

SUPPORTING PRESCHOOL TEACHERS IN ASSESSING ARABIC-ENGLISH
DUAL LANGUAGE LEARNERS (DLLs) IN CLASSROOMS USING AN
AUTHENTIC ASSESSMENT: A QUALITATIVE EXPLORATION ON THE
PERCEPTIONS OF TEACHERS AND ARAB PARENTS

by

LATIFAH ALREMAIH

A dissertation submitted in partial fulfillment of the
requirements for the degree of

DOCTOR OF PHILOSOPHY IN EDUCATION: EARLY CHILDHOOD EDUCATION

2024

Oakland University
Rochester, Michigan

Doctoral Advisory Committee:

Tomoko Wakabayashi, Ed.D., Chair
Julie Ricks-Doneen, Ph.D.
Nicholas Lauer, Ph.D.
Lauren Childs, Ph.D.

© Copyright by Latifah Alremai, 2024
All rights reserved

For the person I was when I started my PhD journey, and the person I am now.

ACKNOWLEDGMENTS

{وَمَا تَوْفِيقِي إِلَّا بِاللَّهِ عَلَيْهِ تَوَكَّلْتُ وَإِلَيْهِ أُنِيبُ}

“And my success is not but through Allah (God).
Upon him I have relied, and to him I return.”
(Quran surah Hud, 11: 88)

Foremost, I would like to express my sincere gratitude to my advisor, Dr. Tomoko Wakabayashi, for her continuous support, timely feedback, and immense knowledge. I cannot imagine having a better advisor and mentor. I would like to extend my thanks to the rest of the committee members, Dr. Julie Ricks-Doneen, Dr. Nicholas Lauer, and Dr. Lauren Childs, for supporting me throughout this process and providing me with invaluable guidance. Also, I would like to thank the preschool teachers as well as the Arab parents who have been part of this dissertation study and shared their valuable experiences and knowledge.

Nobody has been more important to me in the pursuit of the dissertation journey than the members of my family. I would like to express my sincere gratitude to my father Abdulmohsen Alremai, whose mentorship and guidance were invaluable. Although he is no longer with us, his influence continues to resonate in this work. Also I am deeply and extremely grateful to my mother Hessa Altuwaijri, for her love, care, and prayers. Words cannot express my feelings, nor my thanks, for my supportive siblings and for my friend Sarah Algassim for inspiring me to follow my dreams. Finally, I would like to thank the Saudi Ministry of Education for providing me with this valuable scholarship opportunity and for their unlimited cooperation and support during the scholarship journey.

For all of you, THANK YOU.

Latifah A. Alremai

ABSTRACT

SUPPORTING PRESCHOOL TEACHERS IN ASSESSING ARABIC-ENGLISH DUAL LANGUAGE LEARNERS (DLLs) IN CLASSROOMS USING AN AUTHENTIC ASSESSMENT: A QUALITATIVE EXPLORATION ON THE PERCEPTIONS OF TEACHERS AND ARAB PARENTS

by

Latifah Alremai

Adviser: Tomoko Wakabayashi, Ed.D.

The purpose of this research was to explore the perceptions of non-Arab preschool teachers' experiences in assessing Arabic-English dual language learners (DLLs) in classrooms using a well-established, teacher scored authentic assessment of early childhood holistic development. Moreover, this study explored parents' experiences by discussing these assessments and their perceptions of their role in supporting their child's development.

Qualitative interviews were used to collect data from non-Arab teachers and Arab parents to gain a deeper understanding of how teachers assess their Arab preschoolers, what helpful practices they use, and what challenges they face, as well as Arab parents' perceptions of their children's development. A total of 16 participants were interviewed, including eight non-Arab preschool teachers and eight Arab parents, from five schools located in different cities across Michigan in the United States.

A grounded theory approach was used to analyze the data and generate main themes to address the research questions. Findings indicated that non-Arab preschool teachers face challenges in assessing Arabic-English DLLs. The main challenge was

understanding what the child is trying to say when he/she uses Arabic words in his/her answer. The second main challenge was teachers' not recognizing structural differences in Arabic and English, such as writing direction, which could lead to inaccurate assessment scoring. Successful practices that preschool teachers used to raise the level of accuracy of the child's scores, included multiple observations, different forms of communication, like nonverbal communication, learning Arabic words themselves, and engaging families more. The present study points to the importance of teacher-parent communication and the importance of professional development for teachers on Arabic language and culture to help them better understand and engage with their Arab students. Future research may be a longitudinal study with a wider range of Arab nationalities.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iv
ABSTRACT	v
LIST OF TABLES	x
LIST OF FIGURES	xii
CHAPTER ONE	
INTRODUCTION	1
Arab Community in Michigan	3
Assessing Young Arabic-English Dual Language Learners	3
Definition of Terms	6
Statement of the Problem	6
Statement of the Purpose	7
Research Questions	8
CHAPTER TWO	
LITERATURE REVIEW	9
Related Theories	9
Cummins Language Acquisition Theory	9
Vygotsky's Socio-Cultural Theory	13
Piaget's Theories: Constructivist, Cognitive Development, and Language Acquisition	15
Developmental Characteristics of Young Dual Language Learners (DLLs)	17
Discussion of Authentic Assessments	20
Cultural Characteristics of Arab Community and Arabic Language	22

TABLE OF CONTENTS—Continued

Teachers' Perceptions and Practices in Assessing Young Dual Language Learners (DLLs)	25
The Difficulties of Assessing Dual Language Learners (DLLs)	28
Engaging Young DLLs' Parents	30
Summary	34
 CHAPTER THREE RESEARCH METHODOLOGY	 36
Research Design	37
Ethical Considerations	38
Researcher Positionality	38
Study Participants and Samples Selection	40
Recruitment and Interview Procedures	41
Demographic Questionnaire	42
The Child Observational Record (COR) Advantage Tool	44
Data Collection Methods	47
Interviews with Preschool Teachers	48
Interviews with Parents of Arabic-English DLL Children	49
Data Analysis Methods	51
Process of Coding	51
Process of Categorizing	52

TABLE OF CONTENTS—Continued

CHAPTER FOUR	
RESULTS	54
The Nine Emergent Themes	56
Research Question One	57
Research Question Two	61
Research Question Three	71
Research Question Four	74
Research Question Five	79
CHAPTER FIVE	
DISCUSSION	83
Interpretations of the Findings	84
Implications of the Findings	97
Recommendations for administrators/schools and teachers	98
Limitations of the Current Study	99
Conclusion	99
Directions for Future Research	100
APPENDICES	
A. IRB Approval	102
B. Consent Forms foe Preschool Parents	104
C. Preschool Teachers’ Demographic Questionnaire and Interview Protocol and Questions	106
D. Parents’ Demographic Questionnaire and Interview Protocol and Questions	110
E. Quotations’ Tables	115
REFERENCES	129

