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Actions and Words: Meaning Making in a Bilingual Arabic/English Kindergarten

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ACTIONS AND WORDS: MEANING-MAKING IN A BILINGUAL ARABIC/ENGLISH KINDERGARTEN

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ABSTRACT

Much research relating to bilingual education in the early years has focused on how young children are learning a new language, viewed from a monolingual paradigm of language use (Tabors 1997, Clarke 1999, Cummins 2001, Drury 2007, Genesee 2008). Recent sociocultural research on meaning-making in communities (García and Sylvan 2011, Gort and Sembiante 2015, Wei 2018, Creese and Blackledge 2019) reveals a less rigid boundary between named languages, and an emerging theory of translanguaging. This theory offers a new perspective from which to view pedagogical practices in bilingual classrooms.

The multimodal nature of young children's meaning-making has long been acknowledged, founded on the work of Vygotsky in the 1920s, and is evident in the variety of pedagogical practices used by early years teachers to support meaning-making (Rogoff 1990, Siraj-Blatchford et al 2002). More recently, multimodal meaning-making has been explored in different communities (Kress 2000, Flewitt 2013, Bezemer and Kress 2014), revealing the many different modes of communication regularly employed to share meaning. However, in studies of early bilingual education, the significance of non-verbal behaviours has often been overlooked.

This thesis therefore sets out to explore the significance of multimodal meaning-making and a pedagogy for translingual practice (Canagarajah 2013) in an early years bilingual context. Using ethnographic tools, it analyses the pedagogical practices of two teachers working in a co-teaching situation in a kindergarten in Abu Dhabi. By an iterative process of data analysis, it explores how those practices contribute to children's development as confident bilingual learners.

The findings indicate that, as teachers create new spaces for learning using action and gesture as well as speech, children are empowered to draw on both verbal and non-verbal modes of meaning-making in a fluid process of bilingual and multimodal languaging.

Emergent bilingualism, translanguaging, multimodality, sociocultural theory, early years, co-teaching, Arabian Gulf.

ACKNOWLEDGEMENTS

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CHAPTER 1:   INTRODUCTION AND OVERVIEW

In this chapter I will provide the background for this research by describing my personal interest (Section 1.1), the educational context (Section 1.2), the local context (Section 1.3) and the scope and focus of the research (Section 1.4).

1.1   Motivation and rationale

The motivation for this research arose from my experiences working within an Abu Dhabi Education reform project (see Section 1.2) together with my previous history of working in multilingual and multicultural educational settings. As I became involved in the changes relating to pedagogy and curriculum, the different experiences of the classroom teachers inspired questions relating to children's learning that led me to seek a better understanding. External factors such as recent research in the field of bilingual/multilingual education and new perspectives on language and gesture as semiotic systems, prompted me to explore the classroom practices in my own workplace.

1.1.1   Personal context

My experiences working in international education settings in Europe, with young children from a variety of linguistic backgrounds where English was used to deliver the content of the curriculum, have developed my interest in language and communication. Having trained as an early years' teacher I have always had an interest in how children develop language and I became aware, early in my career, of how the physical and emotional environment in classrooms has an impact on the opportunities for children to learn, as supported by the findings of Siraj-Blatchford et al (2002) and Tabors (1997).

Having experienced living and working in non-English-speaking contexts, marrying a non-native-English speaker and raising a family in a third linguistic context, I have first-hand experience of bilingual life. I observed how codeswitching (Baker 2011, Kabuto 2010b) was completely normal for my children as they developed ways of making meaning and communicating in two languages. I also noticed that I was using loan words and phrases (Baker 2011) from other languages to enhance my own thoughts and communication.

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1.1.2   Recent professional experience

Working as a school leader (job description, Appendix A) in an Arabic language school in Abu Dhabi as part of an international English-speaking team alongside native Arabic speakers from various different countries, I reflected on the cultural implications of language and how personal histories and world views impact on meaning-making. Seeking out research to aid my understanding of how the young emergent bilingual children were learning, I found that although much was available little was specific to the context. Gutiérrez et al (2011) note the danger of using findings from research based in different contexts, such as older learners or English-only learners, to develop policy for young dual-language learners. This concern relates to many other national contexts where migration is occurring, and speakers of other languages enter a majority language education system. When creating policy to meet the needs of all learners in these situations, appropriate contextualised research data is invaluable. In the context of this research the children were being introduced to the new language, English (see Section 2.2.4), on starting school, whereas at home they were largely speakers of the local Arabic dialect, in a country where Arabic is the official language. There was also an expectation that classical Arabic would be used in the classroom.

In September 2010, the Abu Dhabi Education Council (ADEC) started employing native English-speaking teachers to work alongside the Arabic-speaking teachers in kindergarten classrooms. As a senior leader in a school, working at that time as an adviser to the principal, I noticed that the co-teaching pair were challenged to create a learning environment that met the needs of the new curriculum and pedagogy and realised that they each had a different understanding of teaching in the early years due to their different cultural backgrounds and professional training. Observing the teachers and children in action in the classrooms I also became aware that a great deal of communication and meaning-making was occurring which was not being captured by the assessment framework used in the school (ADEC 2012) which focussed on measurable verbal, or written outcomes. For example, teachers were assessing if a child could use English words to 'describe familiar objects' or 'orally recount simple personal experiences' and, according to these measures, the achievement data showed weak progress. I

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speculated that, were other modes of communication such as action and gesture to be included, a great deal more achievement would be visible.

As I read further, I came across the concept multimodality especially through the work of Gunther Kress, one of the pioneers in this field (see Section 2.4.4) and also became inspired by the work of Ofelia García, whose work on translanguaging includes aspects of the sociology of language and language function in different cultural groups. I also noted Haggerty's comments (2011) suggesting the scope of pedagogical enquiry in early years meaning-making needs to be expanded to accommodate children's broad range of semiotic repertoires. Siraj-Blatchford et al (2002) have shown that the emotional needs of children are as important as their academic needs and I knew from my own professional experience that happy children were more willing and able to learn. Putting these ideas together, I felt inspired to investigate further what was happening in the classroom in my school, especially focussing on the concepts of translanguaging and multimodality from a sociocultural perspective, in order to gain a better understanding of what was actually happening in the dual language classroom. Drawing inspiration from the words of Chomsky (2012:28) who declared 'If you're teaching today what you were teaching five years ago, either the field is dead, or you are', I decided to undertake my own study into language learning.

1.2   The educational context

The United Arab Emirates is a federation of seven emirates established in 1971, bordered to the east by Oman and to the south by Saudi Arabia. It also shares a maritime border with Qatar and Iran in the Arabian gulf. Abu Dhabi is the largest of all the Emirates, accounting for about 87% of the total land area of the UAE, having the largest population and making the largest contribution to the total GDP of the country.

1.2.1   The education system and policy in Abu Dhabi

Formal, government funded, education in the Abu Dhabi Emirate was not introduced until the 1960s and this emirate then benefited from the national UAE education development programme of the 1970s, when more schools were built. Both boys and girls were

encouraged to attend school although there was no provision for co-education and traditionally many girls had stayed at home with their families, however gradually this began to change. In 2013 the Abu Dhabi regional government office reported that there were 126,216 students in government schools and 214,587 students in private schools, 25% of whom were Emiratis (Abu Dhabi Statistics Center 2013). Manifestly, a significant percentage of Emirati children attend private schools since, of the total 180,000 school-age population of Emiratis, close to 54,000 are in private schools (Abu Dhabi Statistics Center 2013). Although this research project focusses on the government funded schools, which prioritise places for Emirati nationals, it is also important to mention that the public education system runs alongside a private system. The public education sector is only able to offer places to non-Emirati nationals if they are available but, with an average annual population growth rate between 2005 and 2014 of 7.6% (Abu Dhabi Statistics Center 2013), places for non-nationals are limited. The private sector schools offer various international curricula to meet the demands of an international community or alternatively a Ministry of Education curriculum which is the national curriculum available throughout the UAE.

From 2006, a number of initiatives have been launched throughout the UAE aimed at changing from a traditional, transmission model to learner-centred education, by the implementation of new curriculum and assessment frameworks and a change in teaching methodology. Within this context, ADEC was established in 2009, as part of a wider structural reform of the Abu Dhabi regional government. The outcomes-based New School Model (NSM) curriculum and pedagogy, which was implemented by ADEC exclusively in the government schools in Abu Dhabi, aimed to:

> 'Foster a child-centred learning environment; Develop Arabic and English language abilities, critical thinking and cultural and national identity and to standardize the curriculum, pedagogy, resources and support across all ADEC schools'.

(ADEC 2013a).

The school system in Abu Dhabi provides compulsory education for children from five and a half years old (post Kindergarten), divided into three cycles: Grade 1-Grade 5 (aged 6-10

years); Grade 6-Grade 9 (aged 11-14 years); and Grade 10 - Grade 12 (aged 15-17 years). The two years prior to Grade 1, which are designated 'kindergarten' are very well attended, although not compulsory but described as a voluntary level that prepares children for Cycle 1 (ADEC 2013b). In kindergarten, 3 ½ -5-year-old children are placed in mixed gender classes whereas from Grade one girls and boys are traditionally segregated. School buildings may contain provision for kindergarten-aged children up to Grade 12, but often kindergartens are separate buildings housing between 120 and 400 children.

Through the New School Model, bilingual education is provided from the beginning of school, by assigning native English-speaking teachers to work in schools together with Arabic-speaking teachers in a co-teaching relationship (Section 1.2.2). At the kindergarten phase, two teachers worked concurrently in the classroom, the expectation being that one spoke consistently Arabic and the other consistently English. The emphasis in the first year was on developing literacy skills in Arabic, whilst exposing the children to spoken English, during the second year more English reading and writing skills were introduced. In the primary school phase (ages 6-11) and above, curriculum content is divided so that English, Numeracy and Science are taught in English and all other curriculum subjects are taught in Arabic. It should also be noted that the majority of children came from homes where the local dialect of Arabic was used, whereas the expectation of the curriculum was that children should learn to use classical Arabic.

1.2.2   The curriculum and pedagogy

The policy, curriculum and planning documentation provide an important, orientating foundation to this research. The NSM guidelines (ADEC 2012), which were strongly influenced by an Australian early years pedagogical approach, advocate an environment organised in a similar way to those found in Australasia, Europe and to some extent North America, where opportunities for independent and play-based learning are perceived as appropriate for learning and development for this age-group. The co-teaching model, with two teachers almost continuously in the classroom at the same time, was a new introduction to kindergarten schools, and the ADEC policy documentation proposed a number of organisational models from which to choose.

'Co-teaching typically involves two educators jointly planning, instructing and evaluating groups of students. By intentionally varying their roles, the team teachers fully share responsibility for their classes. There are varieties of ways to differentiate instruction and for teachers to collaborate. Three suggested ways are: team teaching; one teach/one observes; and parallel teaching.'

(ADEC 2012:20).

The programme was designed in such a way that the Arab-speaking teacher was responsible for teaching Arabic language and literacy, Islamic studies and civics, and the English-speaking teacher was responsible for teaching English language and literacy and leading pedagogy (by modelling). Both teachers had a responsibility for teaching other curriculum subjects including numeracy and science, with an expectation that these curriculum areas were integrated into a model of 'continuous provision', as a method of planning for learning, as described by Sutherland (2006). This pedagogical approach encompasses a number of principles including 'tapping into the child's interest; planning enhanced learning opportunities; developing interactive activities and sharing meaning-making' (Sutherland 2006:14).

In the NSM, education policy embodies an understanding of the value of English as a resource alongside Arabic. Figure 1.1 gives a proposed example of a school day suggested in the NSM guidance documentation (ADEC 2012), although this was not the structure being used in the case study school. A sample timetable for the class used for this research is shown in Figure 3.3 (Section 3.4.2).

07.45-08.00	Welcome and Opening Circle-time (Daily message, calendar, weather etc.)
08.00-08.30	Reading Time (A literacy focus time)
08.30-09.30	Arabic and Islamic Education Time (focus on Arabic language and literacy and Islamic religion and culture)
09.30-10.30	Focussed Literacy and Numeracy Time (Reading, speaking, listening, writing and numeracy in both languages)
10.30-11.00	Gross Motor Time (Physical activity)
11.00-12.00	Active Learning Time (Independent and free choice activities)
12.00-12.15	Closing Circle-time (Notices, review and dismissal)

Figure 1.1 NSM suggested kindergarten timetable

What can be noted from this proposed timetable is that, apart from the 30-minute period which is designated 'Arabic and Islamic Education Time', there is no specification for language as a discrete subject in the timetable indicating that content and language should be integrated throughout the curriculum. The ADEC curriculum guidelines (ADEC 2012) suggested four possible lesson organisational structures which might be used by teachers, whilst also strongly recommending that each school made adjustments to the suggested structures as fitting their needs. All four models start with a whole-class teaching time followed by small-groups or individual activities and finished with a return to the whole-class for a plenary. A typical example is shown in Figure 1.2.
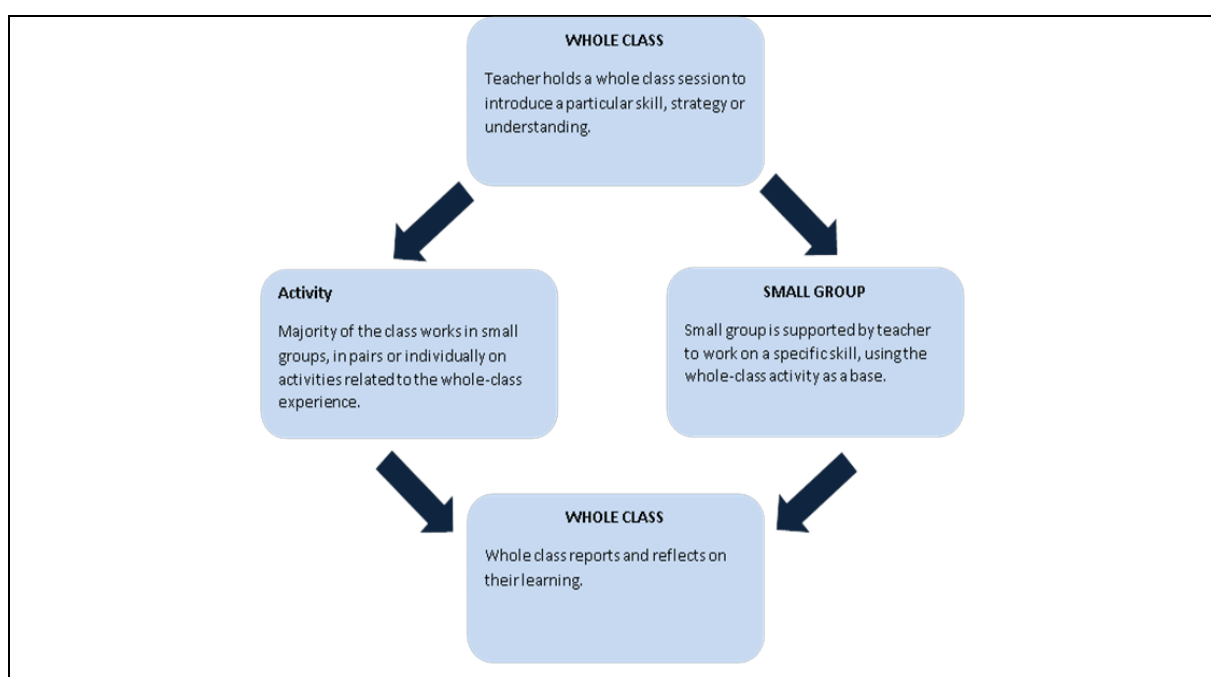
Figure 1.2 NSM lesson organisation structure

Schools were encouraged to create a structure of best practice with the resources, staffing and materials that were available, resulting in different variations of the model in different schools. These included both languages being used together throughout the day or, alternatively, the time being divided between Arabic and English.

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1.2.3 Becoming confident learners

As well as the academic curriculum, the NSM acknowledged that an important aspect of learning in kindergarten, and beyond, is the development of appropriate attitudes to learning, relationships and self-image. These were specified in the NSM through the 'Approaches to learning framework' (ADEC 2012), a set of developmental skills whose aim was to ensure children are academically successful and become lifelong learners. An excerpt of this framework is shown in Figure 1.3. and the full outcomes for KG1 children are given in Appendix B.

Approaches to Learning	
Social KG 1	
Relationships KG 1	Students interact constructively with their peers, other children or adults.
Interactions	Students play calmly and gently with one or more children and communicate using appropriate language and gestures.
Roles and responsibilities	Students respond appropriately to instructions provided by adults.
Emotional KG 1	
Self-image and awareness	Students are confident and comfortable within the setting.
Expressing and managing self	Students understand and can describe or show basic feelings or needs (happy, sad, hungry, thirsty etc).
Attitudinal KG 1	
Being a learner	Students are beginning to stay on task and attend to their learning.
Being a contributor to an orderly learning environment	Students understand that the setting and its resources should be treated with care and respect.

Figure 1.3 Excerpt from Approaches to Learning Framework

The expectation was that '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.' This is discussed in Section 2.3 in relation to the literature.

1.3 Scope and focus of the research

It is generally understood that children draw clues from objects and images in the classroom, as well as from the gestures and body language of others. In many early years classrooms around the world adults actively provide opportunities for children to gain meaning through alternative modes such as visual and auditory stimuli; objects, artefacts, charts and images e.g. weather charts; images of faces showing different emotions; shape diagrams and number lines. Visual timetables help children understand the progression of time throughout their day in the classroom. Many early years teachers intuitively respond

to children's body language as they share their feelings with a movement of the head, a hand gesture or a facial expression.

1.3.1   Research aim

Founded on my interest and recent experience I decided on a research aim:

> *'To explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners.'*

My intention was to focus on the use of language, action and gesture, through the naturalistic observation of communicative practices. I considered all multimodal aspects of meaning-making to be worthy of exploration (see Section 2.4) but due to personal limitations I decided to focus on action and gesture in this study. I chose to use the term *emergent bilinguals* as used by García (2009a), to describe the potential that children have to become bilingual. This terminology embodies the dynamic nature of language development as well as encompassing the metalinguistic aspect of children's understanding of how language is used in different contexts for different purposes. However, this term does not illuminate the non-verbal and multimodal aspects of meaning-making and communication that are occurring continuously in the early years classroom.

I decided to frame the research within a theoretical approach that integrated social semiotics (Halliday 1978) with a multimodal theory of literacy (Flewitt 2013) and Early Years pedagogy (Siraj-Blatchford et al 2002). I considered a sociocultural paradigm (Section 3.2.2) to be appropriate for the study of human interaction based on Vygotsky's (1978, 1986) theory that reality is socially constructed by those situated in and acting upon their environment. As a case study, this research sets out only to describe and offer a better understanding of what I observed in this particular case. It has not been my intention to provide evidence of best practice or to justify any particular teaching methods, although I hope that my findings may contribute in some way to the current body of knowledge in early years bilingual learning and teaching (see Section 7.4).

1.3.2   Research questions

In consideration of the research aim, the following specific research questions (RQs) were developed:

- **RQ1: How is spoken language being used by teachers and children in joint meaning-making?**
- **RQ2: How are action and gesture being used by teachers and children in joint meaning-making?**

In consideration of the professional aspect of this Doctoral Research in Education (EdD), my interest lay in investigating characteristics of teaching, learning and assessment (collectively referred to as pedagogy). My personal knowledge and experience as a teacher and leader, specialising in early years and bilingual education in international classroom contexts, provided a foundation for the interpretative nature of the research. In order to undertake this study, I wanted to explore how the teachers were interacting with the children to develop shared understanding. In this bilingual classroom they operated in a co-teaching situation (Section 1.2.1) which provided opportunities for ideas to be expressed in either Arabic or English. Studying the ways in which the teachers worked together and their interactions with the children offered an opportunity to explore the pedagogical strategies employed to support meaning-making. The English-speaking teacher frequently interacted with the children, unsupported by the Arabic-speaking teacher, in a variety of different situations. In these situations, I felt it would be useful to explore the ways she used English language and the kinds of language she used, drawing on the work of Lindholm-Leary (2001), as well as to explore how she was using other semiotic modes, such as action and gesture, as this was the focus of my study. I also wanted to explore initiations and responses of the children as they interacted with the English-speaking teacher and with each other within the classroom environment, to find out how they were making meaning and expressing their understanding, with a focus on the various modes they employed. Translanguaging theory provided a framework within which some of these aspects of meaning-making could be examined. According to García & Wei (2014) 'translanguaging differs from the notion of code-switching in that it refers not simply to a shift or a shuttle between two languages, but to the speakers' construction and use of original and complex interrelated discursive practices that cannot

be easily assigned to one or another traditional definition of language, but that make up the speakers' complete language repertoire'. I wanted to acknowledge that the interactions of every child and each adult in the classroom involved them in drawing on their own personal linguistic and multimodal repertoires to share meaning.

1.4   Summary and outline of thesis

This chapter has described the motivation for this research and introduced the larger context within which the data for this case study is situated. In the following chapters I will discuss some of the key literature informing the research (Chapter 2), describe the approach I used and the design and methods I selected to gather information (Chapter 3). I will then present an analysis of the data (Chapters 4 and 5) and discuss the main findings (Chapters 6). Finally, I will consider the implications of the findings in the wider professional context (Chapter 7).

CHAPTER 2:   LITERATURE REVIEW

2.1   Introduction

Despite having certain characteristics in common with other multilingual contexts in the Middle East and Asia, the context of this research is a unique one. The Abu Dhabi education policy was designed to create a bilingual population amongst the indigenous Emiratis by adding competence in a second, global language (English) to the first language of Arabic. It is due to the uniqueness of this context that much of the abundant literature in the field of bilingual education needs to be interpreted with caution, since it may be founded on dissimilar contexts or have different purposes.

Much research has focussed on language learning of young immigrant children, acquiring the language of the host country, such as Kenner (2004) in the UK or Aukrust (2008) in Norway, and although the findings from these may have some relevance, the context is again dissimilar. Research focussing on children learning English as a second language may include *transitional bilingual programmes*, where the aim is for all students to become competent in English in order that all learning is achieved through English alone after a fixed period of time, as described Ramirez et al (1991). Alternatively, it may describe *additive bilingual programmes* that encourage students to maintain and develop their first language while developing English, such as described by García (2011) reporting on Spanish/English programmes. While the policy aim of the programme in my research context is one of additive bilingualism, the social context differs because English is not an official language of the country, but rather a *lingua franca* in the Gulf area (see Section 2.2.4).

Despite the presence of a variety of minority language-user groups in the UAE, it is officially an Arabic-speaking country (Government.ae 2018) unlike other contexts that are officially recognised as bilingual or multilingual. In Canada, where French and English are equally recognised, studies into language learning may focus on aspects of power, equality and cultural identity (Cormier et al 2014, Roy and Galiev 2011), which are appropriate to that context. Linguistic and social contexts may also vary. In many bilingual contexts, such as Spanish/English, or French/English as described by Genesee and

Lindholm-Leary (2008), both languages have similar orthographies and grammatical rules, whereas in others such as Chinese/English or Arabic/English these aspects differ, resulting in a different motivational focus for study, such as described by Kabuto (2010a) who explored writing practices of a biliterate Japanese/English child or Wei (2011:382) who investigated the meaning-making practices of British Chinese children in Britain who were attending complementary school (see Section 2.4.4).

Countries that recognise their multilingual contexts while experiencing a demand for English language education in school, have had a range of success in implementing language policies, such as those described by Hornberger and Vaish (2009), who reviewed practices in India, Singapore and South Africa. Although these contexts, where English is the language of teaching for non-English speakers, have some linguistic similarities with the UAE, their research focusses on education for older children. Whatever the context, according to the United Nation's Convention on the Rights of the Child, of which the UAE is a signatory with certain cultural reservations discussed in Section 3.5.2 (United Nations Treaty Collection 2020), young children ' shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child's choice' (UNICEF 2010). The provision of opportunities to achieve these aims, in the classroom, supports children in developing self-esteem and confidence, as described in 2.3.4.

With consideration of these limitations, the review of the literature was undertaken in order to provide a foundation for the research aim:

> *'To explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners.'*

The three foundational theories which contribute to my research study relate to *sociocultural theory*, *translanguaging* and *multimodality*. The classroom context, described in 3.4, is viewed as a dynamic bilingual learning community, co-constructed by the teachers and the children. The members of this community develop and use semiotic

tools to support meaning-making and communication. Translanguaging theory acknowledges that the linguistic boundaries between languages are fluid and that individuals use their full linguistic repertoires when developing language skills and cognition. A translingual pedagogy allows the teachers to cross linguistic boundaries in strategic and flexible ways and to 'promote bilingualism and a bilingual language repertoire as normal, natural, and valuable', as described by Gort and Sembiante (2015:9). As well as this fluidity of boundaries between languages, multimodal theory offers a conceptualisation of transmodal communicative and meaning-making practices, whereby the lived experiences of individuals and social groups may be represented through a variety of modes, including speech. Thus, sociocultural theory provides a supporting framework within which data collected through observation of classroom interactions and through participant feedback can be examined to reveal how meaning is constructed and shared using translingual and multimodal routines. These theories are discussed in relation to bilingual education from both a monolingual and multilingual perspective in Section 2.2, aspects of early years pedagogy, including bilingual education in the early years in Section 2.3 and meaning-making, especially from a multimodal perspective in Section 2.4.

2.2   Bilingual education: an overview

2.2.1   Introduction

In this section I will review bilingualism from a sociocultural perspective (Section 2.2.2); linguistic and cultural identity and power relations (Section 2.2.3); how education policies impact language in societies (Section 2.2.4); bilingual learning in immersion programmes (Section 2.2.5); bilingual learning in programmes integrating language and curriculum content (Section 2.2.6); the practice of having two teachers to teach two languages (Section 2.2.7) and finally the concept of translanguaging and how this change of perspective of language learning might impact classroom practices (Section 2.2.8).

2.2.2   A sociocultural perspective on bilingualism

Mayor (2010), in an overview article, identifies three perspectives on early language acquisition: the nativist perspective which views language as an innate ability which

grows biologically; the empiricist perspective which views language as a cognitive skill developed through learning and the social perspective which views language as a skill developed in social context as a result of social interaction and socialisation. It is from this third sociocultural paradigm (Vygotsky, 1986; Bruner, 1996) that language is viewed in this thesis, namely as a semiotic system of meaning-making that constitute the reality of a culture, as proposed by Halliday (1975, 1978).

This viewpoint does not separate language from culture and society but views language as representing ideas about the world and shows how language serves as a tool for several functions, including exploring the environment and the imagination, and as a means to shape identity and to act upon situations and relationships as discussed by Mercer & Littleton (2007). The term bilingual is currently found in use in many ways and many contexts and embodies a variety of meanings dependent upon the frame of reference employed. Bilingualism (usually referring to two languages) or multilingualism (referring to three or more languages) can be an attribute of either an individual or a group as described by Baker (2011). There are debates in the literature about what constitutes the right to call oneself bilingual, taking into consideration factors such as frequency of use, language proficiency and balance of use, or accent and fluency. An individual or a group may be able to speak two languages but only write one or understand two languages but only be a competent speaker of one. Early understandings of bilingualism, such as that of Bloomfield (1935), defined a bilingual as having *native-like control* of both languages, while Baker (2011) proposes that those who use two languages will rarely achieve a balance in their language use, suggesting that one language will always be dominant. I would argue that the question of whether a balance is achieved is not significant but what is more important to pursue is the opportunity for the child to use both languages, and indeed any other modes of communication available. As Cummins (2001) discusses, many children grow up using two or more languages with equal competence and 'both languages nurture each other when the educational environment permits children access to both languages' (Cummins 2001:18).

The concept of being bilingual has itself had a dramatic change of status since the middle of the twentieth century when it was generally believed by some (monolinguals) that

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bilinguals were inferior to monolinguals and were 'likely to be linguistically retarded in both languages and mentally confused to the point of trying to forge a single language instrument or exhibiting emotional symptoms' (Singer 1956:457). It is evident from data sources (Statistics Canada 2017; United States Census Bureau 2016; European Commission 2006; Associated Press 2001) that a large percentage of the children in the world are raised in bilingual environments and are exposed to the opportunity to develop and use both these languages. Some come from homes where more than one language is used consistently and such as these are often called *Bilingual First Language* learners *(BFLs)* as described by Genesee and Nicoladis (2007), a terminology which implies a fluidity between the two languages rather than a separation. Other bilinguals, those belonging to minority language groups, may not be exposed to a second language until starting school, or when moving to live in a community where a different language is spoken, as illustrated by Tabors (1997:39) who describes different aspects of second-language acquisition in childhood. In the case where a second language is learned after competency is acquired in the first language, the term *sequential bilingual* might be used.

Yazıcı et al (2010), when discussing language use of immigrant minority language communities in the European contexts of Turkey, Norway, Germany and Austria, describe the first language that the child learns in the home as the *mother tongue* whereas the second language, learned outside the home, is that of the host culture. Although it may be appropriate for the context they describe, this definition fails to cover other contexts such as where a child is brought up in a bilingual home with two parents from different linguistic backgrounds each speaking their own mother tongue, or where children are raised in multilingual communities where language boundaries are less fixed.

The concept of bilingualism as *double monolingualism* (Jørgensen 2003), described in 2.2.7, which emphasises the separatist conceptualisation of different languages, has underpinned the variety of educational provision for what is commonly known as *second-language learning; additional language learning, English for speakers of other languages* and *foreign language learning,* as well as in some contexts *bilingual education* or *dual-language education,* throughout the latter part of the twentieth century and into the twenty-first century. This list of labels, which is by no means comprehensive, highlights

the fact that the term *bilingual education* is a 'simplistic label for a complex phenomenon' (Baker 2011:207). More recent ideas, which view language from a multilingual rather than a monolingual perspective, have engendered the development of the concept of *translanguaging* (García 2009b, Baker 2011), and are discussed in Section 2.2.8.

2.2.3 Linguistic identity, languages in society and power relations

The linguistic repertoire of an individual is described by Gumperz (1964) as comprising all the recognised ways of using language to share meaning within a social group. From the perspective of the many bilingual and multilingual speakers globally, multilingualism is the norm and thus their linguistic repertoires encompass all the different languages that they know. For these groups of language users, the different discourse practices which they employ relate to and shape their understanding of their worlds. Changes in social context may prompt a bilingual speaker to use different facets of a comprehensive linguistic repertoire and project different cultural identities, through alternative language choices. As an example, Vaish (2007), exploring the language use of the ethnic Indian population in Singapore, a country recognising four official languages, gives an insight into the variation in language choice according to different domains: school; family and friends; media; public space and religion. The bilingual English /Tamil speaking children who were the focus of the research, appeared to keep one language discretely for specific topics or situations. He found that most of the children used Tamil when speaking to grandparents, whereas a larger number used English when speaking to their parents, and the majority used English when speaking with siblings or friends. He also found that institutional site made a difference to language use, with most children using Tamil exclusively when praying in the temple, whereas a mix of English and Tamil was used in school. This is supported by Grosjean's (2010) suggestion that the knowledge and use of each language will vary, depending on changing need or purpose in response to sociocultural environmental influences. According to Genesee (2008), it is perfectly normal for speakers of two or more languages to mix words from each language when speaking, especially in the company of other bilinguals. There are many reasons why bilinguals or multilinguals use certain languages in certain situations apart from the matter of communicating. Power associated with language is a fundamental issue

globally, and certain aspects of *linguistic imperialism* as discussed by Phillipson and Skutnabb-Kangas (2013) can mean minority languages which are used by few people are at risk of becoming extinct. As Crystal (2003) points out, it is not the language itself that has any intrinsic power, but it is the power, specifically military and political, held by those who use the language, that ascribes it greater importance.

Cultural perspectives on childhood are discussed in Section 2.3, however power differentials which may impact children are also in evidence in the classroom community. Vuorisalo and Alanen (2015:94) using Pierre Bourdieu's theory of practice (Bourdieu 1977), describe how interactions between adults and children in the pre-school classroom of their research, allow some children 'to acquire more eminent positions in relation to both other children and the adults'. This is despite a proclaimed philosophy of fairness where all children are encouraged to participate equally in conversation with adults. As a result of this pre-eminence, they suggest that some children eventually have greater success than others. The acknowledgement of the importance of such power differentials cannot be underestimated when considering how children are developing as confident learners as discussed in Section 2.3.4.

2.2.4   The impact of education policy on the role of language in society

Cummins (2000) discusses the influence of different languages in different situations globally and historically in relation to their perceived power and describes the impact that language policy can have on human lives. He describes programmes in Israel, which bring together Arabic- and Hebrew-speaking children and in Texas, where *two-way immersion* programmes educate native Spanish- and native English-speaking children together to develop competence in both languages. These initiatives aim to unify different groups of society where segregation has historically occurred. Although education policy may be used to positive effect, Hunt (2012), describing the power struggle between Arabic and English in a tertiary institution in the United Arab Emirates, illustrates how it might become a tool in creating unequal language status, although not always through deliberate design. He describes the situation in one institution where an English-only language policy was declared in order to encourage students to take advantage of opportunities to speak English. The policy resulted in patterns of compliance and

resistance to expressions of power from teachers and students alike: Teachers were aware that their professional autonomy had been compromised and students, although willing to attempt compliance were forced into positions of non-compliance through lack of sufficient skills which resulted in feelings of guilt when using their own first language.

Despite policy being in place, it does not always fulfil its intentions as illustrated by research undertaken by Posel and Casale (2011) in relation to South Africa's language-in-education policy. In the post-apartheid era, where teaching and learning in a variety of African languages has been offered to encourage multilingualism, most parents select English-language education because 'they consider it to be the language that will afford their children the greatest success and status' (Posel and Casale 2011:456). Their findings do, however, show that those adults who were proficient in their home language were significantly more likely to be proficient in English, indicating that an education policy of additive bilingualism, such as that undertaken in Abu Dhabi and underpinning the context of my research, might be more beneficial. Another negative impact of education policy is described by Opoku-Amankwa (2009) describing how an English-only policy, which might also be labelled a *subtractive bilingual* programme (Baker 2011), in schools in Ghana, led to increased anxiety amongst students and decreased classroom participation. Opoku-Amankwa suggests that this would not happen if a *mother tongue/English bilingual* programme was offered.

The high status given to English in the UAE is described by Randall and Samimi (2010:49) in a study undertaken in the Emirate of Dubai, which adjoins the Emirate of Abu Dhabi. In an effort to understand the status of English in the community, they surveyed a selection of police officers for whom English language lessons are compulsory. Their results indicated that English has become the *lingua franca* of the Emirate and essential for police officers to be able to do their job in view of the large number of non-Arabic-speaking workers. They note that 'the use of English is seen in a positive light, embedding ideas of modernization and development'. Historically and globally many governments have developed language policies which have endeavoured to support the efficient assimilation of different language speakers into officially monolingual societies or provide shared values in societies where more than one language is used. Examples of these

contexts have been described by Azaiza et al (2011) discussing the situation in Israel, and by Hornberger and Vaish (2009) who describe circumstances in India, Singapore and South Africa. According to the authors, these policies have had varying degrees of impact. The Abu Dhabi context is not dissimilar to these since it was government policy which was driving the bilingual education policy, not so much to integrate different language users but to improve the language skills of the indigenous population, in a country where English language is given a high status alongside Arabic.

2.2.5   Immersion programmes

Language immersion, first conceived in Canada as described by Genesee and Lindholm-Leary (2008) and aimed at redressing the power imbalance between the two official languages of English and French, has influenced second-language teaching across the globe. Such systems, known as *full* or *total immersion*, *partial immersion* or *two-way immersion*, have spread globally during the latter half of the twentieth century and entail teaching the entire curriculum content in a language other than the child's mother tongue, in order to promote equal competence in both languages, as well as some awareness of the cultural differences. The aim may be to introduce monolingual children to the second official language in a bilingual context, as in Canada, or it may describe the use of an unfamiliar language, typically the dominant language of the community, as the language of education for children of minority language backgrounds, as described by Drury (2007).

A system of partial immersion may provide teaching in both the mother tongue and a second language in various ratios, in contexts where there is more than one official language such as Argentina (Banfi and Day 2010) or Switzerland (Grin and Schwob 2002). Partial immersion may also be used in order to maintain or reintroduce a minority heritage language such as the heritage language programmes in Welsh or Irish Gaelic (Hickey 2001, Baker 2010, Hickey et al 2014). A two-way immersion programme provides learning for two groups of language users in the same classroom with the goal that all will become bilingual, as described by Gort and Pontier (2013) in relation to Spanish and English languages in North America.

2.2.6 Integrating content and language

Language can be considered both as a curriculum subject with learning outcomes, and as a medium of instruction. The integration of foreign or second-language teaching with the wider curriculum content has been variously labelled: *Language Immersion*, *Content Based Instruction (CBI), Content Based Language Teaching (CBLT)* or *Content and Language Integrated Learning* (*CLIL*), amongst other descriptors. Although teaching in the new language dates back more than 2000 years as an approach to teaching foreign or second-languages, as described by Mehisto et al (2008), it has grown enormously in the latter twentieth and early twenty-first century and can be described as teaching a subject through a foreign language while teaching the foreign language. This variation of the immersion system can be found in a number of countries, especially where two, or more, official languages exist. Cenoz (2015) describes a secondary school in the Basque Autonomous Community (BAC), in an area where Spanish is the dominant language of the community and the children have little contact with Basque outside school. The curriculum subject teaching is divided between Spanish and Basque languages as a medium of delivery. Jones and Lewis (2014) present the results of a study into the dual use of languages for content learning in Welsh classrooms, and Mehisto and Asser (2007) describe a CLIL approach used in Russian-medium schools in Estonia, where Estonian is being reintroduced. The suggested benefits of CLIL (Mehisto et al 2008:29) include a number of key points such as:

- the involvement of teachers and students in the co-construction of meaning.
- the fostering of critical thinking.
- the development of metalinguistic awareness.
- the creation of opportunities for teachers to work together.

These key points are found to align quite closely with the pedagogy of the Abu Dhabi New School Model shown in Section 1.2.1 (ADEC 2013a).

The literature shows that CLIL is not a method of second language teaching in itself, but rather an umbrella term encompassing any activity in which 'a foreign language is used as a tool in the learning of a non-language subject in which both language and the subject have a joint role' (Marsh 2002:58). One such activity used with young children is the

language shower (Palviainen and Mård-Miettinen 2015), a period of 30-60 minutes of daily exposure to a new language. In these sessions the teacher speaks almost entirely in the new language and uses songs, games and repetition to develop linguistic routines which help learners to develop a sense of security and reduced anxiety about language learning. Such pedagogical features, which promote an environment where children can develop as confident learners, are also often found in many monolingual early years classrooms (see Section 2.3).

2.2.7   Co-teaching models

In some bilingual classrooms two monolingual teachers, or a teacher and an assistant, teach in both languages alongside each other in what is known as a *one-person/one-language (OPOL)* model (terminology attributed to Maurice Grammont 1902) as described by C. Park (2008). In other bilingual classrooms one bilingual teacher is employed, or alternatively, two teachers teach at different times in different languages. A model of *partnership teaching* (Bourne 1997) was developed in the UK to support the integration of immigrant minorities into mainstream schools by providing specialist *English as a second language* (*ESL*) or *English as an additional language (EAL)* teachers and assistants or *native language* teachers in the classroom. However, despite the skills and effectiveness of the bilingual assistants who have been supporting the integration of non-English speaking children for many decades, Cable et al (2006) comment that there is an underlying monolingual culture dominating schools which does not value the children's home language and encourages an attitude of assimilation rather than inclusion. Davison (2008) describes how similar models of provision are found across the globe using an OPOL approach.

Patterns of classroom interaction have long been thought to take the form of teacher-student initiation-response-feedback (IRF) as proposed by the seminal work of Sinclair and Coulthard (1975). However, J-E Park (2014), suggests that different patterns of interaction are created with two teachers working in the classroom. Describing a model of teaching in the government-sponsored, *English Program in Korea (EPIK),* where a *native English-speaking teacher (NS)* works in the classroom alongside a local, *non-native English-speaking teacher (NNS)* he proposes that the resulting multi-party talk offers

students an opportunity to integrate different linguistic styles into their own repertoires rather than depending on one model. Comparisons may be made with bilingual home situations where children develop a capacity to use language in a contextually appropriate way through being involved in multiparty dialogue using two languages. This is discussed by Kasuya (2002), describing the impact on the linguistic development of children with parents from two different cultural backgrounds (Japanese and American). She emphasises how the linguistic and social identity of the adults, as well as the accepted language socialisation practices of the group, have an impact on the child's bilingual development as *active or passive bilinguals* (Kasuya 2002:320). Park also found that the students were able to exploit the co-teaching opportunities to their advantage by making a choice as to which teacher should be the recipient of a question. In this respect, they could engage the attention of the more passive of the two teachers. In Park's study the teachers had teaching roles dependent on their particular skills, however the study revealed that many other roles relating to the sociocultural aspects of the classroom had been developed, although they may not have been explicitly defined.

Liu (2008) describes four co-teaching models which can be found in an English language classroom in Kunming, China: *one teaching one assisting* where one teacher takes the class while another monitors or supports individuals; *alternative teaching* where one teacher takes the majority of the class while the other works with a small group; *station teaching* a model where students move in groups around the classroom and each teacher provides a part of the lesson content; and *team teaching* where both teachers share the responsibility and teaching of all the students at the same time. These definitions are in contrast to those proposed in the ADEC policy documents, described in Section 1.2.2, which are: *team teaching* 'teachers share the instruction of students, take turns in leading discussions and take turns in demonstrating and modelling'; *one teach/ one observe* 'one teacher leads or facilitates the class while the other observe and watch how students respond'; and *parallel teaching* where 'both teachers cover the same information, but divide the class into two groups and teach simultaneously'. Focussing on quality of teaching rather than student outcomes, Liu suggests that teachers need to allocate time to developing a better understanding of each other's cultural differences in order to nurture an effective collaboration and to be able to plan effectively. He also proposes that

without adequate strategic leadership to support ongoing professional development 'willingness and passion for co-teaching will be replaced by frustration and the practice of such collaborative work might therefore result in ineffective teaching and muddled learning' (Liu 2008:114).

Clarke (1999) reports on a study of non-English speaking children entering a bilingual preschool programme in Australia with some similarities to my own research. It operated an OPOL programme where the teacher was the English speaker and teaching assistants spoke Vietnamese or Cantonese. Unlike my research, it was a longitudinal study which tracked the English language development of four children over one year, resulting in the researcher being able to describe stages of development. The research did study the role of the teacher and concluded that the quality of the interaction provided by the teacher impacted on the skills development of the children. As Clarke states, there is no universal definition of quality in this respect, but she concludes that the teacher's knowledge of each individual child's needs provides the appropriate support, which is endorsed by the work of Drury and Robertson, as discussed in Section 2.3.2.

Dillon (2017), in a conference presentation, describes the comments of some teachers working in a co-teaching context in a kindergarten in Abu Dhabi. These range from the benefits available for the children as the two teachers model conventions of inter-cultural communication, to the challenges that arise when teachers of different professional standards and expectations work together. Reporting on another study, Dillon et al (2015:30) propose that 'pooling resources and skills' in the co-teaching model has a positive impact on children's learning. In their small-scale case study, the authors, constituting the senior leadership team (SLT) of the kindergarten school, explored characteristics of the co-teaching model during the literacy lesson. As the SLT, one aim was to co-construct the vision for co-teaching in the school through consultation with the teachers. Further findings highlight that the teachers felt that aspects of co-teaching relating to classroom management were strong but that aspects relating to curriculum goals and assessment were less satisfactory. One of the benefits that the provision of a native English-speaking teacher can bring to the classroom is to create a genuine need for students to communicate through the new language as Carless (2006) emphasises, when

reporting on collaborative teaching in Hong Kong schools. He also suggests that an added benefit to the co-teaching model is that teachers become more innovative in the classroom, leading to greater opportunity for improvement in teaching. However, it is apparent that the OPOL pedagogy is founded on a conceptualisation of bilingualism as double monolingualism and does not encourage the linguistic fluidity that is offered through a pedagogy for translingual practice as proposed by Canagarajah (2013).

The findings of each of these researchers refer to the importance of the relationship between the two teachers, the ability of individual teachers to compromise and to seek solutions, and the acknowledgment that professional development is intrinsic to developing successful outcomes for students. Although there is a certain tension created between the expected benefits and the challenges of creating a well-functioning collaboration of two teachers in the classroom, it is apparent that this aspect of the classroom teaching, learning and assessment would benefit from further exploration. Davison (2008) mentions a number of matters that need to be addressed, or at least recognised, before a fruitful collaboration can be developed, not least being research into the benefits of different co-teaching models on students. As he states, one of the challenges is that 'partnership as a model of ESL/EAL delivery is still relatively undertheorised and needs further evaluation and reconceptualisation if it is to be effective' (Davison 2008:455). My own observations on aspects of co-teaching offer further insights informing future potential research projects as discussed in Section 7.5.

