons. The findings support and expound on previous studies. Instruction on social and emotional skills enhances the psychological welfare of young students (Ashdown & Bernard, 2011). Further, the study found that bi-literacy is influenced by the methods used to teach children mastery of different languages, and social and emotional skills play a role in ensuring that learners master literacy faster and effectively. Although there is some debate concerning the role of clear, scripted directives for social emotional learning with young children, Ashdown and Bernard (2011) suggest that early childhood educators could benefit from clear,

scripted instructional resources and teaching strategies in this area, due to the complexity of teaching social and emotional skills.

Another seminal study of bi-literacy development that underscores the importance of the social context and skills of the students was conducted by Jones (2003). Jones's study explored children's application of literate language and writing in a collaborative approach. The study was based on a pattern analysis of social interaction among children. Jones (2003) explored the idea that the social context plays a significant factor in children's verbal communication and initial literacy development. The research explored the chronological connections of first-grade learners throughout a collaborative writing task to document the approaches associated with peer collaboration in well-read language application. This idea of looking at how language is learned and used for communicative purposes has proven to have a positive impact on students' overall language development (Richards, Rodgers & Swan 2001). Newman (1985) and Strickland and Feeley (1991) state that verbal interaction plays a critical role in the development of student language. Padak and Razinski (1999); Burns, Griffin and Snow (1999); and Justice and Pullen (2003) add that reading aloud adds to the students' oral language development repertoire. In addition, student learning is influenced by their personal experiences and social life (Goodman, Owocki, Martens & Whitmore, 2005).

Jones employed an experimental method to assess the following hypothesis: sequential assessment of social interaction demonstrates that students' use of language in a collaborative writing practices is associated with different frameworks of social guidelines like providing help, monitoring, or directing. The participants were children selected from first-grade elementary classes in an urban setting with an

ethnically diverse population. The focus of data collection was on students' collaborative writing practices and oral language use.

Based on Vygotsky's theory, Jones (2003) proposed that social interactions are self-monitored and socially regulated during peer collaboration. An important finding was that children's application of literate verbal communication throughout collaborative writing practices was associated with numerous categories of social controls like questions, negotiations, agreements, and suggestion. Jones (2003) saw children employ literate language during collaborative writing. Essentially, the social interactions influenced the children's cognitive procedures. The study showed the influence of peer interaction on children's bi-literacy; however, the study was not conclusive, and future studies could examine sequential associations of peers based on other literacy tasks, like play or narration in context.

While the social environment of students can support the development of bi-literacy, it can also hinder it. In a year-long ethnographic study of Chinese learners' school-home learning association, Li (2006) examined three Chinese students' bi-literacy practices. The study found that in the Chinese-American community, verbal communication transfer and language deterioration were extensive in some subjects, and the dominant language was not preserved over generations of migrants. The results of the study suggest that the home environment is a sensitive setting for accomplishments or disappointments in attaining bi-literacy. Many families desire for children to become multilingual or bi-literate; however, the three participants in Li's study differed in their interests and usage of varied literacies and languages in the house.

The hypothesis that home is a challenging place to learn bi-literacy is based on factors like parents' beliefs and the role of the child in the community. Other factors

refer to parents' attitudes about tradition and the status of the native language, parents' competency in the native language, and other community factors. Further, the importance that learning institutions put on the native language, cultural values, the media, and communication policies play a significant role in the development of children as bi-literate. These factors suggest that assisting migrant children in becoming multilingual and bi-literate is a daunting responsibility that requires resources and a concentrated effort, not only from educators, but from parents, policy makers, and society members (Li, 2006).

In summary, the social development of a child and the language development of a child cannot be separated. A child's literacy development is influenced by his social world. Not only do interactions in the classroom foster the development of literacy, but interactions in the home and community can help or hinder the development of bi-literacy skills. As learning a language is a social process, the development of bi-literacy skills can be enhanced in a classroom that fosters social interaction between children and adults and children and their peers.

### **2.3.3 Classroom Environment and Play-Based Learning**

Due to the social nature of language development, a classroom that fosters bi-literacy must be a place where interaction is encouraged. Underscoring the importance of communication between teachers and children, Bradley and Reinking (2011) engaged in an experiment to improve teacher-child communication links in a pre-school environment. The experiment examined how teacher-child communication links are meant to increase the value and quality of language connections between the teacher and pre-school child. The goal was to use strategies to improve language interactions during book allocation, semi-structured team practices, and meal breaks.

The study demonstrated that developing children's verbal power is an essential objective of kindergarten teaching, because it is introductory to literacy growth and ensuing reading and writing accomplishment.

In addition to the importance of interactions between the student and the teacher, interactions among children in a classroom are critically important for literacy development. One way in which young children interact naturally is through play. Play and its benefits to children's overall development has been extensively studied in the field of early childhood (Kendrick & McKay, 2001; Neuman & Roskos, 1997). Children under ten years old, as described by Piaget (1962), are concrete thinkers. Abstract ideas and topics are difficult for them, as they tend to recreate thoughts through play and that is difficult with abstract topics. Through play, children mirror their world, history, backgrounds, and cultural beliefs. Christie and Roskos (2000) assert that play is an essential part of regular literacy practices. They argue that it is through play that children engage with others and develop networks, and therefore, learning becomes a meaningful task. Christie and Roskos (2000) add that play should be an essential part of children's daily classroom routine. Christie (1983) also highlights the importance of play in children's literacy development. Through play, children become active constructors of knowledge.

Vygotsky advocated children's play as a means of developing and enhancing the learning experience. He believes that children develop through the "Zone of Proximal Development (ZPD)," which means that new experiences or tasks move them beyond their previous experiences and notions. The growth and learning of children in the ZPD is facilitated by the social interactions children have when they encounter something new. Through play, Vygotsky (1978) believes that children start to learn social rules and what it entails to work with others. Vygotsky strongly

believes that higher forms of learning and knowledge formation require interaction with others and the exchange of cultures and experiences.

Literacy is a social process, through which children form understandings and knowledge about topics and ideas (Cushman et al., 2007; Gregory, Long, & Volk, 2004). Similarly, play is a social process. Bruner (1983) asserts that play is closely linked to students' learning of narrative. He adds that through play, children learn to build a story. Bruner's belief is in line with Paley's (1983) view, who states that as children play they do not only create stories but also connect two worlds. Children bring their real world and experiences into contact with their imaginative world through play, and it is through play that children start to bring their understanding of cultural norms and expectations into reality. Per Dyson (1994), when children play, they are starting to write. As they start to use descriptive words, they develop characters, a climax, and solutions. When children are in play, they begin to practice skills that include storytelling, writing, developing ideas, and taking turns. During play, children begin to enact the stories that are read to them, which allows them to exhibit their comprehension of what was read in a developmentally appropriate manner.

Rowe and Green (1993) state that literacy gains are directly associated with meaningful play. For instance, children respond better to books if they are linked to movements and feelings. They also respond better to books that are being read aloud to them when they are asked to pretend they are a character in the book (dramatic play). Children enjoy demonstrating the actions of characters in a story, which can lead them to become curious about the author's meaning.

Further, children learn to take turns and engage in dialogue through play. Dyson (1989) asserts that skills children practice in play are transferable to their

participation in a structured literacy activity. Gallas (2004) conducted a study in which she examined the relationship between pretend play and literacy development in children. She found that as children played, they started to develop an identity as readers and writers that was evident in their literacy work. Gallas (2004) states that while children are in play, they use language in a meaningful manner and develop higher-order thinking skills. Gallas (2004) concluded that play provides children with the opportunity to explore, connect with others, problem solve and, most importantly, form knowledge and meaning.

Early childhood classrooms should be places that encourage social interaction between the members of the classroom community. They should also be equipped with play materials that allow children to practice their literacy skills through play. Neuman and Roskos (1997) state that children's literacy experiences are enriched when they can take their literacy skills into play with them. Play centres should have materials that allow the children to draw, read, and write.

To have a well-developed, play-oriented, early-childhood setting, the classroom environment and its organisation play a critical role. Learning opportunities are amplified when the class is designed and organised in a manner that mirrors students' needs and interests. A play-oriented classroom has clear rules or expectations for the students. Students' learning is multiplied when they have boundaries. Students need to be made aware of expectations. They also need to be acknowledged for following the classroom rules and notified when they are not (Blair, 2002; Bruner, 1983; Bowman & Stott, 1994; Emmer & Stough, 2001; Vygotsky, 1978).

In summary, the classroom environment functions as a sociocultural space for young children who are developing literacy skills. Because of the sociocultural nature

of language learning, the classroom must encourage meaningful interactions between the child and the teacher, as well as between the child and other children. One research-based way to increase meaningful social interaction in an early childhood environment is to provide opportunities for play, which has been shown to increase students' literacy development. As asserted by Reyes and Azuara (2008), language is best learned when there is a supportive learning environment that encourages exploration and risk-taking, as a play-based environment does. All learners go through the process of gaining knowledge from their interactions with others and from authentic learning before they become literate in any language (Clay, 1982).

### **2.3.3 Limitations of the Extant Research**

Research on the development of bi-literacy is abundant, but it is not overly diverse. Many of the existing studies have focused primarily on bi-literacy in English and Spanish speaking students. There is less research on bi-literacy in other languages, such as English and Chinese speakers (Commeyras & Hu, 2008). In addition, very few studies have been conducted to examine the reading and writing concepts and behaviours of young children prior to formal instruction (BuckWalter & Gloria Lo, 2002). Another gap is that very few studies have been conducted of bi-literate students for whom two different writing systems are involved, such as a combination of one that uses the alphabet and one that uses a non-alphabet script. The majority of the existing research on literacy and bi-literacy was conducted on English and Spanish speakers; two languages that share the same alphabetical system. Further, there is a lack of studies that focus on children under the age of six.

In addition, it should be noted that the findings related to fostering bi-literacy in young children are dependent on many factors in the classroom environment.

Realising the benefits evidenced in the studies conducted by Azuara and Reyes (2008), Bauer (2009), Buckwalter and Gloria Lo (2002), Dworin, Moll and Saez (2001), and others is dependent on the existence of positive environments that foster additive literacy. As Li (2006) noted, it is not a given that children who are exposed to a second language will become bi-literate. To ensure bi-literacy, it is crucial to encourage students to use their native language. While the outcomes of these research studies may appear to be easily accomplished, the conditions created in a research environment rarely exist in the real world.

Bauer (2009) argues that while there are tangible benefits to be gained from bilingual instruction, this is only possible if there are qualified teachers and the political willingness to make the strategy a success. In many cases, these factors are lacking, with bi-literacy instruction geared to bolstering English/monolingual language proficiency for practical purposes.

## **2.4 Structural and Political Issues: Arabic-English Bi-Literacy**

The acquisition of bi-literacy in Arabic and English has not been widely studied; this is likely due to the structural differences between the two languages. It is important to understand how the structural differences between the two languages might hinder bi-literacy development in the present study.

Per Al Jarf (2008), the early introduction of bilingualism to a child is a potential source of confusion at a linguistic level. Cummins' (1979) hypothesis of "bilingual interdependence" states that a learner's competency in L1 is an indicator of the learner's competence in the language of study, or L2. Primarily, the hypothesis focuses on his model "Common Underlying Proficiency (CUP)." Cummins claims that cognitively demanding tasks, including but not limited to, literacy learning and

problem solving, are tasks that are common across languages. However, it is unknown to what extent this hypothesis is accurate in the case of the Arabic language, where the commonalities between English and Arabic are limited (i.e., positive transfer), and negative transfer between the two languages is significant. Beach (1999) also looked at transferability, but went beyond the transfer of skills. Beach suggests that transfer is a process in which skills and experiences extend from one event to another. The transfer according to Beach (1999) is not limited to skills; it includes experiences, identity and emotions. Therefore, even if the linguistic commonalities between the languages learnt are minimal, one should not neglect the experiences and the identity linked to a language.

Per Palmer et al. (2007), the positive transfers between Arabic and English are limited to the alphabetic systems of both languages (letter-sound correspondence) and the verb tenses. The negative transfers between the two languages override the commonalities. The negative transfers at the orthographic level are many. In English, every letter has the same shape regardless of its placement in a word; whereas in Arabic, every letter has four forms (stand-alone, in the beginning, in the middle, and at the end of a word). In addition, English has a deep orthography (rules for spelling), while the orthography in Arabic is shallow. Vowels in English are letters. In Arabic, vowels are diacritical marks placed on the words. At the syntax level, every sentence in English contains a verb. However, in Arabic a noun sentence does not contain a verb. The significant structural differences between Arabic and English could hinder the transfer of literacy skills from one language to the other.<sup>3</sup>

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<sup>3</sup> Because the school in which the case study was conducted also teaches Chinese, it is important to note the structural differences between English, Arabic, and Chinese as well. Per Shu and Anderson (1997), Chinese is a language of distinctive features in comparison to English and Arabic. One of the biggest differences between English, Arabic and Chinese, is that Chinese is a tonal

It is not only the structural differences between English and Arabic that might make English acquisition difficult for young Arabic students. While other languages offer their unique challenges, English has often been criticised for being difficult due to its lack of conformity to grammatical rules and the complexities that can be found within the language. It is not considered the hardest language to learn, but to non-native speakers it is a challenge to understand how the English language works. Children quickly pick up many different nuances and confusing peculiarities of English, as they have fewer concrete ideas concerning languages. Just as with any language, English is not easy to learn for several reasons. There are different dialects, several words that sound and look the same but have very different meanings, and many versions of words.

Not only are structural differences between English and Arabic especially relevant to the current study, the political context is also pertinent. English as the language of the global economy, and the push for young Arabic students to learn English, creates political tension around ADSM's focus on bi-literacy.

The political status of English in relation to Arabic was the focus of a study carried out by Geva and Saiegh-Haddad (2007) on college students in Saudi Arabia, which sought students' opinions on the status of English and Arabic languages for instruction. The study indicated that there is an increasing preference for the adoption of English as the language of instruction over Arabic, even though Arabic is the native language of the participants of the study. A number of students who participated in the study stated that English has an international presence in the

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language. In a tonal language, voice pitches are used to differentiate between words that have the same phonemes (sounds). Another difference between the three languages is that Chinese uses a logographic writing system, while Arabic and English follow an alphabetical writing system. Most of the time the lexical morphemes of the Chinese language represent two components, a meaning clue and a phonetic clue that provides pronunciation support.

business world, thus it is considered superior to Arabic. The students viewed Arabic as better suited for the teaching of topics that are of relatively low priority internationally, such as Arabic history and religion, which are of less significance on the global scale.

From Saiegh-Hadda and Geva's study, it is evident that Arabic is increasingly viewed as the instructional language for issues that are deemed trivial, and the English language is better suited for instruction in the crucial subjects, such as science and engineering. Therefore, the Arabic language is at risk of being lost due to the popularity of English.

A number of universities have taken up English as the language of instruction regardless of the students' first language. In Saudi Arabia the debate between Arabic and English, and specifically which language should be the mode of education at universities, has persisted for a long time (Francis 2005). Despite mixed opinions of students in regards to the appropriate language for instruction, many of the universities in Saudi Arabia have chosen to make English the language of instruction for some of the most important subjects, including medicine and engineering (Francis 2005).

What is interesting is that a preference for instruction in English may not best-serve Arabic students. Per Al Jarf (2008), students believe that the use of Arabic as the medium of instruction in the schools is a central scaffold for their comprehension in different subjects and content areas. Students who sit for technical examinations in Arabic tend to perform better than their peers who sit for the English version of the same exam (Francis, 2005).

In many of the ADEC schools, students learning Mathematics and Science in English perform at a lower level than their peers from other countries. Looking at the

recently published results of the Program for International Students Assessment (PISA) on the Organization for Economic Co-operation and Development (OECD) official website, the UAE sample students performed below average. The exam targets students who are 15 years old (OECD, 2014). Interestingly, what elevated the UAE overall score was not the student sample from the Emirate of Abu Dhabi; it was the sample of students from the Emirate of Dubai, who are still learning Mathematics and Science in Arabic. The PISA examination tests students' abilities to answer questions that require higher-order thinking skills rather than mere content knowledge. Students who are learning those skills in Arabic were more able to respond to the questions than their peers who are learning the skills in English.

Some researchers have asserted that it is the responsibility of governments and policymakers to adequately plan language policies to protect their nation's first language instead of promoting another language at the expense of the first language (Francis, 2005; Geva & Saiegh-Haddad, 2007). Due to the controversy surrounding ADSM, some citizens of Abu Dhabi agree. It is evident that while developing bi-literacy in any two languages is impacted by the structure of the languages and the sociocultural context of the students, the structural differences between Arabic and English, as well as the socio-political context, are especially relevant as young students in Abu Dhabi develop bi-literacy.

## 2.4 Summary

There is little doubt that bilingualism and bi-literacy are essential as education systems prepare their students for participation in an international economy. Almost all studies have highlighted the importance of learning two languages. Some have indicated that transfer of linguistic skills is from the first to the second language, while others have found transfer of skills to be bidirectional. A large body of research has focused on the transmission of linguistic skills in reading. Writing has not been studied as extensively (August & Shanahan, 2007; Cheung & Slavin, 2003). Yet, there is a growing body of research that supports the notion that writing skills transfer from one language to another. Beeman and Carlisle (2000) are amongst many researchers who believe that writing instruction provides a better platform for the transfer of linguistic skills than reading does.

As the learning of a language is a social experience, the importance of children's play in the early childhood classroom as a support for literacy and language development cannot be overstated. It is believed by a vast body of researchers that children, through play, develop social skills that cannot be acquired via formal instruction in a language. Further, through pretend play children learn to read and write, they learn how to converse with one another, and accept the differences they bring to the play experience.

Perhaps due to the significant structural differences between the two languages, bi-literacy development in English and Arabic and how children develop as writers has not been extensively studied. The current study will address these gaps by exploring how children at the age of four or five become bi-literate writers of Arabic and English in a trilingual school. The data from the current study will lay the

groundwork for more formal, structured research into bi-literacy development of Arabic students as they learn English.

Chapter 3 outlines the methodology for the current study, including the rationale for the methods and a discussion of the participants and setting, as well as issues related to the vulnerability of children as research subjects. The role of the researcher, research ethics, data collection tools, data analysis procedures, and validity are also discussed.

## **Chapter Three**

### **Methods**

To meet the demands of a growing global economy advances in technology, and rapid social change; many countries are instituting education reforms to prepare pupils for the future. The United Arab Emirates (UAE) is in the process of implementing a massive change in education. The Abu Dhabi School Model (ADSM) primarily aims to develop the knowledge and skills needed for the nation to become a knowledge-based economy.

One element of the ADSM is mandatory bilingual education, beginning in the primary grades. The number of pupils who are enrolled in bilingual educational programs is increasing worldwide. Researchers have highlighted the importance of developing effective bilingual programs, pedagogical practices, and learning resources to serve the academic and social needs of the ever-increasing population of bilingual learners (Christian & Howard, 1997; Dworin 2003; Edelsky 1982).

“I speak four languages; how many do you speak?” is a qualitative case study of the development of bi-literacy through writing in young children in Abu Dhabi that explores how children at the age of four or five become bi-literate writers in a trilingual government kindergarten classroom in Abu Dhabi. The study aims to explore and understand the processes children employ when engaged in writing activities within a bi-literate context. The study is in response to the lack of published research on the bi-literacy development of children under six years of age, especially related to writing and the development of bi-literacy in English and languages like Arabic, which do not share the same structure. This chapter outlines the methodology for the present case study, including the rationale for chosen methods, a discussion of the participants and setting, and identification of issues related to the vulnerability of

children as research subjects. The role of the researcher, research ethics, data collection tools, data analysis procedures, and data validity are also discussed.

### **3.1 Rationale for the Theoretical Frame and Methods**

The extant literature on bi-literacy in children has focused primarily on evaluating the final products of learning rather than on the process of learning (Christian & Howard, 1997; Edelsky, 1982). The present study employs Reyes' (2006) description of emergent bi-literacy, which is the continuous involvement of children in developing meaning and experiences in a variety of language skills (reading, writing, speaking, and listening). Reyes defines the experience of becoming bi-literate as a dynamic one during which children actively use cultural and linguistic knowledge while constructing meaning of the learning activities in which they are engaged.

The study is framed by the sociocultural theory of learning, described in Chapter 2. This theoretical framework allowed the researcher to gather data describing the social and cultural interactions of the children while they learned. Further, the pedagogical approaches implemented by the teachers were explored through a sociocultural lens. Last, dialogues between the teacher(s) and the pupils, and the linguistic and cultural elements present in the learning areas, were captured when students were working on the production of various texts.

Sociocultural theory focuses not only on the interactions between adults and children and the lasting effect that relationships in the classroom have on children, but also on how learning is affected by cultural beliefs and attitudes. A child's learning and behaviour are the result of prior knowledge from his/her culture and previous

experiences, as well as his/her experiences in the context of the classroom. The development of bi-literacy skills does not occur in a vacuum and the sociolinguistic approach is used in this study to explore and understand how students and teachers use language within social and cultural contexts.

The sociocultural theory of learning and the sociolinguistic approach to language privilege a child's background, culture, and values. The two frameworks allow children to be viewed as active learners who make mindful decisions based on values, attitudes, backgrounds, and experiences. As the learning of language is a social event, the two frameworks are aptly applied to the research topic.

Per Creswell (2013), Stake (1995) and Yin (2003), a qualitative case study is best employed when a social phenomenon is being studied or explored to gain a deeper understanding of it. A qualitative case study allows for the understanding of "how" and "why" questions. Yin (2003) states that employing a qualitative case study is most beneficial when the phenomenon of interest is outside the researcher's control, and he/she would like to gain in-depth understanding of it. A case study approach also allows for the study of individuals who are involved and affected by the phenomenon. In the present study, conducting a qualitative case study allowed the researcher to form an understanding of how children construct meaning from the environment around them and how they learn a language (Goodman et al.1979).

Qualitative case study methodology relies on a variety of data collection tools, including observations, interviews, and the study of artefacts and documents (Yin, 2003). The present study explored the following research question and sub-questions:

- How do Emirati children at the ages of four and five develop bi-literate writing skills in the languages of Arabic and English?
  - What practical writing strategies do teachers who are teaching in an

Arabic-English bi-literate environment employ?

- How do teachers use the classroom environment to support their pupils' writing styles?

### **3.2 Participants and Setting**

The One Common School<sup>4</sup>, formerly called The Chinese School, is a government-run school located in the city of Abu Dhabi consisting of kindergarten, and primary, middle, and secondary schools. The school opened in 2007. This school in Abu Dhabi is unique in that students not only learn English, but also Chinese. The population of the school is 700 pupils, with approximately 200 in kindergarten, 400 in the primary grades (grades one to five) and 100 students in the middle grades (grades six and seven). The school does not have any students enrolled in grades eight to twelve, yet. It is considered a medium-sized school in terms of population. The One School is co-ed up to grade five. In the middle and secondary schools, girls and boys study in different classrooms. The school primarily serves native UAE pupils and some Chinese pupils.

The classroom capacity is a maximum of 20 pupils with a ratio of one adult to ten children (1:10). The KG students receive instruction for four hours each day from 8:00 am until 12:00 pm. Teachers remain in the school for an additional hour and a half for professional development and planning.

Three languages are taught in the school, namely Arabic, English and Mandarin. Pupils can attend the school only if they have enrolled from kindergarten 1 (KG1) because of the Mandarin language requirement. Verbal Mandarin is taught in KG1 and KG2. Reading, writing, speaking, and listening are taught in Mandarin,

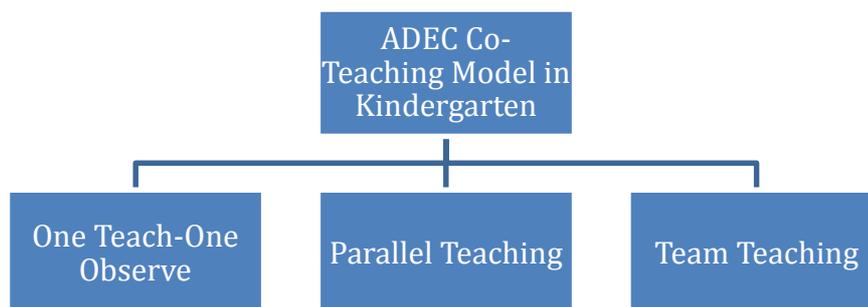
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<sup>4</sup> Pseudonyms are used for all names in the study (school and participants)

beginning in grade one; while listening, speaking, reading and writing are taught in Arabic and English starting from KG1. Emirati pupils are taught Arabic as a first language and English and Mandarin as additional languages. The Chinese pupils are taught Chinese as a first language and Arabic and English as additional languages.