LIST OF TABLES

Table 2.1	A Contrastive Analysis of Arabian and American Cultural Differences	23
Table 2.2	A Contrastive Analysis of English and Arabic (Negative Transfers)	25
Table 3.1	Numbers of Participants from Each School	40
Table 3.2	Teachers' demographic questionnaire summery	43
Table 3.3	Parents' demographic questionnaire summery	44
Table 3.4	Formation of Interview Questions Pertaining to Research Questions	49
Table 4.1	Grounded Representation of Themes Related to Research Question One	57
Table 4.2	Theme 1: Teachers Perceive Arab-English DLL Children as Having High Levels of Self-Regulation and Mature Social Emotional Development	60
Table 4.3	Theme 2: Non-Arab Preschool Teachers Expressed Having Positive Perceptions of Arabic-English DLL Children in Their Classrooms, but Also Displayed Misconceptions about Arab Families and Arabian Culture	61
Table 4.4	Grounded Representation of Themes Related to Research Question Two	62
Table 4.5	Theme 3: Teachers Identified Non-Verbal Strategies and Families as Resources to More Accurately Assess Arabic-English DLL Children's Development	69
Table 4.6	Theme 4: Teachers Identified Challenges in Assessing Arabic-English DLLs	69
Table 4.7	Theme 5: Some Teachers Believed That English Proficient Arabic-English DLLs Require no Special Assessment Considerations	70
Table 4.8	Grounded Representation of Themes Related to Research Question Three	72
Table 4.9	Theme 6: Non-Arab Teachers Identified Needs for Additional Profession Development in both Context and Strategies for Assessing Arabic-English DLLs	74
Table 4.10	Grounded Representation of Themes Related to Research Question Four	75

LIST OF TABLES—Continued

Table 4.11	Theme 7: Arab Parents' Perceptions of Their Children's Experiences and Progress in Preschools Mostly Aligned with Non-Arab Teachers	78
Table 4.12	Theme 8: Arab Parents Expressed Concerns about Cultural and Linguistic Barriers, as Well as Racism	79
Table 4.13	Grounded Representation of Themes Related to Research Question Five	80
Table 4.14	Theme 9: Seems Like the Usual Communication Strategies Teachers use with Families were Effective, and Arab Parents Appreciated Translation of Assessment Results in Arabic	82

LIST OF FIGURES

Figure 1.1	Arab Americans population Growth in Michigan up to 2022	2
Figure 3.1	Data Collection Process	48

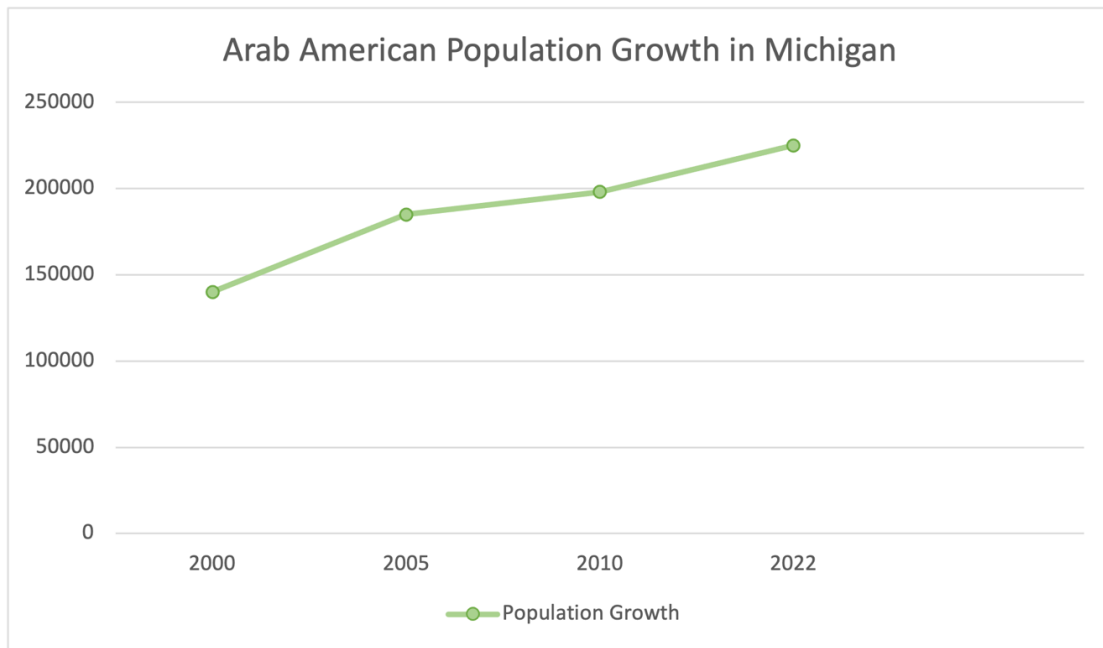
CHAPTER ONE

INTRODUCTION

One of the ongoing difficulties for preschool teachers in the United States is meeting the needs of a growing number of children who are linguistically and culturally diverse. Children who are acquiring two or more languages are known as English Language Learners (ELLs), bilinguals, multilingual learners (MLLs) or Dual Language Learners (DLLs). DLL is the term I use throughout this dissertation to refer to children in this category (Office of Head Start Administration for Children and Families [OHSACF], 2013). In this study, I explore non-Arabic-speaking preschool teachers' experiences in assessing Arabic-English DLLs. According to the U.S. Census Bureau, by 2030, the number of children whose home language is not English will grow from its current rate of 22% to 40% of the school-aged population (Magruder et al., 2013). The Arab population currently make up 4% of the immigrant population in the U.S. (Budiman, 2020), and Michigan—which is the state where this study was conducted—has the second highest Arab American population, at 225,567 (U.S. Census Bureau, 2022). Figure 1.1 provides a visual representation of the Arab American population growth in the state of Michigan through 2022.

Figure 1.1

Arab Americans population Growth in Michigan up to 2022



Similar to the word "European," "Arab" is a very general expression. It refers to all Arabic-speaking people, regardless of origin or appearance (Nydell, 2012). Arabs of various religions (Muslims, Christians, Druze, Jews, and others) and minority groups (such as Kurds, Armenians, Circassians, and Berbers) make up the Arab population. It should be emphasized that not all Muslims are Arabs and/or understand Arabic, and that Arab identity does not equate to Muslim identity. Since the majority of Arabs are Muslims and the *Quran*, the holy book for Muslims, is written in classical Arabic, many people conflate and overgeneralize these terms, for instance by assuming that Iranians, Turks, or Pakistanis are all Arabs and/or speak Arabic. Additionally, the term "Arab world" does not just apply to the Middle East. Arabs originate from 22 Arab nations, including Saudi Arabia, Jordan, Yemen, Morocco, Algeria, Tunisia, Libya, Mauretania,

Egypt, Sudan, Lebanon, Syria, Israel/Palestine, United Arab Emirates, Oman, and Iraq. In other words, many Arabs originate from regions outside of the Middle East, and many Middle Eastern nations are not Arab nations, such as Turkey (Fellure & Thornton, 2009).