2.2.8   Changing perspectives: towards translanguaging

Much of the terminology used to describe bilinguals, positions bilingualism from a monolingual perspective which is inclined to view monolingualism as the norm. As a result, bilingualism may be regarded as *double monolingualism* (Jørgensen 2003), terminology which accentuates the separateness of each language as a discrete code described in Section 2.2.1. In viewing languages as a discreet way of making meaning and communicating, the educational practice has often been to discourage learners from mixing the two by *codeswitching* or *code-mixing* (Baker 2011:109). As an example, Roy and Galiev (2011) describe the monolingual language ideology in Canada where codeswitching (between French and English) has been perceived as a threat to the purity

of the French language. By contrast Ferguson (2009) outlines three strategies involving codeswitching that are widely used in bilingual contexts as well as some nominally monolingual classrooms: the first is codeswitching as pedagogic scaffolding in order to support concept learning; the second is in order to manage classroom behaviour; and the third for interpersonal relations including establishing teacher identity. Hornberger (2003) draws attention to the multidisciplinary nature of bi/multilingualism, observing that the concept of language is of interest not only to linguists but also to biologists, psychologists, anthropologists, sociologists, and educators. She argues that no complete theory of bilingualism exists, in part due to the various perspectives used in conceptualising it. In the early 21st century academics such as García (2009b); Grosjean (2010); Canagarajah (2011); Cenoz and Gorter (2011); and Wei and Hua (2013) have challenged the earlier conceptualisation of bilingualism and proposed a translingual pedagogy that considers language from a multilingual rather than a monolingual perspective. This perspective conceptualises language as a continuum of communicative skills as described by García (2009b). This view of bilingualism has led to a new set of terminology such *emergent bilinguals* (García 2009a) indicating a gradual development of competence in a second language and *translanguaging* (Creese and Blackledge 2015, García 2016, Wei 2018), which suggests a fluidity of use across languages and a merging of codes. The term translanguaging was first attributed to Cen Williams (1994), who was writing about pedagogical practices in bilingual classrooms in Wales, where the language of input varied from the language of output. Cook (1994) suggests a *multi-competence* theoretical perspective as a productive way to consider bilingual or multilingual practices. This model, which reflects 'the knowledge of more than one language in the same mind', views language in relation to the individual's communicative and cognitive meaning-making abilities and does not emphasise linguistic competence as a target. García (2009b) has extended this idea to include the 'multiple discursive practices as seen from the perspective of speakers themselves' (García and Sylvan 2011:389). This shifts the focus away from a monolingual model of language use, whereby those who do not achieve an often-undefined level of competency, are perceived as inferior, towards a multilingual competency model, such as described by Gutiérrez et al (2011). Their study of the literacy practices of young American *dual-language learners (DLLs)* in an after-school club,

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describes an 'ecology of hybrid language practices set in a polycultural space' which is aimed at removing barriers to learning that might be generated by a system which encourages a strict separation of languages. This is similar to the practices found in complementary schools in the UK, described by Creese and Blackledge (2010:112), who conclude that these schools promote a 'pedagogy [which] adopts a translanguaging approach'. Lewis et al (2012) trace the development of translanguaging as a concept and suggest the need for further research both inside the classroom and in the wider universal context. In the context of this research a translingual pedagogy would imply the acceptance of both languages when produced by the children as well as the pedagogic use of both languages by the teachers. Cook's view is supported by García and Wei (2014:14) who recognise that the 'practices of all bilinguals are complex and interrelated; they do not emerge in a linear way' allowing for bilinguals and multilinguals to use all the linguistic knowledge and skills that they possess according to the demands of their particular context. García and Wei (2014) suggest that, by viewing language from a translingual viewpoint, structures and practices of bilingual or multilingual education might be transformed. They acknowledge that in the present globalised society many classrooms have emergent bilingual children who could represent a variety of different language groups and that this provides the opportunity for developing a pedagogy for translingual practice.

Creese and Blackledge (2015) discuss the ways in which communicative practices are embedded in sociocultural contexts and the relational aspects of identity and language. They suggest that greater mobility of cultural groups has influenced the way communication is occurring and that 'discursive practices… may not be limited to a traditional definition of a language, but… make up the speakers' complete language repertoire.' (Creese and Blackledge 2015:33). Wei (2018) frames translanguaging as a 'practical theory of language' from an applied linguistics perspective observing the 'creative and dynamic practices human beings engage in with multiple named languages and multiple semiotic and cognitive resources' (Wei 2018:27). Both Creese and Blackledge and Wei discuss how aspects of power linked to language competence can be reassessed when considered from a perspective of translingual practice that does not attribute

greater power to a particular language code but focusses rather on the individual's communicative competence.

In the next section I will review the literature relating to pedagogy in the early years, especially in terms of language learning and learner confidence.

2.3   Early years classroom pedagogy

2.3.1   Introduction

In this section I will explore the ways in which pedagogy and childhood are understood in this thesis (Section 2.3.2); the role of the adult in the early years classroom (Section 2.3.3); the role of the environment in supporting confident learners (Section 2.3.4); bilingual teaching and learning pedagogies in the early years (Section 2.3.5) which include modifying language (Section 2.3.6) and mediating language (Section 2.3.7).

2.3.2   Pedagogy and childhood

The term pedagogy in this context is understood as 'the particular selection of educational practices and techniques that are applied' (Siraj-Blatchford and Wong 1999:8). In other words, it is the description of 'how' the learning outcomes of the curriculum are being realised and how children are being enabled to learn and encouraged to become successful and confident learners. Interwoven with this understanding of pedagogy are the ways in which childhood is conceptualised. In this thesis, the development of the child is viewed within a sociocultural theoretical frame where children are acknowledged as equal participants in the classroom environment and active agents in their own learning, as described by Rogoff (1990). However, there is a certain tension here since different social and cultural perspectives on childhood and education are manifest through the varied cultural experiences and beliefs brought to the classroom by teachers, children and parents as well as by society and government education agencies and policies. This is evident in the multicultural context portrayed by Brooker (2005), who describes how the families she defines in her research as 'Anglo' expect children's learning to occur in play-like situations, whereas the Bangladeshi families expect learning to occur as a result of more formal teaching. Such differing

perspectives of childhood were noticed by Dosanjh and Ghuman (1998) whose study of Asian families' perspectives on the English education system suggested that interdependence was given greater value by some cultures than the independence expected in other cultures. Thus, there is a conceptualisation of childhood embodied in the curriculum which may not consistently correspond with ideas held by families or professionals. The ADEC New School Model (NSM) documentation outlines a pedagogical approach for the Abu Dhabi kindergarten schools that is intended to 'provide an active learning environment for students where they are expected to learn by doing, not by just listening and watching' (ADEC, 2013b) thus indicating the desirability of a child-centred learning environment. The expectation is for teachers to 'support, encourage and provide feedback' (ADEC, 2012:11) as they promote independent and active learning. This policy does not imply that children have freedom to create their own curriculum, but it is an acknowledgement that not all children have the same learning needs at the same time, and through a well-designed learning environment, a range of different opportunities can be provided which fall within an expectation of curriculum provision. Pedagogical practices demonstrated by the professionals working in the classroom are discussed in 2.3.2. These practices are understood to be underpinned by the individual's professional training and previous experiences together with their beliefs about what is right in their given situation. They will be influenced by the culture of the school and the wider professional community which, in its turn, is underpinned by local or national policy. Thus, pedagogical practices may vary from one classroom to another; from one school to another; from one society to another. In the microcosm of different classroom ecologies, a wide variety of pedagogies might be observed, which are 'all of those processes and provisions that could be considered to initiate or maintain learning processes, and to achieve educational goals' (Siraj-Blatchford 2009:2).

Creating opportunities for children to become confident learners is intrinsic to these pedagogical approaches and discussed further in 2.3.3. Drury and Robertson (2008) describe the conditions that make it possible for young second-language learners to develop a strong learner identity, in relation to the Foundation Stage curriculum in England (Department for Education and Employment 2000). These conditions include 'attending to children's rights; building on children's previous learning; supporting the

learning of [the second language]; and promoting identity' (Drury and Robertson 2008:1). In the context of this thesis, I propose that pedagogical practices which aim to fulfil these conditions would offer children opportunities for positive meaning-making experiences in the classroom and support the development of confident learners. Bilingual pedagogies in the early years classroom are discussed in Sections 2.3.5-2.3.7.

2.3.3 The role of the adult

The belief that knowledge is constructed within a social context, founded on the work of Vygotsky (1986) and developed by Bruner (1996) and Rogoff (1998), can be seen to underpin much modern pedagogical practice. As a result, classroom practices which embody such sociocultural approaches to learning are in evidence in many countries including Europe, North America and Australia and New Zealand. Whereas sociocultural theory considers learning to take place within a social context where more experienced individuals nurture and inspire the learning of others, the constructivist approach founded on the work of Piaget (1954) believes that learning takes place as the individual interacts with the environment, without having the same emphasis on social relationships. The Piagetian view is that the teacher's role is to identify the child's readiness and provide an appropriate environment for the child to be able to utilise creative thought processes, in order to gain higher levels of competency and continuously develop an understanding of their world. From either a sociocultural or constructivist viewpoint, the teacher acts as the guide, scaffolding the learning of the child (Wood et al. 1976, Rogoff 1990), as opposed to the behaviourist view of teaching as transaction, where the teacher is the holder of knowledge and responsible for imparting this to the child.

The theory of *scaffolding*, conceived by Bruner in the 1950s, was developed from Vygotsky's theory of the zone of proximal development (ZPD). Vygotsky (1986) proposes that all developmental events occur twice: firstly, at the social level and secondly at the cognitive level as the new learning is internalised. Guided by a more experienced adult or peer, a child moves through the *Zone of Proximal Development (ZPD)* internalising and owning new concepts using tools and artefacts, which might include language. Thus, as Vygotsky says, 'What the child can do in cooperation today he can do alone tomorrow'

(1986:118). This concept of scaffolding has been critiqued however, as there is an underlying assumption that the knowledge pathway that the child is moving along is fixed and that the adult acting as guide has a preconceived understanding of where the child is going. As MacNaughton (2003:50) suggests these 'staged, hierarchical ways of thinking about cognition and learning ignore the ways in which shifts in our understandings… are messy, context-bound and culturally specific.'

Both child-initiated activities (also referred to as teacher-guided activities) and teacher-directed activities are common features in many early years classrooms (see Section 2.3.4). Leseman et al (2001) in their study of the co-construction of cognitive skills in Dutch kindergartens, concluded that although child-initiated play and traditional teacher-directed lessons both had some benefits, the maximum cognitive benefit was achieved when teachers became involved in the children's play and guided the activity. In such a context, joint attention (see Section 2.3.7) might be established giving the adult and child opportunities to co-construct new meanings. Pedagogical techniques which involve different types of language use such as modelling, questioning, descriptive commentary and encouragement or motivation can be used to support meaning-making. Durden and Dangel (2008), researching monolingual contexts, found that teacher-guided activities, where children are encouraged to be active agents in the learning, provided more opportunities for children to engage in authentic meaningful dialogue than in teacher-directed activities. In the latter, language was more controlled, and children were more likely to give one-word responses to teachers' closed questions. This is important because it shows how teachers can support children's language and cognitive growth when working in small groups, rather than simply using language to manage behaviour, give instructions and share information. With the purpose of improving opportunities for learning, Durden and Dangel (2008:265) suggest that teachers should develop a greater self-awareness of their own conversational skills and teaching practices, and endeavour to use language that challenges children cognitively, giving them 'opportunities to examine their previous schematic understandings' (Durden and Dangel 2008:265).

In order to provide appropriate learning activities in the early years classroom, teachers draw on their knowledge of children's interests and prior learning, as well as the demands

of the curriculum, to support them and offer opportunities for them to extend their existing knowledge and skills in the co-construction of meaning, as described by MacNaughton and Williams (2009:228). Rogoff, building on the theory of Piaget, emphasises the importance that the social context plays in the development of children's cognitive skills, stating that 'children make use of guided participation in sociocultural activity through appropriation of shared thinking for their own uses' (Rogoff 1990: ix). This *guided participation* acknowledges that children can develop greater cognitive skills through participation as an apprentice under the guidance of more skilled helpers, akin to Lave and Wenger's (1991) concept of *communities of practice (CoPs),* discussed in Section 2.4.2. In such learning communities, the role of the adult is important in monitoring the child's participation and creating supported situations with incremental steps towards higher levels of competence, as described by Wood et al (1976).

2.3.4   Providing an environment to encourage confident learners

Stephen (2010) suggests that there are two important features to be found in early years classrooms in the UK, which support attitudinal development as well as cognitive and social skills. The first of these is the provision of a child-centred learning environment where children can follow their own interests according to their own learning desires. The second is the provision of a play-centred learning environment which allows children the opportunities to develop all aspects of creativity. Both these features are characteristics of a sociocultural view of the classroom environment which acknowledges the child as an equally participating active agent. When creating an environment where children can be co-constructors of meaning, consideration must be given to issues of power and agency. For children to be acknowledged as agents of their own learning, the adult and the child require opportunities to be equal partners in interactions as described by Jordan (2004), in contrast to society outside the classroom, where adults may hold the power. However, power issues are often present in the classroom as shown by Vuorisalo and Alanen (2015) discussed in Section 2.2.3. MacNaughton (2005) examines how teachers working within particular organisations develop certain expectations of how children should be behaving. Such 'developmental truths' will unconsciously impact behaviours, ways of thinking, acting and feeling. MacNaughton's discussion, founded on the work of Foucault who

originally developed the concept of *regimes of truth* (Foucault 1980), indicates how power differences are inevitable when *truth* is being sought. According to Foucault, power need not be perceived as a negative force but an inevitable force that motivates change and the advancement of knowledge. However perceived, children who are able to establish positions of power are more likely to be successful learners according to Vuorisalo and Alanen (2015).

The provision of an attractive and accessible physical classroom environment can be valuable in creating a space where children feel safe and comfortable enough to explore and engage in learning. Traditionally it has been the role of the teacher to decide on the provision and positioning of resources in the classroom. However, increasing discussion in relation to children's rights and the empowerment of the child has resulted in some settings engaging children in consultation about the construction of the environment and in other settings, teachers carefully making observational assessments of children's interests in order to provide appropriate resources (Clark 2007). The provision of some familiar artefacts, such as a role-play home corner with equipment which may be found in the home, and books and images that relate to local culture and society, will support children in making the transition from home to school. Strong-Wilson and Ellis (2007) describe how the Reggio Emilia approach to early childhood (Smidt 2013) calls the environment *the third teacher*. Through ascribing it an equal role to that of the teacher and the children, the environment is given a major responsibility in supporting 'autonomy, social affiliation, and creative exploration and expression' (Strong-Wilson and Ellis 2007:45). The resources that teachers provide and the way in which they position them reflect the pedagogical approaches that are being promoted in the classroom, as discussed by MacNaughton and Williams (2009). For example, a teacher who expects children to be agents in their own learning will ensure resources are appropriately labelled with images and that storage is easily accessible. As well as resourcing, routines for the use of the resources must be well established so that all children can have equal access.

The four aspects contributing to the development of confident learners suggested by Drury and Robertson (2008) and listed above (Section 2.3.2), are considered jointly here,

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in relation to the empowerment of the child. As described in Section 2.1, the child has the right to express their own thoughts, ideas and feelings and to have their voice heard, in accordance with the United Nations Convention on the Rights of the Child (2010). In practice, a classroom that adheres to this ethos supports children in expressing their ideas and feelings through different media, without having preconceived expectations of how these expressions are made. Opportunities are planned to allow for children to express themselves and adults will have an expectation that children will share their ideas and will actively seek to listen. Such practices as resources labelled with pictures and opportunities for children to select preferred activities, encourage independence but moreover the relationships established in the group allow children to develop a sense of identity, and this is facilitated by the adults. Building on children's previous learning means that the teacher needs, as a basic requisite of teaching, to get to know the child, not only in terms of the skills and knowledge they already have but also their personal and emotional dispositions, since without this knowledge they would be unable to provide appropriate learning opportunities. The relational aspect of the sociocultural environment is a key aspect in building confident learners, since the promotion of a positive identity is supported through relationships.

Children, joining the school at the start of their journey through the education system, are required to re-imagine themselves from their previous identities as family members to encompass new identities as members of the classroom learning community. The success of this transition is linked to teachers' abilities to acknowledge and understand the home environments from which the children come in order to be supportive. Partnership with parents is often mentioned as an aspect of positive practice in educational settings and the link between parent involvement and children's outcomes has been well established in research (Department for Children, Schools and Families 2008). Drury and Robertson, whose comments were made in relation to additional language learners in English curriculum settings, also refer to the importance of language development. In their view, the child's first language should be equally respected and allowed to develop but, in many situations, support for continued development of the first language is not maintained.

2.3.5   Bilingualism in the early years classroom

Children in the early years classroom may come from a variety of linguistic and social contexts, and the teaching and learning in the classroom will be guided by local policy. Those children who enter an additive bilingual programme might find that the full range of their linguistic repertoire is acknowledged and developed. However, in many monolingual classrooms children find themselves unable to use the language skills they have developed at home, and their journey in bilingualism begins in a subtractive bilingual programme, which aims to develop the new language without supporting the development of the first language (Section 2.2.3). As Drury (2007:78) says, 'they can only have limited communication with adults and their English-speaking peers… it is left to the bilingual learners themselves to devise their own strategies to adapt to the language and culture of the nursery'. The result of not being able to use previously learned verbal communication skills may manifest in apparent silence, or what has been termed the *silent period*, a term dating back to the 1980s and 1990s (see Clarke, 1992 or Tabors, 1997). Tabors (1997) suggests that communication may be occurring non-verbally during this phase which gives a more positive appraisal of silence. Roberts (2014:36) challenges the assumption that young children pass through a silent stage when learning a second language, suggesting that there is 'little empirical support' in the literature that the terminology silent period was ever intended. She proposes that teachers who accept that a silent period is a normal developmental stage have limited expectations of emergent bilinguals' oral language use and proposes that further enquiry which takes into account the 'diverse linguistic, cultural, familial, and socioeconomic contexts' (Roberts 2014:38) of children in early years settings, would offer new ways to inform pedagogical practice and promote second language learning. Bligh and Drury (2015:263) propose a concept of 'fractionally increasing participation' which might offer a better description of the contested silent period, as young emergent bilinguals spend time listening to and copying other more competent members of their community, as well as employing other modes in meaning-making. Despite the fact that the context in which this terminology is used differs from my context since it relates to a minority group of emergent bilinguals in a class of native English speakers, it remains a valid perspective on children's emerging language use.

2.3.6   Modifying language as a pedagogical strategy

The context of the present research outlines an immersive, additive, bilingual programme which according to the ADEC policy documentation has a 'dual focus on the Arabic and English languages (ADEC 2013a). Research into second-language learning in similar contexts is limited. Fraser and Wakefield (1986) studied second-language development through play in a multilingual preschool in Canada, which offered a full immersion programme for the non-English speaking children, but the context differs in that there were also English first-language speakers in the group. Although conducted a number of decades ago, Frazer and Wakefield's (1986) research still offers useful insights into the role of the teacher in scaffolding language in play contexts (also see Leseman et al 2001 in Section 2.3.3), indicating that appropriate intervention into the play is necessary in order to model and stimulate use of the second language. This is supported by Gass (1997) who describes the input-interaction-output model for language learning, which suggests that second-language learners develop their skills in relation to the specific linguistic input of the native speaker (teacher) who is the model. In the second language classroom, modifying language to meet the comprehension level of a learner is a common practice, known as *foreigner talk* (Ferguson 1971) or *baby talk* (Freed 2009), amongst other terminology such as *sheltered language* (Krashen 1987) or *teacher talk* (McArthur 1998). It may also include *repetition* and *rephrasing* (Moore 2011). Gort and Pontier (2013) studied teaching practices in two bilingual pre-schools with additive Spanish/English programmes, in a multilingual and multicultural community in the southwestern United States. They identified that teachers were using a sheltered instruction approach by *modifying and mediating* their language to facilitate meaning-making for emergent bilinguals, using 'simplified, and repetitive speech and highly contextualized language' as well as employing gesture and visual clues (Gort and Pontier 2013:239). Although similar in some respects to the context of my research, there is little exploration into the children's use of gesture or other non-linguistic tools to express meaning, since the research focussed on the practices of teachers.

Lindholm-Leary (2001) studied teacher talk in the context of teacher-student interactive discourse in a bilingual English-Spanish school. The age-group of the children in her

research was slightly older but there are some similarities with the context of this thesis. In the Kindergarten to Grade 2 classrooms of her research, described as having a *90:10 Dual-language Education programme*, over ninety percent of the language recorded was in Spanish, the home language. This is comparable with my own research context where the dominant classroom language was Arabic. In both contexts English was being introduced as a new language, although in Lindholm-Leary's research there was only one, bilingual teacher in the classroom. In order to undertake the analysis of teacher talk, Lindholm-Leary (2001:130) devised a framework comprising a number of types of teacher talk:

- Factual question
- Higher order question
- Motivational
- Information presentation
- Directive
- Modelling
- Expansion
- Others (*sic*).

Although these categories are appropriate for the context of a subject-defined curriculum for slightly older children, I believe they may not accurately reflect the types of language used in early years bilingual classrooms where an integrated, play-based curriculum is used. This is further discussed in Section 4.3. When analysing the extent and types of linguistic responses made by the children, Lindholm-Leary claimed that, amongst other things, children responded to about half of the teacher utterances, an indication, according to Lindholm-Leary, that the children were rather passive participants in the classroom. However, in consideration of the multimodal aspects of meaning-making discussed in 2.4.4, I would challenge the assumption that the children were passive, since no analysis was made of their non-linguistic responses. Knoblauch et al (2014), describing turn-taking in the context of an auction room where gaze and gestures are valid aspects of the interaction between auctioneer and buyers, propose that a turn may not be a speech act and non-linguistic cues might function as turns. From a pedagogical perspective, Casillas and Frank (2017) demonstrate in their study of the development of children between three and five years of age, how the skill of turn-taking in conversation develops over time, and children and adults alike can respond to silence in a sequence of

turns. The value of silence or wait time in teacher and child turn-taking has been shown by Ingram and Elliott (2014) in their research into classroom interactions when investigating older children.

Repetition is another facet of language modification used in the early years classroom, as documented by Moore (2011) who describes revoicing, rehearsing, prompting and language play as some of the aspects. *Guided repetition*, which Moore states has four stages: modelling; imitation; rehearsal and performance (Moore 2011:214) may be used to teach *formulaic* classroom language which is frequently used, such as 'sit down' and 'wash your hands' or vocabulary sets such as number or colour names. Formulaic routines make up much of the daily language used in the classroom, and although the child may not be expected to produce this language initially, there is frequently an expectation of a physical response. Additionally, Moore describes how children may use *repetition* in their play, either alone or with each other, to *rehearse* new vocabulary. In the contexts where all the children are second-language learners, with the same first language, my observations of classroom practice suggest that they will use their first language when engaging in interactive play with each other, unsupported by the English-speaking teacher, since they know they can convey meaning through their first language.

Clarke (1992) describes how the repetitive nature of songs and rhymes is useful in the early years second-language classroom, benefitting learners for a number of reasons. Coyle et al (2014) describe how taught vocabulary can be better memorised through song and as Clarke (2009:19) comments, 'children may join in the singing, particularly the songs that have repetition and are supported by actions.' Song has often been used in second-language learning and is also a well-established pedagogical practice in the early years classroom as described by MacNaughton and Williams (2009). Leśniewska and Pichette (2016) studied both song and storybooks (see 2.3.7) as input sources in English vocabulary acquisition of young French-speaking children and concluded that both aided recall. Their research, although founded on a psycholinguistic paradigm, has many parallels with my own context since they observed children of a similar age, in a classroom setting where the second language was a language absent from the

environment outside of school. However, the focus was on learning and recall of lexical items and not on meaning-making.

In the following section I will consider the literature relating to the ways that the early years teacher may facilitate meaning-making through using gesture and action with speech.

2.3.7   Mediating language as a pedagogical strategy

Bruner (1975) and other colleagues (Ratner and Bruner 1978; Ninio and Bruner, 1978) when investigating early language development, emphasised the importance of establishing *join attention* (described by Tomasello and Farah 1986) between adult and child as a prerequisite to creating a productive context for the growth of language skills. In these joint attention episodes, the adult, or more experienced other, will skilfully engage the attention of the child and, through initiation and response episodes, will scaffold learning. Bruner (1975:9) calls this the *attend to – act upon* routine. Tomasello et al. (2005) suggest that the desire of the child to create shared intentionality is innate and is perhaps a programmed learning device of the younger members of any social group, aiding opportunities for the development of new skills. Tomasello and Farrar (1986) further conclude that it is the quality of the linguistic input of the adult (in the case of their research, the mother) that has the greatest impact on the language acquisition of the child, suggesting that it is important that adults 'talk about the object on which the child is focussed rather than constantly trying to redirect the child's attention' (Tomasello and Farrar 1986:1462).

The development of language and literacy can further be supported through *joint attention* using a big book (a large storybook with simple story lines or sentences, and attractive illustrations) in shared reading, to frame the interactions between adult and child. Gregory (1994), researching the situation for minority language children in British schools, describes how the collaboration that takes place using a shared story can overcome some of the limitations to negotiation of meaning related to conversation between teachers and children who are speakers of another language. As Heath and Branscombe (1986) state, reporting on an ethnographic study of monolingual 3-year-olds

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at home, this type of reading activity gives children the opportunity to share their knowledge about the real world, to ask and answer questions and to develop their language skills and literacy behaviours. Yaacob and Pinter (2008), researching the use of big books in a Malaysian classroom daily English lesson, where English is taught as an official second language, found that children showed greater motivation and more active involvement in language learning than when taught using textbooks. In this context, the skills of the teacher in creating opportunities for high quality interactions were noted as a key pedagogical aspect. The literature indicates that the joint attention device is very important in supporting the learning and meaning-making of emergent bilinguals in the classroom, significantly when the child and the teacher do not have a common language code. It is through the shared focus on an external artefact that meaning can be co-constructed and signifiers, be they words or gestures, can be assigned.

One method, often used to model language in early years contexts, is *descriptive commentary*. This is a pedagogical strategy which provides a gentle running commentary on what the child is doing and what is happening and is used in early years to support language development (Department for Children, Schools and Families 2009). Webster-Stratton (1999) comments on the value of this technique, not only in supporting language development but also in giving the teacher an opportunity to model ways of expressing feelings, thus supporting emotional development. By using descriptive commentary rather than questioning, teachers can build relationships with children that support them in developing confidence to 'test new ideas, make mistakes [and] solve problems' Webster-Stratton (1999:47). I would also argue that it is equally important to acknowledge and support the development of other semiotic repertoires that children have already developed (see Section 2.4 for further discussion). In conclusion, empowering children to be confident learners should be inherent in the types of relationships encouraged and modelled in the classroom since 'positive action to promote self-esteem' (Siraj-Blatchford and Clarke 2000:3) can be provided through such pedagogical strategies.

Clarke (2009) describes how regular interactions between child and adult or more experienced speaker, are a key to the development of language skills in both first and

second-language learning contexts. Among a variety of strategies to be used, she suggests that tying words to actions and objects gives a child an improved opportunity to learn. Research undertaken with pre-school children in Greece by Toumpaniari et al (2015), indicated that combining physical action and gesture when learning vocabulary in a second language enhances children's achievement. In this study, the native Greek speaking children were taught twenty new words in the animal category, over a period of four weeks. The cohort was divided into three groups, one using speech and pictures only, one using speech and pictures with gesture, and the final group using speech and pictures with gesture and embodiment (see Donald 2012 Section 2.4.3). Toumpaniari reports that, as well as achieving greater success, the group using both mime and gesture with speech and pictures reported greater enjoyment in the learning activity.

Guided participation as described by Rogoff (1990) see Section 2.3.3, is also a valuable device in supporting language development in the classroom. As the teacher comes alongside the child who is engaged in self-directed, child-initiated play (see Section 2.3.3), there is an opportunity to enter into dialogue related to the subject of the play and to model language through 'asking more questions, recasting children words, and making connections between children's current play activities and previous experiences', as described by Wasik and Jacobi-Vessels (2017) in their discussion paper about the benefits of play. Using joint attention (see Section 2.3.3), by focusing on an image, object or activity with/in which the child is already engaged, the teacher and child can take part in conversation where the emphasis is the sharing of meaning and the development of linguistic skills is a by-product. As Rogoff suggests 'children contribute to their own development through their eagerness and management of learning experiences' (Rogoff 1990:152) when opportunities are provided for both child and teacher to contribute as equal agents in the learning experience.

I believe there is sufficient evidence in the literature to suggest that action and gesture are important pedagogical tools which can be used in the bilingual classroom to enhance children's word-learning, meaning-making and communication.

In the next section I will review a selection of literature relating to the relationship between multimodality and meaning-making.

2.4   Meaning-making repertoires and multimodality

2.4.1   Introduction

Classical research into children's communication has laid a strong foundation for my own study. Heath (1983) demonstrated that children learn to communicate and make meaning using the spoken word from an early age, as they interact with others in the context of the family and local community. In Section 2.2.8 I highlighted how recent conceptual understandings of language have moved away from ideas embodied by terminology such as bilingualism and code-switching towards a more inclusive conceptualisation of translingual practice. In line with this paradigm shift, a new conceptualisation of meaning-making and communication has emerged which looks at the totality of resources people use. This semiotic repertoire might include tools and artefacts such as: image, text, gesture, sign, gaze, facial expression, posture, speech and objects. As explained by Kusters et al (2017), the concept of multimodal communication and meaning-making goes beyond viewing language as central to communicative practice by looking at how meaning-making is being achieved as a whole. In the following section I examine aspects of meaning-making through language (Section 2.4.2), meaning-making through action and gesture (Section 2.4.3) and multimodality (Section 2.4.4).

2.4.2   Meaning-making through language

Vygotsky's view of language is not simply that it offers a means of social communication, but that it is a tool of the mind which mediates cognition. 'Thought is not merely expressed in words; it comes into existence with them' (Vygotsky 1986:218). Learning communities, or *communities of practice (CoPs)*, as defined by Lave and Wenger (1991), are composed of people possessing variable degrees of skill and knowledge, who interact in such a way as to develop the skills of all community members. Communities exist in various contexts, the significance being that through social interaction, using the tools and artefacts developed by the community, knowledge is constructed, shared and developed according to the model described by Vygotsky. In line with Lave and Wenger,

Rogoff (1990) describes the *apprenticeship* in thinking of young children as they participate in the sociocultural environments to which they belong and are guided by adults and other more experienced caregivers (see Section 2.3.1).

Lantolf and Thorne (2006) propose that adults' first-language system is 'their primary symbolic artefact for regulating their own cognitive activity' (Lantolf and Thorne 2006:295) and in this respect, they argue, the first language or *mother tongue* is used to mediate the learning of an additional language. However, this *fractional* conceptualisation of bilingualism, as defined by Grosjean (2010), becomes problematic when applied to children growing up using more than one language system. A different conceptualisation of language which is not confined to a single user's or group's codification, such as Cook's multi-competence model (see Section 2.2.8) offers the possibility of the consideration of a more dynamic interaction of thought and language. The multimodal, bilingual context of my research has features akin to those described by Creese and Martin (2003:161), a place where 'complex inter-relationships, interactions and ideologies' are found, and where interactional practices are developed by the community to support meaning-making.

2.4.3   Meaning-making through action and gesture

Researchers who acknowledge that language encompasses a wide set of skills which are embedded within social functions take care to include analysis of the non-linguistic context such as action and gesture. Ochs (1979) argues that children have pragmatic alternatives for communication which they can use before they master speech, including gaze and various hand and head gestures, and that such gestural communication can be employed in conversational episodes with caregivers in meaningful dialogic exchange. The notion that competency in communication and meaning-making can be achieved without spoken words offers a new perspective for exploring the multilingual classroom practices in my own research. Donald (2012) describes the development of the use of gesture as a communicative tool by early cultural groups, proposing that *mimesis*, 'the purest form of embodied representation' (2012:1), is a pre-linguistic cultural tool for communication. Mimesis is defined by McCafferty (2008) as 'a mode of representation that derives its essential character from that which it depicts' (2008:151). However, the

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symbolic gestures used to convey meanings are inclined to differ between cultural groups with consequential implications for bilingual classroom practice, where teachers from different cultural backgrounds may have different gestural repertoires to those used by their students.

There have been several recent, valid studies on gesture in second-language learning (McCafferty and Rosborough 2018, Gullberg and McCafferty 2008), although there remains a need for more specific exploration into the meaning-making processes in which young, emergent bilinguals engage in the classroom, as they learn and develop both communicative and cognitive skills. Rosborough (2014), researching in a content and language integrated (see Section 2.2.5) Grade 2 classroom, found that actions and gesture played a central role in meaning-making for emergent bilingual children. Various researchers, such as Novack et al (2015), have demonstrated the importance of gesture in the development of communication and meaning-making in young, monolingual children. After gaze, the use of pointing is generally accepted as one of the first non-verbal communicative acts that a child employs, as described by Colonnesi et al (2010). The first, deictic gestures used by young children are, as Goldin-Meadow (2003) acknowledges, critical for language acquisition since they serve as 'a stepping-stone on the path toward acquiring particular vocabulary items' (Goldin-Meadow 2003:208). Accordingly, there is an undeniable link between gesture, language and meaning-making as McNeill (1992) describes, when he proposes that language and image (gesture) serve the same function in a sociocultural view of cognitive development. Vygotsky proposes that gesture plays a major role in the meaning-making process stating that, 'children's symbolic play can be understood as a very complex system of speech through gestures...' (Vygotsky 1978:108), As Vygotsky suggests, the gestures used by children in play are fully integrated with thought and speech and are capable of modifying meaning-making through their use.

In common with all means of communication, the use of gesture has both a productive and a receptive function for meaning-making in that children can interpret a gesture produced by another or they can produce gestures to signify their own meaning. In terms of concept learning, McGregor et al (2009) suggest that the use of two representational

systems concurrently, as a pedagogic approach, has a positive impact on learning. Researching the use of gesture to scaffold learning with under 2-year-olds, they suggest that the children gained a 'more robust knowledge of the meaning' of a new concept, when both language and gesture were used together (McGregor et al 2009:807). Nomikou and Rohlfing (2011) investigating the multimodal interaction between mothers and infants, also highlight the importance of language and action being used concurrently to aid the development of meaning-making processes. This practice of *speech-accompanying gesture* (Kita, 2009), described by Kelly et al (2009) as *co-speech gesture* and also useful as a technique in second-language vocabulary learning, is one that proved useful as a model for data analysis in this thesis when investigating the meaning-making processes of the research participants.

Kendon (1997) describes how gesture functions alongside spoken language in communication and raises the possibility that differences in gestural use across cultures are related to differences in the way that language is used, both socially and syntactically, in different cultures. In developing the ideas of Kendon, Gullberg (2006) highlights the importance of further study into cultural and language specific gestural repertoires in relation to second-language teaching and learning, when she suggests that there is a need to 'investigate if and how learners can acquire gestural repertoires, and to tackle pedagogical and methodological challenges like teaching and assessment methods' (Gullberg 2006:117). As Kress suggests, the semiotic resources, or meaning-making modes that each community develops are specific to that community and 'the 'salience' of particular modes will vary from community to community' (Kress 2012:393). Salomo and Liszkowski (2013), who made a study of the emergence of gestures in 1-2-year-olds in three different cultural groups found that there were early, pre-linguistic sociocultural differences in gestural use, further supporting the importance of considering cultural differences in gesture in the multilingual classroom (see Section 7.4.2).

There is a variety of research which offers insight into the use of gesture in second-language teaching and findings suggest that it plays an important role. Mayberry and Nicoladis (2000) studied the gestural use of bilingual French-English children from 2-3 and a half-years-old and surmised that children's gestures change as their language develops

confirming the link between language gesture and cognition. Huttunen et al (2013), investigating the use of gesture in both English-speaking and Finnish-speaking 2-5-year-old children, confirm that gesture serves as a communicative and cognitive function. Rosborough (2014) suggests that second-culture gestures can be taught with second language in the classroom and incorporated into semiotic repertoires. Each of these suggest that the interactional aspect of verbal and non-verbal initiation and response (Sinclair and Coulthard 1975) between the adult and child is therefore an important consideration when exploring how children develop communication and meaning-making skills. Lantolf and Thorne (2006) also comment on the use of gesture in second-language learning, proposing two primary areas of interest for sociocultural research, that of culturally specific gesture and that of the interface between speech and gesture. In the context of this research, the relationship between speech and gesture is of particular interest, as the research questions seek to explore the relationships between spoken language, gesture and meaning-making.

2.4.4   Multimodality

The study of action and gesture in meaning-making and communication is not new, but in the past the tendency has been to focus on modes in isolation. Multimodality offers a framing where all modes can be considered as having potentially equal status in meaning-making, and where the researcher can consider how all modes work together in multimodal orchestration. Jewitt (2017b) describes how 'multimodal approaches have provided concepts, methods and a framework for the collection and analysis of visual, aural, embodied, and spatial aspects of interaction and environments, and the relationships between these.' She defines the underpinning theoretical assumptions that: a) meaning-making occurs through multiple modes, b) that authentic semiotic modes are created and refined in cultural communities and c) semiotic modes are used in a dynamic way, within specific social contexts which frame their meaning-making potential. Multimodal research in education was pioneered by Gunther Kress together with other colleagues, in the UK and beyond, demonstrating how meaning is derived from a variety of modes of communication and suggesting how this might impact classroom practices (Kress 2017; Bezemer and Kress 2014; Kress 2005, Jewitt and Kress 2003 and Kress 2000).

Taylor (2014) has shown that primary school children, in a monolingual classroom, draw on a range of semiotic resources, such as gesture, visual signs and images, body posture, and head movement to convey meaning, and that language is not always the dominant mode. Flewitt's (2005b) longitudinal, ethnographic study focussed on the communicative practices of 3-year-old monolingual children. Her findings suggest that these young children employ a number of different modes to convey meaning but that these are not always recognised within their pre-school contexts where there is a focus on communication through talk. Wei (2011) reports on the multimodal and multilingual practices of British Chinese children in complementary schools (additional language classes set up for minority language groups, apart from the local school system) in England. His work reveals that the communicative skills of the children are not fully recognised in the context within which they find themselves. He suggests that the multi-competence practices of the children, like those described by Cook (1994), are at odds with the discourses of traditional education institutions and teachers, as they put into practice the whole range of multilingual and multimodal resources at their disposal to be creative in meaning-making. For Wei, it is the safe space of the classroom environment of the complementary school that gives the children the opportunity to engage in a creative construction of semiotic resources. This implies a space where learner confidence is encouraged.

Kusters et al (2017:2) offer a new perspective on the multimodal and multilingual aspects of communication and a 'more nuanced understanding of translanguaging that recognises the different ways in which individuals draw on their multimodal linguistic resources to make meaning'. Their exploration of bimodal bilingualism amongst those using sign language and speech, offers another perspective from which to view the early years bilingual classroom. Such a translingual or trans-modal perspective gives the opportunity to view all modes and codes of communication equally and offers teachers the chance to construct a language-rich, multimodal classroom environment that serves the needs of the learning community, as well as using the skills and values of its members. As Gullberg and McCafferty (2008:133) propose, this would be a classroom where 'gesture is regarded as a central aspect of language in use, integral to how we communicate (make meaning) both with each other and with ourselves'. Pennycook (2017) looks beyond

classroom-based learning when he considers the various semiotic modes used in different social and linguistic communities and problematises 'what translanguaging could start to look like if it incorporated a much broader set of semiotic possibilities than just language codes'. Focussing on the intersections between different representational codes, he proposes the terminology of 'boundaries'. From the analysis of his ethnographic observation of interactions in a Bangladeshi-owned corner shop in Sydney, he suggests that various popular food items on sale serve as 'boundary objects' otherwise described as 'adaptable artefacts'. Pennycook describes how these items might serve to diminish the semiotic boundaries since their functions are 'sufficiently flexible to be taken up by different people in different contexts, yet also sufficiently robust to be recognisable as 'the same thing' across these different contexts. This trans-semiotic perspective does not focus on the repertoire of the individual or group but instead looks at the 'dynamic relations among objects, places and linguistic resources' and how they interact to convey meaning.

In conclusion, the literature in this section supports the motivation for my research, as it encourages the exploration of the many modes used by teachers and children in the early years classroom, that are not always explicitly described in curriculum documentation.

2.5   Summary of chapter 2

In this chapter I have reviewed a body of literature relating to bilingualism, to pedagogy and to meaning-making. I have taken the position of viewing language, action and gesture as social practice, motivated and supported by social relationships, where semiotic resources are developed jointly within social communities. This position underpins my research and allows for the exploration of meaning-making practices and the ways in which approaches to translanguaging and multimodality might support children to become confident learners in the classroom community.

I have considered some of the aspects of bilingual education in the early years and suggested that a translingual conceptualisation of language provides an appropriate lens through which the events in the classroom may be viewed. I have reviewed some of the literature relating to the discussion of pedagogy in the early years and I propose that the

child is an active agent in their own learning and that the role of the adult is one of expert and guide, providing appropriate environments and resources while developing appropriate relationships which support children's development as confident learners. I have considered how the distribution of power in the classroom, as well as pedagogical practices may impact children's confidence as learners. I argue that the development of a multimodal perspective on classroom interaction offers a lens through which to explore how different modes are working together in multimodal meaning-making.

In the light of my successive reviews of the literature, the research questions were iteratively modified to align more closely with the research aim which was *'To explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners.'* Using an investigative case study method (see Section 3.2) in order to observe the naturalistic meaning-making practices that were occurring between members of the classroom learning community, I posed the questions:

> RQ1: How is spoken language being used by teachers and children in joint meaning-making?

> RQ2: How are action and gesture being used by teachers and children in joint meaning-making?

The literature on multimodality highlighted the myriad ways that individuals and communities develop and use semiotic resources to share meaning. However, for the purpose of this case study, I elected to focus on two aspects, action and gesture. The overarching aim was to investigate how these practices were contributing to children's confidence as learners. The literature on pedagogy indicated that children who are empowered to be creative and take risks in the classroom are more likely to succeed, therefore I explored the pedagogical practices underpinning the research questions, as indicated through the word 'how' in the questions.

CHAPTER 3:   RESEARCH METHODOLOGY

3.1   Introduction

In this chapter I discuss the theoretical and methodological approaches that underpin this research. I discuss how sociocultural theory offers an appropriate framing for the aims of this research and how social semiotics can underpin the analysis of meaning-making as a social practice, in this context. I explain why I chose a qualitative methodology as opposed to quantitative or mixed methods and present the argument for using a case study approach and describe the type of case study employed for this research (Section 3.2).

During the early stages of the Doctorate in Education (EdD) programme, I designed and undertook a pilot study in order to trial certain data collection methods, including the use of media equipment to collect observational data. In Section 3.3 I describe the key points arising from this pilot study and the impact they made on the research design as well as how they influenced the development of the research aim and the research questions.

In Section 3.4 I introduce the class chosen for the data collection and give details of the context of the research. In Section 3.5 ethical considerations are presented. In Section 3.6 I discuss rigour and trustworthiness in qualitative research and problematize my positionality as an insider practitioner-researcher in this multicultural context. In Section 3.7 I discuss data collection and explain the appropriateness of using ethnographic tools in this case study, as well as considering some of the implications of using video-recording in early years classrooms. I also discuss researcher and participant collaboration in relation to interpretation and clarification of data. In Section 3.8 the processes involved in organising the data, transcribing video material and coding data for analysis are presented.

3.2   Theoretical framework

The theoretical framework for this research was shaped by the research aim which was

'to explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners'.

In order to undertake this investigation, I focussed on observing the naturalistic communicative practices that were occurring between members of the classroom learning community, through the use of language, action and gesture.

3.2.1 Research questions

The research questions were founded on a social semiotic paradigm of language, first proposed by Halliday (1978) which views meanings as socially situated and language as a code which is used to represent these meanings. However, spoken language is not the sole means of communication and current definitions of communication and meaning-making acknowledge that other representational modes such as image, and gesture, can be equally employed to make meaning, as discussed by Norris (2006), Jewitt (2017a) and Tabensky (2015).

Since a mode is a 'socially shaped and culturally given resource for making meaning' (Kress 2009:54), I considered that this social semiotic and multimodal paradigm would provide the best lens through which to view the different meaning-making repertoires that were in use and developing in the classroom. It is this concept of the act of meaning-making that is the focus of this study; an opportunity to explore how the children and teachers are making meaning and what tools they are utilising to support their meaning-making, when either exploring, experimenting or constructing meaning through intentional or playful use or sharing meaning with another.

In order to provide evidence to address my research aim, two specific research questions (RQs) were formulated as:

RQ1 How is spoken language being used by teachers and children in joint meaning-making?

RQ2 How are action and gesture being used by teachers and children in joint meaning-making?

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3.2.2   Sociocultural perspective

Consistent with this theory, the reality of the classroom in my research context was co-constructed by the teachers and the children interacting with each other and with their environment. There was no pre-existing reality, but the reality occurred as situations unfolded and were acted out. I believe this ontological position to be true in the context of this research where the individuals each brought their own histories to bear on the present and, as the context evolved, a variety of differing responses were possible.

I decided to adopt an interpretive view to explore the events in the classroom as opposed to a positivist paradigm that believes in an objective reality. Unlike the positivist researcher who aims to collect empirical data to test a pre-determined hypothesis, as described by Burgess et al (2006) and Newby (2010), my intention was to discover possible meaning from raw data. The study of human activity through a positivist frame would be inclined to view human behaviour as predictable and pre-determined, but in the context of this research my intention was to explore the personal and unpredictable nature of the teachers' and children's actions, as they attempted to make meaning.

3.2.3   Qualitative methodology

Whether teaching is considered science or art or, as Dewey (1929) suggested, a combination of both, it is generally accepted that classroom practice can be guided by scientific research which provides reliable evidence (Hargreaves 2007, Atkins and Wallace 2012). The term *scientific enquiry* can be problematic when it is understood to imply that the evidence is gathered from such processes as randomized controlled trials; methods of scientific enquiry which can be traced back to early research in the field of evidence-based medicine in the natural sciences. However, the evolution of the term scientific in research has come to indicate process rather than field and can be described as the procedures followed to gather and evaluate the evidence used to produce new knowledge: otherwise called the methodology. The scientific process seeks to meet the requirements of rigour and trustworthiness which are further discussed in Section 3.6.

Sale and Thielke (2018:132), referring to the field of medicine, propose that qualitative research can be considered as scientific enquiry even in that field where 'qualitative research is not part of the evidence-based medicine hierarchy [and] is often considered the lowest level of evidence alongside expert opinion' asserting that it 'answers different scientific questions than those of quantitative research.' Equally, qualitative research in education, which is seen as a social science, seeks to provide answers to different types of questions than those often posed in the field of medicine.

Appropriate to the interpretive paradigm, I chose a qualitative methodology, since qualitative researchers 'seek insights rather than statistical perceptions of the world' (Bell 2005:7). I rejected a quantitative methodology as unsuitable for the study of human interaction from a sociocultural perspective since an experimental design seeks to quantify data in order to provide evidence for a specific theory or hypothesis. As Creswell (2003:23) states, 'quantitative research is a means for testing objective theories by examining the relationship among variables'. Educational research involving people will inevitably be subjective due to the unpredictable and variable nature of human beings. In terms of the findings of this study, there were no defined hypotheses to test, but rather the research aimed to elucidate some aspects of the observed actions that occurred, and to attempt to develop theory from this, in relation to how the children and teachers were developing multimodal ways of communicating and meaning-making in the context of an Arabic/English bilingual classroom.