Teachers who are native speakers teach Arabic, English, and Mandarin. In addition to the subjects mentioned above, the school teaches Islamic Education, Integrated Social Studies, Arts, Computer Sciences in Arabic, and Mathematics and Science in English. The school follows the Abu Dhabi Education Council (ADEC) ADSM Curriculum, an approach based on learning outcomes.

The kindergarten section of the school follows the ADEC Co-Teaching Model. The model consists of three teaching approaches, shown in the diagram below.



**Diagram 1 ADEC Co-Teaching Model.**

The “One Teach-One Observe “approach requires one teacher to lead/facilitate the lesson, while the other observes how pupils respond to the lesson. The leader/facilitator’s role is to deliver the lesson to the pupils. The observer’s role is to take notes on class dynamics, and pupils’ behaviour, interactions, and responses to the lesson. The data collected by the observer are used to inform instruction and support

pupils' individual needs. The "Parallel Teaching" approach requires both teachers to teach at the same time. The class is divided between the two teachers, according to individual needs or lesson requirements. The teachers deliver the lesson simultaneously. Per ADEC (2012, P.9), "this approach is effective in supporting a student's individual needs, allowing the teacher to focus their instruction on a small number of pupils and facilitates a student-teacher interaction." In the third approach, called "Team Teaching," both teachers teach the same lesson at the same time in two or three different languages. This approach enables instruction to be shared and models quality teamwork, interpersonal skills, and positive interactions. The teachers choose the approach they wish to follow depending on the needs of the pupils and the lesson.

The researcher selected this school in which to conduct the present case study. A case study allows for purposeful selection, choosing a site for the study based on the aim of forming an adequate understanding of the situation being studied rather than an attempt to generalise findings (Creswell, 2013; Dyson & Genishi, 2005; Maxwell, 2005). The school leadership then asked two classrooms, KG1 and 1 KG2, to volunteer to take part in the study. The teachers who volunteered to participate in the study selected the pupils for participation.

Six teachers participated in the study. Three KG1 teachers participated: Lamia (Jordanian Arabic Medium Teacher [AMT]), Alison (Canadian English Medium Teacher [EMT]), and Tara (Chinese Mandarin teacher). At the time of the study, Lamia had been working in the ADEC educational system since August 2015; the study occurred during her first year of teaching. Alison had also been with ADEC since August 2015. She had over five years of previous experience as a teacher in Canada. Tara had been with the ADEC since the school began offering Chinese (9

years). Three KG2 teachers participated: Salwa (Emirati AMT), Karen (American EMT), and Fiona (Chinese Mandarin teacher). Salwa had been working in the ADEC system since August 2011; the study occurred during her fifth year of teaching. Karen had been with the ADEC since August 2015. She had over six years of previous experience as a middle-school English teacher in the United States. Fiona had been with the ADEC since the school began offering Chinese.

The participating teachers all had a background in early-childhood education, except for Karen, the KG2 EMT. Karen had experience as an English teacher in a middle school and was placed in a KG classroom by the ADEC recruitment team. It is important to note that KG1 and KG2 teachers remain with their pupils for a minimum of two years, serving them in both KG1 and KG2.

Five children participated in the study. Three children participated from KG1, two Emirati male students and one Chinese female student. One male and one female student from KG2 took part in the study as well. The participating teachers made clear that the participating pupils had varying levels of academic ability. The teachers described their pupils in the following ways:

Name	Age	Grade	Gender	Description
Gaith	4	KG1	Male	<ul style="list-style-type: none"> <li>• Active</li> <li>• Average performance</li> <li>• writing skills are pre-emergent</li> </ul>
Khaled	4	KG1	Male	<ul style="list-style-type: none"> <li>• low-performance</li> <li>• does not engage with other students</li> </ul>

				<ul style="list-style-type: none"> <li>• writing skills are pre-emergent</li> </ul>
Alia	4	KG1	Female	<ul style="list-style-type: none"> <li>• high-performance in English and Chinese</li> <li>• struggles with the Arabic language</li> <li>• writing skills are emergent</li> </ul>
Shamma	5	KG2	Female	<ul style="list-style-type: none"> <li>• high performance</li> <li>• developing writing skills</li> </ul>
Ahmed	5	KG2	Male	<ul style="list-style-type: none"> <li>• low performance</li> <li>• pre-emergent writing skills</li> </ul>

### 3.3 Protecting Children’s Vulnerability

Using children as subjects in a research study has long raised ethical concerns. Some researchers argue that children should not be used as study subjects, since they are non-consenting and their participation in the study is not by choice. It is usually the parent or the guardian of the child who consents to participation. However, other researchers believe that the involvement of children in social science studies does not put the children at risk. Further, some researchers argue that children provide data that cannot be collected in an alternative manner. Despite the ongoing debate, children have successfully participated in many research studies as active subjects and their voices add value to the findings. Children's involvement in research allows for better understanding of issues involving children, and recommendations and solutions to those issues based on the actual experiences of the children. If children were not

used as subjects, the findings of studies related to the experiences of children would provide no real value. However, as important as it is for studies of topics involving children to include them, children remain particularly vulnerable as research subjects. The vulnerability of children stems from their inability to consent themselves, their limited understanding of research, and most importantly, their inability to understand the potential risks resulting from participation in a study.

To protect the children during the present case study, the researcher employed several principles. First, the researcher respected the children's autonomy and right to withdraw from the research at any time. During the study, Shama showed signs that she did not wish to be part of the observations. Thus, there is only one formal documentation of an event involving her in Chapter 4. Shama exhibited signs of being uncomfortable with being observed; being selectively mute, not participating in any activities, and stopping her activity if she noticed that the researcher was observing her. Shama's desire not to take part in the study entirely, which was telegraphed through her actions, was noted by the researcher and she was observed less than the other subjects. Second, the researcher did not anticipate any physical or psychological risk to the children based on their participation in the study. The results of the study, including data from the observations of students, were not shared with anyone, including the adult participating subjects. Substantial involvement of the researcher with the subjects did not take place. Finally, all participating children in the study were treated in a similar manner, without regard to nationality and/or religious background.

The One School is a pilot school. Parents are made aware upon registration that the school receives much attention from researchers, higher education internship students, media, and visitors in general. The parents of the children who attend the

school have consented for their children to be photographed, to participate in research, and to occasionally be taught by internship students when it does not jeopardise the quality or level of education the pupils receive.

### **3.4 Role of the Researcher**

The researcher conducting the present study works for the ADEC as the head of the Pedagogy and Learning Resources Section. The section mandates that the researcher work to develop curriculum, resources, and training for all English Medium Subjects from KG to grade five. The researcher was heavily involved in the development of some of the core curriculum documents, including the KG and primary years English, Mathematics, and Science Curricula. In addition, the researcher was charged with the development of the KG lesson structure and the ADEC Co-Teaching Model approach. The researcher acknowledges some level of bias in favor of the curriculum, which includes the lesson structure and teaching models she helped to develop. Acknowledging, recognising, and understanding personal bias and its causes helped the researcher uncover the bias, ensure that it remained minimal, and kept it from interfering with the study (Creswell, 2013).

Dyson and Genishi (2005) have described the role a qualitative researcher takes when conducting a study with children as that of an attentive but unhelpful adult. The concept of being “unhelpful” requires that the researcher refrain from actively participating in classroom activities, supporting children with their learning, and reminding them of class rules. The researcher took a passive role in the classroom during the present study. For instance, field notes were taken from the back of the classroom. No interaction with children took place while they were working. The researcher only moved closer to the children when they were engaged

in producing text, to take notes on their letter formation. Video recordings were made when children were involved in lengthy conversations or activities. When the video recording appeared to be causing discomfort, it was immediately discontinued and the researcher took field notes instead.

The researcher's role was to form an understanding of how children can become bi-literate writers, rather than evaluating teachers or students. Some of the teacher participants were concerned about the researcher's opinion regarding the implementation of the curriculum. The researcher made it clear to the participants that the purpose of the study was not to judge or evaluate.

### **3.5 Ethics**

Ensuring that the research was conducted in an ethical manner was a primary concern of the researcher. The purpose of the research was clearly explained to the school leader and the participating teachers. They were repeatedly informed that the purpose of the observations was not directly linked to work done by the researcher in her capacity at ADEC. The researcher asked for school leadership to introduce her as a researcher and not by her ADEC title. The researcher answered all questions raised by the school community about the research. Discussions about ADEC were minimal. One of the participating teachers asked the researcher if she was doing a good job. The researcher reminded her that the purpose was not to evaluate or judge; it was for the researcher to learn more about a particular topic of importance to the students.

A request to conduct the study was submitted to the ADEC Research Office. The application was approved, and the researcher was granted access to all KG schools in the Emirate of Abu Dhabi. The researcher contacted a school principal via

email and requested authorization to conduct the study at a target school. The school principal approved the request for the study to be conducted at the school and informed the Arabic and English faculty heads at the KG section of the school of the researcher's visits. The KG Heads of Faculty (HOFs) asked for two volunteer classrooms to take part in the study. A KG1 and a KG2 class agreed to participate. The selection process was completed at the school level and the researcher had no role in it. Once participants were identified, they were provided a consent form that explained the nature of the study, its purposes and duration.

The researcher took measures to ensure that all work was conducted in an ethical manner, without subjecting the students, teachers, or school administration to personal or professional discomfort. The researcher did not share or use the data collected from the school to evaluate the teachers or administrative procedures of the school or report on the activity of the school to ADEC headquarters. The data gathered from the pupils' writing work were not used to determine performance levels. Neither the data collected nor the video recordings from the classroom were shared with the school principal or any of the leadership team. The anonymity of the school and the study participants was preserved in the writing of the paper. Altering the identities of the school and the study participants was not limited to the final write-up of the paper; anonymity was also maintained in all field notes. Video recordings, pictures, interview transcripts, and field notes were stored in a password-protected folder on a computer. No physical or social descriptions of the subjects were noted to further protect the subjects' anonymity. The school administration officials, pupils, and teachers were given pseudonyms to protect their identities. All personal information and data were treated as confidential.

### 3.6 Data Collection Tools

Data were collected from February 2016 through June 2016. A robust case study includes several methods of data collection (Creswell, 2013; Maxwell, 2005; Merriam, 2009). The study employed several data collection tools to ensure reliability in the analysis of the data collected. The data collection tools included classroom observations, unstructured teacher interviews, videos, and an analysis of the pupils' writing. Table 1 provides an overview of the data collection tools used in this study.

**Table 1**

<b>Research Question</b>	<b>Data Collection</b>	<b>Data Source</b>	<b>Purpose</b>	<b>Length</b>
How do Emirati children at the age of four or five develop bi-literate writing skills in Arabic and English?	Classroom observations Unstructured teacher interview Student work samples	Classroom field notes Student writing documents Writing behaviour checklist ADEC writing curriculum Writing behaviours checklist Student writing	To identify the writing experiences that pupils are provided with  To gain insight from teachers on how children develop bi-literate writing skills	12 weeks (200 hours in the classroom for observational purposes)  One interview each week to talk through the writing lesson(s) for that week
What practical writing strategies do teachers who are teaching in an Arabic-English bi-literate	Classroom observations Unstructured teacher interviews	Classroom field notes Student writing documents	To identify pedagogically sound bi-literate writing strategies	

environment employ?				
How do teachers use the classroom environment to support pupils' writing?	Classroom observations  Unstructured teacher interviews	Classroom field notes  Student writing documents  Notes about the classroom environment	To identify ways in which teachers may facilitate the learning of two languages using the environment as a learning tool	

Data collection occurred in a sequential manner, beginning with classroom observations and collection of student writing samples. Classroom observations and writing artefacts were the primary sources of data used in analyses. Observations were conducted over a five-month period (12 weeks), with approximately 125 hours spent in the classroom. Each observation period lasted for 3.5 to 4 hours. A checklist was not used for classroom observations; instead, field notes were taken as a record of classroom activity. Field notes included descriptions of participant activities, the classroom environment, student-teacher interactions, and language usage.

Collectively, 30 classroom observations were conducted across KG1 and KG2. Each observation lasted for a minimum of 3.5 hours and a maximum of 4 hours. Some observations were carried out over five consecutive days in each classroom to ensure continuity of data collection. The purpose of these observations was to understand how the continuity of learning and writing impacts student writing performance. Classroom observations were the primary method of data collection in this case study. Data were collected through detailed field notes, rather than employing an observation checklist, to avoid limiting the data collection to the items

on a checklist. The KG schedule does not have a specific time/block during the day for writing instruction; writing is embedded in all focused lessons. Even when pupils are learning mathematical concepts, they are frequently asked and encouraged to write about them. The teachers lead circle time, during which they set expectations, share the plan for the day, conduct whole-class shared reading or writing sessions, or complete an activity with the children. Outside of circle time, the lessons in KG are student-centred.

Field notes were recorded during all activities that took place in the classroom, except when pupils had physical education, art, or music. Video recordings were made to gather data when lengthy conversations took place and later transcribed. Pictures were taken of the participating students' work, classroom environment, and student working interactions.

The use of participant observation as a data collection method has many advantages. The present case series took place in an early-childhood setting; therefore, these observations provided data on the interactions between adults and children and amongst the children. Observation also permitted the researcher to record data on feelings and nonverbal cues. Furthermore, direct observation allowed the researcher to blend into the community of the classroom, which resulted in a reduction of observation bias, typically manifested as altered participant behaviours (LeCompte, Schensul & Schensul, 1999). Per Schmuck and Perry (2006), observations allow the researcher to cross-check information and findings. The use of observation as a data collection method was also appropriate to the purpose of the research, which was aimed at developing a holistic understanding of how children become bi-literate writers in two languages. The research questions required detailed answers, and participant observation provided one of the best methods for developing

a rich description of the phenomenon under study. Observation also allows for the development of further research questions or hypotheses that could be the focus of future research. For example, from the results of present study the researcher developed further questions to be considered in future research studies, including how do cultural differences impact students' learning of a language? And how do borrowed pedagogical practices impact students learning? Importantly, a researcher who uses observation as a data collection tool must be interested in the phenomenon itself and desire to better understand it; the researcher must also be interested in the people involved in the study. Because of the researcher's interest in the bi-literacy development of young children as a phenomenon, participant observation was particularly appropriate as a method of data collection.

However, participant observation has some disadvantages that should be noted. Data collection and interpretation could be subject to observer bias, and be inconsistent across researchers or events. To control for confounding observer bias, video recordings were made of some of the events for crosschecking purposes. Field notes were checked against video recordings; alterations were made if discrepancies were found. Environmental factors, such as time of day, could also affect observations. In the present study, observations were organised in a systematic manner such that they started and ended at the same times in both classrooms and across days; each classroom was observed on a different day to avoid observing a class in the morning and another in the afternoon. Another disadvantage of the ethnographic approach/method is researcher bias. A researcher usually comes to the study with some bias or pre-formed understanding about the topic of study. The researcher in the present study is fully aware of her bias and relationship with the ADEC. Consequently, measures were implemented to control for this bias. These

measures included video recording sessions to ensure that the researcher interpreted data in a manner that was consistent with the event. In addition, some observations were cross-checked with the teachers to confirm understanding. Furthermore, the researcher deliberately captured what was working, as well as what was not, when writing the findings and the limitations of the study. Although observational data based on a limited number of participants cannot be generalized to the entire KG population, it remains a source of in-depth and detailed data that can lay the groundwork for a more structured future research study (Bernard, 1998).

In addition to participant observation, unstructured interviews were used as a data collection method. These interviews took place between the researcher and the participating teachers. The purpose of the interviews was to have an informal conversation with the participants to better understand the activities that took place in the classroom (Dyson & Genishi, 2005; Merriam, 2009). The researcher planned to conduct group interviews with the three teachers in each classroom (Arabic, Chinese, and English). However, the interviewees were not equally comfortable conducting the interview in English because they had different levels of English proficiency. Therefore, individual interviews were conducted in each teacher's preferred language, in addition to group interviews. The interviews with the Chinese teachers presented challenges to data collection, because the Chinese teachers had concerns about sharing data or presenting their personal views.

A final method of collecting data was to take pictures of pupils' writings as they started constructing a writing piece. If a writing sample was composed outside of an observation period, the researcher conferred with the teacher to form an understanding of the sample. The names of the pupils were redacted on these samples. All original documents (student work) remained with the teachers; pictures of the

writing samples were taken and used for analysis.

Per Merriam (2009), the researcher should always have the focus of the study in mind to avoid collecting unnecessary data. Therefore, the researcher attempted to maintain a focus on the research questions and the sociocultural framework for the study during data collection.

### **3.7 Data Collection and Analysis Procedures**

Qualitative data is most valid and valuable when the processes involved in collecting and analysing data are made clear. Field notes from classroom observations were transferred to electronic records immediately after observational sessions to preserve as much detail as possible. Field notes included descriptions of the classroom environment, lesson instruction, teacher-teacher interactions, teacher-student interactions, student-student interaction, centre-time activities, circle-time instruction, and verbal and non-verbal language use. All efforts were made to avoid analysing data while taking notes. However, occasionally it was necessary for the researcher to include an inference or explanation in the field notes. Inferences and explanations were recorded in red. Observations were dated, and the classroom section and the teachers' names were included at the top of the document. Data were organised in folders by day of observation. Each folder included the classroom observation document, videos, and pictures taken on that day. Only the portions of the video recordings relevant to the research questions were transcribed. Pictures were used to validate descriptions of space, such as the classroom environment, writing centre, or blocks centre.

Data collected during observations were analysed using established methods for qualitative data analysis. Notes from observations were filtered to avoid the

retention of unnecessary data by reading and crosschecking individual observations and identifying patterns, as recommended by Schensul, Schensul, and LeCompte (1999).

The researcher employed a systematic data collection and analysis process. The different techniques the researcher employed included the following (Maxwell, 2005):

1. Thematic organisation and categorization of emerging concepts from classroom observations and teacher interviews.
2. Consistent data-collection processes.
3. Immediate annotation of pupils' writing in the classroom.
4. Reading of collected data from observation and interviews, and teacher clarification of unclear points in a timely manner.
5. Data organisation by day of observation. All pictures and videos related to the observation session were put in the same folder.

The researcher conducted an ongoing analysis of the data to ensure that the primary research questions were successfully answered, as suggested by Maxwell (2005) and Creswell (2013). As the data were analysed, patterns/themes emerged (social-emotional relationships, classroom environment, quality of instruction). Each event or story was categorised into one of the three themes. If a story or an event fell into two themes, then it was placed under the theme to which it was most strongly connected.

### **Narrative Analysis:**

The analysis and reporting of data took on a narrative form, as the researcher worked to share and make sense of these “stories” of what was occurring in the classrooms. Smeyers (2008) notes that stories “may be a way to do justice to the

study of education” (p. 702), as telling the stories of what happens in a classroom “does not give us fixed and universal knowledge . . . but rather it contributes to the task of improving upon our practical knowledge” (p. 691). Patton (2002) argues that the foundational questions for narrative analysis focus on what the narrative, or story, “reveal[s] about the person and the world from which it came” and on how the narrative can be “interpreted so that it provides an understanding of and illuminates the life and culture that created it” (p. 115). The focus of the present study was to understand how young students develop bi-literacy skills. Thus, narrative analysis, or interpreting the stories from the classrooms, does justice to the data. Data from the present study related to the students and their acquisition of bi-literacy skills, to the teachers and their methods, and to the classroom environment cannot be separated. They are interconnected. Viewing the data from a narrative lens respects that the “stories” of the classroom “are not told in a vacuum—they are simultaneously situated within a particular context and within a wider cultural context” (McCormack 2000, p. 287).

Patton (2002) outlines four forms of narrative analysis as methods for understanding organizations, such as school. The research can be “written as story” or “tales *from* the field” (p. 118). The research can be a collection of stories, or “tales *of* the field” (p. 118). The research can view “organizational life as story making,” and finally, the research can engage in “literary critique” of data related to the organization (Patton, 2002, p. 118). The present study used the first two methods. Research data was collected, in field notes and interviews, as “tales of the field.” The findings, which tell stories of significant events in the classrooms, are written as stories, or “tales from the field.”

When engaging in narrative analysis, the researcher works “back and forth between the data or story . . . and his or her own perspective and understandings to make sense of the evidence” (Patton, 2002, p. 477-78). Narrative inquirers “record personal and social interaction through detailed field notes, available documents, artifacts produced in the context, and interviews” (Butler-Kisber, 2010, p. 69). Bodgan and Biklen (as cited in Butler-Kisber, 2010) describe the process of narrative analysis as using broad “brush strokes” to code data “to establish the names of the actors, the contexts where actions and events occur, the storylines that connect, the gaps that exist, the tensions that arise, and the tone of the narrator” (p. 69). While the researcher used qualitative analysis techniques (Maxwell, 2005), what emerged naturally from the synthesis of the field notes, documents, artifacts, and interviews collected during the study were stories of significant learning experiences for these developing bi-literate children.

The findings of the study are reported, for the most part, in narrative form. Stories from the classrooms are shared as significant events that shed light on the development of bi-literacy skills by the subjects of the study. These stories follow a narrative structure, as outlined by Butler-Kisber (2010):

1. Abstract or summary of the story
2. Orientation of the story (time, place, situation, participants)
3. Complicating action(s) in sequence
4. Evaluation (the significance of the meaning of the actions and/or the attitude of narrator)
5. Resolution (what finally happened)
6. Coda (a return to the present)

Using this narrative structure allowed the researcher to fuse the events observed in the classroom with her own evaluation of the significance of the events. In addition, the research was able to fuse the events from the classroom with the thoughts of the teachers, as expressed during the interviews. Approaching the data from the lens of narrative analysis provided the means to weave together the various data sources into coherent, meaningful snapshots of significant events in the classroom.

When narratives are produced as data or findings, the researcher must be cognizant of and respect the fact that narratives are told from the lens of a particular narrator. For example, interview data collected during the present study was from the viewpoint of specific teachers. At the same time, field notes collected during the present study were collected by the narrator. Decisions were made, by interviewees and by the researcher, related to the data collected and to the words used to record data. The data from various sources came together as “disjointed stories” requiring “sensitivity and insight to unpick meaning” (Dibley, 2011, p. 13). The researcher’s role in narrative analysis of data is to “make something out of . . . events: to render, or to signify, the experiences of persons-in-flux in a personally and culturally coherent, plausible manner” (Sandelowski, 1991, p. 162). For the present study, the researcher—as a narrator—chose which events were significant in the classroom and gave them “cohesion, meaning, and direction” (Sandelowski, 1991, p. 163). The researcher arranged “events and actions by showing how they contribute to the evolution of a plot” (Smeyers, 2008, p. 697).

### **3.8 Validity**

As suggested by Creswell (2013) and Maxwell (2005), a triangulated data-collection method lends validity to the study results. The study employed three data

collection methods. The primary method of data collection was classroom observation, and the secondary methods were unstructured interviews and the collection of artefacts in the form of pictures of students' written work. During observation sessions, the researcher video recorded most of the conversations taking place in the classroom in addition to taking field notes. The notes were crosschecked against the videos to ensure that they were an accurate reflection of the events in the classroom. Additionally, when a pupil's writing was discussed, the researcher crosschecked the written work with information about the context in which the writing took place. Finally, the researcher clarified the biases she brought to the study, which also established a level of validity.