Arab Community in Michigan

According to a Pew Research Center analysis of United States Census Bureau data, about 190,000 Arabs, or Arabic speakers, live in the metropolitan Detroit area. This cohort represents about 13% of all Arabic speakers in the U.S. and 91% of Arabic speakers in Michigan (Moslimani, 2023). Arabic is the second most spoken home language of dual language children in the state of Michigan (Sugarman & Geary, 2018).

Hassoun (2005) mentioned that the Arab American community in the greater Detroit region began in the late 1800s with a small number of Syrian and Lebanese Christians seeking employment in the growing automobile industry. When Henry Ford established his Rouge factory in Dearborn in the 1920s, the city began to draw Arab immigrants. Many laborers came from Yemen, Syria, and Lebanon for positions in the automobile sector. In later decades, the city saw an inflow of Palestinians and Iraqis. In Dearborn, Arab Americans created a dynamic and multicultural community (Hassoun, 2005), and in 2005, the Arab American National Museum was opened. It explores the rich and varied cultures, history, and traditions of the Arab world (Moslimani, 2023).

Assessing Young Arabic-English Dual Language Learners

Arabic and English are widely spoken languages, but they are typologically unrelated languages. They belong to two different language families, and they present substantial linguistic and sociolinguistic differences. One of the salient differences between the two languages lies in their writing systems. For example, Arabic has a right-

to-left writing system whereas English has the reverse. This variation in the script directionality may impose certain cognitive processes on young DLLs who speak both Arabic and English.

As an Arab preschool teacher, I was always acutely conscious of linguistic distinctions in America and felt compassion for DLL children. I once had an Arab student in my class who made typical mistakes for Arabic-English speakers, including opening books from the wrong side, writing his name from right to left, and having problems pronouncing several English letters that aren't present in Arabic. I was aware of these errors and knew why the Arabic-English DLL made them. However, when I spoke with my fellow monolingual teachers, I found they did not see these mistakes as expected language errors but rather as unusual ones. In HighScope's Child Observation Record (COR Advantage; HighScope, 2013), which is an authentic assessment used in many preschool classrooms, there is a criterion in language domain that assesses the child's writing direction. This means that Arabic-English DLLs' writing skills/competence could easily be mis-assessed. This particular event illustrates the need for greater DLL awareness, attention, and focus for classroom teachers.

Authentic assessments are considered "authentic" because the assessment takes place in an informal, natural environment. Early childhood professionals may utilize observation to ascertain a child's skills when children can demonstrate what they know within the daily routine and surroundings. A full picture of the children's knowledge and how they apply it to real-world problems may be obtained via authentic assessment (Pool & Hampshire, 2019). Authentic assessment is effective because it could reduce inadvertent or implicit biases. Authentic assessment provides a collection of evidence that

aims for objectivity away from teachers' expectations and beliefs and that is visible and accessible by others. Implicit biases in particular can have an impact on teachers' expectations and interactions with the young children in their classrooms (Pool & Hampshire, 2019).

In my recent role as a preschool teacher in the United States, I became increasingly aware of the cultural and linguistic challenges preschool teachers encounter when assessing DLL preschoolers. In my classroom, about a third of the students spoke Spanish as their native language, which is a language I unfortunately do not understand. I observed them having conversations with each other fluently in Spanish; however, when I or my fellow teachers spoke with them in English, they found it difficult to respond or express themselves. The assessment used in my classroom was the COR Advantage (HighScope, 2013). The COR Advantage is a comprehensive teacher-scored authentic English language-based assessment of all developmental domains. When teachers are not familiar with children's language and/or culture, their assessment could lead to inaccuracy.

Furthermore, assessment cannot capture all of the children's knowledge and abilities (Peets & Bialystok, 2015). It is important for researchers, educators, administrators, and parents to know if low assessment results are due to poor English proficiency or poor skills in that developmental domain. Additionally, low assessment for DLLs could be mistaken for learning disabilities. As a matter of fact, studies reveal that kindergarten special education classes have a low proportion of English learners and appear to be identified later since it can be challenging to differentiate between a learning disability and a lack of English proficiency (Samson & Lesaux, 2009). Observing this

possibility led me to explore how best to capture DLL children's development and support their teachers.

Definition of Terms

These are terms used throughout the paper and when they are used, these are the definitions that should correspond to them in the context of this study:

Dual Language Learners: Practitioners of early childhood education use this term to describe children from birth to age five who are learning two languages. The term "dual language learner" acknowledges that very young children are actively developing their native language(s) as well as a second language (Ballweg et al., 2014).

Home Language: The language that is most typically spoken in an individual's home environment is referred to as their "home language." Regardless of an individual's level of fluency or proficiency in that language, it is the language used in daily family communication. It does not necessarily mean that's the individual's first or strongest language (Yoo et al., 2023).

Early Childhood Authentic Assessment: Childhood authentic assessment is a process of collecting vital information about a child's development and growth by educators through observation in the child's genuine environment, the information is then used by educators to plan educational activities that are at a level the child can understand and is able to learn from (Boyle & Charles, 2014).

Statement of the Problem

A child learning two or more languages may appear to have delays in social and communication development, but this may be because they are not yet able to express themselves in one or both languages. Therefore, it can be difficult to distinguish between

normal and potential developmental delays for DLL children (Winsler et al., 2014). For instance, if a child is asked to "place the block on top of the table," and, instead, picks up and holds the block, it may be challenging to determine if he did not understand the adverb of place or did not fully understand what was said. The chance to advance DLLs' development will be lost if the teacher doesn't consider DLLs' communication barriers and overlooks their abilities. The lesson learned from this is the need for supporting DLLs' teachers to capture not only surface-level performances but deeper-level competence and comprehension.

Statement of Purpose

In this study I focused on Arab children in U.S. preschools, specifically through shedding light on preschool teachers' experiences in assessing Arab-English DLL children, and parents' experiences discussing these assessments and their perceptions of their role in supporting their child's development. The purpose of this study is to explore preschool teachers' experiences in assessing Arabic-English dual language learners (DLLs) in classrooms using a well-established teacher scored authentic assessment of early childhood holistic development. Moreover, families have an important role in conserving and passing down their language and culture, which can help their children succeed in school and beyond. A significant amount of research has proved the benefit generated when educators collaborate with families. These collaborations enable both families and educators to support young DLLs skills, interests, and identities, paving the path for healthy social development and academic achievement. Strong ties between

family and school have been found to contribute to positive learning and developmental outcomes for children from diverse backgrounds (López, 2013). Therefore, I also explored parents' experiences by discussing these assessments and their perceptions of their role in supporting their child's development. The research questions that guided this study are as follows:

Research Questions (Teachers):

1. What knowledge do preschool teachers have about Arabic-English DLL developmental characteristics?
2. How do preschool teachers describe their experience of assessing Arabic-English DLLs using an authentic observation-based assessment? In particular, what are their success and challenges?
3. What are preschool teachers' needs when assessing their Arabic-English DLLs?