I also rejected the option of using a *mixed methods* approach as described by Creswell (2003), due to my own preference for using an exclusively qualitative approach which was influenced by the broader education policy context. Historically, qualitative inquiry in education has struggled to make a case for itself, since the positivist approach to testing hypotheses has had a stronghold in the field of research in general, influenced by ideas that evidence should be based on empirical data gathered from careful observation through processes that are transparent and can be replicated, even in the field of natural sciences. Although mixed methods may offer an opportunity to develop comprehensive data, I believed this approach might also be interpreted as displaying a lack of confidence in the data produced through qualitative methodology alone, by depending upon

quantitative data to support it. Giddings (2006:202) suggests that 'ideologically mixed-methods continues the privileging and dominance of the positivist scientific tradition' whereas I was attempting to locate this research securely within the interpretive paradigm.

It is accepted that broader policy climate of the education system shapes the cultural practices of the educational organisation, giving strong messages about what is and what is not appropriate in terms of research data, as discussed by Cox (2012). She suggests that 'practitioner-[researchers] may be compelled by forces outside of qualitative research classrooms to think quantitatively' (Cox 2012:129). In my own context there was a positivist policy climate with an increased emphasis on using evidence-based data, such as using standardised student test data to measure attainment and adjust curriculum expectations. Insider-researcher issues (see Section 3.6) are a consideration for the employed practitioner-researcher, used to following positivist methods of testing different solutions to find evidence for success in everyday practice, and who may face epistemological challenges in order to locate the research within a qualitative frame. My commitment to qualitative methodology was therefore further motivated by the goal of raising the status of such methodology in this professional context.

3.2.4   Case study approach

I chose a case study approach as suitable for this research since, although not a true ethnography in the purest form, I believed it was an opportunity to 'provide unique examples of people in real situations' (Burgess et al 2006:59). Green and Bloome (2015:183) propose three possible approaches to ethnography: 'doing ethnography, adopting an ethnographic perspective, and using ethnographic tools'. I decided that the third of these, which involves using ethnographic methods and techniques during fieldwork, would be most fitting for this case study. I did not believe that 'doing ethnography' was applicable in this context since, according to the seven principles of ethnographic research suggested by Walford (2009), there are two salient points that made this inappropriate: the first concerns the position of the researcher who, in a truly ethnographic study, is recognised as the main research instrument. A true ethnographer will become immersed in the situation in order to record the social and cultural

constructs in as much detail as possible from the perspective of the members of the group, making what are known as emic interpretations (Pike 1982); the second is an awareness that a true ethnographic approach needs to follow a process which is 'theory-led and systematic' (Walford 2009:273). A case study approach, in this case using ethnographic tools, can be used to develop theory through a careful, iterative approach to the data analysis. *Action research (AR)* in education, as described by Stenhouse (1975), Carr and Kemmis (1986) and Kemmis and McTaggart (1988), was also considered as a possible approach, but there were key differences that made it unsuitable. I was undertaking data collection over a fixed period of time to create a snapshot of an aspect of classroom practices, whereas AR is more inclined to work in cycles of gathering data, revising practice and re-evaluating in order to make positive change. Also, the practitioner is an active participant in AR, which was not the case in my context since I was an external member of the classroom conducting research on the group, albeit in collaboration with the participants.

Case studies vary by type according to the outcomes they provide and have been defined by theorists in different ways. According to Yin (2014) an *exploratory* case study sets out to discover the 'how' of a situation or context without having a proposition as a starting point; a *descriptive* case study will reveal the detail of a situation and an *explanatory* case study is inclined to look at causal relationships. Merriam (1998:11) defines a *descriptive* case study as having the intention of providing a 'rich, thick description of the phenomenon under study'. The term 'thick description' attributed to Ryle (1949/2009 edition) and developed by Geertz (1973), describes the multi-faceted and nuanced description of a case that might be created by a participant observer, using insider knowledge of the sociocultural environment, as opposed to the representation described by an external researcher for whom certain practices might be invisible or incomprehensible. Since the motivation for this research was to provide a descriptive account of the meaning-making practices of teachers and children in this specific Abu Dhabi kindergarten classroom context, I considered Merriam's (1998: xiii) definition of a case study as 'an intensive, holistic description and analysis of a bounded phenomenon' most applicable. The case used for a case study is variably defined: it may be a single case of an individual or an organisation; it may consist of a number of cases developed to

compare and contrast emerging themes; cases vary in size or in the quantity of detail provided. In this context, where I was working within a school and had reasonable access to a number of classrooms, I believed that a deeper exploration into the practices of one class of children and their teachers would provide some insight into how meaning-making was occurring and some of the factors that were supporting it.

3.3   The pilot study

The pilot study was undertaken in late 2013, at which time the research aim had a slightly different focus: 'To explore how native Arabic-speaking kindergarten children were developing spoken and written English in the context of the Abu Dhabi Education Council (ADEC) New School Model (NSM) biliteracy curriculum' (see Section 1.2). It was divided into two phases because early on in the data collection process I became aware that I needed to make some changes as explained in Section 3.3.1. There were three notable outcomes from the experience of the pilot study:

- Video-recording was selected as a data collection tool in preference to audio recording with field notes
- The class selected as the case for the case study was defined
- The research aim was refined.

3.3.1   Refining data collection tools

Qualitative research covers a range of approaches including ethnography and case study. Researchers from each of these approaches may employ many of the same tools and methods, as described by Hammersley and Atkinson (2007:5), where the research aim is to develop an understanding of the lived experience of any chosen individual or group. It is generally accepted that qualitative researchers rely on three main sources of data: observation, interviews and documents (Burgess et al 2006). Yin (2014) proposes that observation might be further divided into either *direct* or *participant* observation. Direct observation attempts to remove the researcher from the situation in an attempt at making objective observations, the aim being that the observer will have limited impact on the context. The alternative participant observation means the researcher becomes

embedded in the context and attempts to understand the situation from a more intimate perspective, although this may raise ethical issues in the relationship between the researcher and the research participants and threaten the trustworthiness of the research process. As long ago as 1958, Gold proposed that there is a continuum between these two positions from complete participant to complete observer and Atkins and Wallace (2012) suggest that most research using observation falls somewhere around the participant as observer/observer as participant position of the scale.

Documents can provide *primary* or *secondary* sources of data in both qualitative and quantitative research, being used to confirm or complement evidence provided from other sources, or even used as an exclusive source of data where no other data is available, such as in historical contexts. Documents may be used during different phases of a research project, from providing preliminary information on which to build research questions at the start of a research project to providing evidential data from which to draw conclusions. Duffy (2005) makes a distinction between *deliberate* and *inadvertent* sources of documents: those which are produced in order to inform future enquirers about a certain situation such as memoirs or diaries; and those which are produced as a result of the everyday working of an institution such as minutes of meetings or planning documents. Researchers select documents not only in relation to availability but also in relation to the research aim, thus demanding valid selection principles in order to maintain credibility. Burton and Bartlett (2009) describe the variety of existing documents available to education researchers, such as national and local policy documents, curriculum and teacher planning and assessment documents, and various classroom and student specific documents.

The data from Phase 1 of the pilot study was collected using voice recordings of classroom sessions together with field notes. Analysis of the resulting data revealed that there was a great deal of meaning-making activity occurring which was not easily captured using audio and field notes. In order to obtain a richer picture of the classroom interaction, I trialled the use of a video camera in Phase 2 of the pilot study and concluded that it gave greater opportunity to collect more detailed material, thus making it a preferential tool for data collection. Continuing developments in digital technology

have created enhanced opportunities for the collection of observational data which, in turn, has created new paradigms within which researchers operate. These have been widely discussed in terms of methodology and theory (Rostvall and West 2005; Flewitt 2006; Derry et al 2010: Leung and Hawkins 2011 and Jewitt 2011), ethics (Wiles et al 2012) and practical issues (Fitzgerald et al 2013). The opportunity to view and review recordings many times, can supply greater detail and richness to the observation than was previously possible using field notes. However, the challenge lies in faithfully transcribing and interpreting the audio and visual data. Of equal consideration is the time-limited example of classroom events that video supplies, making it impossible to tell from the recording if the events observed occur frequently or seldom. These concerns indicate the importance of using supplementary data sources to confirm conclusions. Using video to record classroom practice requires that all participants are involved in the planning processes to ensure the appropriate amount of time is allocated, and that all participants are informed of the procedures. Unforeseen events may inevitably hamper the planned processes, such as participants or researchers falling sick, or being reassigned to different tasks, or unforeseen changes to the school timetable being made, as experienced in this research (see Section 3.7.1). I considered the use of video recording in this case study to be essential, mostly due to the opportunities afforded to view the gestural meaning-making that occurred. There is a consensus in the literature that 'video data unveil how young children use the full range of material and bodily resources available to them to make and express meaning' (Flewitt 2006:24) and, as Haggerty (2011:396) describes, using video recording of children's activities allows for the study of 'a more diverse range of semiotic modes and a focus on their interconnectivity'.

3.3.2   Selecting a class

In Phase 1 of the pilot study, I selected a class of 4 - 5-year-old children for observation, following consultation with the school principal (see 3.5.3). Initially a class was chosen where we both agreed that there was evidence of good practice and met my initial aim of investigating what might be achievable using the new curriculum. Together we concluded that the following criteria indicated it was a suitable class:

a. The teachers had a good co-working relationship having been co-teaching together for over two years. The evidence for this was shown in the way the two teachers supported each other in making and sharing resources together; readily offered each other cover for breaks when the workload was heavy; and produced detailed co-planning documentation.

b. The English-speaking teacher had a sound understanding of teaching in the NSM. The evidence for this was gathered from the school's systematic classroom observation and from scrutiny of the teacher's planning and assessment documentation.

c. School data indicated that children in this class were making good progress and therefore it presented itself as a class which merited further exploration in order to reveal what could be achieved with successful implementation.

However, initial analysis of the pilot study data revealed that the children had few opportunities for child-initiated activity and that most of the children's spoken English language was occurring during whole-class teaching sessions and could be classified as taught vocabulary or as repetition. A further practical issue of concern was that, due to a shortage of teachers, most of the English-speaking teachers in the upper-age classes were working across two classrooms resulting in an adapted timetable being in place.

In Phase 2 of the pilot study, I selected a class of 3 - 4-year-olds where there was evidence that, as well as meeting the above criteria, the children had more opportunities in the classroom to communicate and share meaning creatively. My research aim underwent a shift in perspective as I began to focus more on the sociocultural and meaning-making behaviours of all members of the classroom community and not focus only on how the teachers were implementing the curriculum. I decided to make this class the focus of my main study as I believed it would allow me opportunities to collect data that related to typical behaviour, rather than investigating best practices. In the event, a new Arabic-speaking teacher was assigned to this class prior to the start of the new school year, making this a new co-teaching pair at the time of the data collection.

3.3.3   Refining the research aim and research questions

I had set out initially to explore how the emergent bilingual children in this classroom were learning English. However, reflections from the pilot study led me to appreciate the following points more profoundly:

a. *The importance of multimodal communication.*

Initially I had been looking at spoken and written English practices but through the pilot study I had become more aware that a great deal of meaning-making was occurring that was not confined to these specific skills. The literature (Section 2.4.4) describes the variety of modes that are used in communicating and sharing meaning but for the purpose of this study I decided to focus on action (embodiment) and gesture as these were the modes that were mentioned in the ADEC curriculum documents and that I had observed the teacher developing.

b. *The role of the teachers as participants in the classroom dialogue.*

I had seen that the two teachers were using spoken language (both Arabic and English respectively) in many different ways in the classroom including: to give directions; to elicit information; to explain concepts; to share emotions; to encourage; to comment on children's actions; and to manage behaviour. Moreover, since the children were still very young and many of them had not developed extensive vocabularies in their first language, vocabulary for both languages were being taught and it might be expected that teachers were using specific strategies to introduce new vocabulary. Consequently, I did not want to disregard the use of spoken language in meaning-making, especially in this bilingual education policy context where the ability to use spoken language was used as an indicator of competence and a measure of achievement (see Section 1.1.2). Thus, I modified the research aim from investigating the development of spoken and written English, to looking more closely at the multimodal meaning-making that was occurring in the classroom:

'To explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners.'

In order to explore this aim, I needed to reformulate the research questions. As a non-Arabic speaker, I was unable to understand the Arabic-speaking teacher which led me to focus exclusively on the spoken language of the English-speaking teacher. In the co-teaching classroom, there were occasions when the English-speaking teacher was interacting alone with the children and I felt it would be useful to explore the ways she was using English language and the kinds of language she was using in these contexts, as well as exploring other modes of communication she employed. Consequently, the two specific research questions were initially developed as:

RQ1 How is spoken language being used in meaning-making

a) **by the English-speaking teacher?**

b) **by the children?**

RQ2 How are action and gesture being used in meaning-making

a) **by the two class teachers?**

b) **by the children?**

The underlying aim of sub-questions a) was to provide an opportunity to study the pedagogical strategies employed in order to support meaning-making by the English-speaking teacher and, insofar as I was able to observe them non-verbally, by the Arabic-speaking teacher. The underlying aim of sub-questions b) was to provide an opportunity to explore the way in which the children were interacting in the classroom with the teachers, with each other and with their environment in order to support meaning-making. I was particularly interested in observing the multimodal ways in which the children responded to the initiations of the English-speaking teacher as well as the ways they themselves initiated interaction. These research questions were then reformulated again following the iterative process of analysis and literature review, as explained in Section 2.5, to be

RQ1: How is spoken language being used by teachers and children in joint meaning-making?

RQ2: How are action and gesture being used by teachers and children in joint meaning-making?

3.3.4   Note on the use of Arabic

The purpose of this case study was to explore how meaning-making was occurring in the context of the bilingual classroom but since I am not an Arabic speaker and I was unable to understand the majority interaction, which was in Arabic, the focus of my observations was on the use of English. There would certainly be scope for similar studies to be undertaken by researchers with skills in both languages (see Section 7.5).

3.4   The research context

3.4.1   The chosen classroom and research participants

The kindergarten-only school chosen for this research was built in the late 1980s in a small suburb, providing housing for middle- and low-income families, on the outskirts of a large town. It contained twelve classrooms, a library, a small auditorium and a canteen. There was a central courtyard area which had been covered to provide a space that was air conditioned for year-round use.

3.4.2   Classroom organisation and routines

Figure 3.1 Classroom showing carpet area

The selected classroom was one of twelve in the school, organised to allow the children opportunities to investigate and experiment with a variety of resources. As well as a large carpet area, capable of seating the 26 children around its edges and enclosed with a

number of low-level storage units containing baskets and trays of puzzles, games and resources, the following learning areas were provided:

- a book corner,
- a writing area,
- an area with numeracy and science equipment,
- a role play area,
- an art area,
- a sand/water tray
- an area for using playdough (a homemade modelling substance provided by the teachers made of flour, salt, oil and water) or other such malleable materials.

The carpeted area provided space for:

- large building blocks,
- construction toys,
- a train set
- 'small world' resources (sets of small animals, small transport vehicles with a road mat, small figures representing family and community helpers).

In the outside courtyard space, there were flexible learning areas which reflected those inside the classroom, and also a gardening area supplied with a water tap. A door within the classroom led to an area, shared between two classes, containing children's toilets and washbasins. The classroom was a print-rich environment with many displays on the walls including: an Arabic and an English alphabet frieze; a number line; a bilingual shape and colour chart; a weather chart and calendar and various other labels and visual aids, as well as children's work. Many of the classroom signs and labels were written in both English and Arabic and some included images.

Figure 3.2 Outside area

The four-and-a-half-hour school day started with a whole school assembly in the central area followed by activities in the classroom. In accordance with the NSM guidelines the school day was divided into teaching blocks as shown in Figure 3.3.

07.45	Whole school Assembly	Both teachers present
08.00	Opening Circle	Both teachers present
08.15	Integrated literacy/numeracy/science	Both teachers present
09.15	PE	English-speaking teacher with PE teacher
09.45	Snack time	Both teachers present
10.10	Playtime	English-speaking teacher alone
10.30	Islamic studies	Arabic-speaking teacher alone
11.00	Integrated literacy/numeracy/science	Both teachers present
12.00	Closing Circle	Both teachers present
12.15	Dismiss to buses	Both teachers present

Figure 3.3 Daily timetable

Co-teaching during the integrated literacy and numeracy blocks was organised by the class teachers following guidance from the ADEC curriculum guidelines (ADEC 2012) as shown in Figure 1.2. (see Section 1.2.2). This consisted of three parts:

1. Whole-class teaching with two teachers presenting or one presenting + one supporting or one presenting + one observing for about 15 minutes.

2. Children in groups working flexibly with the English-speaking teacher or with the Arabic-speaking teacher or independently for about 40 minutes.

3. A whole-class plenary or review session for about 5 minutes with one or both teachers.

The children in the class were divided by the teachers into four mixed-ability and mixed-gender groups to provide optimum teaching opportunities. In this classroom, the groups were distinguished by a shape and a colour: green triangles; red circles; blue rectangles and yellow squares. During the opening circle-time each morning, when children and teacher/s sat in a circle on the carpet for a whole-class session, the children selected the card on which their name was written (in Arabic and English) and placed it on a display chart, as a self-registration activity (see Figure 3.4). Teachers used this opportunity to teach language and concepts related to colour, shape and number as well as an awareness of the written word in both languages.

Figure 3.4 Circle time activity selecting names

3.4.3   The children

The 26 children in the mixed gender class all came from first language Arabic-speaking homes and were in their first year of attending school. Most of the children had a sound, albeit still developing, comprehension of the local dialect of Arabic and could express themselves at a basic level. English had been introduced as a second language for all the children since they started kindergarten six months prior to the data collection period. Pseudonyms, allocated to protect confidentiality, were chosen with the same initial for ease of reference, selected from a compilation of Arabic/Muslim names in order to

maintain cultural integrity. No children in the class had the same names as the selected pseudonyms.

The selected names are as follows:

Girls	Boys
Farida	Hafez
Maitha	Hajar
Mariam	Humaid
Mizna	Maaz
Nawal	Malak
Shakira	Masoom
Sharifa	Mudar
Sherika	Musharraf
Talia	Mustaffa
Wajida	Mutti
Walia	Rashed
Yusra	Saif
	Suhail
	Zafir

3.4.4 The teachers

The class had two full-time qualified teachers: one native Arabic-speaker who spoke some English and had a fair understanding of it, and the other a native English-speaker who had learned to speak and understand a few words of Arabic during the year and a half she had worked in the school. The Arabic-speaking teacher had trained in Syria and the English-speaking teacher had trained in New Zealand, consequently they each had different pedagogical backgrounds. They worked together to develop a shared professional space and to provide a bilingual learning environment for the emergent bilingual children. Both teachers were equally responsible for teaching the majority of the curriculum content. The English Language teaching was the responsibility of the English-speaking teacher, whereas Arabic language and Islamic studies (taught as a separate period according to the class timetable) were the responsibility of the Arabic-speaking teacher. The learning outcomes for literacy (in both languages), numeracy and science were taught through an integrated approach.

For the purpose of this research, the Arabic-speaking teacher was given the pseudonym of Ms. Sabha and the English-speaking teacher was given the pseudonym of Ms. Miranda. In order to explore the development of English skills, the majority of observation data was collected in relation to the English-speaking teacher while she worked with the whole class, with small groups of children or with individual children working independently. Despite some of the observational data relating to both teachers when they were working in a co-teaching situation together with the whole class, my linguistic limitations prevented me from making full use of the data relating to Arabic language. As a result, I acknowledge that there is an impact on my overall understanding of the social and linguistic dynamics in the classroom. In order to mitigate this to some extent, reflections from the teachers are included in the analysis (see Section 3.6).

3.4.5   Language use in the classroom

The curriculum was designed to add English to the linguistic repertoire (see Section 1.2.1) whilst continuing to value and give equal status to Classical Arabic. In order to achieve these objectives, separate learning outcomes for each language were provided, against which assessment of children's learning was measured. Inevitably some of the learning outcomes were similar, such as the ability to hold a pencil, or the ability to distinguish between a letter shape and a word. Almost all the children came from homes where the local Arabic dialect was commonly used and therefore was familiar to children in the non-school environment, whereas the expectation in school was for Classical Arabic to be used. A few children may also have had some exposure to English language before starting school as in some households English was the lingua franca, used to issue requests to domestic staff.

Children joining any kindergarten are required to become part of a new social group and to find ways of making meaning and finding a voice within this group. In this context I observed that there were added dimensions to achieving this as, on entering school, the children discovered that English was a language used for everyday functions in the classroom alongside Arabic and that there was an expectation that they would engage with English through listening and responding, first with actions and then with words. This

was specified through the ADEC curriculum guidelines (ADEC 2012:60-63) for English language, which stated that children would learn to:

- follow a simple instruction
- listen to others
- share personal information, e.g. name and age
- recount personal experiences
- respond to short, simple questions
- demonstrate common speech sounds
- say words in English

The kindergarten classroom aimed to be a place where the children could become increasingly competent language users.

3.5 Ethical issues and processes

3.5.1 Educational research

In the continued search for improvement in educational policy and practice, educational research projects are generally accepted as necessary, however the study of human behaviour also demands respect for the moral and legal aspects of human life. At the outset of a research project, the researcher has a moral obligation to articulate a sound rationale for why the research has value, and to design the research in such a way that the data produced will contribute to the development of knowledge (Burgess et al 2006). Any classroom case study research involving adults and children must consider the responsibility to treat them 'fairly, sensitively, with dignity, and within an ethic of respect' (British Educational Research Association (BERA 2011). Acknowledgment of these values involves a high degree of transparency at each stage of the research: giving participants information, gaining consent, giving freedom to withdraw and giving anonymity and protection from any sort of harm. To achieve this both national and institutional guidance must be sought and followed in order to ensure legal and moral requirements are being observed.

3.5.2   Children as research participants

When working with young children decisions need to be made as to how much the children themselves can understand about the process and how this information can be shared with them. Deleuze (1993:62) proposes that children have their own conceptualisation of the events which may be different from adults and consequently it is the responsibility of the researcher to develop a sensitivity to children's viewpoints. The world viewed through the eyes of the child in the classroom is very different from that seen either by the adult research participants or by the researcher. Gaining consent or assent from and involving children in the whole research process is recognised as desirable (Alderson and Morrow 2011); however particular cultural conceptualisations of childhood and the varied cultural views held by those adults working with children must also be respected, as discussed by Coady (2001). There may be a perception that in certain cultural groups, especially those with tribal hierarchies, greater importance is attributed to gaining consent from the leader of the family or of the tribe, than from the individual research participant. Coady refers to a situation in the field of medical research in Queensland, Australia, where specific guidelines for ethical processes have been constructed in relation to the Aboriginal and Torres Strait Island cultural groups. In that context it is advised that consent be obtained from both the individual and the community, after full consultation with the whole community. This might be seen in other cultures as gaining parental consent while seeking assent from research participants who are very young children.

Attitudes towards children in respect of children's rights in the UAE are largely concerned with care and protection. Social, cultural and religious understandings of childhood tend not to give such great value to children's voice but rather focus on their protection and care. Since 2011 a number of new laws have been passed, in particular Federal Law number 3 of 2016, known as 'Wadeema's law' (2016), giving testimony to the increased awareness of child protection issues. The children's rights to express themselves and articulate their desires and wishes are expressed in article 12 of this law, which states that 'The child shall have the right to express his/her opinion freely according to his/her age and maturity, commensurate with the public order and morals and with the laws in

force at the State'. The wording of the law indicates the expectation of adherence to local cultural expectations and religious laws. Alahmad et al (2015) discuss informed consent and children's participation in research undertaken in the field of medicine in the Middle East. Although the context of clinical research differs from the context of education the principles regarding informed consent for children have some similarities. Their findings indicate that parents generally feel that both mother and father should give consent for the child, and where there is no consensus the father should decide. When asked if assent should be obtained from children, most parents agreed this should be done whenever possible, but when asked what age children should be asked for assent no parents gave an age limit lower than seven-years-old.

Current views on carrying out research which includes young children, indicate that adults who have a responsibility for guardianship of children are usually expected to give consent on behalf of the child, while the assent of the child is also sought through appropriate means when the child is below an age when it is considered that they can give consent (Alderson and Morrow 2011). One such means is the Mosaic approach, originally developed by Clark and Moss (2001), whereby young children can use a variety of communicative modes to express their meanings. Such an approach respects the rights of the child to use any media to express themselves (UNICEF 1990), as described in Section 2.1. In the UAE context, educational research involving young children is still in its infancy and researchers need to develop an appropriate approach which respects local cultural values. Coady (2001) raises the further issue that parents may give consent but then are not present when the research is being undertaken and therefore are unable to exercise their right to withdraw. In such situations the researcher and other adults, such as teachers who know the children well, must be vigilant in assessing children's behaviours for indications of withdrawal of assent, an example of which is given in Section 3.5.3.

3.5.3   Ethical processes

Following the British Educational Research Association (BERA) Ethical Guidelines for Educational Research (British Educational Research Association 2011) and the Open University Code of Practice for Research, Ethics Principles for Research Involving Human

Participants (The Open University 2006), ethical approval was sought from the Open University and granted, after slight modification of original documentation, in August 2012. Following Phase 1 of the pilot study, the ethics documentation was revised to include video-recording in the data collection process, and this was approved in late December 2012 (Copy of document shown in Appendix C).

Since my workplace was the site of this research, my first action had to be to gain consent from my employer, ADEC. The process was not straightforward, but permission was granted in June 2012 (Copy of document shown in Appendix D). As a matter of courtesy, I met with the school principal once permission had been granted and sought her unwritten consent to spend time in the classroom in order to collect the required data. She readily agreed and indicated her interest in the project by initiating discussion about the selection of an appropriate class. I prepared a research project fact sheet (Copy of document shown in Appendix E) and letters for the parents of the children (Copy of document shown in Appendix F) and for the teachers (Copy of document shown in Appendix G). All participants were informed of their right to withdraw at any time and to extract any data they had provided. In order that clarity of purpose was maintained in this bilingual context, all documentation was translated into Arabic by a former, bilingual colleague who worked as a translator and was checked by a bilingual school colleague to verify that the translations were accurate.

In consideration of the linguistic context and my inability to hear the children's voice without an interpreter (see Section 3.6.3) as well as the local conceptualisation of childhood, I decided I would have to limit the collaborative role of the children in this research. My resulting position became one of respecting the responsibility of the adults who were performing the role of 'guardians of thresholds' (Deleuze 1993:62) for the child participants by seeking their collaboration and consent, while seeking informal assent from the children. I did this when I introduced the video camera into the classroom (see Section 3.7.2) showing the children what I was doing in an effort to give them some ownership of the project. I took short video clips and played them back, allowing them to see themselves while explaining, with the help of the Arabic-speaking teacher, that I was making recordings so that I could see how they were learning. I also explained that I

would not film them if they did not want me to. In order to respect children's wishes not to be recorded, I planned to maintain sensitivity to moods and to move to a different group of children in the event that any child indicated they did not wish to be recorded on the day. An example of this arose when a child showed, through modified behaviour, an unwillingness to be involved and the teacher, acting as gatekeeper, was able to clarify this for me when we were reviewing the video. As we looked closely, we saw that the child looked directly at the video camera at one point and Ms. Miranda commented, 'So she knows. And that's probably why she wouldn't have attempted something because she knows people are watching'. I concluded that my presence with the video camera was causing her to modify her behaviour and as a result I decided not to use this particular recording as I felt the child was indicating withdrawal of assent. No formal requests for withdrawal were received from either parents or the teachers.

The two class teachers gave consent and showed an interest in being involved in this research, asking questions for further clarification. The Arabic-speaking teacher suggested that information regarding the research project be shared with parents during the termly school information meeting. In this session, I displayed the fact sheet on the screen and, with the help of one of the administrative staff, explained the research project and invited questions. No questions were asked, and the only comment made was to confirm that teaching would carry on as usual. Since a number of parents had not attended the meeting, I decided to use the established means of communication in the school of text messaging, in which I informed parents that a letter and form would be sent home with their child, explaining a research project and giving my contact details for further information. In the event, no-one made contact and all parents returned the form indicating that they were happy for their child to be involved, making it unnecessary to follow any further procedures.

3.5.4   Data protection

Using video to collect qualitative data for analysis poses further ethical considerations with relation to ownership, storage, sharing and archiving of the data, as highlighted by Morgan (2007). The use of images as supporting evidence may be integral to research findings, and ways to protect the anonymity of participants must be found. A number of

techniques are available using computer software, such as blanking faces or pixelating images. Wiles et al (2012) propose that the anonymisation should take place at the point of data collection by avoiding capturing distinguishing personal information, arguing that distortion of personal features might infringe upon the rights of the individual owner of those features.

To ensure data security, guided by BERA, the following points were decided:

- No detailed personal information such as real names or contact details would be stored by me and all participants would be anonymised by using culturally and gender appropriate pseudonyms.
- Video- and audio-recordings would be kept on a password-protected laptop and a password-protected hard-drive.
- Documents pertaining to the research would be anonymised and kept in a locked cupboard, if in a public space.
- Any images of research participants to be used in the thesis publication would be anonymised by distorting faces.

At the end of the study, I plan to keep the fully anonymised data for a minimum of five years following publication, all video and still images will be stored according to the project agreement, either on a password-protected computer or a password-protected hard-drive. Although not current at the time this research was undertaken, more recent legislation which came into effect on 25/05/2018, relating to General Data Protection Regulation (GDPR) describes conditions concerning storage of personal data. The guidance advises that data for research may be kept for longer periods but should be periodically reviewed and erased or anonymised when no longer needed. It also confirms the rights of those to whom the data relates, to challenge and request erasure should the data no longer be needed (Information Commissioners Office ICO. 2020).

3.6 Reflexivity of the practitioner researcher

Unlike positivist enquiry, the terms *validity* and *reliability* are rarely applicable to research in the interpretive paradigm, although consideration must be given to how rigour might

be achieved as described by Creswell and Miller (2000). Lack of attendance to this aspect could pose the threat that the researcher unwittingly influences the outcomes at all levels from the process of data collection to transcription, analysis and interpretation of results. Lincoln and Guba (1985) suggest that *trustworthiness* in qualitative research is a concept that must be built in, proposing the terminology *credibility*, *dependability*, *confirmability* and *transferability* as an alternative to the more positivist terminology of *internal validity*, *external validity*, *reliability* and *objectivity*. Cohen et al (2007:149) propose that 'fidelity to real life, context-and situation-specificity, authenticity, comprehensiveness, detail, honesty, depth of response and meaningfulness to the respondents' all provide ways of attempting to ensure rigour in qualitative research. The insider-researcher (Hellawell 2006) is inclined to take for granted that their view of certain practices of the organisation are normal when in fact they must be accepted as only one view of many, as discussed by Atkins and Wallace (2012). Aspects of power enter into many relationships in an organisation and can impact the way data is collected, viewed and analysed. In 3.6.1, I discuss how I attended to aspects of power and authenticity as I negotiated relationships within the research context and worked towards attaining credibility and meaningfulness to the research participants. In 3.6.2, I explain how I achieved credibility at the design stage, and in 3.6.3, I explain how I achieved credibility in data collection and interpretation.

3.6.1   Power, positionality and authenticity

Research undertaken as part of a professional doctorate frequently takes place inside the professional's own workplace meaning that the researcher is invariably known by another role and is required to assume the role of insider-researcher. Such a role has both advantages and disadvantages from the perspective of the individual and those involved in the research as described by Unluer (2012). An insider-researcher is confronted with ethical dilemmas relating to confidentiality when acting both as a researcher who has a responsibility to protect the individual research participants and as a practitioner who has a contractual responsibility to contribute to the sound functioning and development of the organisation. The primary obligation has to be to the research participants and not to the research project, and by developing and maintaining sound relationships an attitude

of sharing can be established in which the issues of power between researcher and research participants can be mitigated (Flewitt 2005b).

Power dynamics are also evident in research contexts due to different cultural contexts in which research is undertaken. Differences which may be encountered in an unfamiliar landscape are not limited to geographic boundaries but may include differences found in diverse ethnic communities or variations in socio-economic conditions and these may also result in power differentials. The hierarchical structure within any organisation may influence choices made by research participants, who may unwittingly align themselves with the perceived figures of authority. Hoyle (1999) describes how hierarchical structures of authority can permeate education systems impacting behaviours of those working within the system and distributing power in unequal ways. Established 'regimes of truth' as defined by Foucault (1980), which are evident in the discourses of organisations or societies, may be difficult to act against, especially for members of an organisation who are less empowered.

Fundamental questions may arise relating to the understanding of the role played by research in education. In western cultures, the aim of education research is largely understood to be for the improvement of the profession and is 'valuable above all for its potential to change lives for the better, both those of teachers and of learners, and of the community at large' (Atkins and Wallace 2012:28). As the Cambridge Primary Review reports (The Cambridge Primary Review Trust 2013:7), 'research-grounded teaching repertoires and principles' are fundamental to teachers' professionalism and empowerment, allowing teachers to seek and find solutions to particular problems arising in the classroom and enabling them to teach and lead more strategically and effectively. Rolfe and MacNaughton (2001) demonstrate how research findings have the potential to positively impact the lives of children when they are used to amend policy and practice at local and national levels. Improvement, however, may not be accorded equal value in all cultures, although it is understood from the ADEC local policy that, in the political context of this research, improvement to the point of attaining a 'world-class education system' (ADEC 2013c) was valued.

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Aspects of power inequality were ever present both for me, as I attempted to undertake the research in a context where I was a culturally unequal team member, resident in the country under the terms of an employment visa, and for the adult research participants who perceived me as a figure of greater authority in the organisation. Power differences could also be observed between the adults and the children who participated in the research and, although less easy to identify, there were indications that the societal norms of the context in which the research was undertaken upheld gender and tribal power hierarchies, which influenced relationships between families.

The organisation of the local education system and of the school reflected structures manifest in the cultural understanding of governance, which supported hierarchical structures of authority, such as described by Hoyle 1999:45. As a member of the senior leadership team and a researcher I struggled to balance two conflicting 'regimes of truth' (Foucault 1980): that of the staff member representing a figure of authority within a large authoritarian system, with a responsibility to ensure that pedagogical practices met children's learning needs; and that of an academic researcher with my own perspective as a seeker of knowledge hoping to find the 'truth' of pedagogical practices that were actually being used in this context. The discourse of the organisation and the school embodied a certain truth about education and the child which was bound by cultural understanding and being an employed member of the school, I had little power to influence any change. As a researcher, my position was not bound in the same way by the institutional discourse allowing me an opportunity to consider different ways of 'doing', as described by MacNaughton (2005:62), in relation to practitioner research. However, I had to admit that all knowledge was culturally prejudiced, and inequalities of power would always be present.

The relationship between the Arabic-speaking and the English-speaking teacher was also subject to power differentials. As well as linguistic power hierarchies described above, there were cultural differences relating to professional understanding of early years practices. Each teacher had their own understanding of appropriate classroom pedagogies which were not always the same and this was evident in the different behaviours seen in the classroom. Although professional attitudes ensured teachers

worked together to provide appropriate opportunities for the children, there were times when changes to practices occurred unexpectedly, such as that described in Section 3.7.1. On this occasion the Arabic-speaking class teachers throughout the school decided it would be preferable to teach the daily literacy session separately due to a perceived need to focus more discretely on teaching Arabic language skills. Since this was done without consulting the English-speaking teachers, there appeared to be some aspects of power hierarchy in operation, resulting in the English-speaking teachers feeling obliged to teach in a situation in which they felt less comfortable. Such issues in co-teaching, relating to aspects of the curriculum were highlighted in the literature (Dillon et al 2015) as discussed in Section 2.2.7.

There were both *insider* and *outsider* aspects to my role as researcher as described by Gregory and Ruby (2011). As a member of the school senior leadership team, I was in some respects an insider. In other respects, I could well be defined an 'outsider' since the local culture was not my own and I do not speak or understand Arabic to any great extent. Many of the dilemmas I encountered related to my advisory role with a responsibility for implementing the changes expected of the NSM (Job description shown in Appendix A). At each stage of the research process my own beliefs and values were apt to influence decisions I made, thus developing researcher reflexivity became a key aspect to establishing rigour and attempting to limit the impact I had on the research study. The use of a reflective journal, described by Bell (2005), allowed me to write about events that challenged me which were often related to relationships and underlying personal philosophies. I was able to consider various aspects of the research process and consider my own influence within the research. As Kennedy-Lewis (2012:107) notes, when describing the role of teachers as participant-observers, a reflective journal of experience in the field can help to 'explore intersections between research and practice'. For example, following an early pilot recording, not included in the final data corpus, I noted in my journal 'Children quite fidgety and Ms. Miranda not as relaxed as usual' indicating that they were behaving atypically. I inferred that this might be due to both the teachers and children being unsettled by my presence in the classroom with the video camera, as well as by my lack of expertise in recording. Later, when the recording was being reviewed by the teacher, she was able to add her perspective to this episode which

illuminated for me the impact the process was having on her own behaviour, and also the differences in power that she felt despite my attempts to mitigate these, as shown in Figure 3.5.

Teacher	Yeah. I don't think this was a good story or a good lesson.
Researcher	I guess you were stressed by me being there as well.
Teacher	Yeah, I thought 'I've got to keep them engaged'.
Researcher	I guess you could have just…done some counting?
Teacher	Yeah or just made the story shorter. You don't have to read every page. We chose this story because we were trying to send them [the books] home, but they're not the best stories.

Figure 3.5 Excerpt of teacher reflection of a video recording

As I reflected on her comments, I concluded that my *official* role in the school as a senior leader was probably adding to the teacher's discomfort when the lesson she had planned did not go as well as she had expected. I did not discuss this with her further, but I surmised that she would have behaved differently had I not been in the room. She had also commented on the resources that were expected to be used and again this caused me some discomfort in my professional role, which I had to keep separate from my researcher role. In this instance, I could see that my presence was impacting on the events in the classroom but also that I was inclined to respond to the classroom events in my professional role. Using the diary in this way allowed me to understand the effect I was having on the data being collected.

3.6.2   Credibility in design

In this study, credibility was achieved at the design stage of the research through involving class teachers in discussion relating to purpose and planning for recording in the classroom thus establishing the idea of a shared authority over the knowledge produced in the study. Having explained that the intention of the observation was to explore how they themselves and the children were meaning-making in the bilingual classroom environment, we engaged in a professional discussion relating to classroom practices and

outcomes for children in our shared context. This discussion allowed the teachers an opportunity to develop a better understanding of the research and to become more active collaborators in the research process. Finally, we agreed on appropriate times in the school day for observations to take place in relation to set classroom routines (see Section 3.7.1).

The highly selective nature of classroom video recording, where the camera only focusses on a part of the whole activity both spatially and temporally, is acknowledged as creating the potential for researcher partiality as choices are made moment by moment. Robson (2011) suggests that video-recordings should be considered as co-constructed by all participants in the event, since they are a product of the sociocultural environment. DuFon (2002:40) proposes that when undertaking research in multicultural contexts, greater opportunity to collect 'valid video data' might be achieved if research participants with different cultural perspectives were permitted to operate the video camera, thus revealing different viewpoints. Although I felt DuFon's idea would be interesting to implement, the practical aspects of this research meant that I made all the recordings myself and relied on participant contributions when viewing the recordings as described in Section 3.6.3.

Certainly, I found that there was a continued, subtle reaction to my presence from both teachers and children in the classroom as I caused a disruption to the normal flow of events. Being reasonably familiar with classroom practices through my professional role, I was sensitive to the teachers' general conduct and practice, and knew that the accepted practice, when children were not responding well to an activity, was to quickly switch to something different. However, I found that when I was in the classroom as a researcher, teachers were more reluctant to change the planned activity. This inevitably impacted on children's behaviour as they became more restless and less engaged. In an effort to mitigate this, I planned multiple opportunities for video-recording in order to create a period of *prolonged engagement*, as proposed by Lundy (2008), another device to achieve credibility and to limit the potential impact of the researcher during data collection. As the researcher becomes a more familiar presence in the classroom greater trust between researcher and research participants is developed, making it possible to minimise the

impact over time. As an insider-researcher I attempted to place myself closer to the position of a non-participant observer on the continuum described by Gold (1958), whilst remaining aware that I was inescapably a participant in the classroom meaning-making environment. The *observer's paradox* described by Labov (1972) was exemplified as I was myself being drawn into the context, despite making a conscious effort to remain separate from teachers or children whilst I was using the video camera. While moving around the room recording the events, I was at times approached by the teacher asking questions or initiating brief conversations, or engaged by children to join in their play or show me artwork they had created, as I responded verbally to them my voice was also being captured as I became a part of the meaning-making processes. Conversely, since these exchanges were minimal and manifested as part of the ongoing classroom interactions, they may in fact have helped to minimise the observer's paradox as they resulted from my prolonged engagement. Taking a reflexive position, I considered what, if any, modifications could be made to lessen the impact of my presence on the classroom environment. However, as the recordings were being made during a fairly short, pre-arranged time period, there was not any great opportunity to modify the process beyond continuing to be sensitive to the impact made by my presence and to omit any recordings with which the participants felt uncomfortable.

3.6.3   Credibility in data collection and interpretation

In order to include perspectives other than my own in the interpretation, I planned to incorporate participant reflection, also called *respondent validation* by Flewitt (2005b:9) or *member checking* by Lincoln and Guba (1985), into the data collection process. Houghton et al (2013) describe how credibility can be strengthened through this process which is also described by Hammersley (2008) as a type of *triangulation*. This did not involve the teachers in validating my own interpretations of events but permitted the voice of the teachers to be added to the descriptive aspect of the data which then impacted on my interpretation. This corresponds with Maxwell's proposal that 'sees the validity of an account as inherent, not in the procedures used to produce and validate it, but in its relationship to those things that it is intended to be an account of' (Maxwell 1992:281). Thus, participant reflection supports the researcher in understanding the

culture of the group being observed and allows for the development of a shared frame of reference, a subject also highlighted by Gregory and Ruby (2011) when discussing the challenges of making emic interpretations (see Section 3.2.4) relating to the lives of research participants whose cultural backgrounds are at variance with that of the researchers. Toma (2010) advocates the benefits of developing a more subjective relationship with participants without compromising the rigour of the work. He proposes that cooperative relationships where 'researchers and subjects collaborate to determine meaning, generate findings, and reach conclusions' support the development of rich data (Toma 2010:177), which was the aim I had. Lincoln and Guba (1985) suggest that such member checking can be incorporated into the analysis stage of the research (see Section 3.8.2).

Flewitt discusses her experiences when seeking feedback from children as participant-collaborators in research involving video recording. She describes how time-consuming the process can be with children, since their recall is not always consistent and recording their responses also becomes problematic. One solution she proposes is to video-record the children as they watch the original recordings, in order to capture responses. In the context of this research, I decided to limit participant reflection to the teachers. I acknowledge that, as Flewitt says, listening to participants can reveal a 'multiplicity of realities and meanings attributed to any single act by different participants' (Flewitt 2005b:9). However, as she also acknowledges, including children in this process is not straightforward. In my context, as a non-Arabic speaker, I was unable to communicate adequately enough with the children to collect even simple responses from them without the involvement of a translator. Alderson and Morrow (2011:90) comment that, using an interpreter may 'block rather than aid' the process unless the person involved fully appreciates the aims and ethics of the research. The ideal person would become a member of the research team and would have an understanding of the age and culture of the children as well as reflective skills in listening and respect for participants. Without this option, I felt that involving a third person in the process would not be appropriate, since it would potentially add another person's interpretation to the research findings.

3.7   Data collection

This section provides details of when and how the data was collected from the selected sources: video-recording of teacher and children interactions in the classroom, teacher reflection on the recorded events. The video-recordings of the children and teachers were all made in the environment of the classroom and outdoor courtyard area. The participant reflections were recorded in various other locations in the school where privacy could be found and where a desktop computer was available to play-back the video-recording. These were the training room, the staff room and the administration office area. In Section 3.7.1 I give details of the timing of the data collection; in Section 3.7.2 I explain the video recording processes; in Section 3.7.3 I give details of the participant reflection and in Section 3.7.4 I explain how information from documentation was used.

3.7.1   Timing of data collection

In this case study, the school year presented a basic structure that would impact on opportunities for data collection. The following factors indicated that the best time to undertake video-recording was during the second trimester between January and April:

- the children were starting school for the first time in September and needed a few months to settle into their new environment
- the teachers were a new co-teaching pair and would benefit from a period of time to develop a working relationship
- the weather becomes very hot after April (above 40 degrees C) having a negative impact on the classroom environment
- end of year assessments and other seasonal activities occur in May and June resulting in heavier workloads for all school staff.

Participant reflection was collected after the video-recordings had been made, but within the same academic year.

Early in the research project, I met both the class teachers with the aim of developing a shared understanding and to mitigate the intrinsic power differentials attached to our roles. Discussion included ethical considerations and timetabling, resulting in agreement

to make recordings during the 60-minute, literacy/numeracy/science periods of the timetable (Figure 3.3) when both teachers were in the classroom, working with the children. At the time of this discussion, both teachers were leading the integrated session together however, when the recordings started, changes had occurred resulting in the English-speaking teacher leading on her own during this session while the Arabic-speaking teacher was in the classroom, busy with more organisational and administrative tasks. Towards the end of the data collection period this had changed again, and the last video-recording was made when both teachers were again leading the session. Such changes in organisation of the class day were not uncommon, although not always discussed with all involved staff (see Section 3.6.1), and resulted from schools being encouraged to trial different ways of working during this period of changing pedagogy and curriculum, in order to develop improved practice.

Video-recording was planned to occur daily during a two-week period in February 2014 with a second period in March. This was unachievable due to sick leave of teachers and other work pressures on my own time. Ultimately eleven days of recording were achieved during February, April and early May resulting in three hours and forty minutes of recordings. Since this case study was not looking at the development and growth aspect of language skills but at a snapshot of the classroom language and meaning-making practices, a longitudinal period of data collection was not deemed necessary, although this might be an interesting topic for future study. In practice, an unplanned benefit of the slightly extended period of data collection was the opportunity to note any developments that did occur over that three-month period, providing a glimpse into what might be revealed by a longitudinal study.