The use of narrative analysis recognizes the role of the researcher as a narrator and interpreter of events. Researchers who use narrative analysis question the concept of validity (Butler-Kisber, 2010). What makes one person's narrative more valid than another's? Narratives, by their very nature, are interpretive, and "the result is not so much an account of the actual happenings of events from an objective point of view as the result of a series of constructions; it is instead a particular reconstruction of the researcher" (Smeyers, 2008, p. 698). This type of interpretive act flies in the face of traditional notions of "validity" in research. Bruner (1986, as cited in Butler-Kisber, 2010) points out that "arguments convince of their truth, stories of their lifelikeness" (p. 63). Stories do not have to be "true" to be valid. Instead, they must "ring true." Instead of validity, narrative analysts focus on "trustworthiness" (Butler-Kisber, 2010, p. 78). A researcher establishes "trustworthiness" by openly sharing her positionality as the researcher, her pre-conceived biases, and by using ethical research practices. Further, the researcher attempts to recognize and respect issues around

power and voice. Throughout the research process and in the reporting of data, the researcher has attempted to remain sensitive to her position as a leader in the educational system and the effect that might have on the participants in the study. The researcher has also attempted to be transparent about her role and her beliefs as a leader in the educational system.

### **3.9 Summary**

In this chapter, the rationale for the research methods, including the use of a case-study approach as an appropriate framework for understanding how children become bi-literate at the age of four or five, was given. The growing number of students enrolled in bilingual education systems worldwide has led to a rich body of research on bilingualism and bi-literacy. In the UAE, every student who is enrolled in a government school participates in a bilingual program of study. Therefore, a significant need exists for the collection of preliminary, exploratory data in preparation for future structured social sciences studies in the areas of bi-literacy and bilingualism in the UAE. Few studies have been conducted on the writing development of young children under the age of six. A large body of existing research focuses on studying skills like speaking and reading. Writing is usually examined as an end product only, rather than a process. The present case study adds value to and fills gaps in the existing body of research in two ways; by focusing on children under the age of six and examining writing as process rather than as product.

The participants in the study were five children who are enrolled in a government school. The subjects of the study included two girls, one Emirati (five years old) and one Chinese (four years old); and three Emirati boys (two of whom were four years old and one of whom was five years old). The teachers selected the

pupils for the study. The school in which the study was conducted is a pilot school that teaches three languages at the same time. The school's student population consists of a combination of UAE nationals and Chinese nationals. Students at the school learn Arabic, English and Mandarin Chinese from the age of four. Only oral Mandarin is taught in KG; the written form is taught from age six.

The researcher took a passive role in the research, having almost no interaction with the subjects of the study. To strengthen the study and its design, a triangulated data-collection method was employed. Data collection consisted of classroom observation, unstructured interviews, and analysis of students' artefacts in the form of pictures of their written work. The primary source of data was classroom observations. Interviews were used to validate observations, but were not extensively relied upon because the researcher's position within the ADEC likely placed some restrictions on what the teachers could say or share.

How children at the ages of four and five become bi-literate in Arabic and English within the Abu Dhabi Government kindergarten schools has not previously been explored, making the present study a significant and valuable source of data for the field. This study not only adds to the literature on learning in international children, within which there is a shortage of studies concerning language development in children under six years of age, but it will also add to the understanding of officials in Abu Dhabi, who would benefit from understanding how children become bi-literate from an early age. Even though the results of this study cannot be generalised to all children, it provides some insight into how children become writers in two languages. It also provides insight into the different components of an effective classroom environment and useful learning resources for

young children studying languages, and how relationships between adults and children impact language and learning construction.

Chapter 4 discusses the findings of the study, as well as two policies that pertain to the language of instruction and resource use in the ADEC.

## **Chapter Four**

### **The Study Analysis**

#### **4.1 Introduction**

A vast body of research on child development indicates that the relationships and interactions between adults and students are a crucial foundation for student learning, development, and progress (Hamre & Pianta, 2005; Morrison & McDonald Connor, 2002; Maughan & Rutter, 2002; Pianta, 2003). The present study was conducted in an early childhood classroom; therefore, it was not surprising to see the following themes emerge: 1) the teacher-student relationship in terms of social-emotional support; 2) the classroom environment and how it facilitated learning; 3) quality of instruction. The themes were developed to reflect the research questions:

1. How do Emirati children develop bi-literate writing skills at the ages of four and five in Arabic and English?
2. What strategies for teaching writing do teachers who are teaching in an Arabic-English bi-literate environment employ to foster positive development of students' literacy skills in both languages?
3. How do teachers use the classroom environment to support their students' writing styles?

It must be noted that the findings were not straightforward, nor are they meant to definitively answer these complex questions. Rather, the findings from this qualitative case study are meant to inform our understanding of how emergent bilingual/trilingual pupils at the age of four and five become bi-literate/tri-literate writers of languages. The study also seeks to lay the groundwork for additional studies of bi-literacy in Arabic students.

To understand the findings, it is important to understand the context, including the school system in which the subjects are enrolled (Abu Dhabi Education Council; ADEC), the school itself, and the two classrooms within the school. This chapter first discusses the policies that pertain to the language of instruction and usage of teaching and learning resources in the ADEC system. Next, the chapter outlines data from observations related to description of the school, the classrooms in which the study took place, the approaches applied in each classroom, and the daily routines. Further, a brief description of the three languages spoken by students in the classroom-- Arabic, English and Chinese--is provided. The second part of the chapter focuses on the pupils, and provides an in-depth description and analysis of data from the study that relate to the study's research questions. Data related to the subjects of the study is organized by the three themes outlined above. Under the first theme, "Teacher-Student Relationship (Social-Emotional Development), there are six events detailed in sections 4.6.1.1 to 4.6.1.6. The second theme, "The Classroom Environment," includes five events detailed in sections 4.6.2.1 to 4.6.2.5. The third theme "Quality of Instruction" includes six events detailed in sections 4.6.3.1 to 4.6.3.6. Each event was given a title that related to a statement made by a study subject during that event.

The data were not used to make judgments about the curriculum, the quality of resources used, or the organisation of space. Data were used to form understandings about how teachers used available resources, including the classroom environment, to facilitate students' learning; specifically learning related to bi-literacy and writing. Further, the data were not collected to evaluate the academic system in which the subjects are enrolled or its teachers.

## 4.2 Abu Dhabi School Model Policy on Language of Instruction

Policy 5.1 on the language of instruction in the Abu Dhabi School Model

(ADSM) P-12, ADEC Policy Manual (2013, p 29), states the following:

*All students will be taught in both Arabic and English. In support of the implementation of the Abu Dhabi School Model, students in Kindergarten (KG1 and KG2) will be taught by Arabic Medium Teachers (AMTs) and English Medium Teachers (EMTs), these teachers will work collaboratively to ensure that students meet the outcomes established in the Abu Dhabi School Model curriculum in both Arabic and English. Recognising that students may enter KG1 with limited English skills, the AMTs and EMTs will conduct joint planning to determine when and how English language concepts and skills will be introduced. The goal is for instruction to be provided 50% in Arabic and 50% in English by the end of KG2.*

The ADEC is committed bi-literacy and all students are expected to be bi-literate in both English and Arabic (ADEC, 2012). In Abu Dhabi, students learn English as an additional language from as early as 3.5 years old. They learn it as they are learning their first language, Arabic (ADEC, 2012). Per Dworin, Moll and Saez (2001), literacy is an active process that involves the ability to create conceptual constructions, to read the language being studied, to collect and create new knowledge, to transfer ideas and knowledge from one concept to another, and to make meaning using the language. Bi-literacy is defined as the ability to read and write in two languages (Perez, 2004). Gallagher (2011) notes that the movement toward bi-literacy in the UAE has led to heated debate, as some voiced the possibility of the Arabic language suffering at the expense of foreign languages. However, the ADEC asserts that the Arabic language will always be protected, as it is critical to the identity of the Emirates and the region.

Despite the differences between any two languages, the cognitive gains made when learning different languages benefit learning in general. Education during the early years is critical for preparing students for future academic and social

experiences. The educational and social experiences during a child's first years can have a profound impact on his/her trajectory. These findings have been shown with regards to literacy and language outcomes and content knowledge outcomes, as well as student attitudes. The extant literature indicates that there is a clear expectation of improved proficiency in both languages. Many studies have shown that literacy skills transfer from one language to another, including languages that do not share the same alphabetic system, such as Arabic and English (Dworin, 2003; Escamilla, 2000; Grosjean, 1989, Goldenberg, 2008; Valdés, 1992;). Therefore, students learning English as a second language would benefit from applying the skills learnt in English to the development of Arabic language proficiency and would possibly enrich their culture (Dworin, 2003; Escamilla, 2000; Figueroa & Valdés, 1994; Grosjean, 1989). A deep body of literature also exists on the expected and actual outcomes of bilingualism, which is the greatest driver behind the continued popularity of bilingualism (Iliana et al. 2012).

Not much research has been conducted on the bi-literacy of students with an Arabic language background who are learning English. It is possible that the findings from the similar studies of bilingualism discussed previously would apply to the context in Abu Dhabi. However, the reliability of those findings the current study context is unknown. The differences between Arabic and English are significant; negative transfers between the two languages far outnumber the positive transfers. According to Palmer et al. (2007), the negative transfers between Arabic and English are as follows: first, in English the form of the letter remains the same regardless of where the letter is placed in a word. In Arabic, letters take a different shape depending on the placement of the letter in the word. Second, vowels in English are letters of the alphabet. In Arabic, vowels are diacritical marks. Third, every letter in English has a

unique shape. In Arabic, many letters have the same shape. Fourth, sounds in English can be presented by a multi-letter grapheme. In Arabic, every letter has one sound. In addition, English has a deep orthography, whereas the orthography of Arabic is shallow. Another difference between the two languages is the presence of homophones in English and their corresponding absence in Arabic. By contrast, the positive transfers between Arabic and English are as follows: both languages are based on a phoneme-grapheme correspondence and both use verb tenses. Per Iliana et al. (2012), teachers without expertise in teaching second-language learners can impede the learning experience of students. In a focus group conducted by the ADEC curriculum division in 2012 with Heads of Faculties (HOFs) and teachers, both teams overwhelmingly stated that they were challenged by students' second-language learning needs and that the existing resources and learning outcomes did not adequately recognise such needs. Although teachers of KG and grades one and two expressed some confidence in addressing the second-language learning needs of their students, the challenges grew in grades three, four, and five. Teachers and HOFs stated that the language of the learning outcomes was vague and difficult to apply for teaching and learning purposes. Terms such as "attempts to" and "begins to" were viewed as difficult to interpret when making educational judgments for students. Thus, the ADEC appears to be faced with two problems: teachers who are not necessarily qualified to teach English as a second language and learning outcomes that are not clear enough to be taught. Per ADEC, (2013, p29):

Teachers will be responsible for delivering instruction in a way that enables students to achieve the learning expectations. This will require an understanding of the learning expectations in the grades and subjects that they teach.

Without adequate instruction, students may find the development of bi-literacy to be a confusing learning process (Dworin, Moll & Saez, 2001). This is a significant adverse outcome. Bauer (2009) argues that while there are tangible benefits to be gained from bilingual instruction, these benefits are only reachable if there are qualified teachers and the political willingness to make the strategy a success. Bi-literacy instruction that is mainly geared toward bolstering English/monolingual language proficiency for practical purposes is therefore likely to be more harmful to a student than beneficial. Teachers' concerns regarding how to best teach second-language learners should be made a priority for professional development. Language issues can be overcome with proper training, which should focus on providing increased support for students' language experience in the classroom. In addition, developing more focused training provisions for all teachers, including those who are new to the country and have had little or no experience working in English-as-a-second-language (ESL) classrooms is needed.

One of the ADEC's main stakeholders are the parents. Baure (2009) suggested that building parent engagement and understanding around the overlapping roles of home and school for improving language learning would be beneficial for supporting the overall learning experience of students.

### **4.3 Policy of Instruction in the ADSM**

The implementation of a curriculum based on learning outcomes and a bi-literate learning model requires the availability of educational resources. The P-12 ADEC manual (2013, p 32) policy 5.2 on the use of learning resources to implement the ADMS, states the following:

Teachers will use a variety of materials and methods as a part of the curriculum. To support the implementation of the Abu Dhabi School

Model, ADEC will provide schools with instructional materials for every classroom, to ensure that all teachers have adequate tools and resources to use in helping students to achieve the learning expectations. Instructional materials will be used in a way that facilitates an active learning environment for students. Students are expected to learn by doing, not by listening and watching. While textbooks may form part of the educational resources, not all courses will have a textbook and teachers will be expected to use additional resources.

In 2012-2013, a resource survey was administered and focus group sessions were conducted by the ADEC curriculum division. A total of 159 English Medium HOFs and teachers responded in full to the online resource evaluation questions (an additional 75 respondents completed some but not all the online survey questions). In addition, a total of 235 school-based participants took part in the 10 focus group sessions, which were held across the three school zones of Abu Dhabi, Al Ain, and Al Gharbia. The results of the survey did not reflect widespread implementation of the policy stated above. One concern expressed by the survey respondents was that classroom teachers were required spend a lot of time locating classroom resources, and that those resources frequently needed to be bought and/or developed with personal money because those provided by ADEC were insufficient or inadequate to address the students' learning needs.

#### **4.4 The School**

The One Common School, where the current study took place, is categorised as a “common school.” Common Schools provide education to multiple age groups: kindergarten 1 and 2 (ages four to five), primary grades one to five (ages six to ten), middle school grades six to nine (ages eleven to fourteen), and high school grades ten to twelve (ages fifteen to seventeen). As of the academic year 2015-2016, the

school only had students enrolled up to grade seven; this is because it only accepts pupils for enrolment in KG1 because of the Mandarin language requirement.

The KG section of the school has a total of 195 enrolled students, of which 185 are Emirati nationals (107 males and 78 females) and 10 are Chinese nationals (6 males and 4 females). In general, the number of males in this school is greater than the number of females across grade levels. The KG section has one Arabic, one English, and one Chinese HOF. The role of the HOF ranges from supporting teachers in the classroom to providing support to the school's leadership. For example, HOFs are expected to organise special events at the school and provide feedback on lesson plans and unit plans. They are also expected to hold professional development sessions and model lessons and best practice. A HOF acts as the link between the School Leadership Team and the teachers, sharing expectations and announcements. It is also the responsibility of the HOF to evaluate lessons and hold teachers accountable for progress in areas of needed improvement. To this end, the HOFs collect data and implement strategies for improvement.

In the One Common School, there are ten Arabic teachers in the KG section, eight English teachers, four Chinese teachers, two Arabic teaching assistants, and one English teaching assistant. The demographics of the faculty in the KG section reflect the fact that more emphasis is placed on Arabic and English than Chinese, as there are more faculty who speak these languages. Of the 22 teachers, 16 have early childhood education degrees.

The vision statement of the One Common School reads as follows:

Our vision is to create a learning community that supports and prepares pupils for the challenges and opportunities of the future and ensures their readiness as global leaders while maintaining the culture, traditions, and heritage of the UAE.

The school emphasises shared planning, collaboration, and the efficient use of teaching opportunities. Teachers display respect for each other's roles and the value that each language teacher brings to the classroom. The school's literacy teaching structure is composed of whole-group teaching (10-15 minutes), small-group teaching, parallel teaching (20-25 minutes), and a 5- to 10- minute whole-group closure period. This structure ensures that each teacher receives fair teaching time, with "fair" referring not to an equivalent duration of time, but rather time relevant to the pupils' needs. The teachers collaboratively decide who will facilitate the whole group period; however, because there is only one Chinese teacher for two classes, the Chinese teacher will often conduct an additional whole-circle time.

In general, the teachers employ different methods to demonstrate and teach the three languages. For instance, most books in the classroom are provided in all three target languages, which allows for a print-rich environment in each language. Teachers attempt to teach shared learning outcomes in the three languages, and shared writing outcomes are also employed to provide pupils with opportunities to transfer knowledge from one language to another. The learning centres include a focus on concepts in all three languages. The school also emphasises the division of pupils into social groups in addition to academic groups. The teachers work in a trilingual setting, placing an emphasis on team planning and parallel teaching of the same concept through ADEC's themes and outcomes.

The planning process at the school begins with themes/topics and learning outcomes mandated by ADEC's ADSM Curriculum. The school breaks the learning outcomes into units at the beginning of the year. The teachers develop a unit plan collaboratively by grade level, and then plan more in-depth as they approach the unit in the calendar, focusing on the critical thinking questions that drive each unit. The

teachers choose books that fit the topic and will be of interest to the pupils, and then translate them into the other two target languages. Once the books are chosen and ideas are drafted for student engagement, the teachers break into subject teams. The English teachers consider how to impart the science and math themes to the students, and how to meet specific English outcomes. The Arabic teachers incorporate Islamic Education and civics into the lessons through Arabic language standards. The Chinese teachers identify songs, speaking points, and vocabulary that would enrich the topics of study. The teachers meet as a class team once a week to polish ideas, create items to go into the centres, develop co-teaching plans, create the homework communication letter, and discuss the project for the week or unit. After the plan has been broken down in this manner, teachers follow through with their individual weekly plan by creating lessons, using checklists to ensure that assessments are up to date, and writing down observations and anecdotal records.

#### **4.5 The Classrooms (KG1 and KG2)**

A kindergarten classroom should be an active, literacy-rich, busy, joyful, and respectful place where pupils explore, examine, develop relationships, and learn through play. Working in a kindergarten is not an easy job, because teachers are challenged with keeping their classroom environment and teaching methodologies child-friendly and play-based, while also preparing pupils for a knowledge-based economy by providing a supportive literacy-rich environment.

There were significant differences between the two classroom environments in which the study took place. Commonalities and differences between the two classrooms were also evident in teaching styles, teaching approaches, the experiences

of the teachers, teacher views on pupils, and the quality of the overall learning experience for students.

#### **4.5.1 Kindergarten 1: The Reggio-Emilia Approach (Pilot Approach)**

KG1 is a pilot classroom in which the teachers have implemented a teaching approach that is different from the one mandated by the ADEC. The ADEC approach is explained in the next section. Alison is a Reggio-trained teacher, who struggled with adapting to an alternative teaching style upon joining ADEC. She had previously worked as an early-childhood teacher in Canada for five years. During the case study, Alison was in her first year of teaching with ADEC (AY 2015-2016). Lamia was also a first-year teacher with the ADEC. She had no previous Reggio training, so she and Alison agreed that Alison would be the lead teacher in the classroom.

Observations in the classroom revealed that the class had a free-flowing schedule. The morning started with an assembly in the KG breakout area, where all of the KG students gathered. Each day a different class led the assembly. After the assembly, Lamia and Alison would gather the pupils in a circle on the carpet for morning meeting, attendance, calendar, reminders, and messages for the day. Then they would conduct the trilingual literacy read-aloud. On Sunday the Arabic teacher led the read-aloud; on Monday the English teacher led the read-aloud; and on Tuesdays the Chinese led the read-aloud. After the story, the teachers asked the students critical-thinking questions related to the main idea and/or story details. These questions focused on comprehension skills. The students were then asked to develop a plan for their thinking and learning time. They would take their picture card and place it on the board in the centre, which was displayed in the middle of the

classroom. Three groups were formed for focused instruction involving groups of two to three pupils. The learning groups were specified according to learning ability (high, medium, low) and the teachers would work on further enhancing students' comprehension skills with a learning task. These focused-learning groups lasted for 15 to 20 minutes. The remainder of the pupils had autonomy to choose among centres or inquiry projects.

Snack in the KG1 classroom was self-regulated and students chose when to eat based on when they were hungry. Students independently washed their hands, got their snack out, said their prayer, and placed their name in the "yes, I have had my snack" bowl.

The first thinking and learning centre time typically lasted approximately 45 minutes, allowing students the opportunity to delve deeper into their learning. After the first centre time, the students were asked to stop what they were doing, leave their work, and line up for outdoor playground time (20-25 minutes). Upon their return, the teacher who was leading the classroom introduced the letter of the week, writing lesson, or drawing lesson, as appropriate. The students then made a plan for their second thinking and learning centre time (approximately 35 minutes). The teachers again called on different students for another focused learning time. Students then lined up for their special activity for that day (e.g., music, physical education, art, or library).

When the special activity was finished, students lined up and were asked to meet at the centre carpet for a whole-group math lesson, and the English Medium Teacher (EMT) explained the learning objective of the day/week. After explaining the math lesson, the EMT would call a third focused-learning group for a math activity. The groups usually worked on a critical-thinking question related to the math-learning

objective. Meanwhile, the other students were asked to remember where they wanted to spend their thinking and learning time and returned to their work. If the students had finished their task during the first centre time and wanted to move to a different area, they could do this because the third centre time was approximately 40 minutes long. Toward the end of the day, students listened to the tidy-up cue (song) and engaged in a comprehensive “clean up” for the day. The students then had Islamic time, shared the work they had put into the sharing bin, and lined up for the buses to go home.

In a Reggio-Emilia classroom, the students, their needs and their interests drive learning. The teacher exerts little control over the theme of study, which instead emerges from the students themselves. For example, if a student asks a question during carpet time about the weather and it appears to be a topic that interests other students, the teachers will plan learning activities that relate to the student’s question to support understanding. The Reggio classroom does not follow a blocked system, in which there is a specific time for each subject; rather, it employs a free-flow structure. The colours in the environment are usually kept neutral.

In KG1, the teachers continually modelled reading and writing behaviours and engaged pupils in meaningful literacy activities that met their individual needs. The students were immersed in a literacy-rich environment. Pupils should be provided with a print-rich learning environment, essential learning resources, and teachers who model effective literacy skills in order to develop a robust literacy foundation and become skills-literate.

#### **4.5.2 Kindergarten 2: The Blocked Approach (ADEC Approach)**

The KG2 classroom followed the ADEC mandated structure, which is a blocked structure. After the morning assembly, the two teachers would gather with the students in a circle. The teachers conducted the daily morning routine, which included taking attendance, updating the weather chart and calendar, and sharing special events or reminders. A shared reading session conducted in all three languages (dependent on the availability of the Chinese teacher) would then take place, lasting between 25 and 40 minutes. After circle time, students were divided equally between the three teachers, if the Chinese teacher was available. If she was not available, the children were split between the Arabic and the English teacher, with each teacher having 7 to 10 students. Each teacher taught an aspect of the curriculum to the assigned group. After 15 to 20 minutes, the students would rotate to the next teacher. On occasion, a teacher would dismiss a student from her group to go to the centre of the student's choice. The reason why a student was dismissed from the focused learning group was not always clear. After these focused lessons, the students went to one of the activity lessons (music, health, art, or library) and then engaged in outdoor play for 20 to 25 minutes. When the students returned to the classroom, they gathered in a circle again, and one of the teachers would initiate a discussion of a topic with the pupils.

In KG2, the students had a specific snack time and they all ate at the same time, regardless of whether they were hungry or not. The students then again followed the rotation cycle from one teacher to another. Every time the students transitioned from one teacher to another, or when they left a centre, they engaged in a clean-up activity. During clean-up time, the students had to return the resources to their places

and remove the work they had done. Toward the end of the day, the students gathered in a circle for Islamic Education and then they lined up to go to their buses.

In KG2, the teachers only facilitated the learning of the groups they were instructing. The remainder of the class was not facilitated nor supported. Students were rarely asked about decisions they made or the learning they completed at the different centres. From observations, it was evident that most of the meaningful learning, writing, discussions, and problem solving did not occur in the groups facilitated by teachers. Rather, these things occurred most frequently when the students were learning on their own at the centres. Teachers need to include more observation time in their class schedule to capture student learning when they are interacting with their peers and problem-solving issues that come across them.

#### **4.5.3 Writing in the Classroom**

In both KG1 and KG2, writing opportunities were not limited to specific times. The writing centre in both classrooms was always open to students to develop their writing. Godwin and Perkins (2002) argue that children come to school with a broad range of ideas, experiences, and knowledge of concepts and print, gathered from their observation of the environment around them. Godwin and Perkins (2002) and Riley and Reedy (2003) are amongst the many literacy researchers who agree with the establishment of a writing centre or a specific place in the classroom where children can write. The absence of such a space limits students' ability to express their thoughts and ideas. The main difference between the two classrooms in this study was that in KG1 the teachers were not associated with specific centres. The teachers moved from centre to centre or had one-on-one conferences with the pupils. In KG2, the teachers were allocated a centre, and the children rotated from centre to centre.