Research Questions (Parents):

4. What are Arab parents' opinions about their children's development and school assessment?
5. What roles do Arab parents play in supporting their preschool children's teachers?

CHAPTER TWO

LITERATURE REVIEW

This chapter includes a review of the major theories and the literature regarding developmental characteristics of young dual language learners (DLLs), discussion of authentic assessments, cultural characteristics of Arab community and Arabic language, teachers' perceptions and practices in assessing young DLLs, the difficulties of assessing DLLs, and engaging young DLLs' parents.

Related Theories

For this study, I will examine the theories that tackle the domain of dual language learning at an early age. These theories are Cummins Language Acquisition Theory, Vygotsky's Socio-Cultural Theory, and Piaget's Constructivist Theory.

Cummins Language Acquisition Theory

Cummins (1999) distinguished two types of language attainment: basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). Cummins believed a marked difference exists between academic teaching and social interactions. He argued that both BICS and CALP are necessary for young DLLs to have the confidence required to grasp the languages they aim to learn. Children who have firmly grasped their native language are believed to have a strong foundation for their second language learning.

Young school-age children typically learn BICS quickly by interacting with this language native speakers. The BICS aspect supports those young children to undertake

natural communications while engaging in social situations. Social environments allow young children to practice a form of language in their interaction, and this language becomes familiar and contributes to academic language skills later in their lives. On the other hand, Cognitive Academic Language Proficiency (CALP) signifies the capability to interconnect more progressive and intellectual concepts in English (the language spoken/taught in school). Cummins (1983) stated that it typically takes six months to two years for school-age children to acquire sufficient BICS skills. However, it takes a lot longer (5–10 years) to acquire CALP skills (Cummins, 1984). Young children's cognitive academic language proficiency is enhanced through academic learning which enables the learners to demonstrate proficiency in their academic sense indicating the ability to communicate, read, and write. CALP, as Cummins (1983) pointed out, is crucial not only in language learning and proficiency, but the ability of the learner to apply the language in decision-making, learning comprehension, evaluating, contrasting, and classification of lessons in the classroom.

According to Street and May (2019), one of Cummins' studies which took place in 1980, involved an analysis of more than 400 teacher referral forms and psychological evaluations performed on English as a second language (ESL) students in a large Canadian school system. Teachers and psychologists frequently assumed that children had overcome all challenges with English when they could communicate comfortably in the language, according to teacher referral forms and psychological assessment reports. Despite this, these children typically scored poorly on English academic activities in the classroom (hence the referral for assessment) as well as on the verbal scales of the cognitive ability test conducted as part of the psychological assessment. Many children

were labeled as having language or communication disabilities despite having only been in Canada for a short period of time (e.g., 1-3 years). As a result, the confusion of second-language (L2) conversational fluency (i.e., BICS) and L2 academic performance (i.e., CALP) directly contributed to the incorrect placement of bilingual children in special education programs (Street & May, 2019).

Street and May's (2019) reanalysis of language performance data from the Toronto Board of Education showed the need of distinguishing between conversational fluency and academic components of L2 performance. These data revealed an average gap of many years between attaining peer-appropriate fluency in a second language and attaining grade norms in academic components of a second language. Conversational components of proficiency often reached peer-appropriate levels within about two years of exposure to English, whereas immigrant children took an average of five to seven years to approach grade norms in academic parts of English (e.g., vocabulary knowledge) (Street & May, 2019).

Many research studies conducted over the last 30 years in Canada (Klesmer 1994), Europe (Snow & Hoefnagel-Hohle, 1978), and the United States (Hakuta et al., 2000; Thomas & Collier 2002) have corroborated the difference in time periods required to achieve peer-appropriate L2 conversational fluency versus meeting grade expectations in L2 academic language proficiency (Street & May, 2019).

The following example of a DLL child (PR) from the psychological assessment (Cummins, 1980) demonstrates how these implicit assumptions about the nature of language proficiency can have a direct impact on bilingual students' academic trajectories

and life chances:

PR (289). PR was referred in first grade by the school principal who noted that “PR is experiencing considerable difficulty with grade one work. An intellectual assessment would help her teacher to set realistic learning expectations for her and might provide some clues as to remedial assistance that might be offered.” (Cummins, 1980, p. 34)

There was no mention of the child learning English as a second language; this was only revealed when the child was recommended by the second grade teacher the following year. As a result, the psychologist dismissed this as a possible explanation for the disparity between a verbal IQ of 64 and a performance (nonverbal) IQ of 108. The following is the assessment report:

Although overall ability level appears to be within the low average range, note the significant difference between verbal and nonverbal scores. It would appear that PR’s development has not progressed at a normal rate and consequently she is and will continue to experience much difficulty in school. Teacher’s expectations at this time should be set accordingly. (Cummins, 1980, p. 35)

What is interesting about this case is that the child's English conversational abilities are likely advanced enough that the psychologist (and probably the teacher) is unaware of the child's ESL background. Because of her low verbal IQ, the psychologist concluded that "her development has not progressed at a normal rate" (Cummins, 1980, p. 35) and advised the teacher to establish low academic expectations for the child since she "will

continue to experience much difficulty in school" (Cummins, 1980, p. 35, as quoted in Street & May, 2019).

In addition, Cummins (2001) explained the Threshold Hypothesis, which states that students whose academic proficiency in the language of instruction is not very high will tend to fall further behind unless the instruction they receive enables them to understand what is being said and written and allows them to participate in class academically. Before a learner can benefit from the use of a second language as a medium of instruction in school, he or she must attain a certain minimum “threshold” level of proficiency in that language. As a result, there is a critical need for a useful preschool DLLs assessment’ practices so that teachers can obtain clear and accurate information about their preschool DLLs levels and strive to build a solid foundation for them.

Vygotsky’s Socio-Cultural Theory

The function of social interaction in cognitive development is central to Vygotsky's sociocultural theory (Vygotsky, 1978). Vygotsky's theory is named after his belief that children receive knowledge within a cultural context via interaction with others (Berk, 2012). He indicated that learning has an influence on development and that society and culture are crucial in children's cognitive development. Vygotsky argued that children learn through imitating others' behaviors and actions in group activities. The impact of social interaction is that children learn about attitudes and beliefs from their teachers and classmates. Vygotsky (1978) felt that interaction and play with peers improved children's ability in language, problem solving, and confidence. Vygotsky was a strong advocate of pretend play; in fact, he argued that because this sort of play

involves more peer interaction, it is the primary facilitator for the development of children (Bodrova & Leong, 2015; Vygotsky, 1978).