3.7.2   Video-recording

The experience of the pilot study (Section 3.3) resulted in a decision to use a video recorder which I decided to hold rather than keep it in a fixed position, firstly due to the young age of the children and the difficulty in explaining to them not to touch, and secondly because I felt I would have greater opportunity to gather material relating to the research questions by being able to direct the recording to events where the English-speaking teacher and children were in dialogue. This was pertinent since the teacher

herself was not in a fixed place in the classroom and the children, who were accessing the independent-learning activities, were also moving around the room. I would also be able to move should participants indicate withdrawal of assent. Initially, I trialled the use of the equipment in order to familiarise myself with it and also to show the children what I was doing (Section 3.5.2). Since the school day was structured to offer the children opportunities for *whole-class learning*, *small-group learning* or *independent learning* as described in 3.4.2, there was an opportunity to record meaning-making in a variety of different situations. These included:

- the whole class sitting on the carpet with one or both of the teachers,
- a group of children working with the English-speaking teacher at a table or in another area,
- the English-speaking teacher interacting with one child.

During the whole-class teaching sessions the children sat on three sides of a large rectangular carpet, facing the front of the room where the teachers sat with a large, pull-down interactive whiteboard screen behind them. There were also a variety of classroom signs and pictures on the wall at the front of the room.

Figure 3.6 Whole-class session with two teachers

Following the whole-class teaching, the children moved off the carpet area to a variety of different activities. Generally, they were divided into their four, mixed-ability groups and each group was allocated an activity, either small-group led by a teacher, or independent learning activities planned for and set up by teachers, such as playdough, role play, investigation or construction. The independent learning opportunities differed from the

other two contexts in that they allowed the children to initiate and direct their own learning, albeit within an adult-designed environment, as opposed to being directed by the teachers. As discussed previously, the teacher's role in the independent learning context was that of a guide (Rogoff 1990, see Section 2.3.1), coming alongside and supporting the learning. During this time, I focussed recording on the activity led by the English-speaking teacher as well as activities where children were involved in independent learning. Recording length varied due to the circumstances of the lesson. The teachers spent varied lengths of time in whole-class teaching, between nine and twenty-five minutes, this meant that the other activities in the session also varied in length. Since I was moving around the room recording some independent learning activities and some small-group activities in the same session, these also varied in length. My endeavour was always to be as unobtrusive as possible, maintain ethical integrity and to capture as near as possible authentic behaviours.

3.7.3   Participant reflection on the recorded events

The second source of data, participant reflection as discussed in Section 3.6.3, was collected through audio-recordings of the conversations and comments made by the teachers when we reviewed each of the video-recordings together. Once I had completed writing all the narratives and noting any questions and reflections, I reviewed the videos together with one or both of the teachers, depending on who featured in the recording. As we watched the recordings, I was able to pause the video, rewind and replay in order to allow the teachers to reflect on events about which I felt I needed more information or on which they wanted to comment. During these sessions, I used a digital voice recorder to capture our conversations which I then later transcribed. With the addition of this commentary, I developed a richer picture of the events allowing greater opportunity for the authentic voice of the participants to emerge. For example, when looking at the video recording of the small-group activity making instruments, we discussed the way the children were making and sharing meanings. Ms. Miranda was able to review herself using gesture alongside language and her comments contributed to my understanding of the meaning-making modes being used in the classroom.

CSN   You did that a lot (gesture and signs). This girl Farida had the green triangle name card and then she got a green triangle shape. I think she wanted to show you it was the same, but she didn't use the word 'same' did she?

EST   No. She is only speaking to me in Arabic she said 'Maaz la'. But now she will say 'Maaz sad face'. Or 'this one no'. There has been growth from February to June.

CSN   There you said 'listen' and she knew that she had to shake the shaker to make a sound.

EST   But did I do that [makes shaking gesture]? I think I shook my hand as well.

CSN   I thought they must know 'listen'.

EST   Mmmm any of those mat time things like 'sit down' 'listen'.

CSN   So most of the communication and meaning-making in that episode is ….

EST   …Body language and gesture.

All these reflections and other such comments in my dialogues with the teachers were most useful in that they helped me to fine-tune my understanding of the events that could be observed on the video, making it possible to gain better insight into the data.

3.7.4   Documents

The documents used in this research provided a foundational source of evidence since I reviewed policy and curriculum documents whilst formulating the research aim and considered the policy context of the school and the classroom (Section 1.2.2). Curriculum documents were examined to gain an understanding of the expectation for teaching English and of the co-teaching model. For example, I discovered that the learning outcomes for communication in the curriculum documents (ADEC 2012) showed nineteen statements referring to verbal skills, and two statements referring to non-verbal skills (learning outcomes for communication: Appendix H). Following collection of classroom video observations, teachers' planning documents were scrutinised to gain a deeper understanding of how the teachers were introducing new learning and how the English-speaking teacher was planning to teach English (described in 4.3.1). However, planning documents were not used to systematically explore relationships to classroom practices.

3.8   Data analysis

The processes followed in analysing the data were primarily inductive as possible answers to the research questions were generated through the analysis (Burgess et al 2006:47) although an organising framework was developed to categorise the types of language used by the English-speaking teacher. The inductive processes provided a 'systematic procedure for analysing qualitative data' guided by the research aim (Thomas 2006:238). The task of preparing raw data in order to bring it into clearer focus for analysis requires a long, systematic process of iterative review which is started long before the documentation stage. Yin (2014:130-136) suggests four strategies which may be employed for analysing a case study, which are: building on a theoretical proposition; developing a descriptive framework; combining qualitative and quantitative data to include statistical analysis; and the examination of opposing explanations. By using these strategies, a framework for sequential analysis of raw data can be developed. Wolcott (1994: Ch2) approaches the analysis of qualitative case study research in a similar way describing three different types of analysis which may be undertaken with raw data: descriptive, analytic and interpretative. He does not claim that these types of analysis are mutually exclusive, suggesting, like Yin, that researchers can use them to build a framework to 'organise and present the data' in order to create an 'authoritative written account' (Wolcott 1994:11). As the aim of this case study was to describe what was seen to be happening in the classroom, I decided to employ the second of Yin's four strategies, namely that of developing a descriptive framework. Regardless of chosen strategies, the initial organisation of the data corpus, referred to by LeCompte (2000:148) as 'tidying-up', needs to be completed in such a way as to construct a clear picture ready for analysis. This organising stage is recognised by Derry (2007) who outlines the importance of indexing video data and creating a system for cross-referencing of field notes in order that events or phenomena can be easily retrieved. I planned the strategy in stages as described below: creating narrative accounts (Section 3.8.1); transcribing participant reflections (Section 3.8.2); organising the data corpus (Section 3.8.3); creating video transcripts (Section 3.8.4); coding and classifying data (Section 3.8.3); designing a representational framework to convey the data (Section 3.8.6) and entering data into the framework (Section 3.8.7).

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Transcription principles are explained in Section 3.8.8. A table showing the sequence of data handling events is shown in Appendix Z.

3.8.1   Creating narrative accounts

The initial stage involved writing up every classroom video-recording into what I have named a *narrative account* as described by Derry (2007:28). These narratives were similar in format to field notes which are produced when undertaking observations, but rather than watching the live action and making notes I watched the videos again and wrote what I observed happening through the lens. Figure 3.7 shows an excerpt of a narrative from the independent learning video Messy Dough. The full narrative from the Messy Dough video is shown in Appendix I.

Mustaffa has been playing with mosaics, he fetches Ms. Miranda to see his work. He speaks Arabic '*Abla Ta'ali choo fi' [Teacher come here. Look*.'] She comes over. He points to the table where he has built some structures and smiles. She says 'what's Mustaffa made?' She squats at his level and points to his work, smiling. 'You've got all the orange squares.' He squats too and looks at her smiling he makes a very brief gesture for sleeping. She says, 'for sleeping?' and makes gesture too. He nods. She says, 'A bed for sleeping'. Then he points to the towers he has made and moves away from the table squatting on the floor making a quacking noise. Ms. Miranda says, 'a duck?' and makes beak movement with fingers. She looks at the mat on the table. 'Ah I can see underneath' pointing to where the picture of the duck is covered by the mosaic shapes.

Figure 3.7 Excerpt of narrative from Messy Dough

The process of working on the videos like this was as important as the resulting product because it offered an opportunity to view, review and reflect on what had been captured on camera, as well as to engage reflexively with the process of recording and to acknowledge where this process might have been impacting the data. My reflective journal notes (see Section 3.6.1) also formed part of this iterative analysis process, aiding deeper exploration into the data. After one session I had written, 'I found it very hard not

to intervene as a practitioner' indicating the difficulties of being a practitioner-researcher. On another occasion I wrote, 'recording was a challenge today as there was so much activity that it was difficult to know where to focus' (Appendix J shows a page from the reflective journal). Reading through these notes when I was compiling the data tables helped me to see that I had certain preconceived ideas of what might be appropriate to record and that my own values were actually impacting on what I was recording. It seemed that I felt under pressure to capture the *best* events, but I was able to reflect that it was not my place to exercise judgement or decide what *the best* might be. This led me to adjust the way I approached the recording in order to try to have a more relaxed style, to let the camera roll, and then to spend time reviewing the recordings to study their content without prejudging their subject matter. A further objective of producing the narratives was to focus my attention on anything that warranted further scrutiny in relation to the research questions or required me to seek clarification from the teachers, while also continuing the process of identifying emerging themes or recurring patterns.

3.8.2 Transcribing participant reflection

The audio-recordings of teacher reflection were also transcribed at this time using a simple play-script format (see Figure 3.8). A complete transcript of this teacher reflection recording is shown in Appendix K.

Researcher	Do you think the boy squats down because you do?
Ms. Miranda	At first, I thought he was copying me too but is he trying to show me, or he just thought that that's what I was doing?
Researcher	I don't know. You think it's a bed?
Ms. Miranda	Yeah, but then I squatted down and straight away he did too eh?
Researcher	Do you think he was communicating by doing the same thing that you did?
Ms. Miranda	Yeah (*commenting on a child saying* **Taali**) He just told me come.
We look at the squatting episode again.	
Ms. Miranda	He didn't squat down straight away. He went and put his hands down.
Researcher	Was it a duck? (*Referring to the mosaic*).
Ms. Miranda	I think it was a picture of a duck underneath.
Researcher	So, he's doing the action?
Ms. Miranda	Yes, he means look I've made the animal.

Figure 3.8 Excerpt of teacher reflection of Messy Dough, playscript format

This process added another opportunity for me to reflect on the contribution of the research participants as I listened again to the recordings and considered the meaning they attributed to the events and behaviours they were seeing on the video recordings.

3.8.3 Organising the data corpus

Having gathered a large corpus of data, the second stage was to organise it to be easily retrievable and to facilitate cross-references between different data sets. Initially, I labelled and saved each video-recording according to a date-indexing system, relating to the day of the recording. As the narratives, participant reflections and transcripts were created I used the same system, to facilitate cross-referencing. Later in the analysis process, as themes were refined, I reorganised the data sets and created additional layers of identification, a process which I now describe. As I reviewed the material, in preparation for creating narratives I reflected on the wealth of information that it contained and sensed how easy it would be to become overwhelmed by the task. At this stage, there was a great deal of raw material to work with which included:

- 28 separate video-recordings ranging in length from under one minute to over fifteen minutes
- 28 narrative accounts of the video-recordings
- 15 audio-recordings of teacher reflection of the videos (some recordings containing commentary on more than one video)
- 28 transcripts of teacher reflection on the 28 videos
- 2 researcher reflective journal notebooks

Added to these I had electronic copies of policy and planning documents for reference.

As I became more familiar with the content of the videos and supplemented this knowledge with the comments made by the teachers, I was able to identify some broad trends, across the data sets, relating to how speech and gesture were being used in the classroom. Continuing to work reflexively to avoid selecting episodes that might confirm any preconceived expectations, I made the decision to put aside some of the data that had been gathered in order to have a manageable data corpus, ensuring that I included a

selection of material from each of the three contexts. Large amounts of data often mean that it is 'generally not feasible nor necessary to analyse all the video of a lesson in detail' (Bezemer and Jewitt 2010). The remaining episodes were re-named according to their content and sorted according to the type of classroom activity they contained to provide evidence across the three event types I wished to explore. The final selection of ten episodes are listed in Figure 3.9 and outlined in Section 4.2.

Whole-Class Events:	
WC1	What's in the bag?
WC2	Can you hear?
WC3	Slippery Fish
Small-Group events:	
SG1	Making instruments
SG2	Sponge-printing 1
SG3	Sponge-printing 2
SG4	Looking at Plants
Independent Learning Events:	
IL1	Big Basin
IL2	Mariam playing cards
IL3	Messy-dough

Figure 3.9 List of ten selected episodes

3.8.4 Creating video transcripts

The final step in this second stage was to create more detailed transcripts of these ten video-recordings which I had decided to use, in order to reveal the naturalistic discourse that was occurring in the classroom through the chosen modal communication. Traditionally, transcribing research data has focussed on recording speech as written text with varying amounts of supplementary information relating to social context or other modes such as intonation, facial expression, gesture or vocalisations. Attention has focussed on the layout of the material with the most common presentations of dialogue being linear, such as in a play script arrangement, or in a table with columns and rows. Either choice may imply that certain features have greater importance than others. In a

column-based format the speaker recorded in the leftmost column is often seen to have greater importance (Edwards 2008) whereas in a vertical format the power relations in terms of frequency or amount of talk are obscured. The transcription of children's language may require different formats since children's speech generally lacks the organisational conventions established by competent adult speakers. When transcribing interactions between adult and child, Ochs (1979) suggests that the speech of the child should be presented in the leftmost column since these interactions tend to be child dominant. Cultural bias in the spatial organisation of written language will also have an impact on the analysis, as well as decisions relating to translation and to transliteration when working with languages where transcription conventions are at variance, such as Chinese or Arabic and English.

More recently, growing awareness of the multimodal aspects of communication have caused researchers to reconsider what is being documented and to reflect on how this is being done in order to convey what is needed in relation to the research aim. Norris (2006) warns against according greater value to spoken language as a mode of communication, proposing a framework of three theoretical notions: mediated action, modal density, and the notion of a foreground-background continuum, which offers the opportunity to study the role of spoken language in relation to other modes of communication. Scollon (2001) proposes that action might be prioritized over speech in 'mediated discourse analysis' which first looks at the action and then considers the speech that accompanies it.

There are particular challenges when engaging in the process of converting the visual images in video data into a written account as 'sounds produced orally, or the motion of gesture created actionally through space and time, must somehow be suggested as marks on the fixity of the page' (Mavers 2012:3). The conceptual process of representing one mode of communication by another, for example actions by written words or still images, can be challenging when the requirement is to maintain meaning across modes. The sociocultural process of meaning-making is framed by the social environment, therefore some loss of fidelity seems inevitable, as the semiotic resource changes when the action *in vivo* is converted to textual representation. Unlike discourse analysis which has a fine-

tuned symbolic system to transcribe speech known as Jefferson's conventions (see Maynard 2014) no such standardised conventions yet exist for transcribing other modes of communication. The measurement of units of transcription is also problematic when considering multimodal transcription. In discourse analysis the turns of speech generally guide the transcription but when context and other modes are considered the temporal aspect becomes more challenging to define in written representation.

Researchers in the field of multimodality have developed various systems for their own research projects, such as flow charts or diagrams, which attempt to convey the action in the recorded event. Flewitt et al. (2009), investigating literacy practices of children with learning difficulties, argue that since meanings are created through multiple modes of communication which include gesture, gaze, movement, body positioning and words amongst possible others, data must be presented in such a way as to reveal these. In their study a landscape table is used to present the multiple modes of interaction with column headings of time, orientation, speech/vocalisation, gaze, body movement and touch. Norris (2006) suggests using annotated photographic images integrated into a table, to portray multiparty interaction whereas Goodwin (2007) incorporates images and diagrammatic positional symbols into his transcription together with elements of recorded speech and vocalisations, in an effort to represent action, cognition and stance for analysis in a two party event. Even the term transcription may be misleading when applied to recording the different modes of image and continuous action seen on the video, into a written document. Many researchers have proposed alternative terms to describe the process more accurately: Amongst them Kress (1997) suggested *transduction*; Flewitt (2011) uses *representation*; Newfield (2014) the *transmodal moment* and Mavers (2012) *transmodal redesign.* Each of these terms can be understood although each has a different nuance giving further indication to the complexity of the concept. In this thesis, I will use the term transcription while accepting that this term does not convey an impression of absolute parity between modes.

The process I followed was firstly to transcribe the dialogue in each of the ten episodes using a simple playscript format (An example of a simple transcript is shown in Appendix L). Following this, I needed to create an appropriate format for the multimodal

information, keeping in mind the challenges of representing visual information in textual form. Inevitably my theoretical and interpretive position had an impact on the process and on the resulting transcript, in a similar way to that of the selection process. My personal view of the multimodal interaction was also inclined to influence the way I recorded the data: for example I reflected that it was more natural for me to start with the data relating to the English-speaking teacher since this was easiest for me to relate to on a personal level and orienting the table from left to right, I was inclined to allocate greater value to the left side of the table. The aim of the resulting design was to give me the opportunity to see where words and actions were being used in meaning-making and also to see what, if any, relationship there was between the different modes being used. By allocating separate columns to represent the teachers and the children I was seeking to make more salient any relationship between the speech, actions and gestures of the teachers and the speech, actions and gestures of the children in terms of patterns of turn-taking, or initiation and response.

3.8.5   Coding and classifying data

The kinds of data sets produced by qualitative enquiry do not often lend themselves to such straightforward categorisation as data from quantitative research. Countable data can more easily be processed by computer software to create tables and graphs, whereas the nature of qualitative data may require the creation of a researcher-designed, manual structure which can be used to discover patterns for categorisation, since 'only the intelligence, creativity and reflexivity of the human mind can bring meaning to those data' (Hatch 2002:148). An organised approach of creating defined categories through the imposition of codes; 'a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/ or evocative attribute for a portion of language-based or visual data' (Saldana 2009:198) becomes necessary. Transcribing audio and video data into a researcher-designed framework can be considered the first stage of a coding process as the researcher begins to classify what is seen and heard to be presented according to various headings, such as *speech*, *gaze* and *gesture,* which act as coding categories. Researcher-designed frameworks vary in many respects such as orientation, layout and use of transcription conventions as described by Bezemer (2014) and

Swinglehurst (2012). Cowan (2014) describes how opportunities for analysis of the same video episode vary when the information is presented in different formats, emphasising the importance of researcher reflexivity to ensure transparent decision-making. Further coding techniques include modification of font, colour highlighting, or designated symbols used to mark certain features. The analysis of coded categories may produce numerical data which might appear to embody the theoretical view of quantitative research, aligned to a positivist approach. It has generally been acknowledged by qualitative researchers that simple counts of things to provide terminology such as *some, most* or *often* are acceptable (Becker 1970). Maxwell (2010:480) proposes that the inclusion of some numerical data in qualitative research can be a useful strategy when used as a 'complement to an overall process orientation to the research'. There are however potential problems with using quantitative data of which the qualitative researcher needs to be aware. As with any data in qualitative enquiry, the process by which the data is created needs examining to ensure authenticity, as described in Section 3.6.

3.8.6   Designing a representational framework to convey the data sets

The third stage in the analysis process was to design a framework in which to place the data sets in order to create opportunities to interrogate the data. I decided to use a landscape layout which could be read from left to right, with a number of columns to represent different aspects of the data such as children's speech or action and teachers' speech or actions. The first column was the time-counter reference for each row which helped to show temporal relationships to events and was useful as a reference to the original video source. Time was measured in minutes and seconds. The details of the teachers and children's speech and gesture were added to subsequent columns. The column for children's speech was used to record either individual or group contributions. Where known, the speaker's name was included using brackets, i.e. (Nawal). If the speakers could not be identified this was shown as either (one child), (some children) or (many children). A similar system was used for recording information about children's actions and gestures. In the whole-class episode, the English-speaking teacher and the Arabic-speaking teacher were each assigned a column for speech and for action/gesture (Figure 3.10) but in small-group and independent learning episodes, only the English-

speaking teacher was involved in the action and she alone was assigned a column. (An example of a detailed video transcript is shown in Appendix M).

Time in minutes and seconds	Speech English-speaking teacher	Action English-speaking teacher	Speech Arabic-speaking teacher	Action Arabic-speaking teacher	Speech children	Action children

Figure 3.10 Video transcript column headings

The transcription principles employed are described in Section 3.8.9.

As I trialled the table, I continued to reflect on the design and the opportunities it presented for analysis in relation to the research questions. Reading through the transcripts again there seemed to be some places where the action in the classroom, what might be termed as the sociocultural event, was not revealed clearly by the information as it was presented. I was also concerned that documenting speech and action in separate columns broke up the communication into separate modes. Although this was useful in terms of analysis it tended to imply some separation of modes rather than show how the modes interacted together. In other words, there was a concern that I could look at the event and say that actions were supporting speech or that speech was supporting action when the aim was to view all modes of communication together. I was also aware that the left to right orientation of the table might imply that there was hierarchy of value, with speech coming before action (see Section 3.8.4 for implied hierarchy in relation to the positions given in the table to the teachers and the children). I did not feel I could make any changes but being aware that this had the potential to impact my analysis, I maintained a reflexive stance. To give me a better picture of the context in which the action and speech was occurring, I added a column, on the left for 'Commentary', in which I could describe what was happening in the classroom, drawn from the text of the narratives described in Section 3.8.3. In order to provide a space for comment on interaction, I added a column headed 'Possible Triggers' in effect creating a space for analytical commentary on how the modes were used together to support meaning-making. To include the reflections of the teachers, I added a column entitled 'Teacher Reflection' where the relevant comments from the teacher reflection documents could be added, to give further insight into the events.

Numbering the columns for ease of reference, I decided to give the teacher columns the same numbers distinguishing between them by allocating a letter (Figure 3.11). This was helpful since material for the Arabic-speaking teacher was not provided in every episode and thus the ensuing columns, six-nine, kept the same numbers throughout. Columns 5 and 6 were allocated for speech and action of children respectively.

1	2	3a	4a	3b	4b	5	6	7	8	9
Time in minutes and seconds	Comment ary	Speech English-speaking Teacher	Action English-speaking Teacher	Speech Arabic-speaking Teacher	Action Arabic-speaking Teacher	Speech Children	Action Children	Suggested Triggers	Teacher Reflection	Researcher Notes

Figure 3.11 Full data table column headings

3.8.7 Entering data into the framework

In the fourth stage of the analysis process the data sets were collated and reformatted into the tables that I had designed for each episode, in order to enable further analysis. Starting at the beginning of a video-recording, timings were entered into column 1 measured in minutes and seconds as shown on the digital recording. Using the narratives as a guide, a general commentary of the action and the context was added to column 2; columns 3 to 6 carried the discourse data described in Section 3.8.4; columns 7 and 9 offered space for researcher notes to be completed later following an iterative analysis cycle; and column 8 held the data from the teacher reflection (see Figure 3.12). An example of a completed multimodal data framework can be seen in Appendix N.

WC3 Slippery Fish										
1	2	3	4	3a	4a	5	6	7	8	9
Time in minutes and seconds	Commentary	Speech Ms. Miranda	Gesture Ms. Miranda	Speech Ms. Sabha	Gesture Ms. Sabha	Speech Children	Gesture Children	Possible Triggers	Teacher Reflection	Researcher Notes
00-0.27	The Arabic teacher leads by asking what day it is today. She repeats the question			Asks children to repeat days of week then asks what day it is today	Points to calendar	In chorus children repeat days of week in Arabic		Rote learning characterised by teacher repeating same question	CSN: What day was it in Arabic? Ms. Sabha: Al Ahad CSN: And do any children have a name beginning with the same sound? Ms. Sabha: No because all the days in Arabic begin with Al. CSN: So why did she [the child] say Wadima?	
00.28	Ms. Miranda takes over pointing to list of days in English.	In English What's our day?				[Wajida] Wajida! [Mariam] Monday		Confuses M and W or simply wanting to add her voice!		

Figure 3.12 Excerpt of completed multimodal data table

3.8.8 Transcription principles used

English speech was recorded using a simple orthography, generally with dictionary spellings but with some exceptions as I attempted to convey the nuances of speech and vocal expressions. For example:

- Colloquialisms: gonna (going to) and wanna (want to).
- Fixed spelling for certain special words and sounds such as: OK, yeah, yum, wow, eh, ghau. (Ghau was my invented spelling for a guttural sound made by Ms. Miranda).

- Hesitation sounds/filled pauses and sounds of agreement/ disagreement: uh-oh, oh-oh, mmm, oh, aah, ooh.
- Alphabet letters: spoken letter names are written in upper case 'K' or 'M'; spoken letter sounds (phonic name) are written in lower case 'k' or 'm'; spoken numbers are written in digits '1' '2'.

Arabic speech I deciphered and transcribed with the help of both teachers using Roman lettering to represent Arabic speech, aided by the use of an online transliteration resource (Morse 2003). An italic emboldened font was used when entering transliterated Arabic into the transcripts and square bracketed italic translation was added i.e. ***Abla*** *[teacher].* In Episode WC3, where the Arabic speech of the Arabic-speaking teacher was not the focus, the content of some of the dialogue of the Arabic-speaking teacher was paraphrased in English rather than written verbatim. This was a matter of practical choice due to volume of content.

A further principle I established early on was to record, in the data table, where the teachers and the children were using language and gesture which was part of the interaction and not to record actions and gestures which might be classed as behavioural. By doing this I was aware that I was omitting potentially rich data, but I felt I had limited capacity to include every nod and movement that the two teachers and twenty-six children in the class were making and therefore focussed on the interactive events which provided data for the research questions. For this reason, there are places in the data tables where no data appears although I acknowledge that this does not mean nothing was happening. This is discussed in the final chapter (Section 7.2).

3.9   Summary of Chapter 3

In this chapter, I have presented the theoretical framework for this research and considered why a descriptive case study approach was chosen as appropriate to explore the research aim. I have shown how the pilot study was valuable in helping me to develop the research focus and to refine the data collection tools and processes. I have introduced the research context and explained ethical processes. Issues of power and the professional researcher have been discussed with relation to my own context. I have

explained how I undertook the data collection and shown how more detail emerged through the ongoing iterative analysis process. I have explained how I organised, formatted and coded the material in order to seek more information in relation to the study's aim and I have described the resulting ten episodes which form the data corpus. In the following two chapters I will describe how further themes began to emerge as I worked with the data frameworks and continued the iterative analysis. In Chapter 4 I will analyse data in relation to spoken language (RQ1) and in Chapter 5 I will analyse data in relation to action and gesture (RQ2). The material in these two chapters is divided for practical presentation reasons only.

CHAPTER 4:   ANALYSIS OF DATA ON SPOKEN LANGUAGE

4.1   Introduction

In this chapter, and in Chapter 5, I will present a selection of excerpts taken from the in-depth analysis of the entire data set of ten episodes, which are described in Section 4.2. These excerpts provide information relating to the research aim, which was

> *'To explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners'.*

In the whole-class episodes (WC) I explore data relating to both teachers however Episode WC3 is the only episode where both the teachers are working concurrently with the whole class and thus provides some different evidence than the other WC episodes. In the small-group (SG) and independent learning (IL) episodes I explore data exclusively relating to the English-speaking teacher (Ms. Miranda) and the children. The SG episodes are broadly defined as teacher-directed, and the IL episodes are broadly defined as child-initiated (see Section 2.3). I examined the interactions across action, gesture and speech, and in this chapter, I refer to excerpts of the data from each of the episodes, responding to RQ1: '**How is spoken language being used by teachers and children in joint meaning-making?**' In the first section (Section 4.2) I will give an outline of the content of each of the ten episodes. In the subsequent sections I will describe how certain features began to emerge during the process of compiling the data tables (Section 3.8) that gave impetus to further analysis of certain points in relation to the research questions and describe the process of analysis.

In Section 4.3 I describe the analysis of spoken language used by Ms. Miranda and describe how she is creating joint attention (Tomasello and Farrar 1986) in order to generate opportunities to support children in learning language and concepts. In Section 4.4 I describe what my analysis of the data shows in respect of children's use of language when interacting with the English-speaking teacher.

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4.2   The ten selected episodes

The corpus of ten video-recordings, along with related transcripts and commentaries, were compiled from the data preparation as described in Section 3.8. An outline of each episode is given here:

Whole-Class events:

WC1   What's in the bag? (5.04 minutes)

Figure 4.1 Ms. Miranda holds up a bag

In episode WC1 Ms. Miranda, is alone at the front of the room she has a bag with hidden objects. She tells children there is something you can see, smell, feel, or hear. She selects different children to pick something from the bag and then she describes it. The child takes the object around the circle to show others. Ms. Sabha, the Arabic-speaking teacher, is moving around in the classroom outside the group of children and can be seen speaking quietly in Arabic and gesturing to individual children rather than teaching the class as a whole. Her role is as a support for Ms. Miranda by helping to manage the

behaviour and organisation of the children, following one of the co-teaching models described in the NSM guidelines (Section 3.4.2). The episode ends with the song 'If You're Happy' (Super Simple Songs 2013). The full song lyrics are shown in Appendix O.

WC2 Can you hear? (9.12 minutes)

Figure 4.2 Ms. Miranda reads a book in whole-class session

During this episode, Ms. Miranda is sitting alone at the front of the class with the children while Ms. Sabha is sitting at the back as an observer, as defined in the co-teaching guidelines. The episode starts with participatory, counting activity as Ms. Miranda counts forwards and backwards giving instructions and the children are joining in and following her actions. Following this Ms. Miranda reads a very simple, English-language book with the repeating text 'Can you hear?' followed by a different noun on each page. The book also has photos of each object and a 'stylised picture' over the word 'hear' of a child holding his hand to his ear. The children have seen this book before, since the practice is to use the same book every day for one week and this is the third day of the week, which suggests that they may remember some of the words and gestures that have been previously introduced.

WC3 Slippery Fish (11.13 minutes)

Figure 4.3 Both teachers read the book

In episode WC3 both teachers are together at the front of the class with the children on the carpet throughout the session, as they introduce the morning routine of checking the calendar and the weather. There are a number of resources and visual aids close by and a wall display with calendar and weather chart and an interactive whiteboard behind. After the morning routine, they read the big book entitled Slippery Fish which has English and Arabic text and is bound at the top in an attempt to overcome directionality issues. The teachers alternate reading each page in English then in Arabic.

Small-Group events:

SG1 Making instruments (8.45 minutes)

Figure 4.4 A small-group activity making shakers

In this episode, Ms. Miranda is working with a group of children at a table inside the classroom making percussion instruments, known as 'shakers', by filling small containers with gravel. The children are learning about the sounds that can be made when they put gravel into their containers and create a shaker. The children are quite chatty speaking mostly in Arabic. The triangle-shaped green name cards are on the table as well as a supply of small containers, a pot of gravel, some cut-up coloured paper and glue sticks and large marker pens. Ms. Sabha is sitting with a group at another table out of view of the video camera and is not part of the filming.

SG2 Sponge-printing 1 (6.45 minutes)

Figure 4.5 A small-group activity painting outside

In this episode, Ms. Miranda is supervising at a table set up outside, for a small number of children to participate, with bottles of paint, sponges and brushes. There is a stand with painting overalls, a line and pegs to hang finished work and a pile of paper on the ground. The activity, in which children dip letter-shaped sponges into a tray of paint and then 'print' the shape onto paper, is limited to four children at one time. Other children are involved in other activities close by. Ms. Sabha is inside working with another group and is not involved in the recording.

SG3 Sponge-printing 2 (11.15 minutes)

Figure 4.6 A conversation using gestures

Sponge-printing 2 is a continuation of the session Sponge-printing 1, with different children. At the beginning of this episode Humaid comes to the table to show Ms. Miranda a selection of plastic fish that he has sorted from other animals and put into a small container of water. Ms. Miranda spends a few minutes in discussion with him about the animals then returns to focussing on the group.

SG4 Looking at Plants (7.28 minutes)

Figure 4.7 Looking for vegetables

In this session Ms. Miranda and a few children are outside looking at the vegetables they have grown in three big tyres acting as flower beds, while most of the children are inside

with Ms. Sabha. In one tyre, a cat had earlier given birth to a litter of kittens, so the tyre is out of bounds to the children but is referred to in the dialogue. The recording is close up and there is a limited view of all the children and the gestures being used. There is a water tap on the wall. Ms. Miranda is encouraging children to look for vegetables that are big enough to harvest, and to pull them out and wash them and taste them.

Independent Learning Events:

IL1 Big Basin (12.15 minutes)

Figure 4.8 Big Basin activity

Ms. Miranda has set up a learning centre where children can explore numeracy concepts on a round table. There is a large basin of sand in which she has hidden small plastic camels, some black and white stones and some shells. There is also a selection of different coloured dishes into which the children can sort objects. The group of children is fluid and Ms. Miranda overseas children at other activities and is sometimes drawn away. Despite this she has opportunities for one to one interaction with Masoom and Shakira as they initiate play with the resources. Ms. Sabha is working with another group of children out of view and consequently out of the recording.

IL2 Mariam playing cards (1.43 minutes)

Figure 4.9 Mariam playing with the cards

Ms. Miranda has set up a number of different activities outside and is moving around to support children in their learning as they interact with the resources. The focus of the recording is of Mariam who is sitting at a table playing an animal-matching card game. If two cards are matched correctly an animal is revealed. She has completed some when Ms. Miranda comes to share in her activity. Dialogue proceeds about the animals. Ms. Sabha is working inside the classroom with a different group of children.

IL3 Messy-dough (30.50 minutes)

Figure 4.10 Hafez and Malak with the animals

In this episode, Ms. Miranda is supervising three table activities, playdough, art and numeracy and also watching general classroom events including children playing with the train set on the carpet. The notable two excerpts are her one-to-one interactions with Hafez and Malak, who are at the numeracy table, which is set up with small-world animals (sets of small animals for children to use in imaginative role play) and mosaic shapes and number cards. Both boys have independently initiated play using the animals and other resources on the table. Ms. Sabha is working at a table with another group of children doing an Arabic alphabet activity, but out of camera shot for this recording. There is background chatter in Arabic throughout.

4.3   How spoken language is used by the English-speaking teacher

4.3.1   Introduction to definitions

In order to further analyse the spoken language used by Ms. Miranda, I decided to devise a coding framework similar to that used by Lindholm-Leary (2001) but making adaptations to the categories she used since I believed this was indicated due to the differences in curriculum and pedagogy between the two contexts (Section 2.3). Lindholm-Leary used the categories 'factual question' and 'higher order question' acknowledging the variety of questioning used by teachers as defined in relation to Bloom's taxonomy (Anderson et al 2001). However, I decided to use one category for questions since, although higher order questioning may be used with effect in the first language, my own observations suggested that in this context, the children's *emergent* bilingual competency meant that factual questions were more appropriate. Higher order questions are problematic in that they often rely heavily on linguistic competence as children may be asked to consider 'what would happen if...?' questions. Walsh et al (2019), in their guidance for early years practitioners in Northern Ireland, emphasise the importance of children having acquired the linguistic competence to explain and give reasons before they can answer open-ended questions. In relation to the multimodal aspect of this research, it might be supposed that the teacher and the children could use modes other than speech to share meaning. However, exploring children's higher order thinking was not a focus for this research.

Modelling, as used by Lindholm-Leary, is also used by early years teachers in a variety of ways (Section 2.3.6) including modelling how to use English language, modelling vocabulary and actions and modelling language for classroom routines and concepts. Rather than making *expansion* a separate category, I included it as a sub-section of modelling, to describe the way teachers rephrases or expand an utterance made by a child when treating them as a conversational partner, in a similar way to that described by Ochs and Schieffelin (1984). Since there is no expectation that the child will reproduce the utterance but merely be familiar with it receptively, I believe it can be classified as a type of modelling in this context.

Lindholm-Leary proposes *information* to describe teaching facts and processes and *directive* in order to direct children to engage or refrain from an activity. In the early years classroom, there is naturally a place for providing children with information, and in the emergent bilingual context much of the information shared will be in the dominant language. The English-speaking teacher uses *descriptive commentary* as a tool for sharing information, the fourth category described in figure 4.11. The term directive implies telling children what to do in terms of behaviour. I would suggest *instruction* for the early years teacher, to encompass giving instructions for a teacher-led activity or directing the children to do something specific, such as to sit down. There has been criticism of the use of the term instruction in early years as it may imply an imbalance of power where the child is expected to follow the ruling of the adult without the opportunity to be an active agent in the learning process. Fisher (2007) proposes that the potential of talk for classroom learning and the development of metacognitive skills is often under exploited by teachers. He suggests that learning conversations, whereby the teacher encourages equal participation from the children through techniques such as questioning, are part of a dialogic thinking approach and are a beneficial element of classroom pedagogy providing 'cognitive stimulus, expand consciousness and enlarge the dialogic space for thinking in children's minds' (Fisher 2007:617).

The term *motivational language* is described by Lindholm-Leary (2001:128) as language which 'serves to keep children participating in the ongoing task'. There may be a difference between language which affirms and language which motivates, for example,

'yes, that's right' can be classified as affirmation and 'keep trying you can do it' might be described as motivational. However, I believe that both serve to encourage, and both serve as positive reinforcement for the children in the early years classroom and, in the context of this study, both aspects can be included under the category of motivational language.

The final category I included was *descriptive commentary* a pedagogical strategy described in Section 2.3.4. Thus, the defined categories I chose in order to explore teacher talk in the context of my research are: Modelling, Instruction, Question, Descriptive Commentary and Motivation, as shown in figure 4.11.

Category	Definition	Example
Modelling	Modelling how to use English language. Modelling words and naming objects and actions. Modelling language for concepts.	'Five, the fifth of May.' 'Long and short.' 'One camel please Farida.' 'Our title is Can You?'
Instruction	Telling children how to do something Telling children what to do/where to go.	'Then what you can do is decorate it with stickers'. 'Right Mutti. Mutti you need a piece of paper'. 'This one, you are going to put your gravel inside'.
Questioning	Includes different types of question such as those requiring a factual response or those needing greater cognitive effort but there was not considered scope to categorise these separately in this research.	'It's a fire truck. What sound does he make?' 'Does the lion live in here? The lion?' 'Can you remember what our story was about yesterday?' 'What's our weather? What's our weather today, have a look'.
Descriptive commentary	*Descriptive commentary* Department for Children, Schools and Families (2009). 'Modelling language and using descriptive commentary should make up about 80% of interactions'.	'Wajida. You're making it flat.' 'You've got all the orange squares.'
Motivation	Words of affirmation, praise and encouragement.	'Good', 'That's right', and 'Well done'

Figure 4.11 Definitions of teacher talk categories

These broad categories also reflect the pedagogical aspects of an early years classroom as described by Gort and Pontier (2013), The Department for Children, Schools and Families (2009) and Durden and Dangel (2008) and discussed in Section 2.3. Having devised a framework, I used colour-coding to highlight the different categories in each of the data tables and collected numerical data, as described in Section 3.8, for each category (A Coding Matrix is shown in Appendix P). When undertaking this coding I did find that there were some cases where it was not obvious into which category the language fell. For example, in WC1 when Ms. Miranda uses the question form saying, 'What happens if you

open it?' I considered that she might actually be instructing the child to open the bag. In cases such as these I attempted to use context to make an appropriate coding but continue to be aware that this was another aspect of my own interpretation impacting the analysis. Analysis of the data from the coding matrix gave the following information:

- Totals show that the English-speaking teacher used questioning more than any other types of talk.
- Questioning was used most in whole-class and independent learning, however in small-group sessions there was more instruction than any other type of talk.
- Modelling was the least used type of language in whole-class and in independent learning sessions as well as overall. However, in whole-class sessions modelling had the second greatest use after questioning. This could be attributed to text being read in whole-class sessions.
- Motivational talk was used to a lesser extent than questioning, instruction and commentary in all.

In the following sub-sections I discuss each of the categories in turn, looking at Modelling first, since this is a foundational aspect of language learning in this classroom, and highly valued from a sociocultural learning theory approach (MacNaughton 2003:32). This is followed by the three types of teacher talk that create opportunities for joint attention (Instruction, Question, and Descriptive Commentary) and lastly Motivational language which encourages further effort and participation in the classroom learning community and supports the development of confidence.

4.3.2   Modelling

It became apparent from my analysis of the data that modelling was used the least of all the categories overall; however, it accounted for 21% of all recorded utterances of teacher talk in whole-class sessions, coming second to questioning (35%) in quantity. In these contexts, all the children are present and thus modelling provides the children with examples of language syntax and vocabulary, as well as concept knowledge such as words relating to colour or size. Much of what is modelled can be classified as taught vocabulary sets, such as colour or number words, or formulaic (classroom) routines (Section 2.3.6) which, in the early years classroom, often consist of classroom management language,

including words and phrases such as 'Sit down', 'Finished', 'Group time', 'Wash your hands' and 'Tidy-up time'. These types of phrase are important as they contribute to the social framework of the classroom environment. In most cases the children show by their responses in either words, gesture or actions, that they have understood, although there is little evidence in the data of children producing these phrases themselves, since their receptive language skills are more advanced than their productive language skills at this stage.

At times in the WC contexts, when the children respond using Arabic words to Ms. Miranda's question in English, she affirms the child's Arabic response with a nod of the head or by repeating the word in English, thus using the opportunity to model a correct English word or phrase. Such examples are found in WC3 where Nawal answers a question, posed in English, about the story, saying in Arabic, '**Kabeera samaka ha de'** [*There is a big fish*] and Ms. Miranda, acknowledging a correct response by nodding her head, models the English words for her, 'The big, big fish'. At times, she can be heard restating the Arabic word before adding the English word, 'Where's our **jarras** [*bell*], our bell?' (WC2) indicating an acceptance of the response regardless of the language used. Other types of language modelled by Ms. Miranda in WC contexts come with an expectation that the children will reproduce it, such as the participation in the repetitive text of 'Slippery fish, slippery fish' from the story (WC3), counting or repeating the days of the week 'Yesterday was Sunday so today is mm, mmm, Monday' in WC3 and participation in class songs. Production of language through repetition allows for the development of linguistic routines which in turn generate a foundation for more creative language use as, described by Clarke (1992) and Drury (2007). An example of this creative use can be found in SG4 where the children are using the words 'big' and 'bigger' and Ms. Miranda responds, 'It got bigger and bigger and bigger like our story didn't it' (see Figure 4.15). In the teacher reflection of SG4 she explains that the children are using words they had learnt through the story about the enormous turnip, 'We had done a lot of work on that like, 'they pulled, and they pulled'. (An excerpt showing children using taught vocabulary is shown in Appendix Q). Further examples of children's creative use of language are discussed in Section 4.4.

Another aspect of the modelling undertaken by Ms. Miranda is the way she repeats and expands language (see Section 2.3.6) to model grammar when engaged in individual interactions with children. This is seen when Farida says, 'Ice-cream' and Ms. Miranda models the sentence 'Farida made ice-cream' in IL3, or when Masoom says, 'Big house' and Ms. Miranda expands his utterance saying, 'He's made a big house in the shape of a circle' in IL1. In these instances, there is no expectation that the child will repeat or reproduce the phrase, as might be expected with older learners, but it contributes to a growing receptive knowledge of the language. Using a controlled vocabulary is another aspect of language modification (Section 2.3.6). Although this did not appear to be highly developed, my interpretation of the analysed data suggested that Ms. Miranda attempts to use certain words and phrases and make substitutions in order that the children might more easily understand her. Her reflective interview supports this, when she says, 'I think you have to, at the start of the year, pick one word for English. There are a lot of words you could say.' (An excerpt of teacher reflection WC3 is shown in Appendix R). Scrutiny of the planning documents shows how content and language are integrated in the classroom through themes such as 'animals', 'my world' or 'growing', which focus on specific vocabulary. Teachers' planning for the week of 9 February 2014 describes key vocabulary which is planned to be introduced for during the week, such as 'happy, sad, angry, hot, cold, eyes, ears, nose, see, smell, hear'. (An excerpt from lesson planning is shown in Appendix S). The results of persistent modelling are described by Ms. Miranda in the teacher reflection SG2, as she comments on how Musharraf is writing his name and the date on the painting paper, replicating a process that she has been modelling for a few weeks.

> 'Because I model it every time that we have a picture. We say, "this is our name" or "we put our name here" and I go 'M-u-ba-rak' and sound it out. Then on the other side we say "the second of June". Then I changed my way. At first, I would write 21 bar 6, but because when we do mat time, we say June, the word June, so the third term I changed to writing 2 then June, so that it looked the same. I noticed some of the children weren't understanding why I was writing a 6 for June. It doesn't make sense'. (An excerpt from teacher reflection, small-group can be found in Appendix T).

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Thus, data analysis shows how Ms. Miranda uses everyday events in the classroom to provide the children with models of English to support their conceptual learning and understanding as well as their English language learning. Moreover, she is reflecting on practice and adjusting her teaching to build on previous learning supporting the development of confidence as described by Drury and Robertson (2008).

4.3.3 Instruction

As Ms. Miranda guides the children through the processes involved in the small-group, English-language-and-content integrated activities, she uses instruction to a greater extent than in other contexts. In SG1 she instructs how to make a musical instrument using a step, by step process (see Figure 4.12).

Speech Ms. Miranda	Gesture/action Ms. Miranda	Gesture/Action children
We need to put a small amount of gravel inside one of our containers OK?	Finger and thumb together. Points at pot of gravel.	
Are we going to fill it all the way to the top with the gravel?	Shakes container and points to top.	
No. We need to put a small amount. OK? Small.	Points to line of gravel near bottom of container.	
Start with Farida she's going to pass it around.	Gestures anticlockwise movement around table.	
Small.	Holds up right hand with fingers together.	Farida nods then takes some gravel.
Good.		
	Ms. Miranda nods at Farida, points into gravel pot and then to Farida's container.	Farida looks at Ms. Miranda. Farida takes more gravel.
OK. Well done.	Passes gravel pot to Zafir.	Farida closes her container.
Listen.	Shakes hand next to right ear.	
What does it sound like?	Points to Farida and smiles	Farida shakes container.
Can you hear it?	Shakes hand next to right ear.	Farida changes to right hand and shakes container next to ear. She smiles.