The skill of writing was not assigned to the teaching of either Arabic or English; it was a primary part of student learning that was independent of subject. Students also wrote in mathematics and science. For instance, during the science lesson, the children planted trees and kept a plant journal in which they captured plant growth. In KG1, when the students were learning about patterns and shapes found in mandalas in the mathematics lesson, they drew and wrote about mandalas in the writing centre. Students were consistently reminded to write in Arabic and English and were asked to write their names in Arabic, English, and Mandarin. When pupils were writing in Arabic and English, the writing topics were always connected. Thus, there were numerous opportunities to transfer skills and ideas from one language to another.

During the time spent in both classrooms, pupils were never observed to receive explicit instruction in writing. In the ADEC ADSM KG Curriculum, writing is identified as a main strand that has three sub-strands (writing text type, writing process, and writing conventions). Writing process is a step-by-step approach that pupils learn (i.e., brainstorming, drafting, editing and proofreading, publishing). Students were not provided with the opportunity to explicitly engage in and understand the writing process in either classroom; there was no evidence of attempts to practise the steps involved in writing. The same finding applied to text-type writing; the ADSM curriculum explicitly identifies the text-type genres students are to learn at each grade level. In KG, students are expected to learn the narrative text type. However, little instructional focus on narrative was observed during sessions. Teachers taught a wide range of text types, including procedural, narrative, recount, and information. The students did not receive explicit instruction regarding any text type or their similarities or differences. The instruction primarily centred on getting

the students to write without imparting an understanding of text-type functions or the writing process. Teachers implemented the curriculum in the way that best met the needs of the students, and did not limit the students to one specific text type (narrative); instead exposing them to a wide range of text types. Although the curriculum mandates the teaching of text types and the similarities and the differences among them, it is developmentally inappropriate to expect pupils at the age of four and five to know structural and language features of different text types.

Writing topics were not chosen by the teachers in both classrooms. The curriculum mandated the themes of learning; however, pupils were given freedom to write about the topic of their choice, provided it aligned with the theme of study. One difference between KG1 and KG2 in terms of writing was the subject matter. In KG1 the writing topic centred on the theme of the book they read, an experience a pupil related, or a central concept discussed. In KG2, the writing exercise focused on copying the teachers' writing.

The ADSM Kindergarten Curriculum places a heavy focus on the development of listening and reading skills, and lightly touches on writing and speaking, which left the teaching practices in both classrooms imbalanced. Teachers behaved almost as though the teaching of writing and speaking should be avoided until the students had fluently developed the other two skills. Despite a lack of explicit instruction on writing, students were provided with writing opportunities throughout the day. Writing in English took precedence over Arabic, which could have been because the English teachers led instruction in both classrooms.

#### 4.5.4 Language in the Classroom

Even though the ADSM Curriculum states that Arabic and English are to be taught equally, from observation it was clear that there was a focus on English oral language development and the discrete teaching of English phonics. As far as the researcher observed, the only aspect of Arabic that was taught in a discrete manner was phonics. The other skills were taught through literature and meaningful texts that developed pupils' language and literacy. The teaching of Arabic language skills and use of meaningful Arabic literature occurred infrequently. The students in both classrooms were not presented with as many opportunities to interact with the Arabic language as English.

In an informal discussion with Karen, the KG2 English teacher, regarding the role of Arabic language in the instruction of English, she responded by saying

*Arabic is the mother language for most of the students. Students' development in Arabic is very important. It is almost impossible to teach students English if they have not developed their Arabic language. In our classroom, we always start with Arabic. We teach a concept first in Arabic and then in English. The reason we do that is to ensure that students have understood the concept first in Arabic before we teach it in English or Mandarin. (Transcription, March 13, 2016).*

Despite Karen's recognition of the importance of Arabic and its role in developing students' understanding of concepts, the opportunities she described, where the students develop a concept in Arabic first, were limited during observation sessions.

This section laid a observational foundation for the classroom environment. The following sections of the chapter outline the findings of the study related to the research questions, and include some discussion and analysis. The findings are organised into three themes: the teacher-student relationship (social-emotional development), the classroom environment, and quality of instruction. Within each of

the three themes, events involving some or all of the subjects of the study (the pupils) are presented in terms of how they were observed through the lens of that theme.

## **4.6 Findings and Analysis**

### **4.6.1 Theme 1: Teacher-Student Relationship (Social-Emotional Development)**

Globally, the importance of children's social-emotional development is recognised in preparing them for school achievement. Social-emotional development refers to a child's overall self-confidence, attitude, trust, empathy, language, and cognitive development. These elements are heavily governed by the interactions between children and others, including the extent to which adults around them allow exploration, curiosity, and freedom of expression. Research in the area of the social-emotional development of children indicates that an education system that effectively fosters pupils' social-emotional development from an early age onward is likely to produce students who develop positive and rewarding social and academic trajectories (Blair, 2002; Denham & Weissberg, 2004; Hamre & Pianta, 2001; Pianta, Rollins & Steinberg, 1995; Zins et al., 2004). Since the start of the ADSM in 2010, the ADEC has recognised the importance of children's social and emotional development as measures of their overall growth and development and readiness for formal schooling. This recognition led to the enactment of student learning outcomes named "The Approaches to Learning," like those developed for academic purposes. The Approaches to Learning identify a set of emotional, social, attitudinal, problem-solving, and technological learning outcomes that students are measured against three times a year (See Appendix 1).

Six cases/events are discussed here that are related to the first theme, “Teacher-Student Relationship–Social Emotional Development.” Three events occurred in the KG1 classroom and three occurred in the KG2 classroom. The cases/events relate to the main research question; how do Emirati children at the age of four or five develop bi-literate writing skills in Arabic and English? These events also relate to one of the study’s sub-questions; what writing teaching strategies do teachers who teach in an Arabic-English bi-literate environment employ to foster positive development of students’ literacy skills in both languages?

The cases discussed below demonstrate how students who are supported emotionally and enjoy a strong sense of security exhibit better learning trajectories than those who are not. The first case is titled “**The Language Barrier**,” and it must be noted that the student involved in the event was not one the study subjects. However, as the event represents an excellent example of how language could hinder the learning process rather than facilitate it, it is included here. The second case titled “**Khalid at the Writing Centre**” highlights how some teaching practices can hinder a student’s appetite for learning; specifically, writing. The third case, “**Ahmed Today You Wrote a Whole Sentence by Yourself. I Am Proud of You**,” provides another example of how teachers, sometimes without meaning to, harm student’s learning. The fourth case, “**Khalid Watering a Plant**,” explores the relationships among students and how teachers use incidents that occur among students as learning opportunities. The fifth case, “**Shama at the Writing Centre**,” exemplifies how students react to teacher’s responses when they are approached for support. The sixth and the last case in this section, “**I Speak Four Languages; How Many Do You Speak?**” is a powerful example of how the power of language was

used by a Chinese student who felt undermined by a peer when she mentioned her father's nationality.

#### **4.6.1.1 Teacher-Student Relationship: The Language Barrier (5 Years Old)**

As part of the morning routine in KG2, the teachers and the students gathered in a circle and completed their daily tasks (attendance, calendar, sharing). Most of the students were engaged in the activity, except for one Chinese student. She arrived from the assembly unhappy and cried continuously. The teachers noticed her unhappiness but made no attempt to talk to or comfort her. Eventually, the English teacher stopped the discussion she was leading with the class and said to the student, "*Go wash your face.*" The teacher's reaction toward the student showed that they were disconnected and distant from one another. Little evidence of shared concerns, warmth, or goals was observed. The teachers and students in the classroom failed to exhibit concern for the Chinese student who was crying. It was evident that the teachers' affect did not match the student affect. Both teachers appeared to be more concerned with finishing the task at hand than emotionally supporting the student.

The student stood up and left the circle to go to the washroom. Fiona, the Chinese teacher, saw her; Fiona knelt to the child's level and started talking to her in Chinese and hugged her. The student washed her face and went back to the circle. A few minutes passed and the child began to cry again. The English teacher responded to the student's crying in a perfunctory manner, saying, "*We are sad because you are sad.*" The teacher completed the reading with the class and asked the Chinese student to go to the washroom again. No attempt was made to understand the source of the student's unhappiness.

Although the Chinese student was not a study subject, it remained clear that her emotional state hindered her learning; she was unable to engage in activities that day. Students who are not emotionally supported or shown that they are cared for are highly likely to miss learning opportunities. In this case, a clear language barrier existed between the Arabic teacher, the English teacher, and the Chinese student. They could not communicate with one another. The teachers could not speak the student's language, leading to apparent uncaring behaviour toward her. For example, while the students worked in the centres, the Chinese student stood crying outside the classroom. I went to see her and asked her if she was ok and she responded by shaking her head. The two teachers were standing outside looking at me and I asked them if they knew what was wrong with her; their response was "*We are not sure.*" The teachers did not ask Fiona, the Chinese teacher, what was wrong with the student.

It can be considered unfair to place the Chinese students with adults who do not speak their language because they need to be able to communicate their needs to an adult who understands them, without worrying about the language. At the age of five children require adults around them who can help them find words to express their feelings and needs; children do not usually express their worries without an adult's support. They require permission to speak, and in this case the child was not given that permission.

The system needs to reconsider the placement of Chinese students in classrooms where there is not an adult Chinese speaker present all the time. The same argument could be applied to Arabic students who are placed in classrooms with English-speaking teachers who do not speak Arabic. However, those students usually have peers in the classroom with whom they can speak. The Chinese students in the ADEC system are allocated to different classrooms, because there are relatively few

Chinese students and the administration wants Emirati pupils to have exposure to these students to improve their Mandarin.

Children are empowered by the adults around them. In the event detailed above, the case of the Chinese student is an example of how a teacher can subconsciously cause their students distress and prevent them from learning. The language barrier was the primary cause of the problematic behaviour of the teachers. One student was unable to engage in the learning experience because the adults around her were unable to meet her emotional needs.

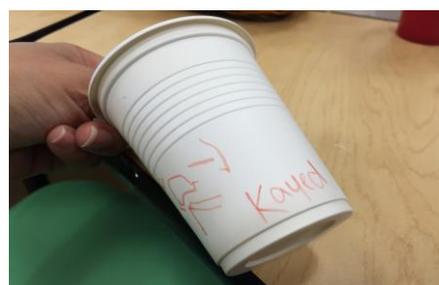
#### **4.6.1.2 Teacher-Student Relationship: Khalid at the Writing Centre (4 Years Old)**

This case addresses one of the study's sub-questions; what strategies for teaching writing do teachers who are teaching in an Arabic-English bi-literate environment employ to foster positive development of students' literacy skills in both languages? This case details ineffective teaching practices for fostering the positive development of literacy skills, and exemplifies what teachers should refrain from doing in their efforts to support students as emergent writers.

In KG1, the teachers expect pupils to plan their learning after circle time. After the students select the centres in which they are going to work, they are asked to make a learning plan. The pupils in KG1 are active learners who construct goals for their learning and then monitor their progress against their self-developed plan. Observation revealed that the pupils were responsible for maintaining appropriate behaviour and self-motivation while completing a task. Constructivists would describe students in the KG1 classroom as having self-regulatory skills (Bruner, 1983; Vygotsky, 1978). Students with self-regulatory skills are the result of a well-managed

classroom with clear processes, organisation, time management, and behavioural expectations (Pintrich & Zaider, 2014).

Not all pupils in KG1 had achieved the same level of independence in their learning. Some students were struggling to understand the concept of developing a plan for learning. Khalid, one of the study subjects, was never observed with a plan over the course of the study. It appeared that Khalid could not decide on an activity before leaving the circle/carpet time. He would spend at least 15 minutes going from one centre to another before deciding upon a centre at which he would work. During his movement from centre to centre, Khalid would not engage in the activities. He would observe what the pupils in each centre were doing and then move away. He visited the writing centre twice during the observations. However, during his rounds from centre to centre, he exhibited no interest in observing what the pupils at the writing centre were doing. The researcher did observe Khalid once in the writing centre with the English teacher. Khalid wrote his name on a cup to use as a container for his seeds, and his teacher Alison took the cup and rewrote his name (Figures 1 and 2). When I asked why she had rewritten his name, she answered, “*So I could read it.*”



*Figure 1 Khalid's writing of his name. Figure 2 Teacher's annotation of Khalid's writing.*

When I saw the teachers annotating students' written work, I could not help but wonder why students' writing is annotated but not their drawing? Children's writing and drawing are both approximations. Why do adults accept some

approximations and not others? Could annotation be a contributing factor to observation that students are more inclined to draw than write? Do children feel safer and more respected because no-one re-does the drawing of a child? Students need to grow into writing from drawing; teachers can facilitate this transition by supporting students' writing development. When I engaged in discussions with the teachers regarding annotating the writing of a student, they failed to offer a valid rationale for the practice, besides understanding what had been written. When asked, "*Why annotate students writing but not drawing?*" Karen responded by saying, "*Would ADEC like us to annotate students' drawing? If yes, I will annotate students' drawing. I did not know we were supposed to annotate students' drawing. Sorry.*" Karen was under the impression that I asked the question to further promote the practice of annotation. In addition, her response was consistent with a trend that I noted across teacher responses—most of the teachers responded as if my questions were loaded with hidden messages from the ADEC.

The responses of the teachers indicate that they lacked some understanding regarding children's developmental milestones. The practice of annotating students' writing was observed in KG1 and KG2. Teachers consistently rewrote the work of students using correct language conventions. From the existing literature on early childhood, however, Khalid's attempt to write was a step toward becoming literate. Clay (1982) defines emergent literacy as the process that children go through to become literate. She explains that literacy is a gradual process that the learner goes through to acquire knowledge. Clay and other researchers argue that children do not gain literacy skills through formal instruction. Khalid's attempt to write his name can be considered an example of emergent writing. His writing behaviours and the

invented spelling he used show that he has some awareness of print and knowledge of letters (Burke, Harste & Woodward, 1984; Lonigan & Whitehurst, 2001).

In the case detailed above, it was evident that there was no other reason for Alison to annotate Khalid's writing aside from the need to be able to read it. Teaching strategies and practices should be directly linked to student-centric goals. Teachers should be able to elaborate on the purpose of their practices and how they support students' learning. Alison's response did not indicate that she thought that annotating students' work would help them improve as writers. Khalid's story demonstrates the importance of putting the student and his/her needs at the centre of the teacher-student relationship. As students develop emergent writing skills, they rely on their teachers to engage in research-based practices that foster early attempts at writing.

#### **4.6.1.3 Teacher-Student Relationship: Ahmed "Today You Wrote a Whole Sentence by Yourself. I Am Proud of You." (5 Years Old)**

Annotation of students' writing took different forms in KG1 versus KG2. In KG1, for the most part, the teachers allowed the students to write and then annotated their work. However, in KG2 the teachers wrote down the lesson text and the students were asked to copy it. While annotating students' work could send a negative message to emergent writers, the copy-based practice in KG2 is likely more damaging to emergent literacy because it puts the teacher in a position of power in the teacher-student relationship. This case was illustrative of a general trend observed in KG2—teachers praised students for their writing, when in fact it was not their writing; it was the teachers' writing.

During one of the observations, the EMT had a group of seven students working with her in a focused-learning session. She highlighted students' improvements in writing and listening to instructions. Ahmed was in her group; he was engaged in copying a sentence. Karen said, "*Ahmed you are improving. Last week you would not write anything. Today you wrote a whole sentence by yourself. I am proud of you.*" She paused before continuing, "*Ahmed you are doing a great job. Thank you for doing your best. It is so much better when you do your best. Thank you. You can put your name in green.*" Green refers to a sign in the behavioural management chart used in the KG1 classroom. The chart is based on the traffic light colours: red for students who are misbehaving, yellow for students who occasionally try to test teacher's limits, and green for students who are excelling.

Superficially, the comments made by the teacher sound positive; however, Ahmed did not write anything original. He copied his teacher's work as she instructed him to. Ahmed was praised for copying and thought he had written something, which does not send a clear message about what it means to develop as a writer.

In the event involving Khalid (1.2), the student was encouraged to write his name, but his writing was annotated because the teacher could not understand it. In the event involving Ahmed (1.3), the student was invited to copy the teacher's writing so that the teacher did not need to annotate it. The two events were similar, except for the order in which the child was asked to write related to when the teacher wrote (copying before writing/writing before copying).

#### **4.6.1.4 Teacher-Student Relationship: Khalid Watering a Plant (4 Years Old)**

Case 1.4 is an example from the KG1 classroom that exemplifies how the classroom environment and the teacher's relationship with a student impacts the

meaningful learning experience. This observation was captured via video recording; the event was 12 minutes in length. The classroom was silent for the most part. Khalid was engaged in watering a flower and said little during the recording. He stood next to a water tap, holding a watering can. The flower was standing tall before Khalid started watering it. Khalid watered the flower with a great deal of care but didn't know that he was over-watering it; the flower was watered over 13 times in a row. It started to bend, and it was not standing tall anymore.

As he was looking after his flower, Khalid did offer help to the students who came looking for water. He helped them open the tap and he held the watering can for them. He even offered to water their flowers. A peer came and filled her watering can and then closed the tap firmly. Khalid tried to fill his can; however, he could not open the tap and thought the water had run out. He became upset and blamed the peer for using all the water. Students began to gather, to find a solution for the lack of water. They thought through potential reasons why it had run out. A student who was planting seeds overheard the conversation and offered a solution, "*Get water from the washroom.*" Two students ran inside the classroom to get water from the washroom but Khalid would not move from his spot. He continued trying to open the water tap and became increasingly distressed. Another student joined him and offered to open the tap; he tried, and the water came out. Khalid happily filled his watering can and continued watering his flower. A passing student noticed Khalid's activity and told him that he was not watering the flower from the right place. She pointed to the roots and told Khalid that he should water from the roots, not the top of the flower.



*Figure 3 Khalid filling the water can. Figure 4 Khalid watering the plant. Figure 5 Students working together.*

Khalid ignored her comment and continued watering the flower. The English teacher approached Khalid and asked him if he would like help. He said, “No.” She asked him, “Where do we water plants from?” He did not answer. She pointed to the flower and said, “Do we water plants from here?” and then she pointed to the roots and said, “Or from here?” He pointed to the roots. The English teacher left as another student called her. The Arabic teacher approached Khalid and noticed that the flower was over-watered. She initiated a conversation with him about how much water we drink when we are thirsty. She asked him to think about what would happen if we over-drank. Khalid stopped watering the plant and moved to a new plant. He over-watered that plant as well, but this time from the roots.

This case is an excellent example of how the strong emotional connection among pupils and between teachers and pupils in KG1 contribute to a positive learning environment. In general, the students in KG1 enjoy being around one another. The pupils who participated in the “watering the plant” event were interested in spending time with one another and actively pursued opportunities to work together on a meaningful task. In addition, the pupils demonstrated a desire to support each other. Some of them offered ideas regarding how to fill the water can and where to water the flower from, and developed theories about why the water had stopped. The

pupils appeared to enjoy the presence of their teachers as well. The pupils' affect matched the teachers' affect. The students were excited about watering the plants and planting seeds; the teachers matched the level of the students' excitement and enthusiasm. In KG1, it was noted that the teachers maintained close physical proximity to the students. When talking to the students, the teachers made eye contact and got down to the students' level.

Even though the watering can event did not lead Khalid to write, as he was not a frequent visitor to the writing centre, it did inspire other children to write about plants and how to water them in their plant journals. Per Dyson (1989), children translate skills, topics, and ideas from play to structured literacy activity. This event highlights how students are enabled as writers when ideas for writing stem from experiences at school and at home. It further demonstrates how meaningful tasks, driven by student interest, result in the student using language for purposeful communication. In both classrooms, the students were engaged in different gardening and planting activities, offering one example of how a meaningful activity led some students to write about the activity and others to engage in discussion about it.

This case also highlights how Khalid demurred from writing activities. Writing, in general, did not interest him. Khalid appeared to enjoy problem-solving, and writing did not present that challenge for him. Over the course of the observation sessions, Khalid visited the writing centre just once more after his teacher annotated his writing. His second visit to the writing centre will be discussed as part of the cases outlined in the instructional support theme. Khalid's resistance to writing is typical for his age and stage of gross-motor development, as children at the age of four can have difficulty with small movements needed for activities such as writing

and handicrafts. Children at this age are better at using large muscles, as they would to build with blocks or play.

#### **4.6.1.5 Teacher-Student Relationship: Shama at the Writing Centre (5 Years Old)**

Observations made apparent that in KG2 the pupils had positive, if not very productive, interactions with one another. Yet, interactions were not always observed among the majority of pupils. Teachers exhibited the same amongst themselves and with the pupils. There was always variance in teacher behaviour toward each other and toward the pupils. For instance, one day Karen was with a small group of students working on a writing task. Shama, one of the subjects of this study, was in the group. This event occurred after a brief school holiday due to a strong storm. Prior to the storm each pupil had kept a plant journal titled “My Planting Observation Book” to capture the growth of seeds they had planted. Karen asked the students in her group to go outside to the classroom garden to observe their plant’s growth and then return to the classroom to write about it. Shama returned to the group shocked and disturbed; her plant was gone. The strong winds from the recent storm had taken her plant away. The teacher asked Shama to write about that in her plant journal.

The teacher did not appear to be connected to Shama in any meaningful way. She was distant with her and did not seem to listen carefully to Shama’s concern and distress. The teacher’s response to Shama’s concern did not seem genuine. For example, rather than engaging in a conversation about what happened to Shama’s plant and how that made Shama feel, the teacher immediately asked her to write about it in the journal.

Likewise, another student had the same experience of losing his plant. Karen’s reaction to this student was very different from her reaction to Shama. The

teacher positioned herself in a close physical proximity to the student when he told her that his plant had disappeared. The teacher went outside with him to see what had happened. The teacher, Karen, returned to the classroom, gathered her group and engaged with them in a social conversation about how she had lost some of her plants due to the weather. The conversation was very brief. Shama did not seem to be engaged; she was more concerned about what happened to her plant.

Shama refused to write and left the week five page in her journal blank, just like the scene she had seen outside. Shama was disappointed to see that her work was gone. Her journal had her plant's progress detailed in it for each week, except for week five; the blank page accurately reflected what had happened to her plant. Shama did not acquiesce to her teacher's request. Rather, she made a decision to not write about her missing plant.

The last page of the plant journal was titled "Project Reflection." Interestingly, on that page Shama showed perseverance as a learner. Shama's drawing was very similar to the one she drew for week one, except that she did not write about it. She used the same colours that she had used in week one, except for minor differences. It was not clear why she chose alternate colours. Whereas most of the students wrote or drew something as a reflection on the project, Shama decided to start again.

Figures 6 to 12 on the following page are from Shama's journal. The journal pages provide an in-depth look at Shama's writing process and her use of language. In the literature on teaching writing, the template used for the plant journal is well known to be a strong scaffold for emergent writers, as the focus is not on actual writing but picture-making (Corgill & Portalupi, 2008; Glover, Katz & Ray, 2008). The space provided in the template for illustrating is larger than the space provided for writing. Through illustration, students learn the process of writing, which consists

of planning, drafting, revising, editing, and publishing. Further, picture-book-making is developmentally appropriate for young children and English-language learners because it provides them with the means to express their thoughts without heavy dependence on language.

**Shama’s Journal: Figures 6 to 12**



**Figure 6** Cover page.



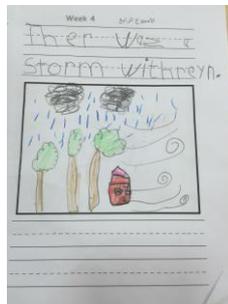
**Figure 7** Week 1.



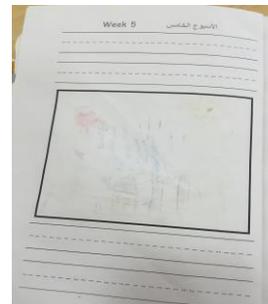
**Figure 8** Week 2.