According to Vygotsky (1978), children's talks with adults and other children are significant because they serve as the backgrounds of language and opinion. Where the thoughts are fundamentally co-opted dialogue, second languages are introduced, and dialogue appears through social contact. Vygotsky's theory indicates that language develops from social interactions that allow communication and acquisition of primary and secondary languages. According to Vygotsky (1978), language is viewed as a great tool that man uses to communicate with the outside world, and it plays two diverse crucial aspects in cognitive progress: 1) language is the principal avenue by which information is conveyed from adults to children, and 2) it is an influential tool used in knowledge adaptations. Vygotsky indicated that language exists in three forms: social, private, and silent inner speech. The social speech form allows adults to communicate with each other and young children to enable external communication. External communication becomes a crucial tool for children to learn their initial language and acquire a second language through diverse language contact during interactions. Additionally, private and inner speech contribute to the language development of children. Gradually, children's own language becomes their primary intellectual development tool, initially as speech-for-self spoken aloud (private speech) to direct and regulate their own behaviors, and later as silent self-talk (inner speech). Vygotsky termed this internalization the process of utilizing a mental instrument (inner speech) that was formerly located outside of children (social speech).

Vygotsky's theory also dealt with the zone of proximal development (ZPD). ZPD refers to the difference between what a child can do alone and what he/she can accomplish with the guidance of a skilled partner. According to this theory, children need to be given challenges that are just above their capabilities. Maximum cognitive development is encouraged via challenging assignments. According to Vygotsky's theory, learning is an essential component of the developmental process as it relates to both professional and cultural development (Vygotsky, 1978).

Moreover, in the literature, the ZPD has come to be associated with the term scaffolding. ZPD is a construct whereas scaffolding is an action. Mooney (2000) explained Vygotsky's theories regarding ZPD and scaffolding as approaches that promote and grow the child via planning and observing others. Scaffolding consists of the activities provided by the teacher or a more competent peer, in order to guide the learner as he/she is led through the zone of proximal development (Vygotsky, 1978). In addition, Vygotsky claimed that via preparing and focusing on the areas that require assistance, the teacher may use observation to determine the children's readiness for the classroom and their development within the ZPD. The social context in which the child lives has a significant impact on the interaction's ability to influence the child's cognitive development (Vygotsky, 1978).

Piaget's Theories: Constructivist, Cognitive Development, and Language Acquisition

According to Piaget's constructivist theory, children go through four stages of development. His theory focuses on understanding the nature of intelligence as well as how children gain knowledge (Piaget & Inhelder, 1969).

Piaget's constructivist stages are:

- Sensorimotor stage: Birth to 2 years,
- Preoperational stage: Ages 2 to 7,
- Concrete operational stage: Ages 7 to 11, and
- Formal operational stage: Ages 12 and up (Piaget & Inhelder, 1969).

Piaget believed that children actively participate in their learning experience, functioning somewhat like young scientists as they conduct experiments, record observations, and learn about the world. Referring to Piaget's constructivist theory, language development is not only based on genetic predisposition but a construct that the child builds based on his cognitive development (Piaget & Inhelder, 1969). The idea indicates that overall knowledge enhances language skills and constructs based on personal experiences. Piaget's theory notes that although language development is based on experiences, understanding the nature of intelligence enhanced through cognitive development stages creates a clear understanding of how language is acquired.

According to Piaget's theory of cognitive development, children's language reflects the four-stage development of their logical thinking and reasoning skills (Piaget & Inhelder, 1969). Throughout these stages, language also evolves. Moreover, he mentioned that children learn and acquire languages through accommodation and assimilation. In the accommodation process, children experience a change in their schema, which allows them to adapt to a new environment and acquire language. In the assimilation process, the changing environment allows children to place information in the existing schema. According to Piaget's language acquisition theory, children can learn their home-based and second languages through assimilation and accommodation (Piaget & Inhelder, 1969).

Joubert (2015) used Piaget's theory on metacognition in her chapter on assessment of English First Additional Language. Cognitive psychologists have advanced Piaget's view that children's thinking consists of mental operations performed in reaction to the child's surroundings through their study of neurobiology. Language learning, particularly reading, demonstrates the interaction of numerous brain areas and synaptic connections (Schunk, 2012). Joubert recognized Piaget's contribution to our understanding of learning and associated assessment techniques of DLLs. Piaget laid the foundation for educators' understanding that they may assist children in being conscious of how they learn through active learning and how to exercise control over their own skills.

Developmental Characteristics of Young Dual Language Learners (DLLs)

The dual language learners' population is a diverse population comprising of different lived experiences, demographic characteristics, languages, immigration experiences, the nation of origin, and early learning opportunities. These various factors experienced by DLLs lead to a diverse understanding of their development and readiness for school (Winsler et al., 2014). According to Barac et al. (2014), the experiences of preschool DLLs with two unrelated languages, like Arabic and English, change their cognitive system. For instance, Arabic is a Semitic language, whereas English is an Indo-European language (Palmer et al., 2007). Children who develop dual languages show greater advancement in self-regulation—such as working memory, inhibitory control, and cognitive flexibility—than their monolingual counterparts. Preschool DLLs' brains process language differently from monolinguals', and the adaptation influences specific cognitive and linguistic developmental domains (Barac et al., 2014).

Arab preschool DLLs experience two separate language systems in their early life, with both languages affecting each other (Hammer et al., 2014). When children experience high quality exposures to both languages, preschool DLLs have the capability and capacity to acquire their languages without negatively affecting their second language progress. Marchman et al. (2010) conducted a study on 26 Spanish-English DLL toddlers (12 females, 14 males) at the of age two and a half. In this study, children were presented with a familiar word orally and shown two pictures, one of which corresponded to the spoken word. Some of the spoken words were in English and the others were in Spanish. Then, researchers measured the time it took those children to look at the correct picture. The findings indicated that Spanish-English DLL toddlers were just as fast to identify the referents of familiar spoken words in Spanish as in English (Marchman et al., 2010).

Moreover, preschool DLLs' exposure to a classroom environment that includes bilingual adults and preschool teachers who build partnerships with parents and community members results in diverse developmental patterns and different degrees of dual language usage (Choi et al., 2023). According to Grosjean's (2008) complementary principle of dual language competence, DLLs are not entirely fluent in all parts of both languages. Guzman-Orth et al. (2017) observed that preschool DLLs indicated dominance in one language and demonstrated more proficiency in receptive language than productive language. Therefore, being fully proficient in all languages should not be a requirement for someone to be classified as DLL. It is also critical to recognize that bilingual competence is a dynamic state, as the languages of bilinguals are in constant change (Franceschini, 2011).