Figure 4.12 Teacher using instruction in small-group contexts

By linking new activities with the repetition of previously introduced vocabulary, and using speech-accompanying gesture and actions, she engages the children in joint attention and scaffolds both language and conceptual development through guided participation in the activities, as seen by the responses of Farida in this excerpt. Using a variety of early years and second-language teaching strategies (Section 2.3), she skillfully conveys her meaning to the children encouraging their active participation in learning. Children's fulfillment of the instructions suggest that meaning has been shared, although whether through gesture or spoken (Arabic/English) word or both acting together, it

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cannot be established. As Ms. Miranda reflects, 'They might not be understanding [the words] they are just watching' (An excerpt of Teacher Reflection SG2 is shown in Appendix T). I believe, from my analysis of the data, that it is likely that context and prior knowledge also played a part in the meaning-making process, as suggested by Ms. Miranda's comment 'You can see that learning it in Arabic first does help' (An excerpt of Teacher Reflection WC1 is shown in Appendix R). The children's learning is not a single event, but a continuous building of parts of information and knowledge gathered through social engagement in the classroom environment as described by Vygotsky (1986). The teachers, as facilitators, are working to equip the children with the appropriate skills to allow them to be agents in their own learning as is shown through scrutiny of the planning documents (Figure 4.13). The weekly planning describes how the English language story is used to introduce new language and concepts, first in Arabic and then in English, allowing the children to build on their prior knowledge. Through careful co-teacher planning, the two teachers provide opportunities for the children to use their full linguistic repertoires while also introducing non-linguistic elements such as the daily action song and opportunities to act out parts of the story using action and gesture.

Sunday	Monday	Tuesday	Wednesday	Thursday
Whole-Class: Introduce the book 'Humpy Grumpy Saves the Day'. Look at the cover. What could the book be about? Can the children predict what might happen? What could be an alternative title for the book? Introduce the words cover, title and author. Explain that this book is fiction. Show some examples of non-fiction books. Action song: Alice the Camel	Whole-Class: Recap over yesterday's circle-time – cover, title, author, children's predictions. Read the book in Arabic to the children. Pause on page ___ and ask the children to predict what will happen next. Continue to read the story. Ask some (Arabic) questions based on the story: what happened in the story? What did Humpy get given at the end? What did he find hanging on the tree? What might have happened instead? Why is water dangerous? Etc. Action song: Alice the Camel	Whole-Class: Recap over the story from yesterday. Can the children remember the events of the story? Read the story in English. Ask some (English) questions based on the story. Who did Humpy save? What type of bird is in the story? Have you ever seen a hoopoe bird? Have you been swimming in a wadi before? Etc. Action song: Alice the Camel	Whole-Class: Recap over the story from yesterday. Can the children remember the events of the story? Use the camel puppet and boy puppet to help retell the story. The puppets can tell the children what happened in their own words. The children can be encouraged to ask the puppets questions – for example: were you scared? How did you feel when you got the medal? Action song: Alice the Camel	Whole-Class: Re-read the story in Arabic and English with the children encouraging them to role play the different characters. Can they swim like the boys? Can they make the noise of the hoopoe? Can they pretend to put on the snorkel like Humpy? Etc. Action song: Alice the Camel

Figure 4.13 Teachers' planning for bilingual learning

The scrutiny of this planning document was an important element in this analysis providing information for the context of the whole week whereas the recording only gave information for one day.

4.3.4   Questioning

As a pedagogical strategy, found in many types of educational setting, questioning (Section 2.3.6) is used by Ms. Miranda more than any other type of teacher talk. My findings from the analysis, of the way in which she uses questioning, revealed that she is encouraging the children to participate, to think and to share their meanings either through talk, action or gesture, supporting their multimodal participation and allowing them to contribute without criticism. Much of the dialogue follows a pattern of teacher-student initiation-response-feedback (IRF) (see Section 2.2.7) and indicates that she has an expectation that the children will respond. She is often rewarded when the children reply with either a gesture, such as gesturing the shape of a rectangle; a word in Arabic or in English; or through acting out a response, such as picking up a rectangle shape to show to the teacher. This non-verbal response element is confirmed in the literature (see Section 2.3.6, Knoblauch et al 2014). Speech-accompanying gesture (see Section 2.4.3) is often used with questions, offering the children a legitimate alternative mode of communication, and if they choose to respond with gesture Ms. Miranda regularly gives positive feedback without insisting on a verbal response, such as in SG3 (Figure 4.14), when Humaid gestures for 'seal' and Ms. Miranda echoes his action adding some words.

Speech Ms. Miranda	Gesture Ms. Miranda	Speech child/ren	Action child/ren
What's this one? The seal isn't it!			Humaid pulls out a fish. Humaid claps his hands. (gesture learned for seal)
That's right, from our zoo song.	Ms. Miranda smiles and claps hands.		Humaid claps hands again.

Figure 4.14 Teacher affirms child's gestural response

This kind of multimodal initiation and response allows the children to respond in a variety of ways rather than creating an expectation that a verbal response is required. This can be seen in the interaction between Ms. Miranda and Mariam in SG4 (Figure 4.15), an example of joint attention when they are looking for the big plants (a longer excerpt can be found in Appendix Q). Mariam responds with actions as she moves the leaves aside

and searches for vegetables, and also with English speech using the words 'big' and 'bigger', employing her knowledge of the taught vocabulary that is part of the classroom repertoire to say, 'This one'.

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
		(Mariam) Ms. Miranda, *choo… choo… choo……? [what, what, what?]*	
What's happened to this one?	Ms. Miranda Points to a plant.		
		(Mariam) Bigger.	
It got bigger and bigger and bigger like our story didn't it.	Makes 'big' gesture with arms		The children search among the plants.
		(Mariam) Ms. Miranda this one!	Mariam points.
This one? Where?			
		(Mariam) Bigger big.	Points to plants in another tyre.
There's one that got bigger like in our story.			
		(One child) Yes.	
Where?	Ms. Miranda squats with children to search the tyre.		
		(Mariam) *Hadoon (here).* This one.	Picks a large bean. Looks at Ms. Miranda.
Wow. This one is big, isn't it?			Mariam jumps up and down.

Figure 4.15 Mariam responds using words, gestures and actions

This question and answer pattern of interaction is modelled by Ms. Miranda in all contexts and sometimes she will also model the answer to her own questions, such as in WC3 when she asks, 'What were the fish doing?' and when there is no audible response from the group, she gestures eating and says, 'They were eating, weren't they'.

Data analysis also shows that Ms. Miranda is using the question 'Ready?' to signal the 'attend to' function described by Bruner (1975) that precedes the 'act upon' (see Section 2.3.7) when she wants to draw the children into a joint attention episode. An example is found in SG2 when Ms. Miranda is attempting to engage Musharraf in joint attention to support his learning about the 'M' letter shape. Musharraf is very involved in his sponge printing activity, but the M shape is not shown from the way he is holding the sponge. Using actions and words, Ms. Miranda shows Musharraf how holding the sponge differently will reveal the M shape. 'Musharraf look. Ready? This way, M, M, Musharraf. This way round ok? Ready? M, M, Musharraf'. Musharraf then takes up the sponge again and prints an M shape. Another example is found in WC2, when Ms. Miranda uses the word 'Ready?' 17 times whilst reading the story, in order to signal to the children that

something will happen and that they should be prepared. I believe this is an indication that she is coaching them into the expectation of classroom routines as a prerequisite for learning to occur. Such a strategy might also be classified as modelling, indicating that there is a soft boundary between these different categories of teacher talk.

4.3.5   Descriptive commentary

	Gesture/action Ms. Miranda	Speech children
Descriptive commentary is included as a category here as it is a specific early years pedagogical strategy used with children who are still at an early stage of language development. As with other categories it is not explicitly bound to bilingual or multilingual contexts. Descriptive commentary is used almost as much as instruction and to about the same extent in each context (the coding matrix is shown in Appendix P). Through descriptive commentary, Ms. Miranda establishes joint attention and supplies the children with vocabulary and a model for English use. This is found in every type of context: in WC sessions the illustrations in a book provide the focus as Ms. Miranda comments on what is seen saying, 'Dog. Woof, woof, it's a dog. He looks a bit like a wolf!' (Figure 4.16). **Speech Ms. Miranda**		
Lion? Lion? Look!	Points to picture of dog.	(Many children) Hau, hau.
Dog. Can you hear the…	Points to words then puts hand to ear.	(Malak) 'Howling sound'
Dog. Woof, woof, it's a dog. He looks a bit like a wolf!	Points to picture.	
He's a dog. Woof, woof, woof, woof.		

Figure 4.16 Descriptive commentary and joint attention in WC context

In SG contexts Ms. Miranda uses the established joint attention of the ongoing activity in which the children are engaged, to reinforce both language and concept learning through descriptive commentary, as seen in the sponge-printing activity when she says, 'Good. Musharraf has got red m, m, m, Musharraf' (Figure 4.17).

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
Red.	Pours red paint into palette.	(Musharraf) **Abla** [teacher] red.	Musharraf looks at the paint being poured.
OK some red for Musharraf.			
There you go.	Ms. Miranda moves the stand closer to help Rashed hang his painting shirt.		Musharraf is printing many M shapes.
Good. Musharraf has got red m, m, m, Musharraf. Well done.	Ms. Miranda squats down next to Musharraf and points to M shapes.		Talia brings a clean sheet of paper to the table.

Figure 4.17 Descriptive commentary in small-group activity

The same device is also evident in IL sessions, such as when she joins the child-initiated activity with the small animals in IL3 and describes what she sees the child doing, providing the English vocabulary, 'Saif is finding the tiger and the lions' (Figure 4.18).

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
What is Hafez doing? Playing with the animals.	Touches the mat in front of Hafez		Hafez smiles
What does Saif have?			Saif is collecting some animals in his hand from the box on the table.
Saif is finding the tiger and the lions.			Hafez can be seen making gestures with his hands whilst moving the animals on the mat on the table.

Figure 4.18 Descriptive commentary in child-initiated play

In this way, she draws the children's attention to an action, an object or a picture, providing a visual focus for the language and again creating an opportunity for further scaffolding, encouraging the children to become confident co-constructors of meaning (see Section 2.3.4).

4.3.6   Motivation

Motivational language is used to a lesser extent than questioning, instruction and commentary in all contexts, although it is used more than modelling overall. Ms. Miranda uses phrases such as 'Good', 'That's right', and 'Well done' as she works with the whole-class and in small-groups. Her words are often accompanied by an action or gesture such as nodding her head in affirmation or pointing to a child who has given a correct answer as in WC3 (Figure 4.19), when she asks who remembers what the book was about. Mariam says 'Fish' and Ms. Miranda points at her nodding her head and saying, 'That's right'.

Speech Ms. Miranda	Action/Gesture Ms. Miranda	Speech children	Action/Gesture children
Fish.	Points at Mariam.		
		(Mariam) Fish.	Nods head.
That's right.	Nods head.		
		(some children) Fish.	

Figure 4.19 Teacher motivates using words and gestures

These may appear natural accompaniments to speech, but they are often more exaggerated in this context, which I believe is indicative of a specific pedagogic function of speech-accompanying gesture (see Section 2.4.3). In the excerpt shown, Ms. Miranda's affirmation is followed by a number of children uttering the word 'Fish' as they develop confidence to join, in suggesting that teachers' motivational behaviour encourages confident learners.

At other times, Ms. Miranda may repeat a gesture made by a child while she offers her praise such as with Humaid, in SG3, when he pulls a fish out of his container and claps his hands in a learned gesture for seal and Ms. Miranda smiles and claps her hands, mirroring his gesture saying 'The seal isn't it! That's right, from our zoo song' (Figure 4.14). These types of motivation encourage the children and instill confidence to continue, as seen when Humaid responds by clapping his hands once again.

Sometimes a motivational response may appear negative, such as when Ms. Miranda does not accept Arabic answers to her questions and instead asks for an answer in English. This is classified as motivation as it encourages the children to use a different word, such as in the class discussion of the date and the weather shown in WC3 (Figure 4.20) where Mariam utters 'Sunny' at the end of the exchange. In this exchange it is of interest that Ms. Miranda repeats the Arabic word for sun [*shams*] but does so in a questioning tone. She does not tell the children that it is wrong, but her form of questioning allows the children to reflect and consider an alternative word, in a form of dialogic exchange.

Speech Ms. Miranda	Action/Gesture Ms. Miranda	Speech Ms. Sabha	Action/Gesture Ms. Sabha	Speech children	Action/Gesture children
What's our weather? What's our weather today, have a look.	Makes looking gesture with hand above eyes.		Points to weather chart then makes looking gesture and turns to look out of the window.		
				(One child) *shams* [sun].	
Shams [sun]?					Mariam looks towards the window.
				(Mariam) Sunny.	
Sunny, good.					

Figure 4.20 Teacher motivating children to use English words

4.3.7   Code-switching or translanguaging

I had noted that Ms. Sabha was speaking Arabic almost exclusively (I had noted only one example of her repeating an English word which was spoken by a child), but that Ms. Miranda sometimes used Arabic words for a variety of classroom discourse functions. To make further analysis of this I scrutinised each data table and highlighted the events where this was happening. I found five episodes, four of these being examples of Ms. Miranda repeating an Arabic word said by a child (see Figure 4.20 for an example), which she often then followed by saying the word in English. Through her acknowledgement of the Arabic word in this way, it appears that she is showing that meaning has been shared, while also offering an alternative word. The emphasis on the ability to share meaning rather than develop linguistic competence is reminiscent of Cook's multi-competence perspective of language use (see Section 2.2.8). A different example is found in SG4. When looking at the plants with Zafir, Ms. Miranda says, '*La, la.* For the cat!', '*la*' being the Arabic word for '*no*', as she instructs Zafir not to touch the planting area where the cat gave birth to kittens (Figure 4.21). In her reflection she says, 'I automatically now say '*La*' instead of 'no' because it just comes out easier. Because you're hearing a mix all day long and they're hearing a mix, you just mix the two together' (Teacher reflection small-group, Appendix T SG4). This example, together with the teacher reflection, provides an illustration of how Ms. Miranda is making use of her full linguistic repertoire in a 'creative and dynamic way' (Wei 2018:27). Her focus is on sharing meaning in a way appropriate to the context, in what might be described as an example of translanguaging (see Section 2.2.8).The method of coding used in the data table attempts to convey that

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communication is a fluid expression of meaning across linguistic boundaries with a focus on meaning-making.

1	2	3	4	5	6	7	8
Time in minutes and seconds	commentary	Speech Ms. Miranda	Gesture Ms. Miranda	Speech child/ren	Gesture action child/ren	Possible triggers	Ms. Miranda reflection
2.55		This one's the biggest.	Gestures 'big'				
03.01	Ms. Miranda notices Zafir looking in the 'cat' tyre	Zafir! Leave this one! This one is for the cat!					
03.05	She indicates the other tyre	You can pull this one					
03.08	She looks into the tyre	Where's one big one for Zafir to pull?					
03.10	She touches a turnip	Zafir you can pull this one.	Indicates a plant				
03.12				[Zafir] *Abla*			
03.13		*La La*. for the cat!					Ms. Miranda Did you notice I said 'La, la' instead of 'no, no.'?
03.15		Zafir can you pull this one? This one.			He pulls radish	? Understood what to do from actions	Ms. Miranda Some of the children are saying Ms. Miranda and subconsciously
03.18	Zafir pulls out the large radish	Pull. Pull. Oo		Children laugh			I think you just carry on in English. But if the chid says Abla you might answer in Arabic
3.24		A big one!					Ms. Miranda Because I automatically now say *La* instead of no because it just comes out easier, like it's an easier word to say. And because you're hearing a mix all day long and they're hearing a mix, like you kind of just mix the two together.

Figure 4.21 Example of using both languages to share meaning

4.4 How spoken language is used by the children

4.4.1 Introduction

While I was in the classroom collecting data, I was aware that the children appeared to be speaking Arabic when in dialogue with each other or with Ms. Sabha and also often when engaged with Ms. Miranda. I noted that there was some apparent code-switching (see Section 2.4.1) such as when they called '**Abla' [teacher]** to attract Ms. Miranda's attention, prior to initiating an exchange, and I wanted to search deeper to discover how much, if any, English language the children were using and in which contexts. I had noticed that Ms. Miranda was introducing a repertoire of English language related to classroom routines and curriculum themes. As I worked with the data, I also noticed that the children were occasionally reproducing English words and I wanted to discover what was motivating this use. Having highlighted the children's English utterances in each data table, I compiled them into one document (a table of children using English words in different contexts is shown in Appendix U), and then looked for the triggers and grouped them according to the types. The results are shown in figure 4.22.

Choral response to question from English teacher	8
Choral repetition of learned response	5
Spoken by a child when responding to question/prompt from English teacher	11
Spoken by child in response to something seen	16
Spoken by child whilst performing and action	11
Spoken by child when telling or asking another (teacher or child)	7

Figure 4.22 Summary of children's use of English words in different contexts

I then grouped these into:

1) formulaic (classroom) routines/(taught) vocabulary sets (see Section 2.3.6)
   - choral response to question by English-speaking teacher
   - choral repetition/reproduction of learned response (previously taught relating to theme or classroom routine)
   - verbal response to question or visual prompt from English-speaking teacher

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2) creative language (see Section 2.4.4; multimodality).

- impulsive response to something seen (object or action)

- utterance whilst performing an action (type of repetition)

- utterance when interacting with another (teacher or child)

I discuss these in terms of formulaic (classroom) routines and taught vocabulary in Section 4.4.2 and in terms of creative use of English in Section 4.4.3.

4.4.2 Formulaic (classroom) routines and taught vocabulary

In the WC sessions, analysis of the data reveals that children were joining in choral responses of familiar words and phrases, both in Arabic and in English and repeating words spoken by both the teachers, such as during the shared reading of the story in WC3, and when joining in with actions and words in English songs.

As discussed in Section 2.3.6, such learning of formulaic (classroom) routines and (taught) vocabulary sets gives the children a foundation from which they can become more creative with language. The organisation of the children, seated around the three sides of the carpet in whole-class sessions, encourages equal participation and generally a choral response with no expectation of hand-raising for permission to speak. In WC3, following Ms. Sabha's prompts, the children participate in chanting the days of the week in Arabic. Such choral response provides an opportunity for those who are more confident and engaged to freely respond while other less confident children can learn from their peers. Peer support is seen again when Ms. Miranda asks the children to remember what the story was about. Mariam initially responds in English saying 'Fish' and Ms. Miranda affirms her answer which motivates a few more children to join in and say the word 'Fish'. This practice reflects Rogoff's theory that children learn by 'observing and pitching-in' (Rogoff 2012, Paradise and Rogoff 2009) when engaged in social communities.

1	2	3	4	3a	4a	5	6	7
Time Min/ sec	commentary	Speech Ms. Miranda	Gesture Ms. Miranda	Speech Ms. Sabha	Gesture Ms. Sabha	Speech child/ren	Gesture child/ren	Possible triggers
02.10	Ms. Miranda moves on the next part of session.	Can you remember what our story was about yesterday?	Fingers to temple in 'remember 'or 'think' gesture.			One voice 'Monday' One voice 'Tuesday'	Mariam shakes head!	
02.13	Ms. Sabha arranges some resources then joins her sitting on cushion at the front	What was our book about?	Palms together then opening in Book gesture			[Mariam] Fish		
02.16		Fish	Points at Mariam					
02.17						[Mariam] Fish	Nods head	Understood Ms. Miranda
02.18		That's right	Nods head			[some more voices] fish		

Figure 4.23 One child responds then others join in

During these whole-class sessions, the spoken language used by the children is often in response to questions from the teachers, but although Ms. Miranda always asks questions using English, the children may respond to her using English or Arabic as previously described. Closer exploration of the questions being asked, in relation to the responses given, reveals why this might be happening. For example, in WC3 (Figure 4.24), when Ms. Miranda asks the question '*Where* are the fish?' there is an answer in Arabic, '***Mai** [Water]'.

1	2	3	4	5	6
Time Min/ sec	commentary	Speech Ms. Miranda	Gesture Ms. Miranda	Speech child/ren	Gesture child/ren
03.24	Ms. Miranda indicates the image on the front of the book	Look at our picture on the front. Where are the fish?		fish	
03.27		The fish are in the….			
03.28				[one voice] Mai	
03.29			Nods head		
03.30		They're in the *mai*, the water aren't they.	Points to water on cover of book.		
03.31				[same voice] Water, water	
03.34		How many fish can you see?	Holds up hand in questioning gesture		

Figure 4.24 Child's response to 'where?' question

However, later when she asks, '*How many* fish?' and '*What colour* are the fish?' the answers are in English; 'One, two, three' and 'Yellow' (Figure 4.25).

Speech Ms. Miranda	Action/Gesture Ms. Miranda	Speech children
How many fish can you see?	Holds up hand in questioning gesture.	
		(One child) Three. (some children) One, two, three.
	Points at child who said three.	
Good. One, two, three.	Touches fish on book cover.	
Which fish came first?		
		(some children) Indiscernible.
Good. Farida might be right. Farida do you remember what colour he was?	Points to Farida.	
		(One child) Yellow.
He's green.		

Figure 4.25 Children's response to questions about number and colour

There are two reasons why I believe this might be happening: Firstly, language relating to counting and colour is practised every day during the opening circle time. The question 'how many?' is, therefore, language that is part of the classroom repertoire of taught vocabulary in English. 'Where?' is a less familiar question word and not rehearsed every day; Secondly, the questions 'how many?' and 'what colour?' only require one-word answers and the vocabulary for number and colour is a familiar feature of the classroom repertoire. In order to answer the 'where?' question, the children need to provide a more creative and open-ended answer with no associated taught vocabulary. Despite having heard the repetitive text of the book 'swimming in the water' frequently throughout the week, as the teachers read the story, the question word 'where' may not yet be part of the linguistic repertoire of frequently modelled, reinforced and repeated words used in the classroom. Thus, it can be seen that the spoken language used by Ms. Miranda needs to be consistently and frequently reinforced in order that the children can become successful learners.

Most of the time that the children are involved with Ms. Miranda in small-groups they are using Arabic words and phrases, as she herself comments in Teacher reflection SG2 'I guess Mariam was the only one who was using English words. Everyone else just used Arabic or just showed me what they wanted…Body language and gesture' (excerpt of teacher reflection is provided in Appendix T). Despite her reflection, there is evidence

that the children are attempting to use spoken English in several ways. Sometimes when they are performing an action as when Malak articulates the shapes he is making while he is drawing on his pot, 'Circle, circle, X' in SG1 or when Shakira counts out loud the shells she is picking out of the sand in IL1, 'One, two, three, four, five'.

In these instances, the children are rehearsing the language that they know and trying it out, described by Moore (2011) (see Section 2.3.6) as one of the stages in guided repetition. In the examples shown, the children are absorbed in their playful learning activities and are self-directed, while they draw on their prior learning to articulate their meaning. Although the words the children are using in these examples are the same words they may use when repeating what the teacher has said or in response to a teacher's question, in this context they are involved in self-directed, child-initiated play and are making their own personal choices. I believe this shows that they are developing as confident learners and showing themselves to be resourceful as they engage in role play, 'imitate and use resources and props imaginatively' as described in the Approaches to Learning Framework (ADEC 2012) described in Section 1.2.3. (An excerpt from the outcomes for Approaches to learning in KG1 are provided in Appendix B).

Occasionally in SG contexts, there is a spontaneous use of English language in response to something seen, as when Mariam calls out 'bigger' as she looks at the plants in SG4, or when Farida says, 'green' as she identifies the green shapes on the table in SG1 (see Figure 4.26).

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/Action children
Same, isn't it?	Points to green name card and green sticker.		
A green triangle.	Draws triangle shape in air with finger.		Farida touches the triangle shaped sticker
		(Farida) Green.	
Green, green. You're right. Well done			

Figure 4.26 Farida's spontaneous use of English

On these occasions the children use the English words previously learned in other contexts, usually as part of whole-class teaching, to share meaning with those around them. At other times it appears that the children are simply trying all the words they can

remember in English, in the hope that one might be correct, such as in WC3 (Figure 4.27) when Ms. Miranda asks, 'Can you remember what our story was about yesterday?'

Speech Ms. Miranda	Action/Gesture Ms. Miranda	Speech Ms. Sabha	Action/Gesture Ms. Sabha	Speech children	Action/Gesture children
Can you remember what our story was about yesterday?	Fingers to temple in 'remember 'or 'think' gesture.		Ms. Sabha arranges some resources, then sits next to Ms. Miranda.		
				(One child) Monday. (One child) Tuesday.	Mariam shakes head!
What was our book about?	Palms together then opening in book gesture.				
				(Mariam) Fish.	

Figure 4.27 Children utter familiar words at random (miscued)

On this occasion, voices are heard calling out weekday names in English, apparently unaware that the teacher has changed the topic from the calendar to the story. Ms. Miranda also realises that she has used the word 'story' when habitually she says 'book' (Section 2.3.6) so she rephrases her question to shift the frame of reference asking, 'What was our book about?' while making a speech-accompanying gesture of palms together then opening, to signify a book. Mariam now understands the question and answers correctly, 'Fish'. Ms. Miranda shows her awareness of the value of formulaic language taught as part of classroom routines when she reflects,

> 'They can all say "clean-up", but they never say what "clean-up" is in Arabic, only
> in English. I think you get the most language through the routine, the classroom
> routines. They know things like that because they are doing it every day. Like the
> bus song, they all talk about the bus, they all say "clean-up". They also say, "sit
> down" and things like that, that happen all the time' (an excerpt of teacher
> reflection IL3 is shown in Appendix V).

4.4.3 Creative use of English

My analysis of the data also reveals a few instances where the children are attempting to use English more creatively, especially when in dialogue with Ms. Miranda. Some of these examples were discussed in Section 4.3.1 in relation to modelling, showing how the children have used their knowledge of formulaic (classroom) routines and taught

vocabulary to develop language use. In IL2 (Figure 4.28), questioning supports the progressive engagement between Ms. Miranda and Mariam, and the child responds with gesture and Arabic words, saying '*La' [no]* before reaching a point in the exchange where she utters a word in English, 'monkey'.

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech Mariam	Gesture/action children
What animals can you see Mariam?			
			Mariam is arranging cards with monkey on.
What animals can you see?	She looks at Mariam.		
Who's this?	Touches card with monkey on.		
			Mariam smiles and continues arranging monkey cards
Mmmm.	Puts finger to mouth, thinking gesture.		
			Arranges other cards.
Is he a dog?	Touches monkey card.		
		La [no].	
Who is he?	Touches monkey card again.		Mariam looks again while continuing to arrange cards.
		Monkey.	Mariam touches lion card.

Figure 4.28 Teacher's progressive use of question to elicit response

In this episode Mariam shows creativity in her response to the linguistic input as, towards the end of the exchange, she takes over as the initiator when she touches the elephant card and looks at Ms. Miranda saying in Arabic *'Ha de' [this one],* suggesting that she has understood the game and the language structure. This use of questioning, following a repetitive pattern, is another example of guided participation (Section 2.3.3) and gives Mariam the tools to become an initiator in the exchange. In IL1 (Figure 4.29), recorded two months later, Mariam approaches Ms. Miranda asking if she can have some water to play with in the sand, using a construction of English and Arabic words, apparently showing that she has made this structure of IRF part of her own repertoire.

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
		(Mariam) Ms. Miranda, water?	Mariam returns to table and picks up a small dish.
Mm? Water?	Looks at Mariam.		
			Mariam nods head.
No water today. We're just going to use the sand.			Mariam pours sand out of the bowl.
See what you can find in the sand. What can you see Mariam?		(Mariam) *Bukra [tomorrow]* water.	Looks at Ms. Miranda.
Mm?	She didn't hear.		
		(Mariam) *Bukra [tomorrow]* water.	Mariam repeats.

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Figure 4.29 Mariam using question and response learnt in another context

Another example of a child using English creatively is found in IL1 as Rashed, Shakira and Farida are actively engaged with the resources provided by the teacher in the big basin of sand (Figure 4.30). Shakira is filling her bowl and wants Farida to help her. She negotiates with Farida as she asks for more sand using words in Arabic (*kabeera*) and English (big) calling on her entire linguistic repertoire in a translingual way. This excerpt also gives an example of how gesture and speech are used together which is further explored in Section 5.3.4.

1	2	3	4	5	6	7	8	9
Time in minutes and seconds	commentary	Speech Ms. Miranda	Gesture Ms. Miranda	Speech child/ren	Gesture actions child/ren	Possible triggers	Ms. Miranda reflection	Researcher notes
9.22	Shakira continues to play in the sand basin next to Rashed, scooping up the sand. Rashed has a bowl full of sand and shells.							
	Holds out bowl towards Farida indicating she wants her to put in more sand.			[Shakira] Big. La Kabeera, big	Holds out her bowl to Farida		**Ms. Miranda**, she's using English to say she wants it bigger and I think she said happy. Yeah, and '*aetani* give me.	
9.23				[Shakira] Oh heavy	Lifts bowl full of sand onto table	Seems to understand concept	**CSN** Bigger bigger. But she is kind of saying bigger meaning more, I want more **Ms. Miranda**, Or bigger like full of sand. But then I think she says heavy right here too **CSN**, Yes, oh heavy.	
9.25	Ms. Miranda Returns to the table	Is that heavy Shakira?			Nods head putting hands back in basin	Understood question		

Figure 4.30 Shakira using English creatively

4.5   Summary of Chapter 4

In this chapter I have discussed how examination and analysis of the data indicates that the English-speaking teacher, supported by her Arabic-speaking colleague, is introducing English language in a systematic way. She is using a variety of strategies to modify and mediate the language she uses and to provide the children with a repertoire of formulaic (classroom) routines and taught vocabulary sets associated with curriculum and thematic topics. It would appear that modelling and questioning are the more effective strategies in whole-class teaching and that children learn new vocabulary and can make meanings when they are linked to action and gesture. There also seems to be some evidence that when the concept is taught first in Arabic, the children are better able to make a connection when the English-speaking teacher introduces the same concept in English and that her use of gesture supports their understanding. Descriptive commentary is used in all contexts and often used alongside the joint attention device as the teacher encourages the children to engage in construction of meanings, contributing to both language and cognitive development. Motivation is also used throughout, and it is seen to encourage the children to take risks and make contributions either using gesture or language.

I have described how analysis of the data shows that the children are beginning to produce some words in English in the whole-class contexts, as they repeat or join in with repetitive text or song. Their receptive skills are greater than their productive skills in English at this stage and they more frequently respond to instruction or questioning with an Arabic word or with an action rather than expressing themselves in English. In independent learning contexts, as children begin to draw more creatively on their entire linguistic repertoires, there is some evidence of translanguaging as Arabic and English words are used together in meaning-making by the children, both when engaging in activities with other children and when engaging with the English-speaking teacher. The words they use in English appear to be those words that have been learnt in relation to the classroom activities such as 'monkey' from the topic about animals and mediated with a picture, and 'water' from the topic about plants mediated by the activity of using water in the outdoor to water the plants. The word 'tomorrow' is spoken in Arabic

[bukra] by Mariam, implying that this word is not part of her active English vocabulary. This may be explained by the difficulty of mediating the concept of tomorrow with an object, an action or an image.

Ms. Miranda is using some words in Arabic which might be classified *code-switching* although I believe that they could equally be described as an element of the pedagogy for translingual practice (Canagarajah 2013) described in Section 2.2.7 that she is using in the classroom. At times she repeats an Arabic word used by a child then supplies the English word, or she simply responds in English to an Arabic utterance implying that she understands Arabic. In this way she is modifying her language while supporting meaning-making and teaching English vocabulary in a way that encourages children to take risks in their communication. The evidence that what Ms. Miranda is doing on some occasions can be described as translanguaging is supported by her own comment 'Because you're hearing a mix all day long and they're hearing a mix, you just mix the two together' (see Section 4.3.2), indicating a less rigid perception of boundaries between languages (see Section 2.4.4). Her attitude to the use of language echoes that described by Gutiérrez et al (2011) in Section 2.2.8, where a strict separation of languages might cause barriers to learning.

In Chapter five I will explore the analysis of the data related to the use of action and gesture in order to explore RQ2: How are action and gesture being used by teachers and children in joint meaning-making?

CHAPTER 5:   ANALYSIS OF DATA RELATED TO ACTION AND GESTURE

5.1   Introduction

In Chapter 4 I gave an outline of the ten episodes and presented my analysis in relation to RQ1. In this chapter I refer to excerpts of the data from each of the ten episodes responding to RQ2: '**How are action and gesture being used by teachers and children in joint meaning-making?**' In Section 5.2 I will describe my findings from the data in respect of the use of action and gesture by both teachers in the process of meaning-making, looking again at how joint attention is used. In Section 5.3 I will discuss my findings in relation to the use of action and gesture by the children, showing how they are using gestural repertoires in meaning-making. My analysis led me to classify children's use of action and gesture as that used routinely and that used creatively in a similar way to the classification of spoken language. I also include a section of children's use of speech and gesture, either as speech-accompanying gesture or as mode-switching between gesture and speech. Although I have separated the analysis of teachers' and children's action and gesture in this way it will be evident from the examples that it is the joint meaning-making which is being explored (see reflection Section 7.2).

5.2   How action and gesture are used by the two class teachers

5.2.1   Introduction

As I worked with the data, I noticed that Ms. Miranda appeared to be using speech-accompanying gesture (Section 2.4.3) frequently and it seemed that Ms. Sabha also used gesture in situations where they were co-teaching. My analysis of the data indicated that when the two teachers were working together with the whole-class, they supported each other using multimodal practices. I speculated that Ms. Miranda was developing a classroom repertoire of gesture to aid meaning-making in the classroom learning community. In order to drill deeper into the data to analyse this use of gesture by Ms. Miranda, I highlighted incidences where action and gesture were used together and added notes to the 'Researcher Notes' column of each data table (an example of a

completed data table is shown in Appendix N) to analyse how speech, action and gesture were being used together in meaning-making. I then extracted this information from each data table and created a gesture table for each episode (an example of a gesture table for analysis is shown in Appendix X). The data I had in relation to Ms. Sabha was limited to the two episodes WC1 and WC2 and these were highlighted and categorised in the same way.

5.2.2   Speech-accompanying gesture

Data analysis of whole-class, co-teaching sessions indicated that both teachers used speech-accompanying gesture in shared reading with the class, such as in WC3 (Figure 5.1). In this episode, where the teachers are taking turns in reading a page each from the big book, first in English and then in Arabic, each teacher uses gesture to accompany the text in the story.

Speech Ms. Miranda	Action/Gesture Ms. Miranda	Speech Ms. Sabha	Action/Gesture Ms. Sabha	Speech children	Action/Gesture children
		Hum, hum, hum	Rubs stomach for eating gesture		
		Aldy menykl al akhbwt?	Puts out hand palm up		
Tuna fish, Tuna fish, splashing in the water	Moves hand up and down for splashing			[some voices] Tuna fish [some voices] water	
Tuna fish Tuna fish				[some voices] Tuna fish tuna fish	
Ghau ghau ghau	Eating gesture hand to mouth			[some voices] Ghau ghau ghau	Eating gesture hand to mouth

Figure 5.1 Both teachers using speech-accompanying gesture in shared reading

It is noticeable that the two teachers do not always use the same gesture for the same meaning. In Teacher Reflection WC3, Ms. Miranda suggests that limited opportunities for joint planning result in these differences occurring 'If we have had time the week before then we will talk it through, otherwise we will just together make it up'. (An excerpt of Teacher Reflection WC3 is shown in Appendix R.) The evidence from the data indicates that Ms. Miranda, who is more frequently seen using speech-accompanying gesture, has developed many of these gestures alone, which suggest that she may not have had advice on the cultural appropriateness of certain gestures (see Section 2.4.3). In WC1 (Figure 5.2)

Ms. Sabha uses speech-accompanying gestures in her role as supporting co-teacher, as she encourages Nawal to follow Ms. Miranda's instructions. Rubbing her hands together in a mime of the action made previously by Ms. Miranda, she guides Nawal to walk around the circle and listen to the noise of the beads.

Speech Ms. Miranda	Action/Gesture Ms. Miranda	Speech Ms. Sabha	Action/Gesture Ms. Sabha	Speech children	Action/Gesture children
And it's something you can…. hear.	Rubs beads together to make sound.				
Do you want to walk around with it?	Gives necklace to Nawal and points around the circle.				
		Ta'ali Nawal. [Come to me Nawal].	Points around circle. Gestures rubbing beads in hand to make sound.		
					Nawal walks around with the necklace. Some children reach out and touch and make a sound. Nawal returns the necklace to the bag.

Figure 5.2 Ms. Sabha mimes meaning to support Ms. Miranda

In her reflection on this episode, Ms. Miranda comments on the actions of Ms. Sabha and the benefit of having an Arabic-speaking co-teacher stating, 'So, she is helping there saying "Miss Miranda wants you to show them"'. (An excerpt of teacher reflection WC1 is shown in Appendix R). Such use of speech-accompanying gesture in the bilingual classroom offers the children an opportunity to make meaning from the different modes employed. In the teacher reflection WC2 Ms. Miranda comments 'I think doing an action for the story helps them [the children] to be more engaged though, because then they can communicate back to me', which gives an indication of how valuable she considers the use of gesture in these WC sessions. (An excerpt of teacher reflection WC2 is shown in Appendix R). Her use of words here indicates that not only does she believe that a gesture is important as a meaning-making tool for the children, but it is important for her since it gives her a greater opportunity to interpret their meaning. As she is interacting with the children, she constantly assesses their responses and adjusts the ways in which she shares meaning by modifying her language or by mediating through using gestures, actions and artefacts in order to improve communication. This supports the concept of a broad semiotic repertoire which includes words, action and gesture and also artefacts and images, all having equal status or value in the way they are employed to create

meaning (see Section 6.4). I believe that, in this context, gesture as a pedagogical tool gains importance when teaching content in the second language. In WC3, actions are used by both teachers and by the children to express an understanding of the specific characteristics of each of the creatures in the story. There is some attempt by the teachers to make different actions and gestures for the different types of fish as they convey the different nuanced meanings for *swim*, *splash,* and *wriggle,* whilst reading the text of the story.

5.2.3   The use of action and gesture in co-teaching contexts

In whole-class sessions, when Ms. Sabha is talking about the calendar and the weather, Ms. Miranda is simultaneously gesturing. Since the children are hearing the information and questions in their dominant language it is unlikely that the gestures are necessary for their understanding. On this occasion, it is apparent that Ms. Miranda is teaching the gestures that she has assigned to the words in a conscious pedagogic strategy on her part, in order to introduce another semiotic tool that the children can learn and accommodate into their own repertoires to enrich meaning-making. As she comments in teacher reflection WC3, 'They wouldn't even know "is it rainy?" without the gesture' (An excerpt from teacher reflection is shown in Appendix R). Some specific actions and gestures have been created as mediational tools by the members of this classroom learning community, to aid in meaning-making, as evidenced by the use of the spoken *sad face/happy face* together with thumbs down or thumbs up gesture used by Ms. Miranda and the children, to describe a child who is behaving in a negative or positive manner. (I have been informed that the thumbs up gesture is potentially offensive in the Middle Eastern context but was, I observed, used as part of the classroom repertoire). However, there is little evidence in the data analysis to suggest that the gestural repertoire of meaning-making tools has been co-constructed taking into consideration different cultural norms (see Section 6.5).

To support the classroom routines and behaviour, the teachers have also created a variety of visual signs which are used to share meaning with the children. Ms Sabha is seen using such a sign while Ms. Miranda is sharing the story in WC3 (Figure 5.3), showing how they work together in a co-teaching relationship.

Speech Ms. Miranda	Action/Gesture Ms. Miranda	Speech Ms. Sabha	Action/Gesture Ms. Sabha
What were the fish doing?	Ms. Miranda points to the image on the cover of the book.		
They were…?	Gestures eating.		Holds up reminder card for good listening. (A picture of a child holding hand to ear).
Eating weren't they.			
		Lstm atifal [listen everyone].	

Figure 5.3 Ms Sabha uses visual signs to share meaning when co-teaching

The unique context of these interactional practices, this particular kindergarten classroom, draws into the ecological framework not only the different communicative repertoires accessible to the participants but also the different specific social and cultural knowledge and practices. It is uncertain from analysis of the data whether there is a shared understanding of these differences, despite there being an acknowledgement that differences exist.

5.3   How action and gesture are used by the children

5.3.1   Introduction

In Teacher Reflection IL3 Ms. Miranda reflects on the importance of gesture in classroom communication and meaning-making and suggests that it 'scaffolds the children's language'. (Excerpts of teacher reflection in IL are shown in Appendix V). Her comments describe how initially the children used gesture alone to share their meaning with her, but later they are able to say words in English together with gesture. This pattern of the development of gestural communication before words, is a reflection of young children's early, first language acquisition and an example of the model of apprenticeship thinking, described by Rogoff (1990). It appeared from the data analysis that actions and gestures introduced by Ms. Miranda in whole-class contexts were being copied by the children and also reproduced by them in different contexts. I also noted that, at times, children were using gesture with Arabic speech when interacting with Ms. Miranda. In order to explore this further, I highlighted children's use of action and gesture on the data tables and added comments to the 'Possible Triggers' column in the complete data table (an example of a completed data table is shown in Appendix N). I then collated this

information into three tables according to whole-class, small-group or independent learning activities and divided these into speech-accompanying gesture or gesture used alone, in each learning context. (A table of gestural modes used by children is shown in Appendix W). Looking at the resulting data I decided to convert the numerical data into percentages to show the range of each type across each context, as shown in Figure 5.4. Using the terminology suggested by Becker (1970), I found that in SG and IL contexts the children were using speech-accompanying gesture quite a lot, although in WC contexts gesture was mostly used alone. From this I speculated that a repertoire of gesture was being taught in whole-class sessions and that children were learning to copy the teacher's gestures during these sessions. Reviewing the teacher reflection in WC3 Excerpt B, I found this was confirmed by Ms. Miranda when she said, 'I plan teaching gestures to help communication' (an excerpt of teacher reflection WC3 is shown in Appendix R).

	Total incidences	Gesture alone	Speech-accompanying gesture
Whole-Class	45=100%	40= 89%	5 =11%
Small-Group	39=100%	15=38%	24=62%
Independent Learning	55=100%	33=60%	22=40%

Figure 5.4 Numerical data showing children's use of gesture in different contexts

The data provided in this way was thus contributing to the overall process and helping to 'identify patterns that are not apparent simply from the unquantitized qualitative data' by contributing to understanding of the typicality of a phenomena, such as described by Maxwell (2010:479) and discussed in Section 3.8.1.

The resulting patterns that I identified are introduced below as action and gesture as routine (Section 5.3.2), creative use of action and gesture (Section 5.3.3) and gesture with speech (Section 5.3.4).

5.3.2   Action and gesture as routine

My analysis of the data indicates that Ms. Miranda is teaching gesture as a classroom routine in the same way that she is introducing formulaic (classroom) routines and taught vocabulary, mostly through her use of speech-accompanying gesture as part of classroom routines and thematic learning and also through action songs. In the WC sessions,

examination of the data reveals that the children are using non-verbal modes as they both imitate the gestures made by Ms. Miranda, and also reproduce previously introduced gestures in response to images in the book, such as when Humaid claps his hands on seeing the picture of the drum in WC2 or when the children touch the different parts of their faces to represent senses of sight, hearing and smell in WC1. In WC2, Maitha makes circular arm movements in a gesture for a train and Malak makes a gesture for trumpet by putting his curled-up hand to his mouth. In each of these examples in WC2, there is no accompanying speech in either Arabic or English, but some children use sound representations such as 'choo-choo' or 'toot-toot' to share their understanding of what is experienced from the images. In WC3 (Figure 5.5) Nawal uses mimetic gesture (Section 2.4.3) when she moves into a space on the carpet and without speaking, makes a whole-body gesture for octopus, confirming McCafferty and Rosborough's (2014) proposal that mimesis is a fundamental aspect of meaning-making which supports the development of conceptual understanding, without relying on spoken language.

Speech Ms. Sabha	Action/Gesture Ms. Sabha	Speech children	Action/Gesture children
Kayf yataharrak al'akhtabut [How does an octopus move?]	Shows up and down gesture with hand for octopus wriggling		
			Nawal moves to middle of carpet and moves arms and body like octopus.

Figure 5.5 Nawal uses mimetic gesture

During the class singing, in WC2 my analysis of the data indicates that more children are participating in the actions of the song than are joining in the words. This again supports Ms. Miranda's reflection that the children initially learn to reproduce the gesture, and later reproduce the accompanying word. The WC sessions provide an opportunity for shared learning of gestures which are then assimilated into the gestural repertoires and reproduced in other contexts.

5.3.3   Creative use of action and gesture

Other examples of how the children use the gestures learned through the song to create and describe their games to Ms. Miranda are also found through close analysis of the

data. In IL3 (Figure 5.6), Hafez uses the gestures for *angry* and *scared,* learnt in the 'If You're Happy' song, to describe the game he is creating with the toy animals. (A longer excerpt is shown in Appendix Y).

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
		(Hafez) *Abla, abla, abla [teacher, teacher, teacher]*	Hafez Stands up.
	Looks at Hafez		Crosses arms and stamps feet.
Angry?			
			Hafez nods

Figure 5.6 Hafez's creative use of gesture in play

He initiates an interaction with Ms. Miranda by calling, ***'Abla, abla'*** *[teacher, teacher]* and when Ms. Miranda turns to look at him he continues to interact almost exclusively using gestures from the song and only joining in the words 'Oh no!' when she sings them. Ms. Miranda's attempts to create a situation of joint attention here demonstrate the skill required in order to correctly grasp the intentional meaning of the child's gestures. Later, when she reviews the video, Ms. Miranda sees some of his actions prior to the moment he called her, and she has an insight into the meaning of his play as shown in her reflection 'I didn't see what he was doing earlier so I just turned it into the song. But then he's going back to this'. (An excerpt of Teacher Reflection IL3 is shown in Appendix X). Reviewing the video, it appeared that Hafez was using the gestures from the song to enact a confrontation between some of the animals. He demonstrated that one animal was *scared* using a gesture, and that another was *angry* using a different gesture. He then picked up both animals and carried out a fight between them. Similarly, Malak uses the gesture for *sleeping* from the same song to share his meaning with Ms. Miranda about his mosaic picture of a duck sleeping in IL3 (Figure 5.7). This suggests that these gestures have become part of the children's own repertoires of meaning-making which they can confidently use to share their meaning with Ms. Miranda. In this short event, Malak does not say *duck*, but he does articulate the sound for duck, 'quack quack'. Ms. Miranda responds by repeating the sound and adding the English word.