**Figure 9** Week 3.



**Figure 10** Week 4.



**Figure 11** Week 5.



**Figure 12** Reflection.

In the journal entries, Arabic was used only for the cover sheet and the entry for week one. In week one (Figure 7), Arabic was used at the top of the page and the English writing was under the illustration. In Arabic, Shama wrote, “*We prepared the soil and planted the seeds*”; while in English she wrote, “*I plant the seed.*” In week two (Figure 8), the top of the page was left blank and she wrote in English under the illustration: “*The plants grow a litul.*” The English writing was placed at the top of the page in week three; it says, “*The stnz grow tol.*” In week four, there was no Arabic writing; English was used on the page. Shama wrote, “*Ther was a storm with reyn.*” Week five had neither writing nor drawing. The reflection page had a similar drawing as week one without text to accompany it.

Even though the purpose of this paper is not to analyse pupils’ writing, Shama’s plant journal is worth discussing here because she made conscious decisions regarding when, what, and in which language to write. These decisions shed light on her development as a bi-literate writer. The text on the cover page indicated that Shama knew how to form simple sentences in Arabic and English correctly; “*My name is Shama.*” She used simple punctuation accurately, at least in Arabic. It is not clear from the picture whether she has put a period at the end of the English text. Shama knew that a capital letter is used at the beginning of a sentence in English. She did not transfer that convention to Arabic. Usually, the capital/small letter is a source of negative transfer between the two languages for English-language learners, because in Arabic there are no capital letters; however, this difference did not present a problem for Shama. The text directionality was accurate in both languages. There was less apparent understanding of where to place the letters on a lined page. There was some evidence of negative transfer from English to Arabic. In Arabic, the word “ana” (me) has the letter “a” with “Hamza/mark.” The Hamza/mark faces the right

side when it's written, unlike the English letter "a" which faces the left side. Shama wrote the Hamza/mark facing the left side the same way she would write "a" in English.

Drawing is an essential part of a child's writing development. The drawing Shama made on the cover page indicates an understanding of the journal's overall theme, "planting." There is evidence that Shama understands proportions, as she placed the tree on one side of the page and balanced it visually with three small flowers on the opposite side. She added two little butterflies opposite from the crown of the tree. The sky included movement, and she used a different colour to show that movement. Her choice of colours was close to what one would expect from a real-world representation.

In the writing for week one (Figure 7), Shama used a simple compound sentence in Arabic. She wrote, "*We prepared the soil and planted the seeds.*" In English, however, she wrote the alternative sentence, "*I plant the seeds.*" This difference indicates that she did not translate the sentence from one language to another. She made choices about the text based on her language skills. The English vocabulary could have governed her vocabulary choices. She displayed mastery over spelling in both Arabic and English languages in the writing for week one. Shama's illustration is expressive and reflects the text associated with it.

In week two (Figure 8), no Arabic language journal entry was provided. The space was left blank. When the teachers were asked why the student had not written anything in Arabic, they replied that the journal was a work in progress and that the student would include Arabic later. However, Arabic was never included during the study. In week three (Figure 9), the English writing component encroached on the physical page space reserved for Arabic. Shama wrote in English, "*The plants grow a*

*litul.*” She displayed knowledge about the usage of capital letters and punctuation. Phonetic spelling is evident from the word “litul” (little); Shama omitted the second “t” and the silent “e” from the correct spelling of the word and added a “u.” These types of omissions are expected developmental errors as learners at this age (five years old) experience difficulties with double and silent letters.

In week two (Figure 8), the illustration was in black and white. The level of detail in the drawing had decreased. It is unclear why this difference occurred, as the rest of the journal entries had similar levels of detail and colouring as the entry for week one. Writing conferences with each student would provide teachers with an opportunity to discuss the student’s writing and illustration decisions. However, teacher-student writing conferences were not part of the writing process in the two case study classrooms. Students in KG1 and KG2 were not observed to converse with their teachers about their writing. Writing conferences provide students with the opportunity to name their thinking, which results in the development of oral language, and allows children to begin to understand the concept of audience and the importance of revision. Most importantly, it allows them to reflect on their work and decision-making process. Students who are not given the opportunity to view writing as a process will almost always think that it is a product only. In Shama’s case, her writing was not discussed with the teachers at any point. Consequently, the teachers did not know why she made some drawings without colour, or why she failed to write in Arabic.

In week three (Figure 9), Shama drew herself for the first time. She drew herself at an above-ground level watering the seeds. Shama wrote, “*The stemz grow tol.*” The description that Shama wrote matched the drawing. Also in week three,

English was moved from the bottom of the page to fill the Arabic writing space at the top of the page.

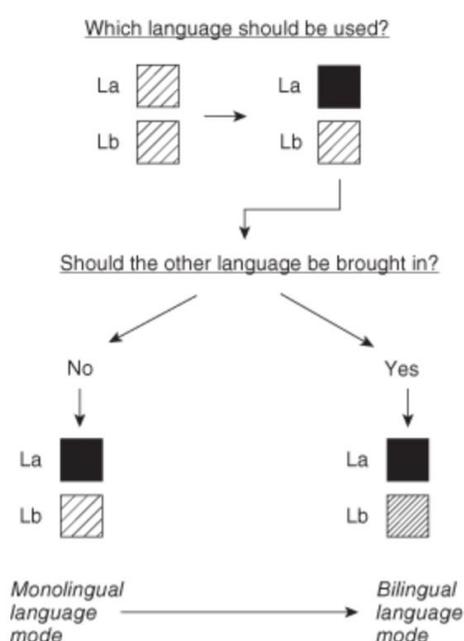
It is evident from the pages of her journal that Shama was not simply making a picture book; she was creating meaning, as the illustrations in the plant's journal demonstrate. For instance, in week 4 (Figure 10), Shama drew three trees with two dark clouds, rain, and wind that moved the crown of the trees. Her illustration in week four is not of her plant and its growth. It is of the environment surrounding her plant. Shama wrote, "*Ther waz a storm with reyn.*" Shama displayed a correct understanding of the usage of capital letters and simple punctuation marks like a full stop. She wrote phonetically. She demonstrated good spelling for her age.

Week five (Figure 11) is when Shama returned to school to find that her plant was gone. She decided to leave the page blank after approaching her teacher and failing to receive support, as detailed above. Shama did not write anything on the reflection page (Figure 12). Instead, she drew a similar illustration to that from week one.

There was an absence of emotional support for Shama during this experience. She should have received help and encouragement to write/draw about how she felt when she lost her plant. Shama's journal is not just a reflection of her linguistic development; it is a reflection of her emotional experience as well.

Per the sociolinguistic approach, a speaker or a user of a language makes conscious decisions about how to communicate meaning through language. Per Coulmas (2005), several factors contribute to this decision-making process: the interlocutor, status of the language in the environment or community, attitude, preference, and topic. In Shama's case, her choice to eliminate Arabic from her plant journal could have been due to the status of English in the classroom. Her choices

could have also been affected by the interlocutor, which in this case was the English teacher. Shama’s decision could also be interpreted through the lens of the language mode. Grosjean and Li (2012) define the language mode as the decision a speaker of multiple languages makes to activate a specific language at a specific point in time. In “*The Psycholinguistics of Bilingualism*,” Grosjean and Li (2012) use a visual model (Figure 13) to explain language mode and the decision-making process.



**Figure 13 Language mode.**

Per the language mode, Shama made decisions regarding two things when writing in her plant journal; first, the language that should be used to describe the progress of the plant’s growth, and second, the other language she would include at some stage of writing. The decisions that Shama made related to language use can be deduced from her plant journal. She began by activating the two languages, Arabic and English; therefore, she was in the bilingual mode. This makes sense, as her audience, “the interlocutors,” spoke two languages, Arabic and English. One of the

interlocutors, the English teacher, did not speak Arabic. Therefore, Shama had to write in two languages. As the plant journal progressed, Shama made a subsequent decision to write solely in English, likely due to a difference in the level of involvement of the interlocutors. The Arabic teacher's participation in the task decreased, and the English teacher's participation increased. Writing in Arabic no longer served a purpose for Shama; thus, she adopted a monolingual mode.

Shama is an active bilingual who knows when to activate both languages and when to resort to single-language use. From the case study detailed above, Shama's decisions regarding language use were clearly based on the purpose served by each language. To her, Arabic did not serve a purpose during that activity, which resulted in a decision not to include Arabic in her writing.

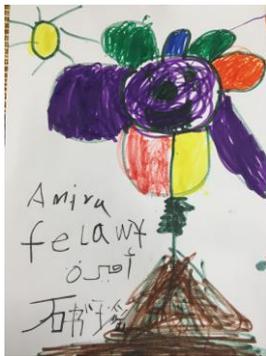
Considering Shama's writing process in the plant journal, it is evident from the seamless movement between the drawings and the writing that she had a reader in mind. She was not just making a journal about plants, she was designing it. The journal represented an ongoing effort over five weeks, during which Shama demonstrated stamina for documenting her plant's growth through writing. It is therefore not surprising that Shama was unhappy about what happened to her plant and that her feelings resulted a discontinuation of her writing process. Because of the importance of the teacher-student relationship in the classroom, I hypothesize that if Shama had received more emotional support from her teacher when her plant disappeared, she might have continued her writing process as a means of expressing and regulating her emotions.

#### **4.6.1.6 Teacher-Student Relationship: Alia “I Speak Four Languages; How Many Do You Speak?” (4 Years Old)**

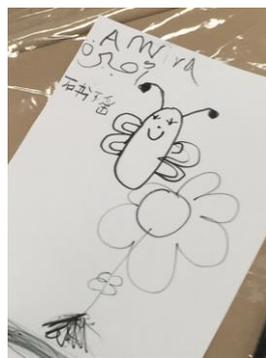
Shama is similar in her knowledge about the power of language to Alia, who is the focus of case 1.6. Both Shama and Alia are strong and outspoken bilingual/trilingual speakers who display strength in terms of how they employ languages.

Alia was a Chinese student in KG1. She was the only Chinese student in that classroom; her teachers classified her as a high-performing student. She had strong mastery over the three languages (Mandarin, Arabic, and English). Based on classroom observations, she appeared to have greater proficiency in Mandarin and English than Arabic. Arabic was not a language that she chose to use when talking to other children in the classroom. During one observation session, Alia was in the writing centre, working on an illustration of a flower. While illustrating, she also engaged in a conversation with another student. The conversation was in English. They talked about their work and the colours they had chosen for their flowers. There was another student in the writing centre who was not as engaged in the discussion. Alia reminded the other student to write her name on her paper. Alia had two illustrations, one of a flower and the sun (Figures 14) and one of a flower and a butterfly (Figure 15). I was not sure why she had illustrated two different pictures. On both illustrations, Alia had written her name in three languages: English, Arabic, and Chinese. In the first illustration, Alia wrote the word “falwey/flower,” but she only wrote it in English. It was interesting to see Alia write her name first in English, then in Arabic, and lastly in her own language, Chinese. This could have been because this was the order in which the three languages were used on labels in the classroom. Chinese labels were always almost placed last (Figure 17). When I asked

the English HOF the reason for this, she replied “*because it is not as important as Arabic and English in the KG context.*” Vygotsky (1978) identified three levels of social interaction that could have an influence (positive or negative) on the cognitive development of a child. One of those levels is the societal level, or the status of an individual or their language in a society. The school society did not value the Chinese language to the same extent that it valued Arabic and English. The lower status of Chinese in the classroom could have affected Alia’s placement of her name when it was written in her native language.



**Figure 14** Alia’s first illustration.



**Figure 15** Alia’s second illustration.



**Figure 16** Alia colouring her illustration.



**Figure 17** Labels in the classroom show the Chinese labels placed last.

The observation of Alia and the placement of her Chinese name shares similarities with a case study conducted by Escamilla (1994), who examined and described the status and use of English and Spanish in a bilingual school. Escamilla

investigated how the two languages were represented in the school, the classroom, and the larger community. The study examined the language policy that was in place, the actual use of the two languages, and the way they were used. While the school's policy and the subjects stated that the two languages had equal status, the findings of the study identified differences in the status of the languages. Escamilla (1994) found that English and Spanish were used in four different types of communication: English only, Spanish only, code-switching, and language accommodation. She concluded that the school was an example of a diglossic community, in which both languages are used, but in separate contexts and for different purposes. The languages each held a different status in the school community. The study concluded that English was the preferred language in the school, and it was used more extensively than Spanish. Despite the school community's acknowledgement of the importance of bilingualism and bi-literacy, English was primarily used for most of the conversations and events held in the school, and students were rewarded for using it (Escamilla, 1994).

The One School appears to have a similar situation with the status of Chinese in the school. The school is a tri-diglossic community that uses three languages for different functions and purposes. Arabic and English hold a higher status than Chinese. Chinese is clearly used for instructional purposes only, while the other two languages are used for a broad range of purposes, in addition to instruction. To enable students to see the value of trilingualism, the school would need to consider the status of each language in the classroom and modify instruction to ensure that each language is valued. For instance, when Alia attempted show her English teacher her work, the teacher asked Alia to place the work in her portfolio rather than engaging in a conference with her to ask her about her choice of colours and words. Engaging in a conference about the work could help a teacher to be more mindful of

the statuses of the different languages in the classroom and how language status impacts students' learning. The opinion expressed by the English HOF that Chinese is less important than Arabic or English should be revisited, because Chinese students are involved in the learning process. A system that lowers the status of any language relative to the others being taught is unfair to the students who speak that language.

The discussion between Alia and the other student turned from a conversation about the work being done to a social conversation. The students began to talk about Alia's birthday. Alia mentioned a toy she had received that could sing the song from the movie *Frozen*. The other student asked if Alia could bring it to school. Alia said that she could not, because her mother would not let her. As the conversation about the birthday ended, the students continued the conversation as follows:

*Alia: My daddy is coming to pick me up today.*

*Student: Your daddy is Chinese.*

*Alia: My daddy is Arabic/Syrian.*

*Student: Oh my god! (holding her head with her hands)*

*Alia: I can speak four languages.*

*Student: What?*

*Alia: I speak Chinese, Arabic, and English...do you know what Kon'nichiwa is? (Hello in Japanese).*

*Student: What? Kon'nichiwa?*

*Alia: I speak four languages; how many do you speak?*

Alia did not wait for an answer; she took her paper and left the table to visit the English teacher. The other student remained at the centre, confused by the meaning of the word "Kon'nichiwa."

Alia appeared to understand that speaking multiple languages gave her power, which explains why she used it as a response when the other student reacted negatively to learning that Alia's father is Syrian. Alia chose to stop the discussion about her father's nationality at that point. This conversation happened during a time of political and social unrest in Syria, and Syria was regularly featured on local news channels. Alia's behaviour toward her friend was normal for her age, as children at

the age of four are generally talkative and enjoy experimenting with language, including providing statements that they do not necessarily understand. Children at the age of four enjoy seeing the impact of their words on a situation; this stems from the explorative nature of children, not only regarding the items but also the people around them.

The sociocultural theory employed in this study suggests that children come to school with ideas that they have developed from their interactions with other children, their parents, and siblings. Children like Alia come to school prepared with ideas about the world that make sense to them (Vygotsky, 1978). Alia's response to her friend's comment about her father's nationality was not necessarily spontaneous. She had previously formed ideas and beliefs from her daily interactions with her community and other resources about what it meant to be half-Chinese and half-Syrian. She did not express shame; instead, she focused on how her ethnicity empowered her—through language.

Linguists, sociolinguistics, and psycholinguists have extensively studied code switching and have concluded that bilingual speakers do not employ the behaviour randomly. It is an intentional communicative strategy that bilingual speakers use to convey language and social message. Among the many reasons why a bilingual speaker would employ code switching are to relate to an identity or a group, include or exclude persons, or raise social status, depending on how the language is viewed. When Alia said, "I speak four languages; how many do you speak?" and then listed the languages she speaks, she did not mention Japanese. Instead, she said "Kon'nichiwa". Alia could have chosen to use the Japanese term "Kon'nichiwa" to exclude her friend from the discussion, taking a position of power by speaking a language that the friend did not speak.

In general, Alia is a student who realises that language is power. She knows she is competent in all three languages (English, Arabic, and Chinese), and she likes to show her competency by writing in the three languages. One day, Alia was in a small group with the Chinese teacher. There were two other students with her in the group (a boy and a girl). They were learning about the colour red in plants. The teacher conversed with the students about the colour and showed the group a flash card with a red leaf (Figure 18). The teacher then selected different items from a basket and asked the students to identify the colour “Hong Se,” or “red.” The students replied with whether each object was red. Alia and the other girl were confident conversing in Chinese but the boy was not. He was more comfortable with “yes/no” answers in Chinese.

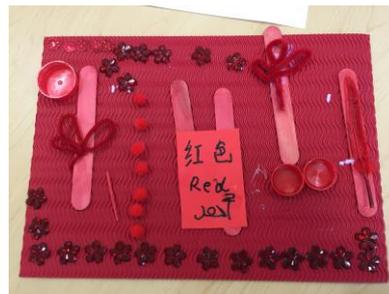


*Figure 18 The flash card.*

The teacher left the group to use the washroom; the students started conversing with each other in English. The boy appeared to be more confident conversing with his peers in English than in Chinese. When the teacher returned, the students switched to Chinese. The teacher then left to join another group. The students began to converse in English and Arabic, switching back and forth between the two languages. Chinese was not used during the conversation, even though the conversation was about the work they were doing in Chinese—the students were asked to make a card about the

colour red. The Chinese teacher returned to the group after 10 minutes and provided verbal feedback in Chinese to each student. All of the students responded to the teacher in Chinese. The boy started to say the colour red in Chinese, “Hong Se,” and showed the teacher an item that represented the colour. The teacher corrected his pronunciation.

Alia decided to make a card to present her knowledge of the colour red (Figure 19). She was asked to write the name of the colour red in Chinese; however, she chose to write in three languages instead of one. She wrote first in Mandarin, then English, and then Arabic. Alia liked to exhibit her knowledge of the three languages during most writing activities.



*Figure 19 Alia's work.*

English was the most dominant language in the classroom. Students resorted to English rather than Arabic when conversing with Chinese students. This could be because English was the only language that is not a native language of any of them; therefore it puts them on equal footing. It was noted during classroom observations that Arabic was the students' second choice of language for conversation purposes. Chinese had a clear use for instructional purposes only. Students were not observed conversing in Mandarin for communicative or social purposes during the study.

Per Mackey (1999), the fluency of a bilingual speaker in two languages is dependent on his/her need for that language to communicate with others in the

community. For that reason, some define bilingualism as the use of two or more languages in different contexts in life. Some researchers argue that a bilingual speaker can never be equally fluent in two languages and that one language always has predominance over another language. Bilingual speakers use their languages for different purposes to accomplish different things. Therefore, the dominance of one language might change over time, which explains why speakers in some situations choose a dominating language other than their mother tongue. Alia was selective in when and to whom she spoke English, as it served a communicatory purpose. While she was in a focused-learning group with the Chinese teacher, she chose to speak Chinese and did not employ English or Arabic; in this choice, she again chose the language that best served her purpose in the given situation. Dyson (1989) states that children find new functions and possibilities for writing, which they use intentionally to communicate messages to others. Alia used language as a social tool to deliver a message about her language abilities.

This was the last case related to the first theme of the study “Teacher-Student Relationship (Social-Emotional Development).” The second theme, “The Classroom Environment,” exemplifies how the environment in which the students are immersed plays a critical role in enhancing students’ overall learning experience.

#### **4.6.2 Theme 2: The Classroom Environment**

Student learning is maximised when the learning environment is interesting and engaging to the student. Negative behaviours are also less frequent when children are engaged in tasks. In addition, students thrive in a well-managed, efficiently-organised classroom that allows them to develop the self-regulatory skills recommended by developmental psychologists and constructivist theorists (Blair,

2002; Emmer & Stough, 2001; Bruner, 1983; Bowman & Stott, 1994; Vygotsky, 1978). The classroom environment functions as a learning tool, and acts as a third teacher that facilitates students' learning and expands their investigation and exploration opportunities. The classroom should be set-up in a way that works for all students, regardless of their physical, emotional, and academic needs. Further, the classroom environment should provide access to resources, manipulatives, and books that are developmentally and age-appropriate. Collier (1992) stipulates that the absence of proper resources in L1 could cause delays in acquiring L2 proficiency, because development in the second language is typically dependent on the development of the first language. Both classrooms, KG1 and KG2, had extremely limited resources available in Chinese for the students. Most of the high-end resources were in English. The available Arabic resources were of average quality.

This section of the paper focuses on "The Classroom Environment," the second of the three themes identified as part of the findings. Five cases/events are discussed in relation to classroom environment. Four events occurred in the KG1 classroom and one event occurred in the KG2 classroom. Of the four events from KG1, three involved one of the subjects. The cases/events help to answer the study's main question; how do Emirati children at the age of four or five develop bi-literate writing skills in Arabic and English? In addition, these cases shed light on one of the study's sub-questions; how do teachers use the classroom environment to support student writing?

The events detailed below demonstrate how the classroom environment can function as a third teacher to support, facilitate, and enhance student learning. The first case is titled "**Khalid Building a Train**," and it exemplifies how a centre in the classroom, equipped with appropriate resources, allows students to problem solve,

design, and practice numeracy skills. The second case is titled “**Khalid at the Listening Centre,**” and it provides evidence of how students bring experiences from their lives into the classroom. The third case, “**Khalid Matching Upper and Lower Case Letters,**” details how a study subject negatively transferred a skill from English into Arabic. “**I Am Starting a Fire**” is the fourth case in this section. The case is another example that demonstrates how students bring their lives into the classroom and the role of the teacher as a facilitator in this process. The fifth case, “**Ahmed at the Animal Hospital,**” illustrates how meaningful play in the classroom provides students with opportunities to use language in a meaningful way.

#### **4.6.2.1 The Classroom Environment: Khalid Building a Train (4 Years Old)**

The classroom was supplied with resources that allowed the students to make discoveries, explore, create, and build things. Khalid was working alone in the block centre but there were two students nearby, building a garden with blocks. Khalid connected some pieces of wooden train tracks (railway) together. He added a bridge to the wooden railway that he had built. He linked train carts together. Khalid placed the train engine between the carts instead of at the lead. As he was about to move his train, the EMT approached and asked, “*Did you do that? How many carts do you have?*” Khalid did not respond. The teacher modelled counting the carts one by one; then Khalid started counting with her. In this case, the teacher supported Khalid by scaffolding the language required for counting, which allowed him to participate with confidence. Then the teacher called out “*Hands on top,*” and the students responded from the different centres, “*That means stop.*” This was a signal in the classroom that students should stop their work in the centres.

As discussed in the literature review, children develop literacy/numeracy knowledge through social situations and meaningful play when they have an opportunity to interact with more knowledgeable peers or adults. This is what Vygotsky (1978) calls the “Zone of Proximal Development (ZPD)”; there are some things that the child can do on his/her own, and others that require support from more capable adults.

After centre time, the class transitioned to the playground for large-motor skill movement. Khalid did not want to leave the centre; he wanted to continue to build his train. The English teacher reminded him that if he placed the stop sign on his work, no one would touch it, and he would be able to continue what he started when he returned to the centre. Khalid placed the stop sign on his work and left the classroom. After the class returned from the playground, Khalid returned to the block centre and continued to work on the train. Khalid tried to move his train on the railway he built but the movement was not smooth. He tried moving it again with his hand and as it began to move, he noticed that the last train cart had fallen from the railway. Khalid reconnected it to the other carts and moved the train again. The carts in the middle of the train fell. Khalid fixed them and moved the train again. The train kept breaking. Khalid showed signs of frustration. He tried again. The train broke. Khalid was not happy. He connected the train again and tried moving it. The train fell to one side of the railway. Khalid became upset and started moving the train forcefully. The train fell again as it reached the bridge. Khalid looked at his train and decided to take the train from the beginning of the railway to the end in parts. He made a smaller train with the engine facing the wrong direction, leaving the cart to lead, and started moving it in parts. The whole train made it to the end of the track. Khalid disconnected the track from the railway when he was moving the train. He fixed the

railway and built a new train—the same as the one that had travelled the railway successfully. This time, the engine was facing the right direction, and the carts were placed behind the engine. He moved the train fast and slowed down as he reached the bridge. He left the train on the bridge and began to build a new train. He connected it to the one on the bridge. Khalid was happy with the way he had solved the problem. He called to the classroom helper to look at his train. Khalid was very proud of what he had accomplished.