Diverse researchers have shown that preschool DLLs comprise dual language systems, for the home-based language and an additional language. These systems change within as well as across languages (Bandel et al., 2012). Researchers have studied preschool DLLs' translanguaging. Translanguaging is the fluid movement of DLLs between multiple languages and dialects in their daily interactions (García, 2009; García & Leiva, 2014). Preschool DLLs have been noted to mix languages in their interactions and communications. When preschool DLLs mix two languages, they may be reflecting on their social identities, as well as indicating their awareness of the differences between the two languages. Notably, using words and phrases from both languages at once allows them to widen the range of their expression rather than showing confusion (Bandel et al., 2012). According to Genesee et al. (2004), when children are translanguaging positively, they do not violate the grammatical rules of the languages. For example, when a child says, “Miss, أريد ماء (I want water) please!” there are two different languages here in one sentence, but the sentence is grammatically correct in both Arabic and English, illustrating that children can keep the languages separate when they code-switch (Genesee et al., 2004).

Some studies have indicated that vocabulary knowledge is crucial to other domains of development. Vocabulary knowledge comprises understanding the meaning of words, association, and conceptual knowledge. In their study on 12 four- to five-year-old DLL children whose first language was Spanish, and second language was English, Reyes and Azuara (2013) noted that with time and meaningful opportunities, DLLs increased their vocabulary knowledge in English as they increased its use in school. This

occurred because their mastery of their home language enabled them time to learn new vocabularies comprehensively.

In preschool DLLs, the home language is crucial in creating solid abilities that enhance second language development. Halle et al. (2014) indicated in their study about the social-emotional development of dual language learners, that the use of home language by family at home can act as a protective aspect for DLL children's home language. Maintaining one's home language while learning a second language promotes cultural identity, self-concept, and metalinguistic skills in addition to preserving familial and cultural relationships (Halle et al., 2014). They also mentioned that dual language learning has been associated with social-emotional development in that preschool DLLs have indicated high levels of self-control and low levels of problematic behaviors compared to their monolingual peers (Halle et al., 2014).

Discussion of Authentic Assessments

When assessing young children, observation in routines and settings they are acquainted with is the recommended approach for gathering information because young children do not necessarily "perform" to score well in assessments. Also, children may perform differently in different situations (Bagnato et al., 2014). Researchers and practitioners have come to recognize the ability of authentic assessments to boost young students' achievement and encourage academic progress (National Council of Teachers of Mathematics, 2007). According to Grisham-Brown and Pretti-Frontczak (2011), authentic assessment is the process of acquiring data on young children's abilities that enables functional skill assessment to take place in natural settings (e.g., school, family, community), utilizing items that are already a part of that environment.

According to Bagnato et al. (2014), there are four major differences between authentic assessment and direct testing: where it is done, what is assessed, how it is done, and who does it. First, a crucial distinction is the context (the where) of the assessment. Authentic assessment relies on information that can be obtained only in the child's natural environments. These environments are the ongoing, daily routines, and typical circumstances the child engages in. Examples of natural environments are children in classrooms or playgrounds in their own preschools, at home during bath time, at childcare, and in the supermarket. This contrasts with the contrived arrangements that characterize conventional testing practices. Direct testing environments typically employ an arranged setting, such as testing rooms. As pointed out, direct testing focuses upon standardized item content (the what) and has little instructional use. By contrast, items for authentic assessment are real behaviors that have functional importance to the child and their progress (Bagnato et al., 2014).

Direct testing records the child's narrow response to standardized objects and procedures (the how). By contrast, authentic assessment relies on natural observations of the child's response to daily routines; in this context, the child can demonstrate competency in any way possible (Bagnato et al., 2014). For example, the child who is unaware of being assessed can show object permanence by exploring the environment tactilely in search of a hidden toy. Authentic assessment does not require the child to show only the narrow response of finding and seeing a hidden toy under a standard cup; rather, it allows the child to demonstrate his accurate level of understanding and ability in his own way. In addition, it provides a more well-rounded picture of the child, and it can

determine the child's cognitive approach, level of expression, and his interactions with surrounding people and objects (Bagnato et al., 2014).

Only specific professionals are permitted to conduct traditional testing (the who). These professionals are often not integral members of the child's program and are most probably strangers to the children. In most cases, these unfamiliar professionals administer tests as individuals rather than as true team members. On the other hand, authentic assessment depends upon the observations of familiar adults in the child's life to provide convergent data on real-life functioning. An array of family members, babysitters, teachers, and interdisciplinary professionals form a team who knows the child well and works to help the child (Bagnato et al., 2014).

Cultural Characteristics of Arab Community and Arabic Language

The family is a highly important part of Arab-American society. Although Arab-American families in the United States are becoming smaller over time, the typical Arab-American family remains an extended one, sometimes with several family members contributing to the family's income (Hassoun, 2005). A small, or nuclear family, consists of parents (father, mother) and one or two children. In the Arab community, this family receives financial and emotional assistance from the extended family (Hassoun, 2005). Along with a focus on the family, the shared cultural traits include an appreciation for generosity and hospitality. An Arab-American home will always provide coffee or tea and a snack to any guest. Refusing such hospitality is regarded as disrespectful (Hassoun, 2005) (Table 2.1).

In the western world, there are some common myths about Arab women in particular. According to Hamdan (2014), the West views Arab women as docile, male

dominated, speechless, veiled, secluded, and unidentifiable beings. Some of the criticism leveled against how Arab women are treated is heavily influenced by stereotypes perpetuated by the media, biased assumptions and individuals, and a lack of cross-cultural awareness. Resistance to such stereotypes is a global education principle that offers the potential to help reduce misconceptions. Cross-cultural awareness, another global education principle, revolves around learning about other cultures (Hamdan, 2014). The truth is that Arab culture appreciates the values of respect, decency and dignity—for both genders. Through many generations, Arab women have assumed major leadership roles and actively participated in protest movements within the Arab world (Hamdan, 2014).

Table 2.1

A Contrastive Analysis of Arabian and American Cultural Differences

	Arabian Culture	American Culture
<i>Community Structure</i>	• In Arab society, a group should be given the priority more than the individual.	• Individualism is preferred by Americans because it values the virtues of independence and self-reliance.
<i>Communication</i>	• Arabs can be ambiguous and indirect and try to omit specifics.	• Americans are direct and clear in their speech.
<i>Cultural Values</i>	• Arabian hospitality is a deeply ingrained value in the Arab culture. In Arab societies, guests are often treated with great respect and generosity, and there is a strong emphasis on taking care of visitors and making them feel welcome.	• American hospitality centers on being polite and gracious in public places.

Most immigrant groups see an increase in intergenerational conflict throughout the acculturation process. Arab-Americans in particular can attest to this. For example, due to television exposure and peer pressures at school, the children of the new immigrants to the United States normally acquire English language skills faster than their parents (Hassoun, 2005).

Speaking of acquiring languages, Arabic and English are totally different languages, some similarities exist between them. Positive transfers are the name given to these similarities. In other terms, Arabic-English DLLs learn to use the same skills and methods learned for the primary language (L1) in the second language (L2). While there are some positive transfers between Arabic and English, there are also significant and complicated negative transfers (Table 2.2) (Abdelgafar, 2014). Although it is unrealistic to expect teachers of DLLs to be fully aware in every aspect of every language spoken by their students, having some understanding of the positive and negative transfers between the languages can help deliver lessons effectively. The teacher can plan instruction directly with the help of a basic awareness of the key variations between the two languages (in this instance, English and Arabic).