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
		(Malak) **Abla Ta'ali choofi choofi** [Teacher come and look].	Malak fetches Ms. Miranda to his table.
What's Malak made?			Points to his construction on the table.
			Malak squats down smiling at Ms. Miranda. Malak makes a brief gesture for sleeping.
For sleeping?	Ms. Miranda puts head on hands gesture for sleep.		
			Malak nods head.
		(Malak) Quack, quack, quack.	Malak goes down on the floor.
Quack, quack, quack. A duck?	Looks at Malak 'acting' on the floor.		
	She makes a beak gesture with her hand.		Malak nods and smiles.

Figure 5.7 Malak conveys meaning using gesture from song

This creative use of gesture supports the statement made by Vygotsky (2004:11) that

> 'A child's play is not simply a reproduction of what he has experienced, but a
> creative reworking of the impressions he has acquired. He combines them and
> uses them to construct a new reality, one that conforms to his own needs and
> desires'.

In other episodes, there are a variety of examples of children responding with actions, such as in WC2, where Ms. Miranda is reading a book in English with many visual images. When she turns to the page with a picture of a bell, Shakira picks up a bell which is amongst the collection of objects close to the teacher, showing that she has understood the meaning, and apparently wants to share her understanding with Ms. Miranda. The children's use of artefacts and actions when attempting to share meaning with Ms. Miranda is also evident in SG and IL contexts, such as the incident in IL3 (Figure 5.8) when Farida gestures *heavy* and *light* with her two dishes of playdough, using actions combined with artefacts. On this occasion, Farida is taking a leading role as agent in creating joint attention, as she approaches Ms. Miranda and, without speech, she expresses and shares her understanding of the difference between *heavy* and *light* objects. Initially Ms. Miranda assumes that the playdough represents cake and she mimes eating but this is not the meaning Farida wishes to convey. Farida persists, holding one dish high and the other low, and Ms. Miranda correctly interprets her meaning as she repeats Farida's

gestures back to her and comments 'Ah! This one's heavy and this one's light isn't it. Because this one's full of playdough and this one's empty isn't it!'

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
			Farida holds out 2 dishes of play dough-one empty one full.
What's this one? A cake?			
Mm, thank you	Mimes eating. Smiles at Farida.		
	Ms. Miranda puts hands under the dishes.		Farida holds empty dish high and full dish low.
Ah! This one's heavy and this one's light isn't it.	Points to each of dishes.		
	Moves hands up and down like scale balance.		
Because this one's full of playdough and this one's empty isn't it!			Continues holding one up and one down.
Heavy and light. Well done Farida.	Points to one then the other.		

Figure 5.8 Farida conveys meaning using action and artefacts

In these examples the children are showing that they are not relying on words to share their meaning with the teacher and in turn the teacher is respecting their chosen mode of communication.

5.3.4   Gesture with speech

My analysis of how children are using speech and gesture together (Figure 5.4) indicated that this was occurring mostly in SG and IL. Further exploration revealed that at times these are used simultaneously as speech-accompanying gesture, and at times the children mode-switch between one mode and another. For example, using speech-accompanying gesture, Malak shares his meaning of his mosaic with Ms. Miranda by saying 'Quack, quack, quack' and then squatting on the floor to imitate the pose of a duck (Figure 5.7). However, in IL1 (Figure 5.9) Shakira uses her linguistic and non-verbal repertoire in her mode-switching dialogue with Ms. Miranda, as she recounts her story about what has happened to the shells. When Ms. Miranda asks, 'Where have they gone?' Shakira responds with a gesture of hands out palms up and says 'Uh oh' as she looks at Ms. Miranda. Then she looks at the bowl and says '***Tmsah' [crocodile]*** while making the gesture for crocodile and the gesture for eating. In response Ms. Miranda authenticates

the non-verbal aspects of the dialogue by reproducing the gestures while also saying English words 'The crocodile ate them!'.

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
How many shells did you find?	Points into bowl.		
			Shakira gestures hands out palms up for I don't know.
		(Shakira) Uh oh.	Looks at Ms. Miranda.
Where have they gone? Are they inside?	Puts hands out palm up questioningly.		
			Looks at bowl.
		(Shakira) **Tmsah** [crocodile].	Gesture for crocodile. Gesture for eating.
The crocodile ate them!	Gesture for crocodile and gesture for eating.		
			Nods head.

Figure 5.9 Shakira mode-switching to convey meaning

This excerpt shows how the child easily switches between modes and blends modes in order to share the meaning of her play with Ms. Miranda (see Section 2.4.3).

As mentioned in Section 3.4.5, Arabic is the principal language in use in the classroom: all the children can communicate in the local dialect of Arabic and it is shown through the analysis to be the language of choice for children when communicating with each other. However, in IL1 (Figure 5.10) examination of the data reveals that when Ms. Miranda supports children, they can use both gesture and English words to enter into dialogue with each other. In this episode Masoom needs more camels to complete his circle and Ms. Miranda suggests asking Farida for one of her camels saying, 'Can you say, "One camel please Farida?"' while holding up one finger and looking at Farida. Farida says, 'Please one' and Masoom repeats, 'One' whilst holding up a finger. Farida then passes him a yellow camel while saying, 'yellow' with the result that Masoom can complete his circle.

Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
	Ms. Miranda looks at Farida who has a collection of camels in a sorting bowl.		
Do you think we could ask Farida for one piece?	Holds up one finger.		
Can you say 'One camel please Farida?'			Masoom is still trying to attach camels.
Farida, can we borrow one camel please?	Ms. Miranda gets Farida's attention.		
Farida! Can we have one camel please?			Masoom looks at Farida.
		(Farida) Please one.	
One. Where is one?		(Masoom) One.	Puts up one finger.
Where is one camel?			Masoom leans into Ms. Miranda putting head on her shoulder. Looks at Farida's camels.
			Looks at Farida, smiling.
One camel please Farida.		(Masoom) One.	Holds up one finger.
		(Farida) Yellow.	Farida passes a camel Masoom takes it.
Thank you for the yellow one. There we go.			

Figure 5.10 Speech with gesture dialogue

This interaction between these two emergent bilingual children in this episode is one of a very few incidences in the data of two children using English words supported by gesture and artefacts, to engage in meaning-making dialogue. Both children express themselves with English words and gestures, through the encouragement and modelling from Ms. Miranda, who skillfully uses the social opportunities provided, in this case by the children's engagement in the big basin of sand with resources. Consequently, she scaffolds their language learning, using gesture and speech.

5.4   Summary of Chapter 5

In this chapter I have discussed how examination and analysis of the data indicates that the teachers and children are working together as co-constructors of meaning using a broad repertoire of meaning-making skills which includes the use of artefacts, action and gesture and the spoken word in both Arabic and English.

The English-speaking teacher, together with her Arabic-speaking colleague, is introducing and establishing a semiotic repertoire of taught and co-constructed gestures in order to provide the children with enhanced opportunities for making and sharing meaning. At times it appears that the gestures are created by Ms. Miranda alone and at times both

teachers and the children are developing these gestures. In the whole-class contexts where both teachers are at the front of the class sharing the teaching time, Ms. Miranda is seen using gesture to mediate meaning while Ms. Sabha is speaking Arabic and Ms. Sabha uses speech-accompanying gesture to encourage the children to participate in the activity while Ms. Miranda is speaking English. When they share the reading of a big book both teachers use speech-accompanying gestures, although the gestures used are not always the same, suggesting that they have not been planned together (see Section 2.4.3 for discussion of gesture and culture). Analysis of spoken language in Section 4.3 also revealed that Ms. Miranda is using speech-accompanying gesture in small-group and independent learning contexts, especially when using teacher talk classified as instruction (see Section 4.3.3).

The children show that they are confidently using the gestures introduced by the teachers in Whole-Class contexts, either by responding to gestures used with speech by the teachers or by joining in gestural routines such as in songs. As they play and interact with Ms. Miranda, they use the gestures introduced in Whole-Class sessions, alone or with speech in meaning-making. There is also evidence that children are using gestures and speech in a fluid way as they draw on their whole meaning-making repertoires and switch between modes when expressing meanings. When initiating interaction with Ms. Miranda, at times children are seen using the 'attend to-act upon' routine (see Section 2.3.7) in a creative multimodal way by employing Arabic speech first when they call '***Abla'*** *[teacher]*and following this with gesture to share meaning.

In the next chapter I will discuss the themes that have emerged from the analysis of the data in both chapters four and five.

CHAPTER 6: INTERPRETATION AND DISCUSSION OF FINDINGS

6.1   Introduction

The focus of this case study was *'To explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners.'* Data was gathered from a classroom in a government kindergarten school in the emirate of Abu Dhabi in the UAE, where a native Arabic-speaking teacher and a native English-speaking were working together in a co-teaching situation with twenty-six emergent bilingual 3-4-year-olds, in order to answer the research questions:

- RQ1: How is spoken language being used by teachers and children in joint meaning-making?
- RQ2: How are action and gesture being used by teachers and children in joint meaning-making.

In Chapters 4 and 5 I presented an analysis of the data and in this chapter, I will discuss my interpretation of the findings in order to hypothesise how spoken language, action and gesture are involved in meaning-making, within a framework of sociocultural theory.

There are few distinct second-language learning pedagogical practices in this early-years classroom since the local policy proposed that content and language teaching are integrated for this age-group of children (Section 1.2.2). It is also accepted that, due to the age of the children, they may be more influenced by the physical and social environment of the classroom than by explicit second-language teaching practices more typically used in teaching older children. Furthermore, it is important to note that Arabic, as the principal language used in the classroom, is the primary language for all forms of meaning-making for all participants apart from the English-speaking teacher. The emerging themes indicate that the children in this study draw on their whole repertoire of semiotic skills in order to maximise their understanding, but that they draw selectively on any resources to convey meaning. I had decided to focus on action, gesture and language as I investigated meaning-making. This was in part due to my own observations

during the foundational phase when I undertook the pilot study, at which point my focus was on emergent bilingual and biliteracy development. My own emergent understanding of multimodality inspired me to consider action and gesture but as my own understanding developed, I became more aware of the many other aspects of semiosis. This limitation is further explored in Section 7.4.

In order to enable children to be confident learners in this bilingual context the teachers are using a variety of strategies such as modelling meaning through many channels and using guided participation, scaffolding, joint attention and speech-accompanying gesture, which are elements both in early years pedagogy and in second-language learning pedagogy as described in the literature. There are also aspects of power relationships emerging from the analysis that permeate the classroom learning community, and these will be discussed in relation to specific examples. The discussion relates to sections in the Literature Review and is divided accordingly, although I acknowledge that the pedagogical features extend beyond these boundaries.

In Section 6.2 I will focus discussion on aspects of bilingual education, specifically how the English-speaking teacher is modifying her use of English to support children's language learning through integrating language and content and the contribution that the co-teaching model used in this classroom makes to learning opportunities. In Section 6.3 I discuss aspects of early years teaching and pedagogy and the construction of a learning environment that allows children to be agents in their own learning, developing as confident learners. In this section, I include how the English-speaking teacher and at times the Arabic-speaking teacher are mediating language with action and gesture in order to guide children into participation. In Section 6.4 I focus on the multimodal aspects of meaning-making and the opportunities and experiences that children have that are revealed from my analysis of the data.

6.2   Bilingual education and translanguaging

Bilingual and multilingual education exists in many places and manifests a broad variety of pedagogical characteristics as described in Sections 2.2 and 2.3. The bilingual nature of

this classroom with its co-teaching model and emergent bilingual members has been described through the presentation of the data in Chapters 4 and 5.

The findings from the data analysis suggest that in this context of a bilingual Arabic/English environment, both languages are given equal status in the curriculum, in terms of teaching time, such as might be found in other established bilingual contexts described in the literature (Section 2.2). In practice, English language is being incorporated into the linguistic environment of the school, which historically has used Arabic language only, rather than being offered as a substitute for Arabic language or being taught as a discrete curriculum subject. As a result, the children are involved in 'fractionally increasing participation' of English language (Bligh and Drury 2015) as they spend time listening to and copying Ms. Miranda while also employing other modes in meaning-making. My findings suggest that the one-person/one-language (OPOL) policy of the co-teaching model attempted to give equal status to each language but that there was a tension between the two as the teachers endeavoured to meet the expectations of the curriculum in respect of their own language. This became evident in the organisation of the whole-class teaching sessions which, at the time of planning the data collection, had been run by both teachers together but then changed to being two separate literacy sessions as described in Section 3.6.1. Ms. Miranda expressed her feelings about how the teaching time is organised in Teacher reflection WC1 when she comments about the children's learning, 'They are making the connection between the two lessons, but it would be easier to do it together.' (Excerpts of Teacher reflection, whole-class are shown in Appendix R). She is referring to children's meaning-making opportunities when she is leading the class alone, in comparison with when she and Ms. Sabha co-teach a concept together, indicating that co-teaching is not always straightforward. As shown in the literature (Liu 2008), adequate strategic leadership and opportunities to nurture an effective collaboration are important for successful co-teaching.

In a later recording WC3, both teachers are together during the whole-class session and both teachers are employing multimodal strategies to share meaning. As they take turns in speaking and asking questions, my analysis of the data suggests that often the same or similar questions are posed first in one language and then in the other. This is seen when

teachers are engaged in shared reading together and when they are discussing the date and the weather in WC3. During the small number of examples in the data that this occurs, there appears to be an expectation that the children respond twice but use a different language to express themselves each time. Arguably, this implies an underpinning pedagogy of double monolingualism as described in Section 2.2.2 (Jørgensen 2003), where each language is recognised and used side by side. However, my analysis of the data in respect of children's responses indicates that they are not fully dependent on the language in which the question is posed. While it is more usual for the children to respond in Arabic to the Arabic-speaking teacher, such as when they answer her questions about the story in WC3, they use either language when responding to the English-speaking teacher. I believe this is because the children are drawing on a broader repertoire of communicative resources which is not compartmentalised but can be regarded as a continuum of communicative skills as discussed in Section 2.2.8. Evidence of this is seen in the way children are mixing Arabic and English such as when Mariam asks '**Bukra** [tomorrow] water?' in IL1 and is further augmented by the integration of other modes, including action and gesture as discussed in Section 6.4.

Although Ms. Miranda is the designated English-speaking teacher in this classroom, she does also respond to the children when they speak Arabic, such as when she affirms a child's Arabic response to her English question with a nod of the head or responds to a child's Arabic utterance by repeating the word in English as discussed in Section 4.4.2, thus using the opportunity to model a correct English word or phrase. I believe this practice indicates a sensitivity on the part of Ms. Miranda to the cultural value of the mother tongue (Cummins 2001), while suggesting that a goal of additive bilingualism (Baker 2011) is an aspect of the underpinning pedagogy. It also appears to imply a pedagogical strategy that is supported by a philosophy of translanguaging which García (2016) says is more than going across languages; it is going beyond named languages and taking the internal view of the speaker's language use. It would seem apparent also that her responses indicate to the children that they are understood by her when they use Arabic words and they do not lose motivation to attempt to express themselves in whichever way they can, thus empowering them to be active contributors to the learning community. Nevertheless, my analysis of the English teacher's feedback to the children,

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when they answer her in Arabic, reveals that there are inconsistencies in her responses. On occasion, she expresses some doubt about a response in Arabic, with an action or gesture or even a facial expression indicating uncertainty or dissatisfaction, sometimes saying, 'In English?' and indicating that she expects a different response. On these occasions she emphasises that speaking English is more important in the present instance, conveying a power hierarchy between the languages. During these WC events, a response in English from a child will elicit a motivational feedback from Ms. Miranda such as praise in the form of a thumbs up sign, a nod or a smile and the word 'good', thus reinforcing for the children the type of linguistic response expected. Ms. Miranda's behaviour in these instances would appear to indicate that she expects the languages to be used discretely and not mixed and could even suggest to the children that she privileges the use of English over Arabic, as discussed in Section 2.2.

In contrast, further analysis of the data shows that Ms. Miranda is sometimes using Arabic words herself in communication with the children, such as when she says '**La, la.** *[No, no]* For the cat!' (Section 4.3.7). When reflecting on this use of both languages, her comments appear to show that she acknowledges that both languages have equal status and that it is acceptable to mix the two languages in a deliberate pedagogical strategy, when establishing shared meaning. I believe this also indicates that she is open to a pedagogy of translanguaging whereby 'any teacher, including a monolingual one, can take up translanguaging to enable their bilingual students to make deeper meaning and legitimize their home language practices' as described by García (2016). However, the expectations of the curriculum and the education authority are also likely to be an influence on her practice in the classroom as discussed in Section 2.2.3.

The children were developing skills in English but, as yet, had a more passive knowledge of this language and this was evident in the way they could respond to certain instructions given by Ms Miranda when she used modified language (Section 2.3.6) or mediated her language using gesture or action (Section 2.3.7). In SG and IL episodes where Ms Miranda interacts with fewer children, her interaction is often developed from descriptive commentary and her questioning sometimes elicits responses in English as described in Section 4.4.3. The words used by the children in these instances have been

learnt in other contexts, usually in whole-class teaching such as those learnt through song or stories. With encouragement and guided participation from Ms. Miranda, they begin to use these words across contexts.

6.3   Early years pedagogy

In Section 2.3. the role of the teacher in a child-centred learning environment is described as one of guide, scaffolding the child's learning. Through this scaffolding, the children are guided into participation in order that they are able to develop greater skills. The analysis of the data in relation to how action and gesture are being used by both the class teachers appears to indicate that both teachers are using strategies to guide the children into participation in their own learning by mediating language with storybooks, song and the introduction of artefacts. Such mediation of language use is an accepted strategy in early learning as has been shown in the literature in relation to joint attention (Section 2.3.7). Examples of creating and using joint attention to scaffold learning are found through analysis of the data in each of the WC, SG and IL contexts (see Section 4.2, ten episodes). The organisation of the timetable into these different learning contexts allows the teachers opportunities for different types of support, as can be seen in the ways in which language and gesture are used in the different contexts. Furthermore, classroom signs and labels often include a symbol or picture to aid meaning-making.

In the WC contexts, the use of artefacts and images are often the objects of explicit attention as the teachers draw the children's focus to the calendar or the storybook, in WC3 for example, in order to scaffold learning of concepts and language. In the co-teaching context, where both teachers plan to teach the same concepts using different languages, the children have the opportunity to integrate their conceptual learning with the learning of vocabulary in each language. This was shown in WC1 as discussed in Section 4.3.2, where Ms. Miranda states her belief that because the children have learned the concepts about the senses first in Arabic, they are more readily able to understand her meaning when she introduces the activity using English (Teacher Reflection WC1 shown in Appendix R).

In the SG contexts, the provision of a variety of resources allows Ms. Miranda to integrate

language and content into her teacher-led activity which becomes a vehicle for learning both concepts and language as discussed in Section 2.2.6. In SG1 the group of children are involved in learning about the sounds that can be made when they put gravel into their containers and create a shaker. Guided by the teacher they explore the qualities of the resources while also listening to instruction in English as the teacher tells them how to make the instrument. Through the careful selection of resources Ms. Miranda gives them the opportunity to use some of the taught vocabulary that is a part of the classroom community repertoire, as seen in SG1 when Farida says 'green' (Section 4.4.2). In SG4 the children again have the opportunity to draw on their prior learning of vocabulary as they explore the plants they have been growing in their garden. This ongoing activity has been planned in relation to the theme of *growing*, and stories about growing plants have been used to introduce the theme and vocabulary. Ms. Miranda comments that a lot of effort had been put into teaching the vocabulary for this theme (Section 4.3.2) indicating the value she places on empowering children to be active agents in their learning. In the teacher-led activity, Ms. Miranda encourages the children to look for growing vegetables, capitalising on their natural interest and creating opportunities for a longer exchange initiated by Mariam, as she talks with Ms. Miranda about the plants she can see. In these contexts, it is apparent that the teacher has planned for appropriate experiences, in order that the children have opportunities to safely test the taught vocabulary in a similar way to the *rehearse* aspect of repetition, discussed in Section 2.3.5, described by Moore (2011) and as a result, they can develop confidence as learners. It is also interesting to see Mariam in this context initiating the exchange with Ms. Miranda, since children are not often seen initiating an exchange using English language. I believe this is another instance of Ms. Miranda empowering the children to be equal participants in the learning environment.

In the IL episodes, different opportunities arise for Ms. Miranda to scaffold learning as the children are mostly engaged in their own, child-initiated, activities. In these activities the focus of the joint attention is often an object or artefact that the child has chosen for play, such as in IL3 (Section 4.3.5) where Saif and Hafez are playing with the small animals. In these contexts, there is more challenge for the teacher to scaffold learning because she has to interpret the children's gestural meanings before she can

appropriately introduce any language, as she reflected when reviewing the video (see Section 5.3.2). It might be argued that although children have greater agency in their own learning in these IL contexts where they can choose their own resources and rehearse their own ideas, the teachers also need greater skills in interpreting meaning in order to suitably scaffold learning. The value of using songs to teach vocabulary is also shown in this episode (Section 2.3.7) when Hafez expresses his meaning through some of the actions that have been introduced in the class song. Although I did not make any systematic analysis of the documents, or of assessment practices, I noted from my scrutiny of the NSM curriculum (Section 1.2.2) that spoken language was given greater importance than other meaning-making modes, especially in relation to assessment of skills. This is an area that might benefit from further investigation as discussed in Section 7.5.

6.4   Meaning-making and multimodality

Perhaps the most significant outcome of this research is the recognition that action and gesture can offer a significant mediational tool for young, emergent bilinguals and that they are not confined to the use of the spoken (Arabic/English) word in order to develop conceptual understanding. Due to the young age of the children in this research, their receptive skills exceed their productive skills in language, resulting in their communicative repertoires being heavily non-verbal. The teachers' understanding of this, and their modelling and encouragement of expression through various communicative modes, allows children to develop confidence as communicators and to participate in the classroom learning community. Furthermore, the communicative aspects of the gestural repertoire encourage cognitive growth which is not bound to verbal language. As Vygotsky (1986) proposed, action and gesture may become material carriers of meaning for the child, freeing them from the limitations of a restricted vocabulary.

In the classroom learning community, the analysis revealed that the English-speaking teacher was introducing a gestural repertoire. Once introduced, the children were appropriating these gestures and making them their own through creative personal use in their own meaning-making play and interaction such as in the example of Hafez and Saif

playing with the animals and using the words from the 'If you're happy' song (see Section 5.2.2). The data analysis revealed that the English-speaking teacher was also repeating gestures used by the children while adding verbal commentary as in SG3 (Section 4.3.4) when she claps her hands in response to Humaid's initiation. This dynamic use of the gestural repertoire contributes to its authenticity as a valid semiotic tool of the classroom community.

The motivation to create optimum opportunities to communicate and make meaning is also evident in the classroom print-rich environment (Section 3.4.2), where many classroom signs and labels are bilingual. This also suggests evidence of consideration of a translingual pedagogical strategy as described by García (2016). Teachers refer to these signs and labels in co-teaching contexts such as in WC3 when Ms. Sabha holds up a behaviour management sign while Ms. Miranda is reading the story in, or when Ms Sabha indicates the weather chart and gestures looking out of the window as Ms. Miranda asks, 'What's our weather like today?' (Section 4.3.6). In these cameo events, an effective co-teaching strategy is seen, as teachers model meaning in various modes, children are provided with multimodal input and are shown in practice that a variety of modes are acceptable means of sharing meaning in this learning community. However, I do not have sufficient data on co-teaching practices to describe these more comprehensively. The data I have on Ms. Sabha's use of gesture is also limited to the co-teaching in WC contexts.

The evidence from data analysis of children participating in child-initiated play in IL activities, shows that they are reproducing the gestures learned in the WC contexts as they enact their own role play scenarios. When Ms. Miranda comes alongside and joins in their play she is able to scaffold their learning further through using the same gestures while modelling vocabulary in English. Using speech-accompanying gesture, while commenting on the child's actions, she adds another layer of meaning-making to the situation, giving the child confidence to share meaning. Although analysis of the data indicated that in WC contexts Ms. Miranda more frequently expected a response in English, in the small-group and independent contexts her expectation appears to be one of opportunity to express meaning using whatever communicative resources are

available, which encourages children to use gesture and speech such as in IL1, described in Section 5.3.3 (Figure 5.9). In this excerpt, Shakira seamlessly incorporates gesture and speech drawing on her whole repertoire of semiotic modes to explain her story to the teacher.

6.5   Summary of Chapter 6

In this chapter I have discussed the themes that are emerging from the data analysis, in relation to bilingual education, early years pedagogy and multimodal meaning-making. My analysis indicates that the classroom practices of both teachers, especially in whole-class contexts, demonstrate an additive bilingual pedagogy with a content and language integrated approach. Ms. Miranda is modifying her language by attempting to use a limited vocabulary and repeating the same words frequently. She is also mediating her linguistic input with image, gesture and action to enrich the learning opportunities. In this way, multimodal meaning-making is encouraged through the acknowledgement and development of a range of semiotic repertoires. This is at times supported by the Arabic-speaking teacher although there are some inconsistencies in gestures employed (see Section 2.4.3). Power differentials between the two teachers are sometimes in evidence, emphasising the importance for co-teachers to allocate time to developing a better understanding of each other's cultural and pedagogical differences in order to nurture an effective collaboration and to be able to plan effectively in relation to the needs of a bilingual curriculum, as proposed by Liu (2008) and supported by Dillon et al (2015) (see Section 2.2.7).

The English-speaking teacher has a child-centred approach to early years pedagogy (Section 2.3) as demonstrated through her practice of providing an inspiring environment and scaffolding children's learning as she engages with them in guided participation in small-group and independent learning contexts. Through using a variety of teacher talk strategies integrated with other modal input, she supports the development of language and cognition and creates opportunities for shared meaning. Frequent use of motivational language encourages the children to be active agents in their learning and to make contributions to dialogue using a variety of modes. The use of joint attention is a

strong pedagogical feature allowing teachers and children a shared focus through which meaning can in turn be shared and developed. There is some evidence emerging from the analysis that the children are being empowered through the pedagogical approaches used in the classroom to take risks and share their meanings with the adults as they are acknowledged as equal participants in the classroom learning community.

In the following chapter I will reflect on the research and share my conclusions.

CHAPTER 7:   REFLECTIONS AND CONCLUSIONS

7.1   Introduction and main findings

The key focus of this research was 'To explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners.'

A review of the literature relating to bilingual education revealed limited research data relating to young children such as the 3-4-year-olds in this study, who have yet to learn the skills of reading and writing. There is also limited data relating to the pedagogical strategies employed by teachers working together in a co-teaching context in a bilingual, kindergarten classroom, especially where a content and language integrated approach is being used. Much recent research has explored the multimodal ways in which communication occurs, often with an emphasis on aspects of literacy such as reading images and emojis. There is also literature available relating to the use of gestures by infants who have yet to develop the ability to pronounce recognisable language for communication. However, there is less which relates to how action and gesture can be used together with language in the bilingual classroom. This study, therefore, aimed to explore how teachers and children were using spoken language, action and gesture to achieve meaning-making in the context of an early years bilingual classroom. My position in the school as a senior leader meant I was performing two roles. I was aware of tensions arising as I attempted to allocate time to researching practice in the classroom as a qualitative researcher, while experiencing increasing pressure from the organisation to provide evidence which might be used to enhance educational outcomes (see Section 3.6.1). In this final chapter I reflect on the methodology, methods and tools I decided upon and the implications for practitioner research including different aspects of power that may influence the research process in Section 7.2. I consider further limitations and any possible solutions in Section 7.3. I summarise the main findings and contributions of this research to bilingual education, translanguaging and multimodality in Section 7.4 and finally I consider some directions future research might take in Section 7.5.

7.2 Reflection on the chosen methodology and methods

7.2.1 Methodology

The socio-cultural theoretical framework of this research, as described in Section 3.2, was underpinned by the belief that the reality of the classroom is co-constructed by the teachers and the children interacting with each other and with their environment. The resulting realities that occurred in the evolving context of the classroom environment were the focus of the research. Following the pilot study and a review of the literature, the research aim changed from 'investigating how native Arabic-speaking kindergarten children were developing spoken and written English' to 'exploring meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners.' Subsequently the research questions underwent a range of modifications as the emerging data and review of literature impacted on my understanding of the classroom learning community, and of the multifaceted and multimodal behaviours involved in meaning-making. I moved through a range of questions relating to meaning-making before finally settling on:

- **RQ1: How is spoken language being used by teachers and children in joint meaning-making?**
- **RQ2: How are action and gesture being used by teachers and children in joint meaning-making?**

7.2.2 Methods and tools

The case study approach offered an ideal framework for this research allowing for an interpretive view to examine the personal and unpredictable nature of the teachers' and children's actions, when attempting to make meaning and communicate. The inductive process allowed for the generative function of data to provide some possible answers to the research questions (Section 3.8). My choice of ethnographic tools to gather data provided material to create a picture of the sociocultural environment of the classroom. Inevitably there were drawbacks to having the researcher present in the setting, not the least of which was interference in the typical functioning of the classroom (Section 3.6). Through including participant reflection, I was able to develop a shared frame of

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reference and this acted as a type of triangulation, as described by Hammersley (2008). Continuous advances in the field of technology, such as the use of micro devices with Wi-Fi capabilities, might benefit future researchers by allowing for remote recording and diminishing the impact of the researcher. I relied on the video camera sound recorder to collect both speech and action and, on reflection, I realise that the speech was not always clearly audible in the recordings. By using individual voice recorders that attach to clothing, the quality of audio recordings could have been improved. Although this technology might not have been appropriate for whole-class recording, it could be used in small-group or individual learning contexts.

7.2.3   Analysing teacher talk

When examining the language used by the English-speaking teacher, I drew on the work of Lindholm-Leary (2001). Her comprehensive studies examined teacher-talk and student interaction in dual-language Spanish/English, language and content integrated classrooms. Based on her categorisation of classroom teacher talk, I developed a framework for analysis which I felt was more appropriate for use in this emergent bilingual, early-years classroom (Section 4.3). The framework was simply one tool that I found useful in the process of exploring how meaning-making was occurring, but I make no claim for its transferability in other contexts. As I proceeded in the categorisation of the English-speaking teacher's classroom talk, I found that some utterances might fit into two categories - for example, where questioning was used to instruct or to motivate, or as described in Section 4.3.4 where using question and answer could be classified as modelling. Lindholm-Leary used two types of questioning, factual question and higher order question, which might alternatively be categorised as closed and open-ended questions. I decided to simply use *questioning* to cover any type of question. I am confident that this served the purpose of allowing me to explore some of the language used for communication in this emergent bilingual classroom, but I might consider an alternative approach in another context. For example, MacNaughton and Williams (2009:156) discuss eleven ways questioning might be used in the early years classroom as a pedagogical approach, which might be interesting for a researcher with a specifically linguistic interest, to explore. In fact, I believe there is an opportunity to develop this

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framework further in order to explore the teacher-talk of both teachers in a co-teaching, bilingual context.

7.2.4 Working with multimodal data

The processes involved in converting the data corpus into a textual representation were not straightforward and I was aware that it was ultimately impossible to capture in my writing all the nuanced aspects of the multimodal interactions occurring in the classroom (see Section 3.8.4). As recognised in the field of multimodality (Bezemer and Jewitt 2010), it is neither feasible nor necessary to analyse everything that occurs in a classroom or to analyse all video data in detail. Instead, I adopted a principled approach to data selection, as described in Section 3.8.8. Initially, I approached the task of converting data to text in a naïve way and the complexities were revealed through ongoing reflection throughout the process. The initial data table did not give the best possible layout for analysing initiation and response; however, this was only a part of the joint meaning-making being explored and the three different contexts provided different types of data. The addition of the extra columns for possible triggers and researcher notes improved the design and allowed me space to reflect on the combined data sources. I decided to use photos in some places to supplement the information provided in the multimodal data tables, although this was not done routinely. Another concern that emerged as I reflected on translanguaging, was the way I was recording Arabic speech in the data tables. I had hoped that the method of coding the data conveyed that communication was a fluid expression of meaning across linguistic boundaries, with a focus on meaning-making. However, by highlighting Arabic words in bold italic type I realised that I might have introduced an idea of separation of linguistic codes. Further refinement of the multimodal data representation processes and improved planning for these which considers the data available for the three different contexts, could allow for better understanding of how different modes are working together in meaning-making.

7.2.5 Power issues and practitioner research methods

The role of the research practitioner inevitably involves power differentials. In my context I could identify aspects of power impacting my research in a number of ways: coming

from authorities who had influence over me; deriving from me moving outwards towards others; and between research participants. Having decided to undertake the research, I had to seek permission from my employer, ADEC, which required completing a very lengthy application form, the format of which implied a positivist paradigm for research projects. Since I was seeking permission for a qualitative case study, I felt that my research might appear in some way inferior or unscientific according to the expectations of the organisation. The time involved from submitting the application to receiving permission was over one year, and my feelings of powerlessness during this time caused an extra burden. Once the research was underway I also felt the challenge of maintaining a reflective attitude to the themes emerging from the data, since I was aware of feeling under obligation to align myself with the accepted viewpoint of the organisation, which may have differed from the emerging themes.

I was also aware of other tensions when in the classroom, due to the different hierarchical power relationship between myself and the teachers which, despite my attempts to develop a collaborative professional relationship, were impossible to fully eliminate. I became aware that there were power differentials in the classroom concerning the relationship between the two teachers which manifested, in one instance, in the unexpected change to the organisation of the teaching time, as explained in Section 3.7.1. Both teachers also had their own personal histories and perspectives on childhood and early years education which were culturally defined, and the analysis of the data indicated that there were differences in their classroom practices. I had not explored these prior to designing the methodology which meant I had made certain assumptions about their working relationship which impacted my research design. I concluded that, when undertaking research in co-teaching contexts, it would be useful to endeavour to clarify the relationship between the two teachers at the outset.

Personally, I found it very difficult to detach myself from the role of educational professional when entering the classroom as a researcher. It was difficult to refrain from engaging with the children and supporting their learning and it was equally difficult not to identify with the teachers in their professional roles, empathising with and supporting them in problem-solving their daily challenges. When making recordings in the classroom

as an insider-researcher, I needed to remind myself constantly that I was a researcher and not a senior leader and I endeavoured to maintain an attitude of 'thoughtful, conscious self-awareness' (Finlay 2002), being mindful of the fact that my own personal history and perspective was very different from that of the participants and liable to colour my interpretation of what I saw or chose to record. As a researcher, I was engaged in an effort to manage my own behaviour in the classroom in an attempt to be as detached as possible and to ignore any feelings relating to power differences that the research participants might have towards me. This was one of the most difficult aspects to the data-gathering process, especially as the teacher in me instinctively wanted to empathise with the class teachers and to engage in collaborative, solution-focussed dialogue.

Aspects of power were also evident between adults and children in the classroom in relation to the establishment of the classroom practices. As I reflected on what I observed and what was revealed through analysis of the data, I was aware that the English-speaking teacher was using pedagogical approaches that aimed to empower children to be active agents in their own learning, as described by Rogoff (1990) (see Section 2.3.2). I had very limited data for the Arabic-speaking teacher, but I speculated that she had a different conceptualisation of childhood (discussed in Section 2.3) which related to her own cultural background. This was suggested by her practices in the whole-class sessions which indicated an expectation that children would respond by repetition. An exploration of each of the teachers' educational viewpoints and beliefs at the outset, may have revealed more about the classroom environment as a shared learning space and the different relationships of power that were operating and in turn this would have influenced the way I approached the design of the research. For example, if I had ascertained, through interview or questionnaire, that the teachers held differing views of how children learn, I may have made greater use of the lesson plans prior to observation and involved teachers in explaining the learning objectives of the planned activities from their own pedagogical perspectives. This would have introduced another element of participant collaboration at the design stage with the potential to contribute to researcher impartiality.

When reflecting on my experience of sharing information and gathering consent from parents, I questioned why parents appeared to show limited interest in the research, manifest through their almost unquestioning compliance regarding this project (see Section 3.5.3). I considered whether there might be aspects of power differentials which prevented them from feeling comfortable in responding or whether the cultural understanding of authoritarian organisations, as described by Hoyle (1999), influenced their apparent lack of willingness to make a comment (see Section 2.2.3). The value of a positive partnership between parents and the school community has been well documented in the literature (see Section 2.3.4) however the expectation of this partnership may vary according to cultural norms. Although the parent-school relationship was not a focus of this study, it is worthy of future investigation since the relationship between empowerment and the development of self-confidence is also evident. As explained in Section 3.5.2, parents who give consent for children to participate in research but who are then not present when the research activities are being undertaken, are unable to monitor their children's reactions. In this respect, it is important that the researcher and the parent have an agreed understanding of the best interests of the child. Any future research in similar contexts would need to take account of the contextual expectation of the partnership between school and parents to ensure children's rights and feelings are protected consistently, not only in accordance to international codes but also across school and family cultural expectations.

Reflecting on the relationship I had with the children in the class, I was aware that my limitations in the Arabic language meant that I did not always understand the meanings they were trying to convey. The relationship between language and power was manifest for me as I felt that spoken language, which was a vital tool for me and one on which I relied, had become ineffective and this in turn diminished my power when attempting to share meaning with them. Interestingly, this did not seem to have the same impact on the children who, as the findings have shown, were confident in using a multimodal repertoire to share meanings. As a result, I felt that my ability to establish a relationship with the children was being hindered. Further reflection on language use in building relationships made me aware of the potential differences in the relationships that the children had with the two teachers in the classroom, and a probable motivation for the

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English-speaking teacher to develop a multimodal repertoire for sharing meaning since, as my own experience showed, language alone was not sufficient. Although not investigated, power differentials associated with language may be mitigated through the employment of multimodal repertoires.

7.3 Specific limitations of the research

7.3.1 Language and multimodality

There were limitations in the research process related to my limited ability to understand and speak Arabic. Miscommunication occurred at times, prompting me to take extra care in ensuring that a shared understanding was achieved. In respect of children's utterances, I was not always able to understand the sounds they were making which resulted in noting them as 'undefined speech' when transcribing. My limited ability to understand Arabic also meant I could not understand the verbal communications that occurred between the Arabic-speaking teacher and the children. This meant that I had an incomplete view of classroom practice which was only partially alleviated by involving the Arabic-speaking teacher in participant reflection. However, language was only one aspect of the multimodal meaning-making being investigated in this research and the fact that I had limited skills in Arabic heightened my own awareness of other communicative modes available and being used in the classroom. I was also aware that facial expression was an important aspect of this communication, especially in relation to supporting the development of confidence. Motivational language was often accompanied by a smile and this could have added another dimension to the analysis, had it been included.

7.3.2 Children as research participants

In Section 3.5.2 I discussed some of the literature available explaining how children might be involved as research participants. I have also discussed and reflected on empowerment of children in this classroom. In Section 3.6.3 I explain the rationale for not including these children in participant reflection which was due to their age and my linguistic limitations in Arabic. However, I feel that finding a way to overcome these limitations such as using a method described by Clark and Moss (2001) in Section 3.5.2 would add a valuable dimension to the research. This would be especially useful in

gaining an insight into children's opinion of how their use of gesture makes them feel in relation to the research aim of developing confidence. The findings indicate that the child's voice is being encouraged in the classroom learning environment through the acknowledgement of the multimodal ways they share meaning and this could be extended to include their voice in relation to the research process, and empowering them as research participants.

7.4   Summary of main findings of the research and implications

7.4.1   Introduction

This research took place in a unique environment and I make no claim that any of the findings are generalisable. However, they may be of interest in other contexts which define curriculum learning and assessment outcomes in two languages. In this bilingual Arabic/English co-teaching context, where the English-speaking teacher was responsible for leading on pedagogy (see Section 1.2.2), she was able to use and share her multimodal, meaning-making expertise. In negotiation with the Arabic-speaking teacher and taking account of the needs of the Arabic language curriculum, opportunities for the bilingual and multimodal learning of all children were enriched through an acknowledgement of the value of a gestural repertoire.

The findings indicate that, using a content and language integrated approach, the English-speaking teacher modifies her language in a number of ways to support the emergent bilingual children's learning of English. Her emerging understanding and acceptance of their use of Arabic language, and her own use of some Arabic words, indicates a sensitivity to the cultural value of the mother tongue. This in turn suggests a pedagogy which encourages translingual practice, focussing on the sharing of meaning rather than emphasising the development of language skills. The pedagogical practices of the teachers indicate an understanding of the value of a child-centred learning environment in encouraging children to be co-constructors of meaning. Through the careful planning of resources, the children are provided with opportunities to develop their knowledge, understanding and skills, building on prior learning. The English-speaking teacher is also encouraging the children's development and use of a gestural repertoire. Responding to

children's use of gesture, alone or with Arabic or English words, through her own use of gesture and words, she enters into multimodal dialogue with them signifying the value that she places on the role that gesture plays in meaning-making. Through the combination of these pedagogical approaches the children are able to develop as confident learners in this bilingual classroom.

In the following sections I will present the implications for practice in relation to early years bilingual pedagogy (Section 7.4.2), the possible contribution to theory on translanguaging (Section 7.4.3) and the possible contribution the research makes to understanding how children's development as confident learners is influenced by how their meaning-making repertoires are acknowledged and valued in the bilingual classroom (Section 7.4.4).

7.4.2 Implications for policy and practice in the bilingual classroom

In relation to teacher's pedagogical practices, I would suggest that teachers might recognize the value of action, gesture and artefacts in meaning-making for young children, and integrate their purposive use in their learning plans and pedagogy, rather than limit their teaching and assessment focus to the achievement of linguistic competence. The findings of this thesis suggest that a more comprehensive focus on the diversity of young children's meaning-making modes could help teachers to recognize and value children's competencies and to nurture their development as confident learners who are willing to take risks (see Section 2.3.4). In practice this means provision of daily routines for children to communicate and share meaning in a variety of ways, not confined to language. This can be achieved in a number of ways (not in order of importance).

- Firstly, the use of modified language would appear to be important, together with the provision of opportunities for frequent repetition and revisiting of language linked to action and gesture, such as through class songs and theme related stories.
- Secondly, the classroom environment and classroom resources are valuable in providing artefacts for shared focus in episodes of joint attention, where teachers can use descriptive commentary and modelling to engage children in multimodal

dialogue. A resource rich learning environment is planned to inspire children to explore and investigate. Teachers who can add culturally and socially relevant resources which are linked to thematic learning, can link learning opportunities across contexts. The whole-class story and action songs, which introduces vocabulary or gesture related to the theme, can be revisited in independent learning as the teacher enters into play with the child who is engaged with the resources.

- Thirdly, the structuring of the classroom environment has also been shown to give children more opportunities to be agents in their own learning and this, together with the supportive relationship developed by the teacher, through using motivational signs and language, encourages them to use their semiotic repertoires more creatively. Appropriately labelled resources using images as well as text, placed in such ways that children can easily access them, will give children greater ownership of their learning environment and allow them to make their own choices. Established routines understood by adults and children can also support the development of a sense of security and confidence within which learning can flourish. Teachers who actively model the language and multimodal behaviours they expect and encourage and motivate the children, support their development as confident learners who are willing to express themselves and share ideas in different ways.

- Fourthly, in the bilingual context it is important that the taught repertoire of gesture be developed and used consistently taking into account all cultural expectations. The evidence from the English teacher's contributions in whole-class episodes reveals that gestural repertoires can be taught alongside language and that children can then use these repertoires in other contexts to express their meanings.

In conclusion, teachers should acknowledge and make provision for the development of a multimodal semiotic classroom repertoire enabling young children to express their own thoughts, ideas and feelings and to have their voices heard.

In relation to policy, the findings of this research suggest that a limited curriculum and assessment focus is not sufficient to capture the full range of children's receptive and productive abilities in a bilingual context, which also involve gesture as a meaning-making mode. Further policy review might consider the value of a pedagogy which promotes

translingual and multimodal practices rather than a pedagogy based on a monolingual view of language abilities and skills. In such a context, teachers could plan together for communication and meaning-making activities, drawing on the full range of linguistic and gestural repertoires, alert to the metalinguistic implications for the development of transferable skills.

7.4.3   Contribution to theory on translanguaging

I believe this research has made some contribution to knowledge in terms of translanguaging in the early years bilingual classroom (Section 2.2.8). There is evidence in the curriculum documentation that a policy of additive bilingualism is intended through a content and language integrated curriculum. The style of co-teaching provides a one-person/one-language model, indicating a conceptualisation of bilingualism as double monolingualism (see Section 2.2.7) which accepts a separatist view of languages (see Section 2.2.2). However, the findings revealed that the English-speaking teacher had a more fluid approach to language and, for most of the time, did not insist on children using English in their responses to her. If they responded in Arabic, she either repeated the Arabic word and added the English word, or repeated the answer using English words. Moreover, there is evidence that she had assimilated some Arabic words into her own communicative repertoire and was fluidly using these, with English, to spontaneously share meaning with the children (see Section 4.3.7). This supports the view of Garcia (2016) who comments that even monolingual teachers can take up translanguaging to support meaning-making in their bilingual students (see Section 6.2). The result of her position on how language is used means that these emergent bilingual children are able to draw on English words where they can and use them as part of their whole communicative repertoires for sharing meaning.

Considering language from a sociocultural viewpoint as discussed by Creese and Blackledge 2015 (see Section 2.2.8), allows for a focus on the meaning-making aspect of the language function rather than focussing on language as an entity or artefact. In this way the language as a system is not what is important. Whether the child uses the English words correctly is not what needs to be assessed. Rather, what is important is the meaning to be shared and what is most important to assess is the success of that shared

communication, by whatever means. Building child confidence is essential for fluency in English to be achieved and I believe that the findings from this research have shown that children can be successful learners and confidently develop meaning-making skills in an emergent bilingual context, when a translingual pedagogy is applied and they seamlessly integrate new words into their existing repertoires.