*Figure 20 Khalid's train and railway.*



*Figure 21 Khalid building his train.*

Khalid's behaviour was typical for a four-year-old child. Children at the age of four are natural explorers. They like to explore ideas and solve problems. Khalid's work in the centre showed strong skills in some areas, including decision-making, perseverance, problem-solving, and trial and error. At the age of four, children learn best when the learning is hands on. The classroom was set up to meet the developmental needs of Khalid and the other children. In the blocks centre, Khalid had the opportunity to not only problem solve, but also expand his cognitive understanding of the various options that could be used to solve the problem, instead of giving up and moving on to a different task.

The process that Khalid engaged in while building his train was like the writing process. He checked his design and added to it (amending it). He revised his work. The process he followed was like the process of writing (brainstorming/design, drafting/building, revising and editing/amending the design, publishing/moving the train). The classroom environment supported Khalid's practice by presenting opportunities for problem-solving, decision-making, and creativity. The provided resources and his experience in the centre were Khalid's teachers.

#### **4.6.2.2 The Classroom Environment: Khalid at the Listening Centre (4 Years Old)**

Khalid's experience at the blocks centre was typical for the KG1 classroom. The classroom serves as the third teacher in KG1. The setup of the classroom facilitates learning by providing students with opportunities that stimulate their creativity and problem-solving skills, and expand their skills in a variety of areas. The classroom environment is rich in essential child-friendly resources. The centres in the classroom do not contain prepared, pre-set activities for the students. Rather, they are supplied with a variety of resources that stimulate students' creativity, and allow them to generate ideas and produce work of their own. For instance, one day Khalid was at the reading centre, which is also a listening centre. He opened the CD-ROM door, placed a CD inside and then put on the headphones. Although he behaved as if he was listening to something, the headphones were not connected. He opened the door again, placed another CD on top of the first CD and closed the door. He moved his head, pretending to listen. Then he took one CD out and realised that the headphones were not connected. He looked at me and asked for help. I connected the headphones for him. He turned the volume up, lifted his head and enjoyed the Chinese song that was playing. With the CD playing, he opened the door of the CD-

ROM, placed another CD on top of the first CD and closed the door. I called Khalid's teacher to assist him, because opening the CD-ROM door with the CD spinning could present a safety hazard. The Arabic teacher approached and sat next to Khalid. She asked him what he was listening to. He gave her the headphones and pointed at the CD-ROM. He tried to tell her that it was not working. The teacher supported his efforts with words that he could use to explain that the CD was not working. She tried to give him words to express that the CD was not working. The Arabic teacher stayed with Khalid, encouraging him to talk about his thinking and decision to insert more than one CD at a time. She asked him if he would like to write about it or illustrate it. Khalid refused by putting the headset on his head so that he would not hear what she was saying. The teacher, Lamia, started modelling language she would use to explain her decision: *"I did think because..."* Khalid did not respond. Lamia did not give up; she persisted and continued to ask him for a reason. He eventually said, *"like in car."* Lamia laughed, and she told him, *"You are right. In the car, we insert more than one CD at a time."* She was very surprised by his thinking and the link he made between the classroom CD player and the car CD player. Vygotsky (1978) states:

In play, a child is always above his average age, above his daily behaviour; in play, it is as though he were a head taller than himself. As in the focus of a magnifying glass, the play contains all developmental tendencies in a condensed form; in play, it is as though the child were trying to jump above the level of his normal behaviour. (1978, p. 16)

Children exhibit high levels of cognitive ability while in play, beyond what formally structured lessons would allow them to demonstrate. It is Vygotsky's belief that children in preschool start to develop higher-order thinking skills that go beyond basic reactive behaviours. They begin to analyse, problem-solve, and create new things by merging their real-world experiences with the cultural tools around them.

Lamia acknowledged Khalid's starting point and then provided the level of support required to develop his conceptual thinking. She used his misconception as an opportunity to scaffold his learning; she built on it rather than dismissing it. Lamia provided Khalid with incremental hints to help him come to an understanding of the problem himself, rather than imposing the concept on him. The back-and-forth exchange and discussion allowed for a high-level learning opportunity to take place. The teacher noticed that Khalid was struggling with expressing his idea, so she used the self-talk strategy—she said out-loud what she was doing. This strategy allowed Khalid to see how the teacher linked words with actions. When he began to express what he was doing, the teacher built on Khalid's responses and his attempts to communicate his idea. Khalid continued to struggle to express his thoughts, so the teacher engaged in parallel talk—that is, she started saying what he was doing. She put words to his actions.



*Figure 22 Khalid blocking his teacher.  
Khalid at the listening centre.*



*Figure 23 Khalid adding multiple CDs.*



Lamia also asked open-ended questions. This practice allows students to explore language beyond yes/no answers. Students begin to explore using language for

complex reasons, and they are better able to communicate their ideas when teachers scaffold the learning and provide the language support required.

The above case illustrates how Khalid took a real-life concept into the classroom and how the teacher helped him to improve his understanding of a situation through supportive action.

#### **4.6.2.3 The Classroom Environment: Khalid Matching Uppercase and Lowercase Letters**

Khalid sat by himself on the carpet where he found uppercase and lowercase letter blocks. He played with the blocks first and then started matching the uppercase wooden block with the corresponding lowercase block. There were blocks for all the letters in the English alphabet, both uppercase and lowercase. Khalid matched each one of them correctly. None of the teachers were around to take notes on what he was doing. He picked up the Arabic alphabet blocks and started looking for additional blocks to match to each of the letters. However, unlike the English alphabet, where each letter has two shapes (uppercase and lowercase), in Arabic each letter has one shape. In looking for the corresponding blocks, Khalid brought knowledge about letter forms from English into Arabic, his first language. He continued to look through the blocks, hoping to find corresponding letters of different shapes. Khalid eventually gave up and moved on to another activity. What Khalid attempted to do with the Arabic letters was consistent with Edelsky's (1982) finding that students transfer skills not only from L1 to L2, but also from L2 to L1.

Assessment, in general, was absent from both the KG1 and KG2 classrooms. Effective assessment of students' performance in an early-childhood setting would involve teachers recording students' performance and progress on a regular basis.

Unfortunately, teachers' judgment of students in KG1 and KG2 was based on overall impression, rather than quantified day-to-day progress. At the beginning of the study, his teachers described Khalid as a low-performing student. The purpose of this study is not to form judgements; however, Khalid's performance was not consistent with his teachers' description of him based on observation data. Developmentally, Khalid's behaviours were consistent with what a four-year-old child would do. Academic judgement based on writing ability and willingness to engage in writing activities only could lead to teacher misconceptions of student performance. At four years of age, children do not gravitate toward writing because it requires fine motor skills; many children have not developed these skills by age four.

This case detailed an event in which Khalid matched English capital letters to corresponding small letters, and attempted to do the same for Arabic letters. His actions reinforce what some researchers have found regarding skills transfer from L2 to L1. It is unfortunate that the teachers were not around Khalid during this event to note his performance and support his progress; however, for the following case “**I Am Starting a Fire,**” the teacher was present when a student wanted to transfer learning to the classroom from home.

#### **4.6.2.4 The Classroom Environment: I Am Starting a Fire (4 Years Old)**

It was wintertime; Gaith came back from a desert camping trip with his family. He left circle time undecided about which centre at which to work. He walked around the classroom and showed preference for the science centre. He found wooden logs there. He took two logs and began to rub them against each other. He called some other students to help him by taking two logs each. He explained to the students that they were going to start a fire in the classroom just like he did with his

family when they were in the desert. Gaith's idea was popular in the classroom; an increasing number of students joined him. Khalid was amongst the students who joined the group to start the fire. When the Arabic teacher noticed Gaith and the group of students around him, she approached him and the following conversation took place:

*Lamia: What are you doing?*

*Gaith: I am starting a fire.*

*The teachers laughed at first and asked him to explain how he was going to start a fire.*

*Lamia (the discussion was in Arabic): How? From wood?*

*Gaith: No. Logs.*

*Lamia: Where did you learn this?*

*Gaith: From when we go to the desert. We get logs, and we start a fire.*

Instead of dismissing what Gaith was trying to do, the teachers approached the situation in a supportive manner without frightening the children or scorning the idea of starting a fire in the classroom. Lamia used an idea that Gaith brought from his everyday life into the classroom as a learning opportunity to support him in learning an abstract concept—fire formation. The teacher engaged with Gaith and other students in a discussion about why they cannot build a fire in class. The students offered different ideas. Someone suggested that they should not build a fire in the classroom because “*this is not desert.*” When Khalid realized they were not actually starting a fire, he lost interest in the centre and the discussion went to the maths centre.

Even though the teacher eventually stopped the students from starting a fire, she still made a sustained and intentional effort to connect student learning to real-life experiences. Lamia's efforts were in line with sociocultural theory surrounding how children construct knowledge from their personal experiences and social interactions (Goodman, Owocki, Martens & Whitmore, 2005). Learning is more meaningful

when students can apply it to real-life situations or bring real-life events to their learning. Four-year-olds are independent decision makers; they do not require an adult to decide. Gaith decided to start a fire in the classroom on his own, and invited others to take part in the activity. He, unlike the five-year-old children, never looked for an endorsement from the adults around him. Furthermore, the effort made by Lamia to turn the event into an oral-language development opportunity for Gaith and the other pupils was a positive strategy for the development of student communication skills. Newman (1985) emphasised the importance of maximising verbal interactions with children at the emergent stage, as it has a significant influence on the overall development of children's oral language.

The case detailed above exemplifies how the classroom environment and its resources support students' development of concepts. Below, another case is identified that describes how teachers (KG2) set up a popular activity centre called "The Animal Hospital" in the classroom. Although the teachers did not observe or evaluate the children in that centre, based on observation data, discussions, decisions, and the use of problem-solving skills were evident in the Animal Hospital centre.

#### **4.6.2.5 The Classroom Environment: Ahmed at the Animal Hospital (5 Years Old)**

One of the main learning centres in the KG2 classroom is the Animal Hospital. The area is set up with stuffed animals and some toy medical equipment. The animal hospital is one of the most popular centres amongst students. It is frequently visited and usually populated with students.

Students who were at the Animal Hospital displayed high levels of participation and engagement in their activities. They were fully engaged in the pretend-play process. They divided the roles amongst themselves: a nurse, a doctor,

and two surgeons. Students ran vitals tests on different animals; they developed stories about the animals and their sicknesses; they animatedly worked and talked with one another about the different medical cases. Almost every animal was sent to surgery, but was immediately dismissed and sent back to the nurse's station. The nurse decided which animal went first for surgery. The animals were seated in the waiting room area in a specific order, which changed depending on the nurse's assessment.

The students at the Animal Hospital centre engaged in writing activities. They wrote about each medical case in the appropriate animal's file. The nurse wrote down the details of the animal's illness. The doctor prescribed medicine. The surgery table was originally a toy cooking stove that the pupils manipulated and used in a different way to serve the purpose of their hospital. They enthusiastically worked with the materials available in the classroom.

Ahmed was a frequent visitor to the Animal Hospital. He showed a high level of enjoyment when working as a nurse; seating animals, shelving them, or sending them to the surgery room. Ahmed, like other five-year-old children, learned best through active play and exploration. He easily expressed himself through dramatic play. Unfortunately, the teachers did not record the high level of student engagement in the centre or meaningful writing produced by the pupils. After centre time was over, the students shelved the animals and threw away their writing. The discussions that took place between the students at the Animal Hospital were not resumed, and the teachers made no reference to events that occurred in the centre. Most of the time, they were not aware of the rich discussion that ensued among the pupils in the centres.

It should be noted that students failed to be credited with what they accomplished at the Animal Hospital. At the start of the study, Ahmed's teachers described him as a low-performing student. The teachers' assessment of Ahmed was one-dimensional, and based solely on his ability to copy teachers' writing correctly and recite reading passages. Those types of assessments are developmentally inappropriate and ineffective for determining the performance level of a student. Authentic assessments of performance should be both age- and stage-appropriate. Pupils should be assessed through observations that capture their independent actions and those with peers, and how they interact with the available resources and adults in the classroom.



*Figure 25 Animal Hospital waiting area.*



*Figure 26 Operation room.*



*Figure 27 Nurse with the surgeon.*

As discussed in Chapter 2, Neuman and Roskos (1997) state that children in early-childhood classrooms that utilise play to foster literacy skills are more likely to develop better literacy skills, because they begin to use the language in a manner that is meaningful to them. The example detailed above demonstrates how the Animal Hospital empowered the children to write independently, converse with each other, and use higher-order thinking skills. For example, Ahmed prioritised the animals in

the waiting area according to the severity of their medical need. The doctors in the operation room problem-solved methods of treating the animals' injuries.

“Ahmed at the Animal Hospital” is the last case in the second theme of the study, “The Classroom Environment.” The third and final theme in the present case study is “The Quality of Instruction.” The Quality of Instruction theme was developed from cases that highlight how high-quality instruction supports students' development of concepts and ideas.

#### **4.6.3 Theme 3: Quality of Instruction**

The quality of instruction is a key factor in determining the quality of any early-childhood classroom. The quality of teachers' interactions with the students, including discussions and activities designed to support the development of higher-order thinking skills, lie at the centre of good teaching practices. Students learn better when they are supported through constructive and specific feedback that focuses on their individual learning needs.

In this section of the paper six cases/events are discussed that were used to develop the third theme, “Quality of Instruction.” Four of the events occurred in KG1 and two occurred in KG2 classroom. The cases/events address the main study question: How do Emirati children at the age of four or five develop bi-literate writing skills in Arabic and English? They also partially answer one of the study sub-questions: What strategies for teaching writing do teachers who are teaching in an Arabic-English bi-literate environment employ to foster positive development of students' literacy skills in Arabic and English?

The following cases demonstrate how quality of instruction impacts students' learning. The first case is titled “**Khalid and the Discovery of Colours**” and it details the response of a teacher to a student who discovers that mixing colours leads to the

formation of new colours. “**How Do Planes Fly When They Are Made of Metal?**” is the second case in this section. A student posed the question during circle time and the teacher took advantage of that question to start a rich discussion with the children. The third case “**Plants Are Not Black, Ahmed; Why Did You Do This?**” exemplifies an instructional technique that was not very effective for supporting the student as a writer. “**It Is a Horse, Not a Camel**” is the fourth case in this section. The case is a strong example of how teacher-provided feedback can engage the class in an open discussion and support a student’s thinking. The fifth case is “**Making a Fattoush Salad,**” which illustrates how whole-class reading was effectively used in one classroom to support students’ learning and the development of skills.

#### **4.6.3.1 Quality of Instruction: Khalid and the Discovery of Colours (4 Years Old)**

Khalid enjoys adventures and problem-solving. He was with Gaith at the science centre, and they were both going to start a fire in the classroom. The Arabic teacher stopped them from starting the fire and engaged the students in a discussion about the concept of fire formation. When the discussion began, Khalid lost interest and decided to leave the Science centre. He roamed the classroom, visiting different centres, but none of the potential activities caught his interest. He stopped at the maths centre, where there were various maths manipulatives. He picked up some transparent, coloured fans and began to play with them. He accidentally placed one fan on top of the other and was surprised to see that a new colour was formed. He discovered that when colours are mixed, new colours form. Khalid placed a purple and green fan together, and made orange. This surprised Khalid, and he showed the Arabic teacher his colour formation discovery. He was amazed by the idea that new colours can be created from existing colours. He took this new knowledge to the writing centre, where he used different-coloured markers to further explore his

discovery. He took a range of coloured markers (red, blue, orange, etc.), and began to connect them, placing them on top of each other. To his disappointment, stacking the coloured markers did not produce new colours like the transparent fans at the maths centre. Khalid lost interest in the activity and left the writing centre and the fans; he didn't understand why stacking the markers failed to produce new colours. The English teacher saw him leave the writing table and asked him why he was leaving but he did not answer her. He moved to another centre. The Arabic teacher spoke with the English teacher about Khalid's discovery of colours and explained that Khalid wanted to mix colours to produce new colours. The teachers decided to add an easel to the classroom with paints for students who wanted to experiment with different colours and write using different colours. Khalid's behaviour was normal for a four-year-old child; they quickly lose interest quickly in things that don't work or show immediate progress. The short attention span of a four-year-old child does not lend itself to a long period of engagement in a single activity; when Khalid did not see an effect of stacking the markers he moved on to another centre.

Use of the classroom to facilitate student learning was evident in KG1. The classroom served as an educational tool rather than a space for learning. The room was frequently physically modified to match the students' current social and learning needs.



*Figure 28 Coloured transparent fans. Figure 29 Khalid trying to mix markers.*

Quality instructional strategies used by teachers in their interactions with students can have a substantial impact on student learning. The above event involving Khalid exemplified how a teacher can facilitate student discovery by not dismissing or disregarding that student's thinking. The teacher encouraged Khalid to capture his learning in the form of writing. Even though he lost interest in the idea of forming new colours after he discovered that coloured markers cannot be mixed, his teachers still built upon the experience by establishing an area in the classroom for painting.

#### **4.6.3.2 Quality of Instruction: Gaith "How Do Planes Fly When They Are Made of Metal?" (4 Years Old)**

This case took place in KG1 with Karen and Lamia, who were asked a question by Gaith about planes and how they fly when they are made of metal.

I observed students as the class was returning from an assembly after a two-week spring holiday. They gathered in a circle and completed the calendar and daily routine, which consisted of greeting each other and discussing the calendar and the lesson objectives. During this particular circle time, students shared what they had done during spring vacation. The students gathered in a circle with their Arabic and English teachers; the Arabic teacher led circle time. When a student came in late the English teacher stood up to greet him and asked him to join the circle. The Arabic teacher greeted him as he approached the circle by saying, "*Al Salum Alikum. How are you?*" The teacher shook hands with him. The English teacher changed his attendance status from absent to present. The Arabic teacher said to the students

*Children, we want you to share with us one thing. The most interesting thing you did during spring break. We will start with Giath, and then*

*we will take turns in saying one interesting thing we did during the break. Moreover, then what do you think we are going to do?*

The students shared what they did, one by one. One shy student refused to share in front of all the other pupils. The teacher asked her to come close and tell her so that the teacher could say it to the rest of the class. The discussion proceeded as follows:

*AMT: Muzna travelled. She went on an airplane.*

*EMT: Where?*

*Muzna to the AMT: Oman.*

*AMT: She went to Oman.*

*AMT: Salama, can we please listen to Muzna, please.*

*AMT: Do we know where Oman is?*

*Most of the students responded by saying no, but one student said yes.*

*AMT: Does an airplane go on land or air?*

*Student: Air.*

*The EMT went to get a map.*

*Gaith: How can an airplane made of metal go up?*

*AMT: Smart question. Did you hear what Gaith asked?*

*Students: No.*

*AMT: How can an airplane made of metal go up?*

*Student: Because it can't go up. (girl)*

*Another student: Because it has a strong engine. (boy)*

*AMT: Is metal heavy or light?*

*Students: Heavy.*

*Students started to give examples of heavy items from around the classroom. A student stood up and went to the door and said the door is heavy. More students went toward the door and said it is heavy.*

*AMT: Now let's think of the question Gaith has asked. How does an airplane fly?*

*Student: It is the engine.*

*AMT: What engine?*

*Student: Engine of the airplane.*

*AMT: Does an airplane have an engine?*

*Students: No.*

*AMT: Think...Think...Ok is the engine small?*

*The same student that suggested it is the engine: No. Big. (He opened his hands wide to show how big the engine of the airplane is.)*

*AMT: Ok. I have another question, the car.... (Then she didn't finish her question). Let me tell you something, Gaith. An airplane is not made from metal. It is made from something similar to metal called "aluminium." (Then she looked at me.) Right?*

*EMT (Who joined the Arabic teacher): Gaith is asking how the airplane flies and it is from iron.*

*EMT: From?*

*AMT: Iron.*

*EMT (looking at Gaith): Interesting.*

*AMT (to the EMT): Then I asked them how do you think it flies, and then Zayed said because it has a machine, a big engine inside. (Both teachers look at Zayed with amazement and pride at his thinking.)*

*EMT: Maybe we need to look at planes. Would you like to look at planes and how they are made and how they fly?*

*(Some students nod their head, agreeing.)*

*AMT: Ok, children, how does a car move?*

*Student: It has tires.*

*Student: To move with the key. You have to have a key.*

*AMT: Ok, what do you do after you have the key?*

*Students: You open the car.*

*AMT: How does a car sound?*

*(The children started making noises to resemble a car.)*

*AMT: That's the noise an engine in a car makes. Just like an airplane, a car has an engine. An airplane has a key and an engine.*

This conversation demonstrates how the teacher used a spontaneous response from Gaith to create a learning opportunity for the students in the circle. She maximised students' learning by involving everyone in the discussion, rather than limiting it to a discussion between her and Gaith. In doing so, she helped all students learn correct information, without dictating answers to them. She modelled the process of learning, which usually starts with a question or statement; followed by a hypothesis; research; a meaningful discussion; and finally, an answer. The teacher went beyond simply stating whether an answer was correct. What mattered to her was how she could expand the discussion to maximise learning. Notably, the teacher did not leave the students with an incorrect understanding of how planes fly; she provided clarification on student misconceptions. However, she did so only after she had nurtured a rich discussion amongst the students around Gaith's question, to increase understanding and foster persistence of the learners.

This type of open discussion around a student's question helps students to develop the skills required for harder cognitive tasks. They learn to question the norm. The natural flow of information from the teacher to the students and vice versa

sent a strong message to the students that they are valued as speakers and that the discussions they start and the questions they ask are significant and worth exploring.

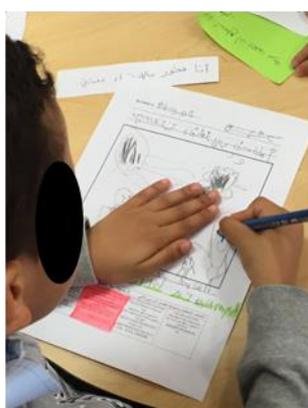
Gaith's question about planes was used as a teaching opportunity to stimulate a discussion amongst students and challenge their thinking. Lamia facilitated the discussion and accepted all answers from the students. Lamia's reaction to Gaith's questions and the answers from the students was entirely different from the way Salwa, the Arabic teacher in KG2, reacted during a similar situation. In the event detailed below, Salwa rejects Ahmed's colouring of a plant because it does not meet her expectations.

#### **4.6.3.3 Quality of Instruction: "Plants Are Not Black Ahmed; Why Did You Do This?" (5 Years Old)**

I observed students on one occasion in the KG2 classroom as they were seated in groups to continue a writing task they had started earlier. They each had a sheet of paper with space for illustration, lines for writing, and emotional attitudinal goals to select from. The Arabic teacher wrote a sentence for each pupil to copy on a piece of paper. The English teacher wrote a sentence for each student on the paper and the students wrote beneath it. A pedagogical practice such as this one does not allow students to develop as writers. The ability to copy a teacher's writing is not a sign of being able to write independently. Rather, it is a sign of lack of trust. Teachers do not trust their students to write independently or view them as competent writers, capable of writing their own sentences and expressing themselves. The AMT and EMT each had a group of students. Both teachers discussed the goals of the activity with the students and highlighted each student's chosen goal. The teachers then wrote a

sentence for each student that reflected the goal, instead of encouraging students to write for themselves.

Ahmed chose the following goal: “I can take care of my plant.” He drew a picture, then copied his teacher’s writing and began to colour in his illustration. He coloured his plant black. The Arabic teacher asked, “*Plants are not black; Why did you do this?*” Ahmed seemed unsure about what she expected him to do. He did not change the colours as per his teacher’s instruction; however, he did look concerned.