Table 2.2

A Contrastive Analysis of English and Arabic (Negative Transfers)

Arabic	English
• Depending on where they are located within a word—initial, middle, or end—letter forms take on a distinct structure. • The shapes of many characters are similar. • Because short vowels are diacritical signs joined to consonants, some scholars believe Arabic is a syllabic language rather than an alphabetic one. Arabic uses letters to convey long vowels, but each letter corresponds to a unique long vowel phoneme. • It is written from right to left. • Both formal Arabic, also known as Modern Standard Arabic (MSA), and informal Arabic, also known as Non-Standard Arabic (NSA), are spoken in each Arabic country. Additionally, NSA differs from country to country. Also, NSA may reach up to ten dialects within the same country.	• No matter where they are in the word, letters remain the same shapes. • Every character has a unique form. • Vowels are alphabetic characters. But numerous vowel phonemes are represented by a single vowel character. • It is written from left to right. • Although there are dialects in English and the idea of standard and nonstandard English but there is limited difference between them

Teachers' Perceptions and Practices in Assessing Young Dual Language Learners (DLLs)

To accurately assess preschool DLLs, teachers and professionals consider children's linguistic and cognitive development as well as the communal and cultural backgrounds in which they interact (Castro, 2014). Valid and accurate assessment of

young children's progress is crucial in ensuring quality instruction has been provided to them, and especially young DLLs (Snow & Van Hemel, 2008). Assessment systems include a cardinal rule that indicates assessments must guide instruction provided by the teachers (Barrueco et al., 2012). Authentic assessment instruments and data collecting procedures used by teachers are intentionally chosen to make accurate and valid decisions about an individual child's progress or a program's effectiveness. Early Care and Education programs should be carefully reviewed to ensure the assessment practices applied by the teachers enhance the correct frame of assessment decisions (Barrueco et al., 2012).

According to Aikens et al. (2020), an assessment analysis was performed of seven extensive-scale government studies of early childhood. The study included at least one direct assessment of children before kindergarten entry involving young DLLs and 73 smaller studies. The study involved preschool DLLs and recognized three shared methods for assessing preschool DLLs' knowledge and skills:

- Assessments conducted exclusively in English or the native language (language-specific assessment)
- Dual language evaluation (evaluation in both languages)
- Dual language assessment with conceptual scoring

Each stated method is applied by teachers in measuring the knowledge and skills in DLLs and provides unique data about the DLLs' development. Each approach has led to diverse conclusions about DLLs' skills and expertise (Aikens et al., 2020). An assessment in English or a home-based language can only provide evidence of the developmental skills acquired in the directed language. The conclusions from such

assessments are based on the perceptions and vocabularies known to children in that language (Bandel et al., 2012), whereas a dual language assessment consists of principles that ensure the assessment recognizes that preschool DLLs know perceptions and words in both languages (Bandel et al., 2012).

Karem and Washington (2021) conducted a study to investigate the appropriateness of standardized English assessments in a sample of 176 preschool-aged Jamaican-English dual language learners and 33 Jamaican-English speaking adults, aged 24–51 years, who were from the same linguistic community as the children. Jamaican-English speaking preschoolers and adults completed the Word Structure and Expressive Vocabulary subtests. Adults' responses were used to develop an adapted scoring procedure that considered the influence of Jamaican linguistic features on responses. DLLs' responses that were scored using the standard English and adapted Jamaican procedures, were compared. Using the standard English scoring procedure, Jamaican-English DLLs were classified as being developmental language disordered (DLD) at significantly higher rates compared to that expected for the standardized English sample. On the other hand, the researchers found that using adapted scoring procedures informed by adult models revealed a statistically significant positive change in children's subtest scores (Karem & Washington, 2021).

Classroom assessment' scores can be termed reliable, accurate, and valid when they consider the preschool DLLs' linguistic and cultural aspects related to them through the administration, interpretation, and design of the procedures (Karem & Washington, 2021). Teachers engage in assessment procedures in a classroom to increase the capability and probability of DLLs benefiting from cultural and practical assessments of

their development and learning, as well as teachers' ability to improve their overall instructional procedures (Karem & Washington, 2021).

The Difficulties of Assessing Dual Language Learners (DLLs)

According to Guzman-Orth et al. (2017), DLLs epitomize one of the most rapidly increasing populations in the United States. In the coming decades, the number of DLLs will continue to rise. In 2019, one in five students in U.S. schools were found to speak languages other than English at home. Although more than 350 languages are spoken in the United States, the only dual language assessment available comprises only Spanish-English language assessment tools (U.S. Census Bureau, 2019; Guzman-Orth et al., 2017). According to Guzman-Orth et al. (2017), dual language assessments that have not been specifically created, validated, and normed for DLLs may have substantial limitations. There are concerns that assessments for young DLLs in the U.S. may be culturally biased because many of the existing dual language assessments have not been culturally verified multilingual speakers. Another problem is that current dual language assessments assess each language independently. As a result, many of the dual language assessment tools used now do not accurately reflect the range of DLL children's abilities, and the results may be read as reflecting weaknesses in young students' language development (Guzman-Orth et al, 2017).

Unfortunately, where assessments do exist, teachers are not given the necessary training or support to use them effectively. Preschool teachers are frequently asked to perform assessments of children in their classrooms without receiving the necessary training or assistance. This scenario points to a larger problem in the early childhood education field, where licensing and training standards are limited (Asare & Afriyie,

2023). This issue affects all early childhood development assessments, but it becomes more complicated when the requirements of dual language learners are taken into consideration. For instance, many programs lack bilingual employees who are competent to assess children in their mother tongue. Importantly, the unique characteristics of dual language learners are not taken into consideration in assessments designed for monolinguals (Méndez et al., 2019).

Méndez et al. (2019) conducted a study that examined the relationship between early numeracy skills in Spanish and English and the expressive vocabulary and grammatical comprehension skills of preschool DLLs in those languages. The participants included 342 Spanish–English DLL children from low-income homes ranging in age from 37 to 65 months. Assessments of children’s language and math abilities were completed at the children’s preschool in the autumn once they were settled in their classrooms. The children were tested in each language on separate days by different data collectors within one to two weeks. The researchers found that the children's expressive vocabulary and grammar comprehension in each language explained a significant amount of the variation in the early numeracy skills in each language. This finding implies a relationship exists between early numeracy development within the same language and vocabulary and grammatical proficiency in both languages. Therefore, early numeracy skills in the same language depend on strengthening children's total language skills in each language (Méndez et al., 2019). In addition, when dual language learners are evaluated in only one language, their overall vocabulary knowledge is frequently underestimated. DLLs frequently know some vocabulary in their first language and other vocabulary in their second language (Méndez et al., 2019).