7.4.4   A multimodal pedagogy for developing confident learners

The findings from this research have shown that, as well as developing linguistic repertoires, the children in the classroom are developing other modal repertoires for meaning-making, due to the multimodal pedagogical approach developed by the English-speaking teacher. The findings of the analysis support the suggestion of Kusters et al (2017:2) that 'individuals draw on their multimodal linguistic resources to make meaning' as discussed in Section 2.4.4. The success of the multimodal approach was summarised in Section 7.4.1; in this section I review the impact this has on supporting emotional development and self-confidence.

The aim of the research was to explore how certain practices were supporting the development of children as confident learners. This related to the Approaches to Learning curriculum expectation (ADEC 2012) described in Section 1.2.3 that children would be 'confident and comfortable within the setting'. Confidence is not easy to measure and nowhere in this research have I attempted to measure it. However, I have considered how various pedagogical approaches empower children (see Section 2.3.4) and that self-worth and confidence develop from being empowered as described by MacNaughton and Williams (2009:312). Drury and Robertson's (2008) criteria for developing strong learner identity, described in Section 2.3.2, include attention to children's rights, which in the context of this research is considered in the right to express their own thoughts, ideas and feelings and to have their voices heard (see Section 2.3.4). As discussed in the literature, Section 2.4.4 (Wei 2011), I believe the bilingual classroom context of my research offers insights into creative multi-competence practices. The safe space offered in the classroom learning community places value on communication and meaning-making through a variety of modes and has the potential to empower children to be creative and take risks, thus developing confidence as learners. The pedagogical approaches of the English-

speaking teacher aim to empower children as she endeavours to interpret their meanings by whichever mode, or blend of modes, they choose to use. The Arabic-speaking teacher, working in a co-teaching situation, also adopts an approach of encouraging children to engage with activities independently, in the structured learning environment. As a result, the children can investigate and take part in new experiences and share their ideas with confidence that the adults will listen.

7.5　　Future research directions

I have identified the importance of multimodal meaning-making in this early years, bilingual classroom, whilst also highlighting the limitations I faced due to my limited ability to understand and speak Arabic. I believe there are a number of exciting opportunities for bilingual, collaborative researchers who are able to make a fuller analysis of multimodality in a similar context, to explore the demands of a curriculum with dual language expectations. The different aspects that these might focus on are described below.

- I collected little data in relation to **Arabic language, action and gesture** used by the Arabic-speaking teacher and the children in dialogue. I believe a more comprehensive exploration of these aspects would provide opportunities to develop a richer picture of the multimodal and multilingual classroom practices. This would offer more opportunities to explore similarities and differences between multimodal use across cultures.
- Extending the exploration of multimodality to look at a **broader range of modal meaning-making** than was covered in this research could also be of interest. As noted in section 2.5, many modes are involved in joint meaning-making, but I chose to focus only on gesture, action and speech. Through analysis of the data, I noted the significance of the use of artefacts in shared meaning-making resulting in their inclusion this study. As I explored the data, I felt it also contained some interesting information relating to gaze, facial expression and the use of images and signs. Although I decided not to investigate these modes, they are equally worth exploring in any future research.

- In respect of multimodal meaning-making, this research focussed on the communicative (interpersonal) aspects and only touched on cognitive (intrapersonal) aspects (Section 2.3.2). I believe that further research over an extended period of time, observing children as they engage in routine classroom activities in a similar context, might explore the relationship between **multimodality and cognitive development.** This would give impetus to reviewing the value of including multimodal skills as an aspect of early years curriculum and pedagogy.

- The data collection period for this study covered a period of 12 weeks and over this period there was an emerging picture of the progress made by a few children. A **longitudinal study**, following the development of meaning-making skills of emergent bilinguals during the first year of attendance at school, would offer more opportunities to explore the development of their full semiotic repertoires. This might also include a more systematic review of curriculum and assessment in order to explore the relationship between policy, practice and skills and how these are assessed.

7.6   Conclusion

This research set out *'to explore meaning-making practices in a bilingual kindergarten classroom, in order to discover how they might contribute to children's development as confident learners'*. In this co-teaching context, where the curriculum goal was one of additive bilingualism, the teachers operated a one-teacher/one-language strategy, based on a monolinguistic view of language skills. Close observation of the daily classroom interactions was guided by the research questions:

> 1. How is spoken language being used by teachers and children in joint meaning-making?

> 2. How are action and gesture being used by teachers and children in joint meaning-making?

Through an iterative process of analysis, I discovered that the English-speaking teacher was initiating the construction of a repertoire of action and gesture for classroom use

while also introducing English vocabulary. Through incorporating these gestures into their multimodal, semiotic repertoire, members of the classroom community were sharing meaning through words, actions and gestures which were often interchangeable, each mode being recognised as having equal semiotic legitimacy. In the co-teaching context, the two teachers were seen, at times, conveying meaning simultaneously through different modes using Arabic or English words together with action and gesture.

The children, guided by their English-speaking teacher, were developing a gestural repertoire with which they were able to communicate. Furthermore, the English-speaking teacher showed, through her own use of gesture, that this was a valid means of expression and communication giving the children confidence to express themselves using gesture. It was evident that they were able to utilise the pragmatic alternatives for communication in a similar fashion to that employed by very young children while they are still learning to speak in their first language (Ochs 1979). Moreover, the children freely integrated action, words and gestures in a mode-mixing effort to convey meaning to their English-speaking teacher. She in turn, when responding to the children, showed a respect for, and encouragement of the multimodal ways they attempted to share meaning. Both teachers acknowledged the value of providing a richly resourced learning environment with open-ended activities which allowed children to investigate and explore the world around them. This was seen through the provision of planned opportunities for independent learning as part of the daily classroom schedule. The children were empowered through the pedagogical practices of the classroom which acknowledged them as agents in their own learning and this supported them to develop as confident learners.

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APPENDIX A: FACULTY HEAD JOB DESCRIPTION

Abu Dhabi Education Council Job Description			
Job Title	Faculty Head – English Medium (G1-3)	**Cycle**	KG + C1

Job Objective

The primary responsibility of the Head of Faculty is curriculum and pedagogical leadership within the school. The Head of Faculty develops, adapts, coaches and promotes 'best teaching and learning' strategies and practice within the school to ensure that the students achieve ADEC's vision as world class learners, fully proficient in both Arabic and English. The Head of Faculty plans and collaborates with the school leadership to ensure that the curriculum is implemented effectively in the school and that teachers use modern teaching, learning and assessment strategies to optimize student achievement. The Head of Faculty reports to the Principal as the supervisor.

Organisational Relationships

Internal Communication	**Purpose**
Licensed Teachers	To provide coaching, mentoring, technical and managerial guidance
Other Faculty Heads	To work collaboratively and in coordination on curriculum, lesson planning, professional development and pedagogical strategies
Principal & Vice Principal	To participate actively as a member of the school leadership team; work collaboratively and obtain clarity and direction as required
Educational Adviser	To obtain clarity and direction as required
Administration & Student Support	To coordinate over shared matters
External Communication	**Purpose**
Educational bodies/institutes	To remain abreast of educational best practices in the English medium
Parents	To build productive relationships with parents on education issues, teaching, learning and assessment strategies; reporting student progress and achievement

Key Responsibilities/Duties

Managerial Role:

Provide advice, coaching and supervision to teachers;
Identify the professional development requirements of teachers and arrange the training to enable teachers to implement ADEC's curriculum;
Acts as a role model for the teachers showing them how to improve their professional performance through self-development and strengthening areas of weakness;
Evaluate the professional performance of teachers in accordance with ADEC's approved policies for teacher standards and performance management cycle and provide ongoing formal and informal advice and feedback to teachers;
Guide teachers in the development and implementation of appropriate and effective assessment tools and techniques to monitor and guide student learning;
Train teachers to analyse the results of student assessments and to use the analysis to adjust and improve their teaching programs;
Support teachers who are experiencing classroom management issues or who are having difficulties in managing the behaviour of students;
In collaboration with the (Vice) Principal and relevant Cluster Manager, deal with the unsatisfactory or sub-standard performance of teachers;
Sets clear priorities and objectives to be achieved during each semester and the academic year.

Organisational Role:

Participate as a member of the school leadership team to develop, plan and implement strategies and priorities for school development and improvement;
Contribute to the development of the School Improvement Plan and the achievement of the associated KPIs;
Contribute to the development of school policies and procedures concerning all matters relevant to teaching and learning, students and parents;
Prepare the budget and other teaching resource requirements for the Faculty;
Promote and model a collaborative, cooperative and productive working relationship with other Heads of Faculty in the school, the School Librarian and Special Needs Teachers;
Encourage positive relationships with parents and the community;
Establish networks and productive working relationships with Heads of Faculty in other schools, and with ADEC staff, especially with the relevant Cluster Manager and the Curriculum, Assessment, Professional Development and Student Services;
Uphold ADEC's Code of Conduct and all school policies;
Abide by all ADEC and United Arab Emirates mandates in reporting sexual or physical abuse and neglect;
Assist the principal to communicate education initiatives to parents and the wider community.

Functional Role:

Convene regular subject and grade meetings of English Medium Faculty teachers;

Approve the teaching and learning programs and the lesson plan schedules of each English Medium Faculty teachers and, where necessary, make modifications to those plans and programs;

Maintain an overview of the student intervention plans developed by English Medium Faculty teachers;

Perform substitute teaching as required;

Conduct model demonstration lessons for teachers and in-school professional development, including digital pedagogy, aimed at improving the professional performance of teachers;

Coordinate the implementation of ADEC's curriculum for the subjects allocated to the English Medium Faculty teachers, as indicated in the context statement, and ensure that:

Teachers implement ADEC's curriculum in ways that engage, challenge and motivate students to achieve their best, such as the use of differentiated instruction;

Emirati culture and heritage is included in teaching programs, where possible and appropriate;

Teachers build into their teaching programs appropriate extra-curricular activities which extend the learning outside the classroom

Where learning outside the classrooms involves excursions outside the school, ensure that the relevant policies and required supervision are implemented.

Ensure that curriculum support and other assistance that English Medium Faculty teachers require to implement ADEC's curriculum is identified and provided;

Monitor the implementation of ADEC's curriculum within the school to ensure effectiveness, and where required, instruct teachers to modify their teaching programs;

Develop and implement teaching and learning contexts which are appropriate for a more integrated approach to student learning, including:

Identification of suitable subject content and contexts which suit an integrated approach, and which contribute to student engagement, challenge, motivation and learning;

Assisting subject specialists to take responsibility for teaching outside their discipline and to participate in team teaching where the content and contexts of different subjects suits an integrated curriculum approach.

Collaborate and cooperate with other Heads of Faculty within the school to:

Plan and implement joint teaching sessions for particular lessons where English Medium Faculty teachers and Arabic Medium Faculty teachers work together;

Share information about student progress, and jointly plan and devise strategies to build on student strengths and remediate weaknesses;

Organise student excursions which are appropriate to both the Arabic and English language mediums and which involve the Arabic and English teachers jointly planning and supervising the excursions.

Plan and implement arrangements for English Medium Faculty teachers to participate in in-school moderation of student assessments;

Ensure that the all student assessments are conducted in a timely manner and that results are recorded as per ADEC requirements;

Ensure that teachers encourage students to participate in Emirate-wide and international assessments conducted centrally through ADEC;

Coordinate arrangements for regular reporting of student progress to parents by teachers allocated to the Faculty;

Perform other duties as requested.

APPENDIX B: APPROACHES TO LEARNING FRAMEWORK

Approaches to Learning	
The New School Model recognises 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. 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 KG 1	
Relationships	Students interact constructively with their peers, other children or adults.
Interactions	Students play calmly and gently with one or more children and communicate using appropriate language and gestures.
Roles and responsibilities	Students respond appropriately to instructions provided by adults.
Emotional KG 1	
Self-image and awareness	Students are confident and comfortable within the setting.
Expressing and managing self	Students understand and can describe or show basic feelings or needs (happy, sad, hungry, thirsty etc).
Attitudinal KG 1	
Being a learner	Students are beginning to stay on task and attend to their learning.
Being a contributor to an orderly learning environment	Students understand that the setting and its resources should be treated with care and respect.
Problem Solving KG 1	
Exploration	Students are naturally curious; they spontaneously engage with and explore the world around them.
Investigation	Students use their senses to explore as they experiment and play. They are beginning to try and find ways to overcome difficulties and challenges they face.
Share Understandings	Students impulsively share their discoveries in excited and engaging ways.
Innovation KG 1	
Creativity	Students engage in their learning across the curriculum creatively.
Resourceful	Students role-play, imitate and use resources and props imaginatively.
Expressive Language	Students express their ideas through art, languages, ICT, construction, movement and/or music.
Excerpt from The New School Model Kindergarten Teacher Guidebook & Learning Outcomes 2013-2014 (unpublished)	

APPENDIX C: OU ETHICS CONSENT

HREC_2012-#1257-Swanborough-Nilson-1-approval

This memorandum is to confirm that the research protocol for the above-named research project, as submitted for ethics review, is **approved** by the Open University Human Research Ethics Committee.

Please make sure that any question(s) relating to your application and approval are sent to Re**********@ open.ac.uk quoting the HREC reference number above. We will endeavour to respond as quickly as possible so that your research is not delayed in any way.

At the conclusion of your project, by the date that you stated in your application, the Committee would like to receive a summary report on the progress of this project, any ethical issues that have arisen and how they have been dealt with.

Regards, Dr B Chair OU HREC

From Dr B Chair, The Open University Human Research Ethics Committee

To Christine Swanborough-Nilson, CREET

Subject "*Investigating literacy practices in the kindergarten classroom when an Arabic speaking teacher and an English-speaking teacher are working together*."

Ref HREC/2012/1257/Swanborough-Nilson/1

Red form Submitted 29 August 2012 Date 11 September 2012

Memorandum

From: res*********@open.ac.uk To: c***@hotmail.com; ***@open.ac.uk

Date: Thu, 20 Dec 2012 15:49:10 +0000

Subject: HREC/2012/1257/Swanborough-Nilson/2

Dear Christine, please find attached an 'approval' memo for the changes in your application for ethics review. This means that you can now include video recording with your research.

You should make sure that you email res*** @open.ac.uk quoting the reference HREC/2012/1257/Swanborough-Nilson/2 in any further communication.

Best wishes,

Dr B

Chair, HREC

APPENDIX D: ADEC APPROVAL

التاريخ: 2012/6/11

الأفاضل

السادة/ مدراء المدارس الحكومية في أبو ظبي

الموضوع: تسهيل مهمة باحثين

يطيب لنا أن نهديكم أطيب التحيات.

ونود إعلامكم بموافقة مجلس أبو ظبي للتعليم على موضوع الدراسة التي ستجريها الباحثة الدكتورة Christine Swanborough-Nilson، بعنوان:

Investigate literacy practices in the kindergarten classroom when an English speaking teacher and an Arabic speaking teacher are working together.

لذا، يرجى التكرم بتسهيل مهمة الباحثة ومساعدتها على إجراء الدراسة.

شاكرين لكم حسن تعاونكم

محمد سالم محمد الظاهري

المدير التنفيذي لقطاع العمليات المدرسية

APPENDIX E: PROJECT FACT SHEET

Researcher: Christine Swanborough-Nilson (Doctoral student at The Open University UK)
Research Title: Investigating literacy practices in the kindergarten classroom when an Arabic-speaking teacher and an English-speaking teacher are working together.
The Abu Dhabi Education Council (ADEC) has given permission for this research to be undertaken.
Research Aim: To gain a better understanding of how children are developing their second language skills in this context. •   The research will involve one class of KG children •   The researcher will undertake recorded observations in the classroom and write field notes •   The researcher will ensure that any facial or identifying features of teachers are not included in recordings unless consent is given. •   The researcher will collect and analyse work products including teachers' planning and assessments and samples of children's work.
All the above will be undertaken with primary consideration for the smooth running of the classroom and the emotional and academic well-being of the students and the emotional and professional well-being of the teachers. All electronic data will be kept on a password-protected computer and a password-protected hard-drive. No personal data will be used. All documentation such as planning, and work products will be anonymised and kept securely by the researcher. Before commencing the project, written consent will be sought from the class teachers (App 3) and the parents/guardians of the children (App 2). (The children are deemed too young to give informed consent). All participants will have the right to withdraw at any time by contacting the researcher. There is no risk of any kind associated with non-participation or withdrawal. All participants involved will be kept anonymous by the use of pseudonyms.
Contact details for researcher: cas**********@hotmail.com 050 ***********

APPENDIX F: PARENT/GUARDIAN LETTER

السيد ولي أمر

أشكر لك على وقتك في قراءة هذه الرسالة .

أريد أن أقول لكم عن مشروع بحثي الذي أقوم به في روضة السوسن .

كما تعلمون طفلك لديه معلمتين في الفصول الدراسية، واحدة للغة للعربي واحد للغة الإنجليزية .

التعلم في اللغة الإنجليزية في رياض الأطفال إمارة أبوظبي هو تطور جديد وأريد معرفة المزيد حول ما يعمل بشكل جيد للأطفال

سيكون القيام بذلك عن طريق بعض الملاحظات في صف طفلك في فصل. المدرسة سوزان والمدرسة ميكايلا سيتم مساعدتي

وسأحاول قصارى جهدي عدم تعكير صفو التدريس. وسوف تستخدم جهاز تسجيل فيديو صغيرة لتسجيل المعلمين والأطفال وهم

يعملون في الفصول الدراسية . وسيمضي الوقت في تحليل ما يوضح في تسجيلات الفيديو بمساعدة المعلمين. سوف ينظر إلى

تسجيلات من قبلي والمعلمين 2.قد استخدم بعض الصور في المنشور النهائي لكنني لن أظهر أي الوجوه.

والتسجيلات ستكون خلال شهر فبراير .

الرجاء السماح بتصوير طفلك حتى نستطيع مساعدة المدارس في أبوظبي توفر أفضل أساليب تدريس اللغة الإنجليزية .

الرجاء الحضور ومقابلتي في المدرسة إذا كنت تحتاج إلى أي معلومات .

إذا كنت حقا لا تريد لطفلك أن يشارك الرجاء التوقيع على النموذج وسوف أتأكد من طفلك ليس في أي من التسجيلات

APPENDIX G: TEACHER CONSENT FORM

Investigating literacy practices in the kindergarten classroom when an Arabic-speaking teacher and an English-speaking teacher are working together

Name of participant: _____

Name of researcher: Christine Swanborough-Nilson

1.   I consent to participate in this project, the details of which have been explained to me, and I have been provided with a written statement in plain language to keep.

2.   I understand that my participation will involve recorded observations, field notes and document review and I agree that the researcher may use the results as described in the plain language statement.

3.   I acknowledge that:

(a) the possible effects of participating in this research have been explained to my satisfaction;

(b) I have been informed that I am free to withdraw from the project at any time without explanation or prejudice and to withdraw any unprocessed data I have provided;

(c) The project is for the purpose of research;

(d) I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements;

(e) I have been informed that with my consent the data generated will be stored on a password-protected laptop and hard drive;

(f) If necessary any data from me will be referred to by a pseudonym in any publications arising from the research;

(g) I have been informed that a summary copy of the research findings will be forwarded to me, should I request this.

(h) I have been informed that any photographs or videos taken will not show my face.

I consent to these observations being recorded   □ yes □ no (please tick)

I wish to receive a copy of the summary project report on research findings. □ yes □ no (please tick)

Participant signature: Date:

Contact details for researcher: cas**********@hotmail.com 050 ***********

APPENDIX H: ADEC KG LEARNING OUTCOMES FOR COMMUNICATION

Table of statements from KG Handbook: Green highlight for non-verbal communication. Pink highlight language use	
Statements Relating to Communication	**Document Reference**
Teachers are required to consider how to challenge students' intellectually whilst developing their language skills in more than one language.	Pedagogy Matrix Language and Dialogue p.6
Language support ensures students practice new language structures and vocabulary in a larger context. Teachers understand layers of questioning that move children from low level thinking and responses to deeper analysis and reflection as language acquisition and understanding is supported.	Pedagogy Matrix Language and Dialogue p.13
encourage discussions during circle time	KG daily activities p.27
check the weather outside every day and talk about how it changes	KG daily activities p.27
ask questions as you read[books].	KG daily activities p.27
Explain to students what they are going to be engaged with in the next timeslot of the day.	KG daily activities p.27
Children …. use language to share their thinking. For instance, during dramatic play they learn about dialogue, characters, taking turns, listening to others...etc.	KG daily activities p.28
Allow students to work in small groups to discuss	Lesson structure p.29
Reporting – students talking about their learning	Lesson structure p.30
Language play Children develop mastery by playing with words, rhymes, verses, and songs they make up or change. They tell stories and dramatize them. They are fascinated by foreign languages, especially when they are presented playfully in a story, verse or song.	Types of play p.42
Effective and positive interaction can be accomplished through asking proper questions while students are engaged in a learning activity	Assessment cycle p.47
Communication: Developing a child as a communicator: bi-literate in Arabic and English	Lifelong learning p.63
Students interact constructively with their peers, other children or adults. Students play calmly and gently with one or more children and communicate using appropriate language and gestures. Students respond appropriately to instructions provided by adults. They follow and understand rules.	Approaches to Learning; Social skills p.65
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 understand and can describe or show basic feelings or needs (happy, sad, hungry, thirsty etc). They recognise and label basic emotions.	Approaches to Learning; Emotional skills p.66
Students will use verbal and non-verbal language to express and to communicate their feelings and emotions.	Approaches to Learning; Creative and resourceful p.67
Students impulsively share their discoveries in excited and engaging ways	Approaches to Learning; problem solving p.68

APPENDIX I: EXAMPLE OF VIDEO RECORDING NARRATIVE

IL3 Narrative Messy Dough

EST= English-speaking teacher AST= Arabic-speaking teacher

Inside the classroom: Children are engaged in various activities. M is at the table with 'play doh' she has used a new recipe and it is very crumbly. Children have tools, cutters and dishes on the table as well as play doh mats with pictures and letters. The children's name cards are also on the table. Green triangle group is here.
Another group are at the art table with brushes, water, palette paints and paper.
Another table has small world animals and mosaic shapes and cards.
Arabic teacher is working at a table with another group of children doing an Arabic alphabet activity
0.50
Child calls 'Ms M, Ms M'
She looks at the child and answers 'Yes what is W….Look, here is another one.'
Boy next to her calls 'Ms M' and looks at her. She looks at him, touches his play doh and says and says. 'what shape have you got?' but doesn't wait for response as another child puts doh on a stick in front of her face.
0.58
She looks and says 'It's an ice cream thank you' she plays at eating it. And looks at giver. 'mmm thanks 'smiles at giver and passes it back. Saying 'mmm yum F made an ice cream' Turns and smiles at boy on her left who was calling her previously, while continuing to mould and flatten a lump of doh on the table. The boy selects another shape and M says 'you have a shape'
Child F watching M flatten her piece of dough asks something and M looks at her with questioning expression. says 'do you need more?' Pointing at her doh 'do you want a big piece, a big piece?' She passes her a lump of doh.
01.24
M remarks to child W with rolling pin 'good W you're making it flat' 'The rolling pin will make it flat'
Turns to boy with shapes. 'You made a s…circle'
{Sounds from classroom of children speaking Arabic and teacher S responding and questioning in Arabic.}
Teacher M talking to boy on her left suggesting he could find a rolling pin like W to make his shape flat. She points to W 'Do you want to roll it flat like W?' She shows him the basket (behind on the shelf) from where he selects a rolling pin.' There you go'.
01.55
M says, 'will it work?'
2 children from painting table bring their work to show to the camera!
2.34
They take their painting to Teacher M. She looks at the child M.
'wow you made a hand?' She puts up her hand, child nods and smiles. Teacher M tells child to hang it on drying rack.
Child R is calling 'Abla, Abla' and showing his painting. Teacher M says, 'good R. did you write your name' and does gesture for writing. R nods and returns to the art table to write his name.
Teacher M helps child M to hang her painting.
03.18
Another child comes with painting. M asks did you put M…on it? Your name?' gesturing writing.
Teacher looks and sees name is missing.

She beckons child. 'come and get a pencil' child follows her to the art table. Teacher writes name and asks her to hang it up. Child looks reluctant/confused. Teacher says 'no?' child says 'la' Teacher says, 'you can hang it up' and gives paper to child. They both go to drying rack and Teacher becomes involved hanging and helping children to hang work.

Video scans room: Boy engaged with mosaic shapes. Children on carpet with trains. Girls at painting table.

4.58

Teacher is back at play dough table but still helping with hanging art-work on rack close by. Children at table mostly engaged in own activities. One girl points to another's resources and calls her name 'F F'. F passes her a toy cup and says something. First child passes back a different cup. F smiles.

6.28

Boy with mosaics fetches teacher to see his work. He speaks Arabic 'Abla Ta'ali choo fi'

She comes over. He points to the table where he has built some structures and smiles. She says, 'what's M made?'

She squats at his level and points to his work.

06.43

'You've got all the orange squares.' He squats too and looks at her smiling he makes a very brief gesture for sleeping. She says, 'for sleeping?' and makes gesture too. He nods. She says 'A bed for sleeping.:

Then he points to the towers he has made and moves away from the table squatting on the floor making a quacking noise. M says, 'a duck?' and makes beak movement with fingers. She looks at the mat on the table. 'Ah I can see underneath| pointing to where duck is covered by the mosaic shapes.

07.00

Child Ms attention is drawn to basket of numbers on the table. He pulls out a card saying 'four' Teacher repeats 'four'

Chid takes a handful of numbers and M says 'spread the numbers out' making a space on the table.

She engages in activity with number cards with boy M girl M comes to table and teacher M negotiates her play with boy M.

Teacher M is called away by another child.

Video pan different activities.

13.00

Boys in role play area have basket of soft toys.

1 boy comes to show elephant to camera. He makes arm gesture lifting trunk to denote elephant. He finds a camel and says 'camel'

14.20

Children at play doh table all engaged in independent activity.

15.25

Children at number table all engaged in independent activity.

16.00 teacher M on carpet negotiating resources with children who are learning to share.

16.25 voice calling 'abla choo fi'

16.30

Teacher M goes to play doh table and admires child's model.

16.45

Teacher M returns to number table and engages child with Abacus in discussion. Talks about colours. Other children arrive. Child passes abacus to teacher. Teachers asks 'finished?' while making eye contact with child. child nods and teacher put abacus away.

17.22 child F arrives with 2 containers of play doh.

Teacher M says, 'ooh F what have we got?'

Child holds up one container almost empty in one hand while keeping other container which is full, down low.

Teacher asks what is it? Is it a cake? And makes eating gesture.

Child puts full container in teacher's hand and holds up empty one again.
Teacher m says
'Oh this one's heavy and this one's light, because this one's full of play doh and this one's empty. Heavy and light:'
Child does not speak but smiles and returns to playdoh table.
18.00 teacher M squats to engage with children at number table again.

The boys are playing with the small animals.
M says 'what does S… have? Ooh S is lining up the tigers and the lions'
18.10
S… has 2 animals on the grass mat and he is playing that they are fighting.
Teacher M asks another boy 'how many do you have?' pointing to his arrangement of animals. She says 'one, two, three'
Sultan calls her '*Abla, abla*' she looks at him. He makes a sign for angry by folding his arms and stamping his feet. 'M says angry? Angry?' sings 'when you're angry, angry, angry stamp your feet.'
S… makes gesture for scared. M says 'scared?' sings 'when you're scared, scared, scared say oh no' Child makes gesture with hands up and joins in 'oh no'.
M carries on with song 'when you're sleepy, sleepy, sleepy take a nap. Child joins in.
'when you're happy, happy, happy' child makes smiley face.
Play continues with S. and F. joining in wit animals. M is naming animals and sometimes asking 'how many?'
Children want to communicate with M. S. taps her hand to get her attention. He says 'stop' He then points to the animals on the grass mat. M says 'stop? Are the animals saying stop?' S. nods his head.
Children continue to play with animals. teacher M helps them to share.
21.58.
Another girl brings play do to show 'abla, abla' She talks to her briefly.
Sultan is making actions for scared again and says 'oh no' but M appears not to see.
22.36
Girl F is making mosaic patterns calls '*abla, nejma*!' M says you made a s…star. well done F made a star.' Gives her more shapes and says. 'what else can you make?'
M moves to sit on the side with the 2 boys playing with the animals. She squats between them and points to various animals saying their names. Boy points and says '*nemera*' M says 'tiger' and nods her head 'what else can you see?'
She counts some animals.
23.08
S makes a sign with his hands which M understands to mean black and white. She says, 'black and white' and nods her head pointing to the zebras.
23.46
M moves to solve a dispute on the carpet with the trains.
Another boy joins the table and starts to arrange the animals.
24.19
He finds a star and shows me saying *Nejma*. I reply 'star'.
F (who made the mosaic star shape previously calls out 'Choo fi star' pointing to her star.
Play continues.
25.07
F calls out '*Kooleba s'bait*' she has 3 small house shapes made with mosaic tiles.
M says, 'you made a house for the dog?' 'Fatima nods her head. M says, 'we have a dog?'
She looks in the animal basket. One boy says '*ma fi* dog' M says, 'mm no dog is there?'
M continues engaging boys in counting the animals and matching the numeral cards.
26.18 AST teacher rings bell for clean-up time. Some children start to chant 'clean up'
M says 'let's put our clean-up song on'
F says '*Abla ma fi* clean up *ma fi* clean up'
M says, 'we need to clean up otherwise we won't catch the bus!'

M goes to find the song on the computer and some children start to tidy and put away the toys. 27.01 song starts playing. Most children are very busy tidying. Both teachers support the children. Lots of busy noise. Some children calling '*abla, abla'* some children chanting 'clean up, clean up'. 31.07 children start to sit in circle on carpet.

APPENDIX J: EXAMPLE TRANSCRIPT OF TEACHER REFLECTION

IL3 'Messy Dough' teacher reflection transcript

28.30	
EST	Now the child is saying Ms M instead of Abla! It is hard to make out what everyone is saying when they are talking in all the different centres. What is he saying?
CSN	The children wanted to show me their pictures.
EST	But she's still saying Abla
CSN	I thought her English was quite good
EST	Yes she is one of the best English speakers but I guess she chooses when to use it. And I guess it's me because I responds to Abla or Miss M
CSN	She is using Arabic
EST	Yeah 'look, look.' {Translates the Arabic}" Ah look she copied (the other child) and wrote her name on after
CSN 35.30	Do you think the boy squats down because you do?"
EST	At first I thought he was copying me too but is he trying to show me or he just thought that that's what I was doing?
CSN	I don't know. You think it's a bed?"
EST	Yeah, but then I squatted down and straight away he did too eh?"
CSN	Do you think he was communicating by doing the same thing that you did?
EST 36. 05	Yeah" (commenting on child saying Ta'ali) He just told me come.
We look at squatting episode again.	
EST	He didn't squat down straight away. He went and put his hands down.
CSN	Was it a duck?" (Mosaic)
EST	I think it was a picture of a duck underneath."
CSN	So he's doing the action?"
EST	(boy placing number cards) "He can recognise and read the numbers"
CSN	(girl with numbers) "She is saying sita sita because it's six"
EST	Yes he means 'look I've made the animal'.
CSN 41.40	It is interesting that there are 3 children playing in the same place but no communicating."
EST	But they are not playing together or communicating at all even in Arabic
CSN	Are they communicating in another way through their play? What about the boys playing the trains, are they talking more to each other?"
EST	A little bit but they are not trying to play a game together they are just telling each other 'No, this is mine' or 'I want this one' I think
CSN	They are not even articulating their game to themselves. At 4 years old it seems late"
EST	I think so, because you would expect to see in a role play corner, children having a game of mother and father or saying 'hi what are you doing' there would be some way of interacting. Or they would say to each other 'Let's make it bigger'. It's quite insular, they're all in their own little circle."
In the other corner Mo is quite busy building and Ma wants to see what he is doing and he doesn't even acknowledge that she's there."	
CSN	"But the child who comes over doesn't say 'what are you doing?' or 'what is that?'
EST	"No, they just look, and then maybe try and take something or touch and then the other one gets cross."
CSN	Do you think it is because in western culture we model that language and in this culture they don't?
EST	In western culture before you come to kindergarten you have a lot of playgroup, or coffee group with mum so they've been taught from a really early age to interact and share and the mums will always say 'share'
CSN	But here they come from big families and they spend time playing with their siblings often with a non-Arabic speaking nanny"
EST	And the nanny doesn't interact but stands back and they haven't really been taught to use language in their play" That's quite interesting!
CSN 50.22	This boy is making the animals fight, isn't he?
EST	Yes. He's role playing with them like he has a story going on. He's even making noises. She understood 'finished' because she nodded but she didn't say 'yes'.
Child shows heavy and light playdoh'	
EST	She doesn't use the words 'heavy' and 'light' but she is just sharing the idea by showing me She knows because we've done that at mat time"
CSN	Do you think she knows the words in Arabic?
EST	A few say 'heavy' but they never say 'light'.
EST	He's making the action for the seal from the song we're going to the zoo."
CSN	Do you think he is telling you that one animal is angry and the other one is scared?
EST	Yeah, I didn't see what he was doing earlier (Animals fighting) so I just turned it into the song (about emotions). But then he's going back to this. But he understands what I am asking.
CSN	Do you think that's because he wants to please you?
EST	Yeah, but he was trying to share an idea, an angry animal and a scared animal. That was cool.
CSN	Did you see how he got your attention? He hit you on the hand!

EST	Yeah, you are not listening to me, so I am just going to hit you!
EST	[Child making star] He said 'this one' in English he used part English part Arabic
CSN	She is speaking Arabic she said she made a house for the dog
EST	The can all say clean up, but they never say what 'clean up' is in Arabic, only in English. I think you get the most language (Learning) through the routine, the classroom routines. They know things like that because they are doing it every day. Like the bus song, they all talk about the bus, they all say clean-up. They also say 'sit down' and things like that happen all the time.
EST 01.10.43	For other things they use gestures (animals or emotions) for communications. At the start they just used gesture to show it but now they can say happy sad angry, sleepy. I guess that helps scaffold the language until they learn to say it cos at least if they show me a gesture they think I can understand what they are trying to share.

APPENDIX K: PAGE FROM REFLECTIVE JOURNAL

STORIES IN PROGRESS
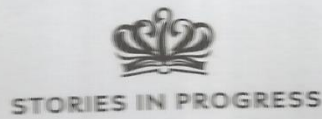
Next table free painting.

On carpet 3-4 children with train track.

Role play 3-4 children playing

M was moving between 3 table activities + intervening when needed on carpet.

Recording was a challenge as there was so much activity + it was difficult to focus or know where to focus.

After the recording session M said she felt she was behaving differently because of the camera. She was continuously thinking about how she was using language & communicating.

APPENDIX L: EXAMPLE OF VIDEO RECORDING SIMPLE TRANSCRIPT

WC1 What's in the Bag transcript

1	Ms. Miranda	There's something in here, that you can see with your eyes,
2	Some children	Ayoun Luthnin
3	Ms. Miranda	There's something that you can hear, ….
4	Some children	Alnf
5	A child	Abla, haada w haada w haada w haada
6	Ms. Miranda	That's right
7		Your eyes, Your nose, mouth, ears, Hands,
8		So, let's have a look and see what we can find.
9		Who's sitting back there listening?
10		Hmm, Malak Bawadi wanna come and have a look inside?
11		Ready? Put your hand in. Find something in there.
12		What's he found?
13		Shake it and see. Does it make a noise? A small noise.
14		What happens if you open it?
15		Can you smell something?
16	Malak	Zaatar
17	Some children	call out in Arabic
18	Ms. Miranda	Mm smells like zaatar doesn't it?
19		Uh oh Uh Oh Abian, abian. Abian. Sit back
20	One child	Abian. Sit down
21	Ms. Miranda	What else is in here?
22		Let's see who is listening?
23		Najwa? Wajida do you want to come and find something?
24		No?
25	Mariam	Ana
26	Ms. Miranda	Nawal? Nawal. Ready?
27		Put your hand in, see what you can find.
28		You choose. See what you can find.
29	Nawal	speaks but indiscernible
30	Ms. Miranda	Not food? Which one? This one? Pull it out
31		Wow. What has she found?
32	One child	It big
33	Ms. Miranda	It is big. It's something you can ...see, And it's something you can….
34		Shakira!
35		Hear,
36		And it's something you can wear.
37		Do you want to walk around with it?
38	Ms. Sabha	Ta'ali Nawal.
39	Ms. Miranda	One more.
40		Saif?
41		Ready. One more. Saif
42		Find something inside.
43		What's Saif got?
44		Something that's a..?
45	One child	Da'era
46	Ms. Miranda	Circle. Good.
47	Ms. Miranda	Shakira.
48		Sit down Malak, Taqwa.
49		Saif, take it round the circle to show them.
50		Take it round the circle.
51	Ms. Sabha	Saif Ta'ali (speaks in Arabic)
52	Ms. Miranda	Thank you Saif right around
53	Some children	Ana
54	Ms. Miranda	Halas Finished now. OK.

APPENDIX M: EXAMPLE OF VIDEO RECORDING DETAILED TRANSCRIPT

WC1 'What's in the Bag' detailed transcript

Teachers have settled the children on the carpet in a large circle. They have finished attendance and collecting money for snack. Ms. Miranda has a bag in her lap. Ms Sabha is taking a less prominent role in this session and not sitting at the front with Ms. Miranda. For most of the session she is out of camera shot and only becomes involved at 2.55 when she is seen/heard to support the child moving around the circle.

TIME	SPEECH MS. MIRANDA	GESTURE MS. MIRANDA	SPEECH MS. SABHA	GESTURE MS. SABHA	SPEECH CHILDREN	GESTURE CHILDREN
00.12	There's something in here	Holds bag in front of her.				
00.14	that you can see with your eyes.	Fingers in corners of eyes.				
00.17					(Some children) *Ayoun, luthnin [eyes, ears].*	Some children touch eyes then ears,
00.20	There's something that you can hear…	Left hand to ear.				
00.24					(Some children) *Alnf [nose].*	then nose.
00.28	That's right,	Nods head.				
00.31					(Muna) *Abla, haada w haada w haada w haada [Teacher this and this and this and this].*	Muna touches nose ear mouth eye.
00.36	your eyes,	Touches eyes.				Some children touch eyes.
00.38	your nose,	Touches nose.				Some children touch nose.
00.40	mouth,	Touches mouth.				Some children mouth.
00.41	ears,	Touches ears.				Some children touch ears.
00.42	hands.	Holds out hands, then				Some children stretch out hands.
00.43	So let's have a look and see what we can find.	picks up and shakes bag.				
00.47	Who's sitting back there listening? Hmm	Looks around circle.				
00.52	Malak Bawadi wanna come and have a look inside?					
00.55						Malak comes forward.
00.57	Ready? Put your hand in.	Holds up bag.				
00.58	Find something in there.	Holds up bag.				Malak puts hand in bag and removes object.
01.03	What's he found?	Hand on chin.				Malak slowly moves item in the air, making quizzical facial expression.

Time	Speech	Action		Child speech	Child action
01.06	Shake it and see.	Makes shaking action.			
		Makes quizzical expression placing finger on chin.			
01.08	Does it make a noise?	Shakes hand beside ear.			Malak nods head slightly.
01.10	A small noise.	Finger and thumb together to show sign for small.			
01.12	What happens if you open it?	Takes object and opens the top.			
01.15		Smells contents of jar and hold up to Malak's nose.			
01.16	Can you smell something?	Touches nose.			
01.18				(Malak) *Zaatar [thyme mix].*	Malak sniffs jar.
01.19	Mmm smells like zaatar doesn't it?	Sniffs jar.		(Some children) *Ana [me].*	One child touches nose.
01.20		Smiles and passes the jar to the next child to smell.			Some children stand and move to front.
01.26	Uh oh Uh Oh *Abian abian,*	Claps hands.			
	abian. Sit back.	Clicks fingers and points at child.			
01.30				(One child) *Abian* sit down.	
01.35					Children return to places on carpet.
01.40			Ms. Sabha takes jar and passes it around.		
01.56	What else is in here? Let's see who is listening?	Looks around.			Wajida looks at Ms. Miranda.
		Shakes bag.			
	Najwa?				
	Wajida do you want to come and find something?	Raises eyebrows quizzically and holds bag out towards Wajida.			

Time				
02.03				Wajida shakes head and looks to right to take the herb jar from next child.
02.06	No?	Shakes head.		
02.12	Nawal?	Looks at Nawal.	(Mariam) *Ana [me]*.	Mariam raises hand.
02.15				Najwa looks towards Ms. Miranda and makes a small movement with her hand up to her shoulder.
02.19	Nawal. Ready? Put your hand in, see what you can find.	Gestures dipping hand into bag.		
02.20				Nawal smiles and nods head.
02.21	You choose. See what you can find.			
02.22				Nawal looks into the bag.
02.23		Dips hand in bag.	(Nawal) indiscernible.	
02.24	Not food?	Shakes head.		
02.25				Nawal puts hand into bag.
02.26	Which one?	Puts hand into bag and pulls out object.		
02.27	This one?			
02.29	Pull it out.	Passes necklace to Nawal.		
02.33	Wooooow.			Nawal holds up necklace and looks at teacher.
	What has she found?			
02.38			(One child) It big.	
02.40	It is big.	Stretches out arms in 'big' gesture.		
02.42	It's something you can ...see.	Fingers on eyes.		
02.46	And it's something you can…. hear.	Rubs beads together to make sound.		
02.50	And it's something you can wear.	Gestures arm around neck.		
02.51	Do you want to walk around with it?	Gives necklace to Nawal and points around the circle.		
02.52			(Ms. Sabha) *Ta'ali Nawal*. *[Come to me Nawal]*.	Ms. Sabha Points around circle.

Time					
			Gestures rubbing beads in hand to make sound.		
02.53					Nawal walks around with the necklace.
					Some children reach out and touch and make a sound.
					Nawal returns the necklace to the bag.
02.55	One more.	Looks at Saif.			
03.14	Saif? Ready. One more. Saif,	Holds up bag.			
03.20	find something inside.				Saif comes to the front and takes object out of bag
03.24	What's Saif got?				
03.25					Saif turns object over in hand looking at it.
03.26	Something that's a..	Runs finger around the shape of object (circle).		(One voice) *Da'era [circle].*	Saif watches Ms. Miranda's gesture
03.27	circle, good.	Looks at child who spoke and nods head.			
03.28		Takes the object from Saif and opens the container. Holds object to her nose and sniffs.			
03.29					Saif takes object in his hand again and looks at it
03.30		Holds object to Saif's nose.			Saif sniffs object

Time						
						A few children move to the front to see.
03.33	Shakira,	Points to floor.				Saif holds object up to children who are still standing at the front.
	sit down Malak, Taqwa.					
03.38						The standing children slowly return to their places.
3.40	Saif, take it round the circle to show them.	Gestures around the circle.				
03.42			*(Ms. Sabha) Saif Ta'ali [come to me].*	Reaches hand towards Saif, co-holds object and pulls Saif towards children on carpet.		
03.45	Take it round the circle.	Gestures around the circle.				
03.47						Saif starts to walk around the circle allowing children to smell, continuing until he gets back to Ms. Miranda.
03.50	Thank you Saif right around.	Takes the container from him.				
03.51						Saif returns to his seat.
03.52		Holds the container out to some children on her left.			(Some children) *Ana [me].*	
03.53	*Halas [Enough].* Finished now. OK.	Hands up with palms facing out in stop sign. Shakes head.			(Some children) indiscernible.	
03.55					(One child) Group time.	

APPENDIX N: EXAMPLE OF COMPLETED DATA TABLE

WC1	What's in the bag: Teachers have the children settled on the carpet in a large circle. They have finished attendance and collecting money for snack. Ms. Miranda has a bag in her lap. Ms. Sabha is taking a back seat in this session and not sitting at the front with Ms. Miranda. For most of the session she is out of camera shot and only becomes involved at 2.55 when she is seen/heard to support a child.								
1	2	3a	4a	3b	4b	5	6	7	8	9
Time	commentary	Speech Ms. Miranda	Gesture Ms. Miranda	Speech Ms. Sabha	Gesture Ms. Sabha	Speech child/ren	Gesture child/ren	Possible triggers	Ms. Miranda/Ms. Sabha reflection	Researcher notes
00.12	Ms. Miranda is looking around at the children, most of children looking at her	There's something in here	Holds bag in front of her						Ms. Miranda It's about the 5 senses. Because AST had already done the 5 senses with them in Arabic so she [child] understood what I was saying. She was saying ears, nose, mouth in Arabic. ha der means 'this' but earlier Muna was saying fem- mouth, ayoun-eyes

You can see how learning in it in Arabic first does help'

CSN 'so they were saying the words in Arabic because they had recently done it in Arabic?'

Ms. Miranda 'They would have done it | |
| 00.14 | | That you can see with your eyes | Fingers in corners of eyes | | | Ayoun, luthnin [eyes, ears]. | Some children touch eyes then ears | | | |
| 00.20 | Muna joins in touching parts of her face and M.s Miranda looks at her smiling and nodding her head | There's something that you can hear, …. | Left hand to ear | | | Alnf [nose]. | Then nose | Muna is responding to teacher's gesture | | |
| 00.28 | | that's right | | | | Abla, haada w haada w haada w haada [Teacher this and this and this and this]. | Muna touches nose ear mouth eye | Children copying gestures | | Teacher is suggesting that Pre-teaching the concept in L1 helps L2.