**Figure 30** Ahmed’s colouring.



**Figure 31** Ahmed’s final paper.

The students were encouraged to add details to their illustrations. However, the teachers made decisions on behalf of students regarding when they should stop illustrating and/or colouring. Teachers made statements like, “*Show me your work. I think it has enough details. You are done here.*” The students were then dismissed to go to another centre of their choice. “*I finish.*” said Ahmed to his teacher. “*Is this your best? You cannot just finish quickly because you want to go to the centres,*” the EMT replied, looking Ahmed in the eye. She added, “*Add more colours. This is going to the goal wall.*” The EMT then looked at me and said: “*Goodness me!*” Expanding on Ahmed’s initial work, rather than making ineffective statements would have been a better teaching strategy, allowing Ahmed to benefit from feedback and clarification on needed further developments. Specific and individualised feedback is

more beneficial to helping students develop their learning than making global statements, such as “*Is this your best?*” “Best” is an abstract term that children at the age of five do not necessarily understand. Vocabulary at this age is limited to words with which they can associate a picture.

Per Hallinan (2008), teachers who invest in building relationships with their students and who teach to their students’ needs and strengths are more likely to have students who build additional learning capacity, as learning is a psychological process and not just cognitive. In the event detailed above, Ahmed did not alter the colour of his plant; he was not provided with feedback regarding what to change and why. The feedback from both teachers was at an abstract level; Ahmed could not access it, cognitively. The students in KG1 generally received more feedback than their peers in KG2. Further, the children in KG1 were almost always supported and encouraged to think beyond the norm. The teachers at KG1 engaged the students in meaningful discussions that facilitated their thinking and learning. In the case detailed below, Gaith demonstrates that he feels it is safe to voice his opinion and justify it, without worrying about being different from the rest of the class.

#### **4.6.3.4 Quality of Instruction: Gaith, “It Is a Horse, Not a Camel.” (4 Years Old)**

During classroom observations in KG1, the students gathered in a circle around the smart board on which the Arabic teacher displayed the story “*A Trip to the Desert.*” The cover of the book had an illustration of a boy, a camel, and a mouse. The three figures were standing on a dune in the desert. The discussion was in Arabic. The teacher asked the students to predict what the book might be about:

*Gaith: It is about a girl and horse. The girl is happy.*

*Teacher: So, what do you predict the book to be about?*

*(A student answers, unintelligible.)*

*Teacher: So are they all upset?*

*Gaith: No. No, they are happy.*

*Teacher: Why do you think they are happy?*

*Gaith: No, the mouse is crying.*

*Teacher: Why do you think he is crying?*

*Gaith: Because water is coming out of his eye.*

*Teacher: What is the name of the water that comes out of the eyes?*

*Gaith: Tears.*

*Teacher: Good. Maybe he is crying because there are tears in his eyes. I like your thinking.*

*Teacher (to rest of the students): Is he crying?*

*Gaith: Yes, I think he is crying.*

*Gaith: He is crying because of the horse.*

*Teacher (pointing at the camel on the cover): Do you think this is a horse?*

*Students: No, this is a camel.*

*Gaith (standing up): Yes, this is a horse. (Gaith points to the camel.)*

*Rest of the class: No, no, this is not a horse; it is a camel.*

*Teacher: Wait ...wait children, let's ask. Gaith, why do you think this is a horse?*

*Giath: Because it is big.*

*Teacher: What else? Why do you think it is a horse?*

*Gaith: Because the word says it is a camel and girl and mouse.*

*Teacher: So, is it a horse or a camel?*

*Gaith: It is a horse. And this is a boy, not a girl. And this is a sun. And a sun doesn't have eyes and mouth. But it has many hands (he pointed with his hand in different directions to mean rays).*

*Teacher: How did you know it has hands?*

*Gaith: Because it is big like the horse.*

*Teacher: The sun is big like the horse?*

*Gaith: Yes.*

*Teacher: Gaith thinks like this, that the sun has hands and this is a ...when we read the story we will find out.*

*Student: And this is a mouse that has a big eyes and teeth. No, one tooth.*

*Another student: No, it has two.*

*Gaith: No, he only has one tooth.*

*Teacher: Gaith, did you finish?*

*Gaith: No.*

*Teacher: Ok.*

*Gaith: Its colour is red.*

*Teacher: Listen, children, Gaith has told us so far, this animal is a horse, this person is a girl, this is a sun with hands, and the mouse is happy. Right?"*

*Gaith: I also think this is red (pointing at the girl.)*

*Teacher: I like Gaith's thinking.*



*Figure 32 Gaith predicting and answering.*

The Arabic teacher successfully helped students become involved in preparing to read the book by accepting all predictions about the plot of the book and asking open-ended questions that allowed Gaith to give full, meaningful answers; this also allowed the teacher and other students to challenge his thinking. Students' engagement with and exploration of the text were maximised by the teacher because she allowed their engagement with the text to exceed her own.

The teacher demonstrated the ability to encourage students to use effective thinking strategies instead of relying on the memorization of facts. Throughout the discussion around the book, open-ended questions were asked, which encouraged students to use analysis and reasoning skills rather than rote learning of facts. The open-ended questions that the teacher asked added depth to the discussion, which facilitated a deeper understanding of the relevant concepts and the development of thinking skills. Lamia used different teaching strategies to facilitate a rich discussion with the students, including problem-solving, prediction, and compare-and-contrast techniques. She challenged students' responses by asking them follow-up questions and encouraged them to explain and justify their answers. Further, the level of questioning was sustained throughout the discussion. The teacher was not interested in soliciting one correct answer, even though some questions had only one correct

answer. Rather, the purpose of the discussion was to encourage the students to analyse the question and explain the rationale for their answers.

The teacher did not dismiss any of the statements or answers Gaith proposed. She acknowledged that they were feasible by saying, *“I like your thinking.”* She asked him “why” and “explain your thinking” questions to follow up on his ideas and answers. This action allowed Gaith to explain his rationale and engage in a sustained, meaningful discussion to further develop his thinking. This level of teacher engagement allowed the students to perform at a higher intellectual level.

This case is an example of how effective teachers use students’ questions, responses, or discussions to promote language and concept development. These are the kinds of discussions that allow pupils to develop vocabulary and ideas to transfer to a writing task. Even though the reading activity detailed above was not directly linked to a writing task, it supports the notion that the development of reading and writing starts with the development of oral language. With increased oral development comes increased writing and reading proficiency.

New vocabulary is most effectively introduced through reading. Reading is used as a stepping-stone for writing, as it provides pupils with a base from which they can build their writing. Read-aloud activities represent a strategy that effectively supports the vocabulary acquisition and comprehension skills of students. In the event detailed above, the teacher led a discussion about the events of the story. She explained unfamiliar and new words to the students.

In literature, Lamia’s approach is also referred to as the establishment of a dialectic, which refers to the discourse between two or more people who hold different opinions about a subject, and who are arguing from positions of reasoned justification. In educational psychology, the transfer of knowledge usually refers to

the act of transferring a skill from one language to another or from one situation or problem to another. The term transfer primarily relates to the application of skills from one situation to another. Beach (1999) has advocated for a broader understanding of the term transfer in educational psychology, which includes considering transfer beyond the literal cognitive transfer of a skill or a language. Beach proposes linking the individual and the changes he/she is going through while engaged in a discourse with the changing social contexts. Beach suggests that transfer represents an ongoing relationship between changing individuals and social contexts. This proposal takes a holistic view of bilingualism instead of focusing on separate skills or experiences. Beach (1999) defined transfer as the continuity an individual carries from one social context/state to another. This continuity involves the transfer of knowledge, skills, and identity. A transfer, per Beach (1999), is not a linear task; it is a complex task that involves an interrelated process.

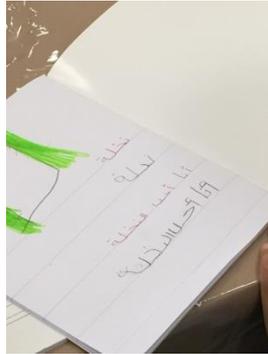
Students in both classrooms were not simply learning two languages and transferring skills from one language to the other; they were constructing knowledge and in doing so, were positioning themselves in the world by interacting with peers and other community members in and through different languages.

Lamia demonstrated strengths in the teaching of reading, speaking, and listening skills. The teaching of writing, however, is not an area of strength for her. Lamia frequently asked students to copy her sentences instead of encouraging them to write their own. The following case is an example of how a lower quality of instruction in a subject area can negatively impact students' development as writers.

#### **4.6.3.5 Quality of Instruction: Gaith, “Copy What I Write!” (4 Years Old)**

On one occasion that I observed the students, Gaith was at the reading centre; he was holding an English book entitled “*Eagle’s World*.” The book was above Gaith’s age level, like most of the books in the KG classrooms. He was not engaged in reading the book, but was flipping through the pages without looking at them. A KG classroom should be supplied with age-appropriate picture books that facilitate the emergent reading skills of pupils at the age of four and five. Gaith displayed proper book-handling skills, including directionality from left to right. Gaith was not in the reading centre for long, leaving, as most pupils do, after less than five minutes. He went to the EMT and asked if he could work with her. She replied, “*You want to work with me. I have the maths group today. Once I finish I will come and see what you can do.*” Gaith wandered around the classroom but did not go back to the reading centre. Gaith finally joined the writing centre where the Arabic teacher was working. In a notebook, he copied the phrase “palm tree” in Arabic from a flash card. First, the teacher wrote the word and then Gaith copied it. When he finished, the teacher said, “*Do you want to write a sentence now?*” Gaith replied, “*Yes.*” She wrote, “I love the palm tree.” The teacher sounded out each letter and Gaith said the name of the letter

that corresponded with each sound. The teacher wrote the sentence and he copied it. The teacher dictated the sentence for Gaith to write. The sentence read, “I love the palm tree.” Gaith began to copy the sentence the teacher had written. As he did, he made a mistake; the teacher erased his work and asked him to write it again.



*Figure 33 Gaith's writing/copying.*

If the event detailed above was the type of writing activity in which the students were expected to complete, then the writing centre should have been called the copying centre. Students should have been given the opportunity to write and illustrate freely, instead of being told what to do. The activity in which Gaith engaged was not a component of writing development because it did not reflect the process steps relevant to writing (i.e., brainstorming, drafting, editing, and publishing).

#### **4.6.3.6 Quality of Instruction: Making a Fattoush Salad**

During classroom observations, the teachers were observed to frequently read to the whole class in the three languages of instruction; children at the ages of four and five enjoy having a teacher read to them. Through whole-class reading, the teachers modelled fluent reading and expression for the students and how to a book read from the beginning. One day in KG2, the Arabic teacher led the whole-class reading session of a procedural book on the making of fattoush salad. The students

were going to make one the next day. The teacher began the session by reminding the students that they would be making Fattoush salad by following the steps in the book. The reading experience was mediocre for the students. Unfortunately, whole-class reading activities were frequently not fully maximised by the KG2 teachers. Meaningful discussions of the books were typically limited and brief. During reading time, the discussion on salad-making was primarily centred on facts, rather than understanding and analysing student ideas. The opportunities for focused analysis, reasoning, and concept development were interspersed with basic rote learning that was heavily fact-based. The Arabic teacher did attempt to ask higher-order questions; however, these types of questions were infrequent and only loosely linked to the overall discussion. Attempts to incorporate higher-order questions into the discussion were isolated, possibly unintentional, and did not build on students' thinking or expand their learning. Overall, the discussion around the book focused on close-ended questions, such as, "What are the ingredients of the salad?" Some open-ended questions were posed, but they were limited. The teacher consistently posed close-ended questions to the class that did not require substantial critical thinking and had only one correct answer.

The vast body of research on emergent literacy suggests that the development of reading and writing skills is heavily dependent on the richness of the oral experience (Feeley & Strickland, 1991). Pupils in KG2 that are primarily exposed to experiences like the one above cannot be expected to develop as readers and writers. It was not surprising to the researcher that the students in KG2 were not observed engaging in creative writing tasks. For students to develop stamina for learning and writing, they need to engage in meaningful learning tasks. They need to develop evaluation skills and the ability to be critical of their work. Furthermore, these

meaningful learning opportunities need to be sustained and occur at regular intervals, rather than brief episodes, as typically occurred in KG2.

For students' writing to develop weight and depth, teachers should support students in the gradual development of concepts and efforts to link different concepts with one another. For this to occur, learning must be viewed as a holistic process, not a fragmented one. Most of the time in KG2, ideological concepts were not explicitly linked for the students; if they were, the links were superficial. For instance, during writing activities the teachers would remind the students of a phonics song that they had learned, to help them remember how to spell words. A more robust manner of linking concepts might be reminding students of the links with what they have learnt in maths or their lives or a specific event. Any integration of ideas and concepts in KG2 appeared to be an unintentional by-product of the teaching strategy, rather than an intentional effort. Students would benefit if teachers integrated different areas of the curriculum at the planning stage.

## 4.7 Summary

This chapter described and analysed data collected during a case series study conducted at a government KG in the Emirate of Abu Dhabi. The One School is a pilot program that has implemented the teaching of three languages: Arabic, English, and Chinese. The findings of the study were grouped under three main themes, namely: social-emotional development (the student-teacher relationship), the classroom environment, and quality of instruction. The case series presented here indicated that pupils' engagement in literacy activities that facilitated the development of reading and writing skills was dependent on the quality of the teacher-student relationship, the support provided through a positive classroom environment, and the quality of the instructional strategies used by the teachers. In addition, the development of bi-literacy skills was dependent upon the status and use of the languages in the classroom. It was evident from classroom observations that the dominant language, and most preferred language for learning, was English. Arabic was the second-most preferred language, and Chinese was mainly used for instructional purposes.

The subjects in this study were Alia, Gaith, Khalid, Shama, and Ahmed. Alia was a four-year-old female Chinese student who was enrolled in the school as part of the pilot project partnership between the UAE and Chinese government. She was a

KG1 student who was part of the classroom piloting the Reggio-Emilia approach instead of the ADEC blocked approach. Alia likes to problem-solve. She has a strong presence in the classroom, both socially and academically. She is more outspoken in small groups than in large groups; she was not as active during whole-class readings or discussions. The title of this study was inspired by Alia, who once said to another student, *“I speak four languages; how many do you speak?”* Alia is half Chinese-half Syrian. Her teachers described her as a high-performing student. Throughout the course of the study, Alia demonstrated independence and self-confidence.

Gaith was a four-year-old Emirati male student; he studied with Alia and Khalid. Gaith is a quiet student who is very curious about all kind of things. He enjoys bringing experiences from his life into the classroom. For instance, one day he wanted to start a fire in the classroom because he saw someone do it on a desert camping trip. He is not afraid of being different from the rest of his classmates or challenging his peers and his teachers. During the study, Gaith enjoyed being around his teachers, especially the English teacher. He performed at a higher level when he was around adults than when he was on his own. He and Khalid were frequent visitors to the blocks centre during the study.

Khalid was a KG1 student who was described by his teachers as a low-performing student. His teachers also called him the “silent student,” as he would not speak often in the classroom. I would call him “selectively mute.” Khalid chose when he wanted to talk during the study. He is adventurous, and likes to explore. He also likes to problem-solve. When a situation did not require problem-solving, Khalid withdrew from that situation. Khalid was an unnoticed student in the classroom. He did not get the same amount of teachers’ attention as the other pupils. In the opinion

of the researcher, Khalid's academic performance during the study was above average.

Shama and Ahmed were subjects from KG2. Shama was a five-year-old Emirati female student. Her teachers described her as a high-performing student. She is very independent and self-confident. Shama followed her teachers' instructions exactly during the study, and did not take risks like the other children. She did not interact much with peers. Shama was mentioned only once in the analysis, "Shama at the Writing Centre." This is because during the observations, she would not interact with her peers or teachers. She was uncomfortable with being observed in a research context.

By contrast, Ahmed did not mind a stranger in the classroom. His teachers described him as low performing. Unlike Shama, he is a risk-taker when he is not with his teachers. His favourite centre was the Animal Hospital. He was almost always the nurse. During the study he enjoyed interacting with other children and loved to pretend-play. Because of the classroom environment and teaching strategies used in KG2, Ahmed and Shama were much more controlled in their actions by their teachers than the subjects in KG1.

During the classroom observations that were made over a five-month period, between February and June, explicit teaching of the writing process—planning, drafting, editing and proofing, and publishing—was not observed. Students did not engage in any activities that focused on understanding the steps of writing. The writing activities in which students were involved focused on the product, rather than the process. Students' opportunities to develop writing pieces were limited, if one does not consider copying a teacher's words to be writing. It is not overly surprising or problematic to have a limited number of written pieces from four- and five-year-

old children. Young children are more likely to develop skills through active learning and hands-on experience rather than passive learning experiences, such as writing. Writing requires logical thinking, which children do not develop until the age of almost seven. At four and five, children are intuitive and literate. Further, the physical process of producing writing requires fine motor skills that students at this age are still mastering.

Story-reading occupies a major space in the ADSM Curriculum. Based on observations conducted in the two classrooms, reading in general and reading aloud, more specifically, were part of every lesson. Razinski and Padak (1999) argue that the inclusion of reading in the context of the daily routine of facilitates students' reading growth.

Both classrooms had an effective focus on whole-class reading activities. Existing literature supports the notion that KG is the appropriate place to support pupils as they develop foundational literacy skills and become readers and writers. In addition, exposing pupils to reading and writing from an early age prepares them for formal schooling (entry to grade one) and the core literacy requirements (Burns, Griffin & Snow, 1999). Reading aloud and the questioning techniques employed by teachers facilitates the acquisition of required literacy skills from an early age (Burns et al., 1999; Justice & Pullen, 2003). In addition, a read-aloud session fosters the development of relationships between the teacher and the students, as they read the same books and live the same experience with the characters. Reading works as a scaffold for writing; the books that were read were always related to the theme the students were studying. Through read-aloud activities, pupils develop concepts about print and learn about the structural and language features of stories and genres. Read-aloud activities also provide students with information about the function of written

language (Rog, 2001) and support students' ability to recall events, and their sequence of occurrence, which is important in writing.

It could be concluded that both classrooms focused on developing the communicative and interpersonal skills of the students, which are of ultimate importance to these young children when they are interacting with members of the community in the real world. Researchers in the field of second-language acquisition have extensively studied the need to develop language for communicative purposes, and it has proven to be effective in the long run (Chamot & Stewner-Manzanares, 1985; Richards, Rodgers & Swan 2001).

The use of open-ended questions and prolonged discussions was more evident and frequent in the KG1 classroom. The KG2 classroom employed less-effective teaching practices and had weaker student-teacher relationships than the KG1 classroom. Learning was meaningful in the KG1 classroom because it was linked to pupils' lives. They were encouraged and challenged by the teachers. Students were supported in their efforts to explore various points of view and ways of completing a task. The KG2 classroom had a rigid time-management system, which hindered the children from "being children." Most meaningful learning occurred when the students were in the centres working independently, not with their teachers. Classroom observations consistently showed meaningful use of language among the pupils when they were not under a teacher's supervision. In fact, it was observed that the pupils were not their "normal" selves when they were with the teachers. Except for the whole-class reading activity, most of the activities conducted with the teachers were centred on copying teachers' work, which is pedagogically ineffective and inappropriate.

The subjects in the study demonstrated an aptitude for higher-order thinking skills: analysing, evaluating, comparing-and-contrasting, problem-solving, and communicating. The teachers captured some demonstrations of these skills but many were unnoticed. Effective assessments of student learning were nearly absent from both classrooms. Teachers' judgment of individual pupils was based on their overall performance, which lacked a robust and repeatable methodology. The absence of meaningful writing opportunities for the students limited the ability of teachers to document the linguistic skills used by students in transfer from either language. The activity of copying the teacher's writing did not provide a good foundation for the teaching of writing. Annotating students' work is a universal practice that could be incorporated by the KG1 and KG2 teachers. Understanding developmental milestones for children who are four and five years old could be an area of professional development for the teachers.

Despite some of the problematic features of the classroom environment and instructional strategies present in both classrooms, the pupils were observed to be on a promising trajectory toward bi-literacy or tri-literacy. The system administrators should review the inclusion of the Chinese students in the school, as the status of the students and their native language in the school is problematic. Emirati pupils appear to benefit from the program more than the Chinese students. The Chinese language should be presented and referred to by all members of the school with respect; otherwise, the school should reconsider teaching it.

Last, pupils develop bi-literacy skills when they are fully supported, understood, and cared for by the adults around them. In this study, the whole-class reading activity (read-aloud) was the most efficient teaching practice observed. Students were almost always interested and engaged when teachers read to them.

Their knowledge was challenged and expanded, and they formed conclusions and supported them with rationale thinking. The best and most effective resource in the classroom was the pupils—their lives and their stories.

Chapter 5 discusses the findings of the study and their implications. It also makes recommendations based on these findings. The limitations of the study are also discussed, and future research opportunities are explored.

## **Chapter Five**

### **5.1 Discussion**

The education reform in Abu Dhabi is the result of the Abu Dhabi Economic Vision 2030. Rapid growth and development of the global economy have put pressure on the Emirate to develop and reform the education system so that students can compete in the global economy. Therefore, education policy-makers have decided that the educational program in the Emirate of Abu Dhabi must reflect 21<sup>st</sup>-century skills. Further, the program is designed so that students are at the centre of the education system and the outcomes-based curriculum is driven by creativity, innovation, flexibility, bi-literacy, and active learning.

Governments and policymakers around the world recognise that for pupils to become positive contributors to their communities, countries, and the world, they need to be equipped with a variety of skills, knowledge, information, and qualities. Unfortunately, educators in many education systems merely pay lip service to these skills, qualities, and knowledge; some educators continue to teach such that students acquire only discrete knowledge, rather than the skills needed to apply learning to

real-life situations. It is evident from the present case series that at least one classroom, and very likely many more, in Abu Dhabi suffers from a mismatch between the skills required for the Emirate's current and future needs and those being taught to students.

Bilingual speakers like Alia, Gaith, Khalid, Shama, and Ahmed make up most pupils enrolled in the education system in the United Arab Emirates (UAE), and all pupils in the Emirate of Abu Dhabi. The pupils in this case series and the system, in general, used two or more languages in their day-to-day life. The government invested in establishing bilingual and trilingual education systems because of the benefits bilingualism and trilingualism bring; not only to the students, but also to the community in which they live. Bilingualism and trilingualism provide the country with a stepping stone towards economic competitiveness. The current study was conducted to add knowledge regarding how children under the age of six become bi-literate writers in two languages (Arabic and English).

The findings from this study fall under three main themes: the student-teacher relationship (social-emotional development), the classroom environment, and quality of instruction. It is evident from the events and the stories detailed in the study that the pupils were cognitively, academically, and socially competent in using the two languages, Arabic and English. The pupils exhibited high levels of ability when navigating between the different languages. They demonstrated an ability to use code switching strategically. Findings also uncovered limited-to-absent use of appropriate assessment strategies by teachers. It was unclear how teachers formed their judgements on the pupils' performances. Findings further revealed that the teachers did not accept the language approximations of the pupils during writing tasks. Pupils'

approximations were viewed as errors that had to be corrected and annotated.

The sociocultural theory of learning and the sociolinguistic approach to language were both used as overarching frameworks in this study to gain an understanding of how children who are pre-emergent or emergent learners of two languages become bi-literate writers. The sociocultural theory of learning provided the opportunity to view and understand children and their language practices based on the cultures and experiences they brought with them into the classroom. It also allowed the researcher to understand how the relationships between the teachers and students impacted students' learning. Furthermore, sociocultural theory allowed the children to be viewed beyond what they exhibited in the classroom; a child brings ideas, concepts, and beliefs about others and the world around him/her from his/her individual social context and background. Taking a sociolinguistics approach to language provided an opportunity to analyse language use by the subjects by focusing on when and how each language was used.

The findings of the present case study point to a gap between policy and actual implementation. For instance, the policy on language of instruction states that both languages, Arabic and English, are to be taught additively. It was clear from the classroom observations that English was the dominant language in both classrooms. In addition, the absence of the Chinese language in the policy points to its low status. The Abu Dhabi Education Council (ADEC) goals of improving education in the Emirate of Abu Dhabi are ambitious and well-intended. However, if the gap between the intended policies and implementation is not addressed, the reform might suffer from a lack of consistency and misunderstanding amongst its stakeholders.

The gap between the “intended” and “actual” curriculum experience is not unique to Abu Dhabi. For instance, the Singapore reform is like the reform in Abu Dhabi, with the goal of the reform to become economically competitive in the global market. Both Abu Dhabi and Singapore are experiencing a gap between policy and practice. From my experience and after meeting with large numbers of teachers and educators in the system, the barriers to implementing the ADEC Abu Dhabi School Model (ADSM) can be traced to one underlying issue: there is a lack of a coherent and well-articulated ADSM conceptual framework that is accessible and understood by practitioners and developers alike. Teachers in the study were familiar with standards and ‘outcomes-based’ models of curriculum. However, there was a limited understanding of constructivist pedagogy and authentic assessment practices which, in theory, underpin the ADSM. If efforts are made to ensure that the ADEC early-years system is well-developed and articulated, improved student outcomes are likely.

In addition, the ADEC hires teachers from overseas who have a wide range of expertise. The ADEC perennially struggles to familiarise western teachers with the social, cultural, and educational context of the UAE. Rapid changes in the education system in Abu Dhabi have affected the system at the school level. The system has created internal pressure by requiring native English Medium Teachers (EMTs) to teach English, Mathematics, and Science. Some hiring compromises have had to be made, because quality teachers are not always available. For instance, in the present case study the kindergarten 2 (KG2) EMT was not specialised in early childhood. She was previously an English lower-secondary teacher. Furthermore, many of the foreign teachers lack the experience required to work in bilingual settings with students who have limited or no exposure to English as a second language. The ADSM reform is very ambitious, and finding qualified staff is critical. The ADEC

must continue to study the reform agenda and work to ensure that the quality of education is not compromised by the inability to find qualified staff.

One reason that the reforms in Abu Dhabi and Singapore have faced implementation challenges is that many school principals are unable to understand the conceptual basis of the reform, and fail to understand how they can become leaders of learning within their schools. Responding to this barrier presents a significant challenge, because it is based on the premise that the developers and implementers of the ADSM should have a basic level of knowledge, understanding, and skills related to modern school leadership and pedagogical and assessment practices. However, it cannot be assumed that this is always the case. As with any educational system implementing change, there are significant gaps between the understanding of policy and practice at the beginning. Many leaders and teachers do not understand the theories behind the reform-based practices, and even fewer know why or how they should change their current patterns of teaching behaviour. For instance, the KG1 teachers in the present study could not articulate why they were implementing a Reggio approach into their classroom.

Although the central policy documents issued by the ADEC include strong rhetoric related to what curriculum, pedagogy, and assessment practices should exist in its schools (e.g., higher-order thinking, integrated active learning, continuous assessment), there is still much confusion and a lack of awareness amongst school leaders and teachers of “how” to implement the ADSM. The practices in KG2 were not appropriate for early childhood and were not in line with ADEC’s requirements. Thus, there is a critical need for ADEC to provide more practical examples and case studies drawn from actual schools in which verified progress has been made by leaders and teachers in implementing key elements of the ADSM.

Short timelines and system-level expectations for ADEC schools to rapidly engage in the ADSM have resulted in a situation that is less than ideal. The teachers in the present study repeatedly expressed this frustration in relation to curriculum development. They shared genuine concerns regarding the “quick” changes that ADEC continues to make. Mature systems typically ensure that a process of “piloting” and “field-testing” of new curricula, syllabus guides, or pedagogical strategies occurs before wide-scale implementation. Further, the teachers stated that some of the KG learning outcomes are not age appropriate. One of the most salient aspects of any successful wide-scale curriculum implementation is for teachers and school leaders to have a sound understanding of the key elements associated with proposed change and what is expected of them in their classrooms. The ADEC reform is still in the early stages. The reform aims to provide all students with a quality education and access to world-class tertiary level education. The reform faces implementation challenges, but the present case study, and additional research, will hopefully aid in improving the system as implementation of the reform continues.

A key factor for the success of the ADSM reform’s focus on developing bi-literate citizens is ensuring that Arabic has real value in the schools. Policy-makers need to work beyond writing policies that artificially support the teaching and learning of Arabic. The Arabic language is at risk being lost; it is evident that an increasing number of students favour the use of English over Arabic. This could be due to certain factors including but not limited to, the pedagogy used to teach English, the availability of digital resources that facilitate the learning of English, and most importantly, the training opportunities provided to teachers of English. Based on the present study, it is evident that English was not only the dominating language but also the most preferred language of the KG students.

An area that the ADEC should reconsider is the introduction of Chinese as a language of instruction, as well as the inclusion of Chinese students in the system. The decision to teach oral Mandarin only in KG is not advantageous to the Chinese students, even though it might be beneficial to the Emirati students. The needs of the Emirati students appear to have been put before the needs of the Chinese students, which is inequitable to the Chinese students.

## **5.2 Implications**

The acquisition of languages other than a native language has become advantageous over the past few decades as the world continues to change. Whether it is based on an interest in other cultures or the academic and professional advantages it can offer, learning additional languages can provide several benefits. It is common for language practice to begin at earlier ages, but without reinforcement and continual practice, it becomes more of a basic beginner's course that may or may not be used later in life. Teaching children a new language early offers a great advantage in life.

While I attempted to control my personal biases in this study, I did have positive preconceived notions of what I was going to observe in the KG classrooms before conducting the five months of observations. These preconceived ideas were abruptly challenged by the reality of what I observed, especially in KG2. A system I have worked to develop, along with many other educators who work for the ADEC Curriculum Division, is, to my disappointment, less than ideal and does not serve all children equally. I have aggressively advocated for the blocked system to be implemented in classrooms, without having any real data on its effectiveness. As a result of collecting data for this case study, I have observed teachers struggle to meet

the curriculum requirements following the blocked system, as the focus was mainly on the covering of outcomes rather than the teaching of learning outcomes.

Opportunities to read, write, and converse in Arabic and English were always available throughout the day, but the same was not available for Chinese. The teaching of Chinese was almost always out of context. Students were provided with strong teaching and learning experiences in Arabic and English. Perhaps, the school and the teachers could invest in teaching Chinese in the same manner Arabic and English are taught. The school leadership has put a lot of efforts into making the school a trilingual environment that is tolerant of all cultures and backgrounds, therefore, it is disappointing to see the Chinese language not given the level of importance the other two languages receive. Explicit teaching of writing was not observed in any of the classrooms, nor was there an authentic assessment of students' learning. Students would benefit from formal teaching of writing starting from the age of five. They need to be exposed to print regular and learn how print is formed. There was a strong tendency of all teachers to annotate students' writing. Teachers expected students to have mastered the Arabic and English techniques related to form and mechanics at the ages of four and five, which sends the wrong message to the students about the process of writing. An authentic assessment of writing should focus on the development of ideas and on writing as a means of communication, not on spelling words correctly. Perhaps teachers could work with the students on developing their writing through writing workshops or student-teacher conferences instead of resorting to annotating student's work. Further, opportunities for students to share writing were infrequent. It was observed that writing in English was more frequent than Arabic, which could have been because more subjects were taught in English than Arabic; therefore, pupils had more opportunities to write in English than Arabic.

Balancing the opportunities to read and write in all languages would benefit the students' in terms of viewing the languages equally.

There were many opportunities for students to engage in discourse and discussions around different topics and books. However, those opportunities were more evident in the KG1 classroom than they were in the KG2 classroom. The whole-class reading sessions were rich with open-ended questions and in-depth discussions about different topics. Students were not afraid to share their ideas about the world and the topics of the books. For instance, Gaith was not afraid of saying that a camel is a horse and that a horse is as big as the sun. As the book was read and discussed, Gaith came to understand that the animal in the book was a camel, not a horse.

Over the course of the observations, the children developed a significant interest in oral discussions and challenged one another in the way in which they used language. I observed linguistic complexity increase as the children engaged in more real-life situations. For example, the event called "Khalid Watering a Plant" exemplifies how the children interacted with one another and shared knowledge about how and where to water a plant. It also showed how the children respected each other's ideas. Further, that event showcased the higher-order thinking skills of the students; for example, they generated hypotheses about why the water had stopped. Gutierrez, Baquedano-Lopez and Turner (1997) stated that for children to develop as bi-literate learners from a sociocultural perspective they need to have access to a wide range of learning resources and activities that require them to interact, participate, and use the language in different ways. From the data collected, it was evident that those opportunities to interact, explore, and use language for different purposes and audiences were available in Arabic and English. However, the same opportunities were not available in Chinese. Despite the lower status of the Chinese language in the

school and the lack of opportunities to use the language provided to the children in KG2, I strongly believe that the children are on a positive trajectory toward becoming trilingual thinkers and learners. I also strongly believe that this pilot project is going to be an example and a benchmark for other systems to learn from.

Gort (2006), Rayes and Costanzo (2002, Moll, Saez and Dworin (2001) and Carlisle and Beeman (2000) have all confirmed that the development of bi-literacy is idiosyncratic, and it is hard to pinpoint a pattern in which the languages develop. The findings of this study confirm this viewpoint. However, while language development is idiosyncratic, the way bilingual classes are taught contributes a great deal to the success or failure of a student to develop bi-literacy skills. Those who have learned dual languages from a very young age as a part of their natural environment make the switch far easier than those who are thrust into a situation they do not understand. Learning three languages simultaneously is not an easy process and requires a great deal of patience, work, knowledge, and experience on the part of the teachers, the students, and their families. The students in KG2 deserve a better experience than the one they currently have. It is not the fault of the teachers, as they were placed there by the system. The system needs to be careful not to compromise specialisation for the sake of staffing every classroom. The pupils in KG2 need to work as children. They need opportunities to explore, investigate, and interact with adults who respect them. To ensure that students have a fair chance of learning the three languages, teachers should be provided with adequate training on how to meet the curriculum requirements of the three languages.

### 5.3 Recommendations

Given the preceding information about the reform in the Emirate of Abu Dhabi, there is a clear need for the ADEC, if it is to be recognised as a quality educational organization, to consider giving attention to several factors that would aid implementation of the ADSM reform. A comprehensive policy review process of the ADSM should be part of the continuing implementation of the reform to ensure that subsequent revisions are informed by school-based practice. Modifications to student learning outcomes, teaching practices, support systems or policy should be based on sound evidence. A clear articulation of the key theoretical elements that underpin the ADSM should be provided for the benefit of the school community, as well as academic and international audiences that have a research interest and stake in educational policy development and reform in a developing education system. The ADSM will continue to suffer in its implementation unless proper research is conducted to address the key theories and concepts that have informed the design and development of the ADSM's approach to curriculum, pedagogy, and assessment.

Further, the published documents related to the ADSM do not link the philosophy of the ADSM directly to theories and concepts that draw from the various disciplines of physiological, psychological, sociological, and philosophical foundations. These theoretical knowledge bases include socio-constructivist theories of knowledge and language acquisition and development; re-conceptualist theories of curriculum design for living in a modern inter-connected world; theories of cognition, social-emotional and physical development, and learning during early-childhood years; theories of early-language learning (including multi-literacy) in Arabic/English/Chinese bi-literacy cultural contexts; school-wide pedagogical frameworks that are based on student-centred, "activity-based" approaches to

teaching and learning; curriculum frameworks drawing from “outcomes-based” education vis-à-vis “standards-based” education models; and continuous assessment and monitoring principles that incorporate a broad understanding of learning from a knowledge acquisition, as opposed to a knowledge-transmission culture. A clear link between the philosophy of the ADSM and well-founded theories would have established a common understanding amongst all stakeholders, as the ADSM-published documents outline a sound philosophy and expectations for student learning.

The use of effective reading and writing strategies that are age appropriate for young pupils supports the development of all literacy skills. Therefore, it is recommended that strategies such as guided reading, read-aloud, shared reading, and independent reading (Callella et al. 2000; Dickinson & Smith, 1994; Franzese, 2002; Fisher, Medvic & Medvic, 2000; Mooney, Parkes & Stratton, 2000; O’Donnell & Wood, 2003; Rog, 2001); guided writing, shared writing, and interactive writing (Fountas, McCarrier & Pinnell, 1999; O’Donnell & Wood, 2003; Rog, 2001); and phonics and phonemic awareness (Padak & Rasinski, 1999) are included in the curriculum in order to support students in becoming independent readers and writers.

#### **5.4 Limitations**

A study that aims to study one aspect of children is a study that will always be limited. Children and their development during the early years can only be fully understood if it is considered from a holistic point of view. In my opinion, the study of children in the early years has to triangulate data from various aspects of the child’s life. The current study fell short in trying to understand language development without looking closely at factors related to culture and identity. As the researcher, I

did not have knowledge about the world of the five children outside the classroom. The factors that influence children's growth, social interactions, and language interactions and choice are extensive. Vygotsky (1978) stated that children construct knowledge about the world from their immediate environments first. Not having access to the children's first environments (home life), parents, and siblings limited interpretation of the data of the study. Sociocultural theory and a sociolinguistic approach to language were the two frameworks that were used in the study. Both require having some knowledge of or access to the child's history to understand their choices related to language and social interaction.

Another limitation of the study is the fact that it was a qualitative case series study that explored how children at the age of four or five become bi-literate writers in two languages over a period of five months. The duration of the study was considered adequate to serve the purpose of this study. However, a longer period of observation would have been beneficial for understanding how children's writing develops and changes over time. This limitation could be resolved by conducting a follow-up study that observes the same children who were studied in the present case series study in subsequent years.

The study and research of early childhood will always be limited if researchers do not adopt and develop participatory methods that are appropriate for children and that allows them to be viewed as active participants rather than objects of study. As Tisdall, Davis and Gallagher (2008) points out, early childhood research needs to be conducted such that the process is child-centred and focused. Research needs to allow children to express themselves and state their opinion in a manner that does not threaten or overwhelm them. A researcher of early childhood should utilise a wide

range of participation methods to allow the children as well as the adults to be active in the study.

Like most case studies, the sample of children observed in this study was small, and may not have been representative of the larger population; therefore, the findings of this study cannot be generalized to all KG children in schools in the Emirate of Abu Dhabi.

The education reform in Abu Dhabi is still in the early stages; it might have been premature to conduct structured research at this stage, as the implementation of the ADSM is new and has not yet stabilised. I would be interested in conducting the same research again in the future when the system has reached a more mature stage. Further, I believe longitudinal research that follows children over several years can reveal significant information related to the importance of quality early-years experiences and the impact that could have on children's formal schooling and performance over time.

Finally, I may have been constrained in my attempts to collect data due to the position I hold in the ADEC. I felt that my position limited the information I could access.

## **5.5 Future Studies**

Bilingualism and bi-literacy are rich areas for research, especially when the subjects are children. Including children as subjects allows for new understanding to be formed and new horizons in research to be explored. Children provide data that are real and untouched. The data one gathers from observing and interacting with children is the closest one can get to the reality of a phenomenon. Studies that explore pre-emergent and emergent bi-literacy in languages based on alternative writing

scripts (e.g., Arabic and English, English and Chinese, Chinese and Arabic) will add value to the existing body of knowledge, because they provide a fresh look and perspective on bilingualism and bi-literacy.

The ADEC pilot program at the One School, in which three languages are taught simultaneously, is an ambitious one that has the potential to serve as a pioneer in the area of simultaneous teaching of multiple languages from an early age. The ADEC should allow researchers more access to openly conduct research, and share and publish findings with the wider research community. This will allow the program to develop based on strong data.

Another area of research that is unique to the context of the One School is the inclusion of Chinese students and teachers. The school serves UAE nationals only, except for the few Chinese students who are enrolled. The Chinese students are a minority group in the school. These students do not share the same culture, language, or religion as the other children. The differences between the Chinese students and the other children outnumber the commonalities. It would be interesting to conduct a comparative study that examines differences between the learning experience of the Chinese students enrolled in this school and that of Chinese students who are enrolled in a Chinese school or a school that has a student body enrolled from different nationalities (an international school).

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## Appendix 1

### “Abu Dhabi School Model Approaches to Learning”

#### Approaches to Learning

The New School Model recognizes that learning is much more than knowing and remembering facts. In addition to academic outcomes, the New School Model will also develop positive approaches to learning which will enable students to be academically successful and to become lifelong learners.

	Social	Emotional	Attitudinal	Creative & Resourceful	Technological
Approach	How a student approaches learning from a social perspective.	How a student approaches learning from an emotional perspective.	How a student approaches learning from an attitudinal perspective.	How a student approaches learning from a creative, resourceful perspective.	How a student approaches learning from a technological, innovative perspective.
Essentials	<p>Integrated <i>Essentials</i> describe what students should be demonstrating in their approaches to learning by the completion of a particular grade level. Teachers must assist students in developing and refining these approaches through the learning experiences they provide for students.</p> <p><i>Essentials</i> may capture the essence of a learning area that may be approached in greater detail.</p>				
Statements	<p>“I Can &amp; I Am” Statements interpret the <i>Essentials</i> into easily understood descriptions of what a student can do, if the <i>Essentials</i> have been achieved at each stage.</p>				

## **Lifelong Learning**

The New School Model seeks to instill lifelong learning by developing the following capabilities in students:

- 1. Communication**

Developing a child as a communicator: bi-literate in Arabic and English

- 2. Thinking**

Developing a child as a thinker and problem solver

- 3. Culture**

Developing a child to appreciate the UAE culture and heritage

- 4. Community**

Developing a child as a person able to develop positive relationships

- 5. Health and Well Being**

Developing a child as a confident, healthy person

- 6. Creativity**

Developing a child as a creative and imaginative person

These outcomes serve as the overarching goals and will shape the choices schools make about learning experiences, resources and assessment practices.

## **Approaches to Learning**

### **A. Approaches to Learning Framework**

The Approaches to Learning Framework describes the skills and dispositions students require to successfully undertake (approach) learning in the school setting. When developed, these abilities enable students to apply learning to new contexts and new experiences. This set of outcomes describes aspects of child development and learning that should be evident in all subject areas and all grade levels in both Arabic and English. Schools working in the New School Model, teachers teaching successfully in the New School Model and students achieving outcomes in the New School model, will have extensive opportunities to experience learning that effectively develops these approaches.

	Social	Emotional	Attitudinal	Creative & Resourceful	Problem Solving
Approach	How a student approaches learning from a social perspective.	How a student approaches learning from an emotional perspective.	How a student approaches learning from an attitudinal perspective.	How a student approaches learning from an innovative perspective.	How a student approaches learning from a problem solving perspective.
	<ul style="list-style-type: none"> <li>• <i>Relationships</i></li> <li>• <i>Interactions</i></li> <li>• <i>Roles and responsibilities</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Self-image and awareness</i></li> <li>• <i>Expressing and managing self</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Being a learner</i></li> <li>• <i>Contributing to the learning environment</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Creativity</i></li> <li>• <i>Resourceful</i></li> <li>• <i>Expressive language</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Exploration</i></li> <li>• <i>Investigation</i></li> <li>• <i>Share understandings</i></li> </ul>

## Approaches to Learning Outcomes

i. Social			
	KG 1	KG 2	Grade 1
Relationships	Students interact constructively with their peers, other children or adults.	Students take part in group activities, take turns and share; they recognize the feelings of others. With teacher support, students work in small groups with their classmates to achieve a goal.	Students participate fully in group activities; they use socially appropriate behaviour with peers and adults, such as helping, sharing and taking turns.
Interactions	Students play calmly and gently with one or more children and communicate using appropriate language and gestures.	Students are friendly and helpful to peers, adults and other children within the school setting. They interact easily with familiar adults and develop positive relationships with peers.	Students sustain friendships with one or more children. They are able to resolve conflict with adult guidance.
Roles and responsibilities	Students respond appropriately to instructions provided by adults. They follow and understand rules.	Students understand clear routines and expectations of the school setting and adapt their own behaviour in response. They also understand the consequences of their behaviour.	Students respond positively to praise. They understand and accept sanctions when their own behaviour does not meet expectations of the school setting.

ii. Emotional			
	KG 1	KG 2	Grade 1
Self-image and awareness	Students are confident and comfortable within the setting. They express feelings of self worth and celebrate their achievements. Students describe themselves using several basic characteristics.	Students show pride in personal achievements within the setting. They demonstrate increasing self direction and independence.	Students show enthusiasm for new tasks and experiences. They show perseverance if not immediately successful. Students exhibit confidence as abilities and potential develop.

Expressing and managing self	Students understand and can describe or show basic feelings or needs (happy, sad, hungry, thirsty etc). They recognize and label basic emotions.	Students respond appropriately to significant experiences. They express and manage how they feel when experiencing a variety of emotions.	Students express personal needs appropriately within the setting, including asking for help when needed. They are developing coping strategies to deal with basic emotions. Students express feelings appropriate to the situation.
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iii. Attitudinal			
	KG 1	KG 2	Grade 1
Being a learner	Students stay on task and attend to their learning. They prefer one familiar activity but will try others when encouraged by an adult or peer. Students exhibit eagerness and curiosity as learners.	Students sustain good attention in teacher directed activities and demonstrate increasing involvement in learning opportunities provided. They are satisfied with their best efforts when completing a task. Students show curiosity in an increasing variety of activities and tasks.	Students are able to sustain good attention in self selected learning opportunities. They recognize their skills and continue to attempt new skills even when they do not initially succeed. Students choose to participate in an increasing variety of activities and tasks.
Being a contributor to an orderly learning environment	Students use classroom materials responsibly with modeling and guidance from adults.	Students independently demonstrate responsibility and respect when using class materials and working in the learning environment.	Students organize materials needed for play in the learning environment. They demonstrate care and respect for class and school property and materials.

iv. Creative & Resourceful			
	KG 1	KG 2	Grade 1
Creativity	Students engage in their learning across the curriculum creatively. They use their imaginations to try new ways of doing things and work with materials in creative ways.	Students demonstrate persistence and creativity when working individually or in group settings. They use their imagination to solve problems, use materials, role play, write stories, or create works of art (e.g. create pretend spinach out of torn green construction paper to serve for dinner).	Students demonstrate originality and inventiveness when completing their tasks and contributing to group or whole class initiatives. They use their imagination to generate a variety of ideas and contribute in individual and group settings.
Resourceful	Students role play, imitate and use resources and props imaginatively.	Students experiment, invent and engage in extensive pretend play. They experiment with materials to enhance their learning.	Students show curiosity about why things happen and/or how things work. They explore and experiment with a wide variety of materials and activities.
Expressive Language	Students will use verbal and non-verbal language to express and to communicate their feelings and emotions.	Students will use verbal and non-verbal language to express and to communicate information. They express their ideas through art, languages, ICT, construction, movement and/or music.	Students use appropriate words, phrases and statements with adults and peers when speaking, listening, sharing and taking turns. They express their ideas creatively through multiple means and methods.

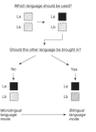
v. Problem Solving			
	KG 1	KG 2	Grade 1
Exploration	Students are naturally curious; they spontaneously engage with and explore the world around them.	Students are inquisitive and ask questions as they engage in both structured and spontaneous learning experiences. They demonstrate satisfaction or delight when solving a problem or completing a task.	Students are involved in planned, active explorations as well as responding to inspiration from incidental experiences. They attempt several different strategies when encountering difficulty during daily routines or in the use of materials. Students seek help from adults and peers when needed.
Investigation	Students use their senses to explore as they experiment and play. They try and find ways to overcome difficulties and challenges they face.	Students use a variety of creative approaches and persist when faced with challenges. They are persistent when taking on challenging tasks.	Students observe, ask questions and begin to make predictions as they explore areas of interest. They apply a flexible approach to their learning and use a wide range of idea creation techniques (such as brainstorming).
Share	Students impulsively share their discoveries in excited and engaging ways.	Students are enthusiastic in sharing their discoveries with their peers.	Students describe and explain their exploration effectively.



## Appendix 2

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