When Ms. Miranda uses gestures with English, children make the link to what they learnt earlier in Arabic |
00.36	Ms. Miranda maintains eye contact with Muna as she touches different parts of face	Your eyes	Touches eyes				Other children touch mouth/ears	The children are responding to gesture and facial affirmation		
00.38		Your nose	Touches nose				nose	Ms. Miranda is using action to		Are children copying Ms.
00.40		mouth	Touches mouth				Mouth/ears			

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00.41		ears	Touches ears				Stretch out hands	show children what she is talking about.	that morning on the mat'	Miranda's actions?
00.42		Hands,	Holds out hands, then						That's when we split our lessons to like half English Half Arabic because the mat times were so long in the morning that there was no time to breathe. But yeah like definitely I've noticed they get the concept of the story a lot more now when we sit and read the book together first thing in the morning than doing it at this time of the day [after playtime]. And this time of day I've just turned it into an action song and a counting song and no story, so the story goes first thing in the morning together.	
00.43	Ms. Miranda lifts up the bag for all the children to see. She looks around the circle as if deciding who to choose. She calls Malak and he moves up to sit in front of her.	so, let's have a look and see what we can find	picks up and shakes bag							
00.47		Who's sitting back there listening? Hmm								
00.52		Malak Bawadi wanna come and have a look inside?					Malak comes forward	Comes when he is called		
00.57		Ready? Put your hand in.	Holds up bag							
00.58	He pulls something from the bag and she makes an enquiring gesture	Find something in there	Holds up bag				Malak B puts hand in bag	Responds to gesture not words		
01.03		What's he found?	Hand on chin				Malak B slowly moves item in the air			

01.06	Ms. Miranda chooses Malak to take something from the bag. When he has it she asks what he has found a uses quizzical expression placing finger on chin.	Shake it and see	Makes shaking action Makes questioning gesture					It appears that Malak is responding to gesture rather than speech	CSN 'It's all visual isn't it? ……. your instructions, because you've got the box/bag of things they are just communicating with visual clues. That's how they are making meaning from what you are doing. I don't think they are really picking up on your verbal communication at all. Ms. Miranda 'No. they're just taking turns and yeah….' CSN' they're not saying anything in English' Ms. Miranda 'no. See' (watching video) 'she's not using language to communicate with me, she points to her nose to say like 'I want to smell'	
01.08		Does it make a noise?	Shakes hand beside ear				Malak B nods head slightly			
01.10.	Tells him to shake it using action, he shakes.	A small noise.	Finger and thumb together to show sign for small							
01.12	She asks if it makes a noise and gestures small noise.	What happens if you open it?	Takes object and opens the top				No response			
01.15	She tells him to open and asks if it smells.		Smells contents of jar and hold up to Malak B s nose.							
01.18	He says zaatar. And Ms. Miranda nods and smiles at him as she passes the jar to the next child to smell	Can you smell something?	Touches nose			Malak says *Zaatar [a herb mix]*	Malak B sniffs jar	Malak responds to Gesture-touching nose-for smell		
01.19		Mmmm, smells like zaatar doesn't it?	Sniffs jar			A number of children call out in Arabic wanting a turn to smell		Possibly the use of the Arabic word Zaatar triggers the children to all approach the front.		Zaatar used in Arabic and English for aromatic spice mix
01.20							One child touches nose			

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01.26	A few children move to come and smell. She has to encourage them to return to their places with help of Ms. Sabha. Ms. Miranda tells Malak to take the jar to every child to smell, he is slow. Ms. Sabha takes jar and passes it around. Children return to places on carpet	Uh oh Uh Oh *Abian abian [sit]* Abian Sit back	Claps hands Clicks fingers and points at child			One child's voice is heard saying 'abian sit down'		Ms. Miranda is using an Arabic word at this point to encourage children to sit down	'I think all the lessons you taped were the worst ones we had out of all of them. There's so many things that didn't work.'	
01.56	Ms. Miranda looks around the class and shakes the bag. She makes eye contact with some children. Some look at her, but some are looking at Ms. Sabha and the jar she is passing around to smell	What else is in here? Let's see who is listening? Najwa? Wajida do you want to come and find something? No?	Shakes bag Raises eyebrows quizzically and holds bag out towards Wajida. Then shakes head				Wajida looks at Ms. Miranda then shakes head and looks to right to take the herb jar from next child	Maybe Wajida is more interested in the jar than in picking something from the bag			
02.12	Some children are busy smelling the herb jar which has almost got around the last child on Ms. Miranda's right	Nawal?	Ignores Mariam and looks at Nawal			Ana	Mariam raises hand Najwa looks towards Ms. Miranda and makes a small movement with				

							her hand up to her shoulder		
2.19		Nawal. Ready? Put your hand in, see what you can find.	Gestures dipping hand into bag				Nawal smiles and nods head		
2.23		You choose. See what you can find.					Nawal looks into the bag		
2.24	Nawal seems slow to pull hand out of bag so Ms. Miranda puts her hand in and helps remove something		Dips hand in bag			Nawal speaks but indiscernible			
2.25		Not food?	Shakes head				Puts hand into bag		
2.26		Which one?	Puts hand into bag						
2.27	Ms. Miranda helps Nawal to pull a necklace out of the bag. Nawal holds it up high. Many children are now watching her	This one?	Pulls out object						
2.29		Pull it out	Passes necklace to Nawal.						
2.33		Wooow. What has she found?					Child holds up necklace and looks at teacher		
2.38						Unknown voice 'It big'		Big is a word that has been taught related to theme	
2.40	One or two children stand up and move to the front to look	It is big	Stretches out arms in 'big' gesture					Ms. Miranda uses gesture after child has said big	
2.42		It's something you can ...see	Fingers on eyes						
2.46		And it's something you can…. hear	Rubs beads together to make sound						
2.50		And it's something you can wear	Gestures arm around neck.						

2.52	Nawal walks around with the necklace and Ms. Sabha supports.Some children reach out and touch and make a sound.She returns the necklace to the bag.	Do you want to walk around with it?	Gives necklace to child and points around the circle	*Ta'ali [come here] Nawal.* Speaks in Arabic	Points around circle. Gestures rubbing beads in hand to make sound.				Ms. Miranda notes that Ms. Sabha is supporting her. 'So, she is like helping there saying 'Miss Miranda wants you to show them; walk around make a sound'.'	
2.55		One more. Saif?	Looks at Saif							
3.14	Saif comes to the front and picks something out of the bag. Most children sitting in circle but 2 boys up on knees at front.	Ready. One more. Saif Find something inside.	Holds up bag.				Saif Takes object out of bag	Saif probably knows the routine now rather than responding to words		
3.25		What's Saif got?					Turns object over in hand looking at it.			
3.26	Ms. Miranda holds the object with Saif and runs her finger around it.	Something that's a..?	Runs finger around the shape of object (circle)			Another voice calls out 'Da'era' [circle]	Saif watches Ms. Miranda's gesture	Child speaking- Arabic word for circle on seeing the shape		
3.27	Ms. Miranda takes the object from Saif and opens the container. She smells and then holds it to Saif's nose and he takes it.	Circle. good	Looks at child who spoke and nods head							Ms. Miranda gives positive gestural response to child calling out in Arabic, affirms Arabic word and gives English word.
3.28			Holds object to her nose and sniffs				Saif takes object in his hand again and looks at it			

3.30	A few more children come up to the front to see.		Holds object to Saif's nose				Sniffs object	Probably didn't respond to word 'smell' but to gesture		
		Shakira, Sit down Malak, Taqwa	Points to floor				Saif holds object up to children who are still standing at the front			
3.40		Saif, take it round the circle to show them.	Gestures around the circle	Saif Ta'ali	Reaches hand towards Saif					Ms. Sabha helping Saif and other children understand what to do
3.45	The standing children slowly return to their places and Saif starts to walk around the circle allowing children to smell	Take it round the circle.	Gestures around the circle	speaks in Arabic	Helps Saif show object by co-holding it and pulling towards children on carpet					
3.50	Saif continues until he gets back to Ms. Miranda. Ms. Miranda takes the container from him and he returns to his seat.	Thank you Saif right around								
	Ms. Miranda holds the container out to some children on her left who didn't smell at the beginning.					Some voices call out 'ana' [me]				
4.52		Halas [enough]. Finished now. OK.	Hands up with palms facing out in stop sign. Shakes head.			Some children call out in Arabic				

APPENDIX O: 'IF YOU'RE HAPPY' SONG LYRICS

Verse one: (point to smiling face while singing)
If you're happy, happy, happy clap your hands (*clap, clap*)
If you're happy, happy, happy clap your hands (*clap, clap*)
If you're happy, happy, happy clap your hands, clap your hands (*clap along with word 'clap'*)
If you're happy, happy, happy clap your hands (*clap, clap*)

Verse two: (fold arms and make angry face)
If you're angry, angry, angry, stamp your feet (*stamp stamp*)
If you're angry, angry, angry, stamp your feet (*stamp stamp*)
If you're angry, angry, angry, stamp your feet, stamp your feet (*stamp along with word 'stamp'*)
If you're angry, angry, angry, stamp your feet (*stamp stamp*)

Verse three: (hands in front of body and cowering expression)
If you're scared, scared, scared say 'oh no!' (*Oh no*)
If you're scared, scared, scared say 'oh no!' (*Oh no*)
If you're scared, scared, scared say 'oh no!' say 'oh no!' (Make action on words 'oh no')
If you're scared, scared, scared say 'oh no!' (*Oh no*)

Verse four (sleepy gesture with head on hands)
If you're sleepy, sleepy, sleepy take a nap (action for sleeping)
If you're sleepy, sleepy, sleepy take a nap (action for sleeping)
If you're sleepy, sleepy, sleepy take a nap, take a nap (action for sleeping)
If you're sleepy, sleepy, sleepy take a nap (action for sleeping)

Verse five: (point to smiling face while singing)
If you're happy, happy, happy clap your hands (clap, clap)
If you're happy, happy, happy clap your hands (clap, clap)
If you're happy, happy, happy clap your hands, clap your hands (clap along with word 'clap')
If you're happy, happy, happy clap your hands (clap, clap)

If You're Happy (22/11/2013) YouTube video, added by Super Simple Songs [Online].
Available at https://www.youtube.com/watch?v=l4WNrvVjiTw (accessed 05/10/2015)

APPENDIX P: CODING MATRIX FOR TEACHER TALK IN ENGLISH

282 utterances	Modelling	Instruction	Question	Commentary	Motivational
WC1	0	19	19	12	4
WC2	21	21	46	13	18
WC3	39	6	33	15	16
total	60	46	98	40	38
% of all WC utterances	21%	17%	35%	14%	13%

288 utterances	Modelling	Instruction	Question	Commentary	Motivational
SG1	0	22	17	15	11
SG2	1	19	14	12	11
SG3	4	16	18	29	13
SG4	0	31	32	15	8
total	5	88	81	71	43
% of all SG utterances	2%	31%	27%	25%	15%

198 utterances	Modelling	Instruction	Question	Commentary	Motivational
IL1	3	14	37	12	6
IL2	0	0	12	2	3
IL3	12	12	42	32	11
total	15	26	91	46	20
% of all IL utterances	8%	13%	46%	23%	10%

- Totals show that the English-speaking teacher uses questioning more than any other types of talk.
- Questioning is used most in whole-class sessions and independent learning, however in small-group sessions there is more instruction than any other type of talk.
- Modelling is the least used type of language in whole-class and in independent learning sessions as well as overall. However, in whole-class sessions modelling has the second greatest use after questioning. This is most likely due to text being read in whole-class sessions.
- Motivational talk is used to a lesser extent than questioning, instruction and commentary in all.

APPENDIX Q: SG4 EXCERPT SHOWING CHILDREN USING TAUGHT VOCABULARY

Time	Speech Ms. Miranda	Gesture/action Ms. Miranda	Speech children	Gesture/action children
00.10	Right you can find one and then go inside. Take it inside to eat Wajida.			
00.15	Malak this one's for the cat. Out of this one: one, two. Find a long one in here.	**Ms. Miranda points to two of the tyres.**	(Humaid) *Abla [teacher]*.	
00.20			(Humaid) *Choo fi! [what is it/look]*.	**Humaid shows a bean.**
00.22	Yummy. You can eat that.	**Makes eating gesture.**		
00.24				**Humaid pulls the bean apart and puts it in his mouth.**
00.28	Malak do you want one bean to eat?			
00.33	Malak, do you want one like Mariam?			
00.34			(Malak) Yes.	
00.35	OK come and have a look.	**Beckons Malak.**		
00.37			(Mariam) Ms. Miranda.	**Malak leaves playdough table and comes over and joins the other children.**
00.38	No Mariam, this one's for the cat. This one's not.	**Ms. Miranda Indicates the different tyres, showing the two tyres, they can use.**		
00.39	Because it's for the cat.	**Ms. Miranda squats down close to the plants.**		
00.40	This one; this one, yes.			**The children look into the tyres.**
00.44			(Mariam) Ms. Miranda, *choo… choo… choo……[what, what, what]*	
00.46	What's happened to this one?	**Ms. Miranda Points to a plant.**		
00.48			(Mariam) Bigger.	
00.50	It got bigger and bigger and bigger like our story didn't it.	**Makes 'big' gesture with arms**		**The children search among the plants.**
00.54			(Mariam) Ms. Miranda this one!	**Mariam points.**
00.56	This one? Where?			
00.58			(Mariam) Bigger big.	**Points to plants in another tyre.**

01.00	There's one that got bigger like in our story?			
01.01			(One child) Yes.	
01.02	Where?	**Ms. Miranda squats with children to search the tyre.**		
01.03			(Mariam) *Hadoon (here)*. This one.	**Picks a large bean. Looks at Ms. Miranda.**
1.06	Wow. This one is big, isn't it?			**Mariam jumps up and down.**
			(Farida) Big, big.	**Mariam gives bean to Malak.**
01.08	Well done.			
01.10	Wash them first. You need to put the water on. Malak, you need to put the water on.	**Points to the tap. Indicates the beans and tells children to wash them.**		

APPENDIX R: EXCERPTS OF TEACHER REFLECTION: WHOLE-CLASS

Teacher reflection WC1	
EST	You can see that learning it in Arabic first does help
CSN	I'm not sure what they are saying in Arabic?
EST	*Ha der* means 'this' but earlier M was saying *fem*- mouth, *ayoun*-eyes
CSN	So, they were saying the words in Arabic because they had recently done it in Arabic?
EST	They would have done it that morning on the mat. So, they are making the connection between the two lessons, but it would be easier to do it together. So she is helping there saying 'Miss M wants you to show them'. [Refers to action on video of AST supporting Nawal]

Teacher reflection WC2 Excerpt A	
EST	She is saying the Arabic word for bell. He's done the book before, so he knows the action we do
CSN	Trumpet sound yeah
EST	I think doing an action for the story helps them to be more engaged though, because then they can communicate back to me
CSN	[child says mai] Oh Mai, water, for the fire engine?

Teacher reflection WC2 Excerpt B	
EST	Even the words sleepy and scared they use quite a lot now. Like one child was sleeping today and they came and told me 'Z sleepy'. And scared if they see an animal or a face they say, 'ooh scared' because we try to use them as much as possible.
CSN	So, it's repetition….
EST	Mm and It's also things that they understand that they relate to. And they use it to communicate with me more. Like they will come and say, 'oh Mariam scared'.
CSN	It's interesting because children at that age are only just beginning to identify emotions. So, they're getting it in Arabic and English.
AST	But they don't say it about themselves they say it about the other person. So maybe like 'oh sad face, oh no' if someone's crying. Or someone else is sleepy/scared/happy/angry. I did really notice that those 4 words stuck in their heads!

Teacher reflection WC3 Excerpt A	
CSN	Also, I wanted to ask you, do you talk about the action you will make so you both make the same action, or does EST make an action and you copy her, or you make an action and EST copies you or you both make different actions?
EST	It depends on the story…. If we have had time the week before then we will talk it through otherwise we will just together make it up.
CSN	Would you like to plan the actions together?
EST	Yes. So, they always match so when the children use the action it always matches to Arabic and English. When we do songs, we tend to do the same actions but we kind of just do it on the spot.
AST	(Nods) I read it like a song in Arabic. Not a song but like a song
EST	It has a rhythm.
AST	If it's song they like it and they learn more quickly.
EST	We said that last week when I was talking to CSN and I said its better when it's a song they keep it in their head.
CSN	We agreed that, and another teacher came in too and she agreed that they learn more quickly with songs
EST	I think you're right because it has a rhythm and a pace, so it will stay in the head. When you're reading, you choose a story that has a nice rhythm, or the same word at the end like this one keeps finishing 'in the water' so they can join in. Then they become the reader with you.
EST	This story is quite good because the rhythm matches in Arabic
EST	Oh, yes, we are using a different action there for 'eat'. MM and she's saying a different word as well!
AST	In Arabic, it's not a nice word.
EST	So, I guess if we want it to match perfectly, we need that time to plan how we deliver it.

Teacher reflection WC3 Excerpt B	
AST	With the picture they know foggy
CSN	But if you say to them in English 'is it foggy?' they don't know what you are saying?
EST	But they wouldn't even know 'is it rainy?' without the gesture
CSN	So you are teaching them the gesture as a learning outcome?
EST	Yeah, I plan teaching gestures to help communication.
CSN	There, first of all you said, 'what was our story yesterday' and you got some bizarre answers
EST	Yeah, I forgot to say 'book'.
CSN	When you said 'book' and did the gesture for book then they answered.
EST	I think you have to, at the start of the year, pick one word for English, there are a lot of words you could say like 'what did we read yesterday?"
CSN	So very limited controlled language?
EST	Yeah. So I always have to remember to say 'book' not 'story'.

APPENDIX S: EXCERPT FROM LESSON PLAN

Opening Circle: Morning Meeting	Opening Circle: Morning Meeting	Opening Circle: Morning Meeting	Opening Circle: Morning Meeting	Opening Circle: Morning Meeting
Self-Registration (K1LCP5- recognise one's name; K1NS1; K1NS3), **Good Morning song** (SLT6, SLT5, K2SLC1- give messages) **Sharing personal information** (K1SLC1 how are you? what is your name? where are you from?) **Calendar** (NS3- count in sequence in Arabic and English, PA2- patterns) **Weather** (KES3 recognise characteristics of weather; KES1, KES2) **Share learning outcomes**. (15 **Minutes**)				
Whole Class: (20Minutes) كل المجموعة Introduce the book 'Humpy Grumpy Saves the Day'. Look at the cover. What could the book be about? Can the children predict what might happen? What could be an alternative title for the book? Introduce the words cover, title and author. Explain that this book is fiction. Show some examples of non-fiction books. Action song: Alice the Camel	Whole Class: 20(Minutes) كل المجموعة Recap over yesterday's circle-time – cover, title, author, children's predictions. Read the book in Arabic to the children. Pause on page ___ and ask the children to predict what will happen next. Continue to read the story. Ask some (Arabic) questions based on the story: what happened in the story? What did Humpy get given at the end? What did he find hanging on the tree? What might have happened instead? Why is water dangerous? Etc. Action song: Alice the Camel	Whole Class: (20Minutes) كل المجموعة Recap over the story from yesterday. Can the children remember the events of the story? Read the story in English. Ask some (English) questions based on the story. Who did Humpy save? What type of bird is in the story? Have you ever seen a hoopoe bird? Have you been swimming in a wadi before? Etc. Action song: Alice the Camel	Whole Class: (20Minutes) كل المجموعة Recap over the story from yesterday. Can the children remember the events of the story? Use the camel puppet and boy puppet to help retell the story. The puppets can tell the children what happened in their own words. The children can be encouraged to ask the puppets questions – for example: were you scared? How did you feel when you got the medal? Action song: Alice the Camel	Whole Class: (20Minutes) كل المجموعة Re-read the story in Arabic and English with the children encouraging them to role play the different characters. Can they swim like the boys? Can they make the noise of the hoopoe? Can they pretend to put on the snorkel like Humpy? Etc. Action song: Alice the Camel
happy, sad, angry, tired, worried, hot, cold, eyes, ears, nose, mouth, hands, see, smell, touch, taste, hear				**Key Vocabulary** الكلمات الاساسية
Excerpt from teacher's lesson plan highlighted to show planning for formulaic (classroom) routines/taught vocabulary and gestural communication				

APPENDIX T: EXCERPTS OF TEACHER REFLECTION: SMALL-GROUP

	Teacher reflection SG2 Excerpt **A**
EST	I guess Mariam was the only one who was using English words. Everyone else just used Arabic or just showed me what they wanted
CSN	So, they are communicating a lot with facial expression?"
EST	Or even like gesture because you saw like Masoom brought the book over then he was sorting through which container he wanted and showing me, like holding it out to show that he wanted the selotape. But then they must be understanding some of the English to understand what I wanted them to do because they took small amounts of gravel.
CSN	You were very, very clear about that they way you used gesture- small (indicted with hand) and you held up the container and you pointed to a level on the container.
EST	Yeah. Oh yeah. So, they might not be understanding [the words] they are just watching.
CSN	You did that a lot (gesture and signs). This girl, Farida, had the green triangle name card and then she got a green triangle shape. She wanted to show you it was the same, but she didn't use the word 'same'.?
	Teacher reflection SG2 Excerpt **B**
EST	I wonder if he is understanding what I am asking or is he understanding from the gesture? Is he writing the date? I think he actually is! He is totally following the model of write the name on one side and the date on the other, and he knew numbers instead of letters because the M was definitely an M
Me	So how has he learnt that?
EST	Because I model it every time that we have a picture we say like 'this is our name' or 'we put our name here' and I go 'M-u-ba-rak' and sound it out then on the other side we say like 'the second of June' and then I changed my way. At first, I would write 21 bar 6 but because when we do mat time we say June the word June so the third term I changed to writing l2 then June so that it looked the same. I noticed like some of the children weren't understanding why I was writing a 6 for June. It doesn't make sense.
	Teacher reflection SG4 Excerpt **A**
EST	Did you notice I said '*La, la*' instead of 'no, no.'?
CSN	Some of the children are saying Ms. Miranda and subconsciously I wonder if you just carry on in English. But if the child says 'Abla' you might answer in Arabic?
EST	Yeah.
CSN	Because now your Arabic is quite good.
EST	Because I automatically now say '*La*' instead of no because it just comes out easier, like it's an easier word to say. And because you're hearing a mix all day long and they're hearing a mix, you just mix the two together.
CSN	Don't you think if they were speaking English to you, you would automatically answer in English but if they say it in Arabic '*Abla, abla choo fi…?[Teacher, teacher what is it?]*
EST	Because you're not…
CSN	But you are 'in the Arabic' and you answer in Arabic
EST	Because you are not really thinking about it consciously especially when you've got like 10 different people saying things to you.
	Teacher reflection SG4 Excerpt **B**
EST	Because there was a lot of language there.
CSN	You can see that was because it was something they were interested in.
EST	It encouraged them to use a lot of words but the words they used they had been taught for something else.
CSN	They were enthusiastic.
EST	And trying to share their discoveries.
	Teacher reflection SG4 Excerpt **C**
EST	Instead of in I'm saying inside and outside because they know inside and outside and I think if I say in its going to confuse them
CSN	Yeah
EST	I just try and use inside instead of in.

APPENDIX U: INCIDENCES OF CHILDREN USING ENGLISH WORDS IN DIFFERENT CONTEXTS

Episode	WC1 What's in the bag	WC2 Can you hear?	WC3 Slippery fish	Making instruments	Sponge-printing 1	Sponge-printing 2	Looking at plants	Big basin	Mariam playing cards	Messy dough
	It Big	**Two, one, zero**	**Monday**	**Green**	**Two, one**	**Blue**	**Yes**	**Big House**	**Monkey**	**Oh No!**
	Spoken by child when another pulls long necklace out of mystery bag	Spoken as chorus joining in actions with Ms. Miranda	Spoken by children in response to question by Ms. Miranda	Spoken by Farida about her shape	Spoken by Rashed as he counts his sponge prints	Spoken by Humaid when Ms. Miranda asks, 'what shape is it?'	Malak answering Ms. Miranda's question	Spoken by Masoom talking about his construction	Spoken by Mariam describing picture on the card	Spoken by Hafez as he plays with animals and uses words from 'if you're happy' song
		Circle Ms. Miranda	**October May**	**KG1C**	**Red**	**Clean Up**	**Ms. Miranda Bigger!**	**Uh oh**	**Lion**	**Happy, happy, happy**
		Spoken by child about shape of drum in the book	Spoken by children when asked 'what month is it?'	Spoken by Malak about his writing	Spoken by Rashed asking Ms. Miranda for paint	Spoken by child at 'clean up' time	Mariam talking about plants	Spoken by Masoom when telling Ms. Miranda construction has broken	Spoken by Mariam describing picture on the card when asked by Ms. Miranda	Spoken by Hafez as he plays with animals and uses words from 'if you're happy' song
		Triangle	**Five**	**Sticker**	**Finished**		**Ms. Miranda This one!**	**Please one**	**Elephant**	
		Spoken by child about shape of object in the book	Spoken by children when asked 'what number is this?'	Spoken by Malak when he uses a sticker	Spoken by Musharraf when he finishes painting		Mariam talking about plants	Spoken by Farida when Ms. Miranda asks for one camel	Spoken by Mariam describing picture on the card when asked by Ms. Miranda	
		Rectangle	**Sunny**	**Open Shut**			**Big, Big**	**One**	**No**	
		Spoken by child about shape of object in the book	Spoken by children when asked about the weather	Spoken by Malak when Ms. Miranda tells him he must open his sticker			Spoken by a few children about the plants	Spoken by Masoom asking Farida for a camel	Spoken by Mariam in answer to question from Ms. Miranda	
		Sad Face	**Fish**	**Circle**			**Yes**	**Yellow**		
		Spoken by Mariam when Ms. Miranda says we will sing *If you're happy*	Spoken by children when asked about the book	Spoken by Malak as he draws circles			Spoken by Mariam in response to question from Ms. Miranda	Spoken by Farida when giving a camel		

		Happy Face	Water	X, C			Ms. Miranda bigger big, Ms. Miranda This one bigger.	Ms. Miranda Water?		
		Spoken by Mariam when Ms. Miranda says we will sing *If you're happy*	Spoken by children repeating word said by Ms. Miranda	Spoken by Malak as he writes x and c			Spoken by Mariam about plants	Spoken by Mariam when asking for water in a bowl.		
			One, two three				Two	No water		
			Spoken by children counting fish in picture				spoken by Mariam when Ms. Miranda asks how many?	Spoken by Mariam when refused water		
			Yellow, green				This	*Bokra* water?		
			Spoken by children in response to question by Ms. Miranda				Spoken by Farida when showing plant to Ms. Miranda	Spoken by Mariam asking for water tomorrow		
			Happy					Two, three, four.		
			Spoken by child responding to another child's action.					Spoken by Shakira as she counts shells into her bowl.		
			Water					Big, Big, oh heavy.		
			Spoken in chorus to complete line in story					Spoken by Shakira as she lifts her bowl full of sand.		
			Octopus							
			Spoken by child predicting next page in book							
			Yellow yellow							
			Spoken by children looking							

			at octopus picture							
			Tuna fish tuna fish …. water							
			Spoken by children joining in story							
			Uh oh							
			Spoken by child predicting fish being eaten.							
			Bigger, uh oh							
			Spoken by children on seeing picture of shark							
			Finished							
			Spoken by one child when story ends, and book is closed							
Total in episode	1	6	16	6	3	2	8	10	4	2

APPENDIX V: EXCERPTS OF TEACHER REFLECTION: INDEPENDENT LEARNING

Teacher reflection IL1 Excerpt	
EST	But then I missed that whole thing (child's play and language) so I put her back onto something else (with my questioning).
EST	Ah the crocodile eats (gesture). We do the song with the 5 little monkeys and the crocodile.
CSN	But shells?
EST	Well she's just telling me that, I said 'where have the shells gone'? and she says, 'the crocodile came along and went 'chomp, chomp, chomp' (eating sound).
EST	They seem to use the English words for animals and then a sound or gesture to show what the animal is doing so they kind of know those nouns.
CSN	Like what? Roaring? Eating?
EST	Yeah, eating like this (gesture), the snake (gesture), the fish (gesture),
CSN	Are they the gestures you have taught them?
EST	Yes, so they are not sharing their own ideas…. Crab pinch, pinch, pinch. They don't say the crab pinches they say crab then do the gesture.
CSN	I think it is only what they have been taught.
Teacher reflection IL3 Excerpt A	
CSN	Do you think he is telling you that one animal is angry and the other one is scared?
EST	Yeah, I didn't see what he was doing earlier so I just turned it into the song. But then he's going back to this. But he understands what I am asking.
CSN	Do you think that's because he wants to please you?
EST	Yeah, but he was trying to share an idea, an angry animal and a scared animal. That was cool.
EST	The can all say clean up, but they never say what 'clean up' is in Arabic, only in English. I think you get the most language through the routine, the classroom routines. They know things like that because they are doing it every day. Like the bus song, they all talk about the bus, they all say clean-up. They also say, 'sit down' and things like that happen all the time.
EST	For other things, they use gestures for communications. At the start, they just used gesture to show it but now they can say happy sad angry, sleepy. I guess that helps scaffold the language until they learn to say it cos at least if they show me a gesture, … I can understand what they are trying to share.
Teacher reflection IL3 Excerpt B	
EST	Yeah, but she seemed like a little bit… I don't know because the camera was there. Was she looking at the camera?
CSN	She actually looked straight at the camera. At one point, she did!
EST	Because that's a little bit shyer than her normal self like her body movement is a little bit shy.
CSN	At the beginning, she didn't really know I was there.
EST	Yeah, probably when I came along….
CSN	You see I am behind her...
	We notice her look up at the camera
CSN	There.
EST	Yeah, so she knows. And that's probably why she wouldn't have attempted something because she knows people are watching.
CSN	So that's interesting, so the camera does have an impact on them.
EST	Yeah, cos now if you ask her she will just say anything even if it's not right. Or she'll, you know she'll use a lot more language to try, or she would say it in Arabic and wait for me to say it in English.

APPENDIX W: INCIDENCES OF GESTURAL MODES USED BY CHILDREN

1. Making an iconic gesture with/without a word 2. Making a Symbolic gesture with/without a word 3. Touching/ Pointing to/ indicating something talked about indexical mode	Incidences counted as either one child alone at one time or a group of children together at one time.

WC1 What's in the Bag		
Making an iconic gesture		
Making a Symbolic gesture	Gesture for yes	01.08 Nods when Ms. Miranda asks does it smell? 02 19. Nawal nods head when Ms. Miranda shows her what to do possibly affirming she understands what she must do
	Gesture for no	01.56 Wajida shakes head after Ms. Miranda says 'no' and shakes head
Touching/ Pointing to/ indicating something talked about indexical mode	Touches eyes	00.14-00.42 Children make gestures after Ms. Miranda uses gesture and word together
	Touches nose	
	Touches mouth	
	Touches ears	
	Touches hands	
	Holds up necklace	02.33 Nawal holds up necklace to show teacher

WC2 Can You Hear (story book) At the start children are copying Ms. Miranda doing actions of the rhyme (squat jump stretch). They all sit when she says sit down and models sitting on the carpet.		
Making an iconic gesture	Gesture for drum	01.15 Humaid/ 02.20 Malak /04.50 Malak/ 04.53 many. Response to picture of drum in book
	Gesture for listen/hear	02.21 Nawal /02.27 Mariam In response to gesture of teacher
	Gesture for trumpet	02.50 Malak. Learned Response to picture in book
	Gesture for train	03.07 Many. Learned Response to picture in book
	Gesture for dog	03.24 Maitha 03.28 many. Learned Response to picture in book
	Gesture for long	04.30 Shakira Copying gesture made by teacher to describe sides of rectangle
	Gesture for short	04.30 Shakira Copying gesture made by teacher to describe sides of rectangle
	Gesture for happy	06.37 Few. 06.46 Mariam. 06.52 Mariam. Responding to teacher making gesture in song
	Gesture for sad	06.41 Few. 06.50 Mariam. Responding to teacher making gesture in song
	Gesture for angry	06.53 Mariam. 06.58 Few. Responding to teacher making gesture in song
	Gesture for scared	08.11 Some with words in song
	Gesture for sleepy	08.34 all Joining in song
	Gesture for dog	03.40 Malak Learned Response to picture in book
Making a Symbolic gesture	Gesture for yes	06.24 few in response to 'are we ready?'
Touching/ Pointing to/ indicating something being talked about indexical mode	Touches circle shape	O1.37 Shakira Response to picture in book as Ms. Miranda indicates the shape
	Touches bell	02.39 Shakira Responding to picture/word
	Touches rectangle shape	04.24 Humaid in response to picture/word rectangle
	Touches square shape	04.09 Malak Response to picture in book as Ms. Miranda indicates the shape

	Points to picture of bell	02.30 Shakira While saying word *Jarras* [bell]
	Holds angry mask	07.50 Maitha while singing verse in song

WC3 Slippery Fish		
Making an iconic gesture	Gesture octopus	2.22 Nawal gestures octopus answering question about the story 6.20 Children gesture octopus for story
	Gesture shark	8.00 Children gesture shark for story
	Gesture big	2.23 Nawal makes gesture for big describing octopus in the story says Kabeera 8.26 children gesture big for story
	Gesture eating	5.31 Nawal gestures eating for story 6.22 Children gesture eating for story 7.12 Children gesture eating for story
Making a Symbolic gesture	Gesture yes	2.10 Mariam nods head in agreement with Ms. Miranda
	Gesture no	2.16 Mariam shakes head when Ms. Miranda asks can you remember?
Touching/ Pointing to/ indicating something being talked about indexical mode	Points to calendar	1.00 Wajida points to calendar to show Wednesday

SG1 Making Instruments		
Making an iconic gesture to convey meaning	Gesture for one	00.10 Zafir holds up 1 finger saying 'one'
Making a Symbolic gesture with a word	Gesture for no	01.17 Mariam shakes finger at Malak saying 'La'
	Gesture for yes	02.06 /02.13. Farida nods head in response to Ms. M
Touching/ Pointing to/ indicating something talked about indexical mode	Touches shapes	02.42 Farida touches green triangle saying 'green' 05.15 Zafir touches green triangle whilst saying *'metheleth'* [triangle]
	Touches stickers	05.59 Says 'sticker' while touching it

SG2 Sponge-printing 1		
Making an iconic gesture		
Making a Symbolic gesture	Gesture for yes	00.14/0019 Musharraf nods in response to Ms. M 01.15 Rashed nods in response to Ms. M
Touching/ Pointing to/ indicating something talked about indexical mode	Touches paint	3.05 Musharraf says 'red' and points to red paint
	Points to painting	0.34 Rashed points to his painting while counting the shapes he has printed saying numbers in English.
	Touches paint	03.05 Rashed Touches red paint saying 'Abla Red'

SG3 Sponge-printing 2		
Making an iconic gesture	Gesture for swimming	00.37 Humaid 'swims 'seal' through air saying oo oo
	Gesture for seal	00.26 Humaid makes gesture for seal when showing the toy seal saying *Samaka [seal]*
Making a Symbolic gesture	Gesture for yes	01.21 Talia in response to Ms. M 04.30 Zafir in response to Ms. M 04.57 Humaid. When Ms. M says 'what?' 05.39 Zafir in response to Ms. M 06.23 Zafir in response to Ms. M
	Gesture for no	00.44 Humaid saying *La [no]* in response to Ms. Miranda
Touching/ Pointing to/ indicating something talked	Holds up container of fish	00.06 Humaid saying *'Abla'* [teacher]
	Touches teacher's arm	00.45 Mutti saying *'Abla'* [teacher]
	Pointing to painting shirts	00.59 Humaid wanting to paint

about indexical mode	Holds up painting shirt	01.28 Humaid requesting help from Ms. M
	Holds up painting	06.11 Humaid saying *'Abla' [teacher]*
	Pointing to painting shirts	00.54 Mutti points while saying *'Abla' [teacher]*
	Points to painting	03.30 Humaid saying *'Abla'* [teacher]

SG4 looking at plants		
Making an iconic gesture		
Making a symbolic gesture	Gesture yes	01.34 Mariam nods head in response to Ms. M
	Gesture no	04.04 Masoom shakes head in response to Ms. M
	Gesture for helpless	02.05 Mariam Shrugs shoulders when she fails to pull up the vegetable.
Touching/ Pointing to/ indicating something talked about indexical mode	Points to plants	00.54. Mariam saying 'this one' 00.58 Mariam saying 'big'
	Touches bean	01.03. Mariam saying 'this one'
	Points to vegetable	01.15 Mariam saying *ha doon tasara [this one here]* 04.49 Masoom saying *'Abla' [teacher]* *06.03 Masoom showing Ms. M*
	Holds out a bean	03.31 Farida saying 'this!'
	Holds out playdoh model	03.33 Sultan saying 'big'

IL1 Big basin		
Making an iconic gesture	Gesture one	5.59 Masoom holds up 1 finger to ask for 1 camel
	Gesture big circle	6.18 Masoom gestures big circle for his construction
	Gesture crocodile	9.44 Shakira gestures crocodile when telling Ms. Miranda her story in Arabic
	Gesture eating	0.32 Wajida gestures eating as she 'plays' eating the teacher 7.04 Rashed makes gesture for eating when Ms. Miranda asks what's inside? 9.44 Shakira makes gesture for eating explaining to Ms. Miranda her 'story'.
Making a Symbolic gesture	Gesture yes	01.16 Musharraf nods in affirmation when Ms. Miranda says 'airplane' 6.32 Mariam nods when Ms. Miranda asks 'water?' 9.25 Shakira nods when Ms. Miranda asks, 'is that heavy?' 9.48 Shakira nods when Ms. Miranda asks, 'Crocodile ate them?'
	Gesture for helpless	05.20 Masoom hands out palms up shoulders shrugged saying 'uh oh' 09.38 Shakira gestures hands out palms up shoulders shrugged saying 'uh oh' when Ms. M asks, 'how many shells?'
Touching/ Pointing to/ indicating something talked about indexical mode	Holds up camel	02.08 Farida saying 'Abla [teacher] baby'. Holding small camel 03.35 Masoom saying 'yes' when he finds camel.
	Holds out bowl	09.22 Shakira showing Farida saying 'Big, La, *Kabeera* Big'.
	Touches bowl	06.52 Rashed while saying *'Abla [teacher]*
	Points to camels	02.18 Masoom while saying 'Abla *[teacher]* uh oh'

IL2 Mariam playing cards		
Making an iconic gesture		
Making a Symbolic gesture		

Touching/ Pointing to/ indicating something being talked about indexical mode	Touches picture card	01.07 Following on from interaction with Ms. M where teacher has been asking names of animals on the cards at this point Mariam takes the lead and touches a picture saying 'He de…' [this one?]
IL3 Messy Dough		
Making an iconic gesture	Gesture for happy	19.05 Hafez in response to Ms. M saying song words also joining in words 'happy, happy, happy'
	Gesture for duck	06.44 Malak squats pretending to be a duck while making a quack sound to show meaning of construction
	Gesture for angry	18.35[Hafez says 'Abla, abla, abla [teacher, teacher, teacher]. He then stands up and crosses arms and stamps feet
	Gesture for scared	18.42 Hafez Gestures scared [hands together under chin] sharing his meaning with Ms. M 22.34 Hafez watching as Saif and Farida arrange the animals says 'oh no!' while making gesture for scared
	Gesture for sleeping	06.36 Malak while interacting with Ms. M 18.55 Hafez in response to Ms. M saying song words
	Gesture for drinking	07.21 Najwa gestures drinking to show meaning of her playdoh.
	Gesture for Elephant	12.55 Humaid brings elephant to show camera and makes elephant gesture of arm waving like trunk.
Making a Symbolic gesture	Gesture for yes	02.33 Mariam in response to Ms. M 02.45 Rashed in response to Ms. M 06.39 Malak nods in response to Ms. M 06.49 Malak nods in response to Ms. M 17.19 Maitha nods head in response to Ms. M 18.34 Hafez in response to Ms. M 18.43 Hafez in response to Ms. M 19.42 Farida nods in response to Ms. M 20.44 Mariam nods in response to Ms. M 20.55 Saif nods in response to Ms. M
	Gesture for no	04.33 Mizna shakes head saying 'La' [no] in response to Ms. M 11.46 Mizna is shaking her finger vigorously at Ms. Miranda to say she is not finished 17.14 Maitha shakes head in response
	Gesture for stripy	23.07 Hafez points to zebras and gestures with hands slicing up and down after saying 'Abla, abla'
	Gesture for heavy and light	17.36 Farida holds 2 dishes one empty (high)one full (low) gesturing to Ms. M that she has heavy and light.
Touching/ Pointing to/ indicating something talked about indexical mode	Pointing to child	01.14 Farida speaking Arabic
	Pointing to construction	06.27 Malak saying "Abla Ta'ali choofi, choofi' [Teacher come and look] 06.41 Malak indicates to Ms. M another construction
	Pointing to animals	20.46 Saif saying 'stop, stop!' 22.50 Saif and Hafez while speaking in Arabic to Ms. M
	Holds up painting	02.32 Mariam saying 'Abla' [teacher] 02.44 Rashed saying 'Abla, abla' [teacher teacher] 05.00 Maitha saying 'Abla' [teacher]
	Holds up play dough	00.58 Farida saying 'ice cream' 07.15 Najwa saying 'Ms. Miranda'. 20.35 Mariam offering cup of playdoh to Ms. M
	Points to cup	05.43 Wajida points to purple cup while speaking in Arabic to Farida. Farida then points to the red cup.

	Pointing to playdoh table	17.17 Maitha indicating to Ms. M she wants to play on the playdoh table

WC	5/45 speech-accompanying gesture 11%	40/45 gesture alone. 89%
SG	24/39 speech-accompanying gesture 62%	15/39 gesture alone. 38%
IL	25/55 speech-accompanying gesture 45%	30/55 gesture alone. 55%

APPENDIX X: EXAMPLE OF ANALYSIS OF TEACHERS' GESTURES

AST Gesture WC1 What's in the bag?			
Making a gesture with a word	Gesture for making sound with beads	1	1
Touching, pointing to/indicating something she is talking about	Touches child	1	1
	Touches beads	1	1
	Points around circle	1	1

EST gesture WC1 What's in the bag?			
Making a gesture with a word	Gesture for see	✓✓	2
	Gesture for hear	✓✓	2
	Gesture for shake	✓	1
	Gesture for small	✓	1
	Gesture for smell	✓✓✓	3
	Gesture for big	✓	1
	Gesture for wear	✓	1
	Gesture for around/circle	✓✓✓✓	4
	Gesture for stop	✓	1
	Gesture for 'no'	✓	1
	Gesture for 'think'	✓	1
Touching/ Pointing to/ indicating something she is talking about	Touches eyes	✓	1
	Touches nose	✓✓	2
	Touches mouth	✓	1
	Touches ears	✓	1
	Touches hands	✓	1
	Holds up bag	✓✓✓✓✓✓	7

APPENDIX Y: IL3 EXCERPT: ARTEFACTS USED IN JOINT ATTENTION AND SCAFFOLDING

Time	commentary	Speech Ms. Miranda	Gesture Ms. Miranda	Speech child/ren	Action child/ren
17.58		What is Hafez doing? Playing with the animals	Touches the mat in front of Hafez		Hafez smiles
18.01	Saif is collecting some animals in his hand from the box on the table	What does Saif have? Saif is finding a tiger and a lion			Hafez can be seen making gestures with his hands whilst moving the animals on the mat on the table
18.12	Malak has arranged some animals on the top of the abacus	What do you have on top?	Points to the animals.		
18.18	Malak takes off the monkey and the elephant and moves them back and forth in his hands.	The monkey and the elephant and the lion. You've got three.	Passes a number 3 card to Malak		
18.24	Ms. Miranda turns to where Saif is arranging animals on the abacus beside her.	How many does Saif have? One two three	Moves finger along the animals		Saif looks
18.30	Saif seems disinclined to engage but Hafez begins a 'pantomime' to show Ms. Miranda what his animals are doing			[Hafez] *Abla, abla, abla {teacher, teacher, teacher}*	Stands up
18.32					Crosses arms and stamps feet
18.34		Angry?			Hafez nods
18.35		(sings) When you're angry, angry, angry stamp your feet.			Sits down
18.42		Scared?			Gestures scared [hands together under chin]
18.43					Hafez nods
18.43		When you're scared, scared, scared say oh no			
18.47	Saif is sitting between Ms. Miranda and Hafez absorbed in his own activity	Oh No!		[Hafez] Oh No!	Puts up hands
18.52		What else do we have in that song?		[Hafez] Dom, dom, dom, dom.	Plays with 2 animals on the play grass mat
18.55		When you're sleepy, sleepy, sleepy take a nap			Sleeping gesture
19.05	At this point Saif moves his animals onto the same mat as Hafez and begins to play with Hafez 'animals. Hafez becomes distracted.	What about happy. What do we do for happy?			Shows smiley face
19.08		When you're happy, happy, happy, clap your hands			Plays with animals

19.23	Hafez stands up and walks away from the table	Saif's got the lion			
19.28	Saif plays with the animals and makes growling noises.	What's the tiger doing?			
19.30	Farida approaches Ms. Miranda with a 'play doh' ice cream cone. Ms. Miranda continues to give a commentary of Saif's play but there is little response from Saif.	You've got one tiger and two lions			Farida holds the cone out towards Ms. Miranda
19.36		One tiger and two lions and a leopard			
19.40	Ms. Miranda turns towards Farida			Speaks in Arabic indiscernible	Holds out an animal to Ms. Miranda
19.42	Farida sits on the chair	Are you coming to play here Farida? Finished	Points to the play doh in her hand		Nods her head
19.52	Farida leaves to take away her play doh.			[Saif] *Jiraffa {Giraffe}*	
19.54		What else can you find Saif?			
19.58	At this point Hafez returns and picks up one of the animals			[Hafez] Happy, happy, happy.	Picks up animal and moves it on the mat
20.00	Ms. Miranda starts to sing the song again while the two boys engage with the animals Farida returns and looks into the animal box on the table.	If you're Happy, happy, happy clap your hands		[Hafez] Dom dom, dom, dom	Hafez Plays with animal then looks at Saif.
20.06	She takes out an elephant	What do you need Farida? Grass for your animals.	Passes a play mat to Farida		
		How many elephants can you find? One		[Farida] one	
20.18	She removes another	two			
20.22	Saif continues to take animals from the box and place them on the mat			[Saif] stop	

APPENDIX Z: DATA HANDLING SEQUENCE

Order	Action
1	Video recordings made
2	Audio-recordings of teacher/s reflections
3	Video narratives written
4	Teacher reflections transcribed
5	Selection of 10 episodes
6	Data tables designed
7	Video dialogue transcriptions made
8	Video multimodal transcription completed
9	Video multimodal transcription and teacher reflections data added to data tables
10	Other analytic details added to data tables