Another study conducted by Fernandez et al. (1992) investigated receptive vocabulary in English and Spanish by using complementary measures of receptive vocabulary. Nearly 400 Hispanic children (N=396), ages 3 years and 0 months to 5 years and 11 months, were recruited from preschools in economically diverse neighborhoods of Miami. Researchers discovered that assessing students' vocabulary in only one language strongly undercounted the preschool dual language learners' real vocabulary knowledge. In their research, preschoolers only knew a vocabulary term in both languages about half the time, but they knew it about a third of the time in either their native language or their second language (Fernandez et al., 1992).

Engaging Young DLLs' Parents

López (2013) conducted a study to better understand why parents chose to enroll their children in bilingual programs. Bilingual programs or bilingual education is a term that refers to the teaching of academic subjects in two languages, in a native and second language. The participants of this study were parents of kindergarten and first grade age children who were enrolled in a bilingual program at the time of the study. The researcher interviewed eight mothers and two fathers. She mentioned that since parents are crucial to the continued effectiveness and success of bilingual programs, they must be among the first groups to be aware of the research and justification for bilingual programs for children from varied linguistic backgrounds. Due to their concern that their child will continue to struggle with English language proficiency because they are still receiving instruction in their native tongue, some parents of dual language learners refuse to use bilingual education services. Sometimes, school staff members fail to communicate with parents effectively or provide them with accurate information about educational

programs, which causes misunderstandings and makes it difficult for parents to make wise choices (López, 2013).

According to López and Tápanes (2011), in their study about the goals of the language-minority parents in placing their child in a bilingual program, and to determine children's progress in such a program, parents must personally battle to keep their children's local tongue alive while also emphasizing the value of developing English language skills. The researchers interviewed eight Spanish-speaking mothers and created a survey for them to fill about the family as well as indicating general home-language and literacy resources available to the family. Also, they applied a standardized assessment on these mothers' kindergarten aged children who were attending a school district differentiated bilingual Spanish-English program. This assessment consisted of a set of subtests used to measure different aspects of language and literacy skills. Researchers found that families were already noticing language loss in their five-year-old children, which is a typical occurrence for immigrant families. Immigrant families of all language backgrounds fight the "personal battle," as one mother described it, of preserving their child's home language while recognizing the importance of learning English (López and Tápanes, 2011).

Shannon and Milian (2002) conducted a survey with parents whose Spanish-English children were enrolled in dual language programs in Colorado. The survey focused on how parents who enroll their children in dual language programs perceive the topic of choice, how well they comprehend the goals of the programs, and how successful they think the programs are at teaching the two target languages. A total of 1,043 surveys were completed. The researchers concluded that parents of children who knew English

and Spanish were very supportive of dual language programs. Parents felt the importance of learning a second language, that involvement in the program was their option, that it was essential to do so, and that the program was successful in teaching a second language. (Shannon & Milian, 2002).

According to Butter (2012), bilingualism is defined as the ability to speak two languages or the frequent use (as by a community) of two languages. Bilingualism, and specifically learning English as a second language, is seen by an increasing number of non-native parents in the U.S. as a noble family aim. The motivations behind this tendency include the wish to preserve links to the parents' native tongue and culture, to give children an educational and cognitive edge, and to foster cross-cultural communication and understanding. However, findings show that in the United States, success in growing children to be bilingual remains the exception rather than the rule, as most children end up becoming English-dominant or even English-only monolingual (Bialystok, 2017). The high status of English and the limited opportunities for children to acquire languages other than English are at least partially to blame for this. Additionally, an observational study was conducted by Wijayanti et al. (2018) to investigate the effect of parenting style, bilingual school, social environment, speech and language development in preschool children. The sample included 200 preschool children with their mothers from 25 preschools. The data were measured by Parenting Style Questionnaire (PSQ). Results indicated that parenting styles and their relationship with their children play a significant role in a child's development as a bilingual. There was an effect of parenting style on speech and language development of preschool children, and it was statistically significant. Good parenting style improved speech and language

development of preschool children rather than poor parenting style (Wijayanti et al.,2018). Moreover, there was an effect of social environment on speech and language development of preschool children. The data of the type of social environment were measured by questionnaires. A good social environment improved speech and language development of preschool children rather than poor social environments (Wijayanti et al.,2018).

Twenty-four families in Washington, DC, diverse in socioeconomic status and cultural background, participated in individual interviews performed by King and Fogle (2007). King and Fogle (2007) looked at the family language policies of parents trying to raise their children bilingually in Spanish and English and focused on what sources parents drew from to establish their language policies. The researchers noted there are increasing numbers of parents wanting to raise their children bilingually. Many of the parents they interviewed thought that their children's dual-language schools had caused or would cause language delays. There is no concrete proof, according to the research, that bilingualism causes any kind of language delay (King & Fogle, 2007). According to Kohnert (2010), there is currently no empirical evidence that hearing multiple languages causes delays or other problems with language learning. Numerous children around the globe start speaking two or more languages at a young age without displaying any symptoms of language disorders or delays (Kohnert, 2010).

The one-parent, one-language method is an approach that can be used when children are exposed to multiple languages through their parents/caregivers in which each parent/caregiver uses only one language with the child. This method is suggested to reduce confusion (Barron-Hauwaert, 2004). However, studies show that the capacity to

transition between languages, also known as translanguaging, is an indication of language mastery rather than confusion, and that children as young as two are able to code-switch in socially acceptable ways (Smolak et al., 2019). According to Smolak et al. (2019), many multilingual children who are typically growing blend their two languages, with the type and degree of translanguaging based on external variables, like how much their parents or the larger community code-switch and who they are talking with.

Parents of young DLLs frequently worry about their children's assessment. They are concerned that the assessments being used will not produce a reliable judgment of their child's actual ability and knowledge, and that these assessments may produce inaccurate results if they are not supported by other crucial data (Brebner et al., 2016). This includes the child's performance in all the languages he or she speaks while taking into account data from case history interviews, parent reports, and/or standardized questionnaires about the child's language environment, patterns of language use and language dominance, first language skills, and developmental history. (Bedore et al., 2012; Brebner et al., 2016; De Lamo White & Jin, 2011; Paradis, Emmerzael, & Duncan, 2010; Thordardottir, 2015).

Summary

This literature review supports the goal of this study that in order to have more accurate assessments for our young dual language learners, additional support is needed for teachers. Assessing young dual language learners is the focus of a lot of research due to the significance of the topic and most of these studies showed that preschool teachers need support to develop their students' growth, especially from the child's parents. Moreover, some studies showed that assessing young children in their natural authentic

setting, known as authentic assessment, is what demonstrate the child's abilities and real behaviors that have functional importance to the child and his progress. Arabic-English DLLs develop two languages with totally different characteristics and backgrounds, making it even more challenging for teachers to understand, unless they have had the required support. This is because what they actually want is to assess what the child knows and is able to do, not simply what he or she can say. According to some studies, young DLLs' parents also have their concerns and worries about having inaccurate results for their children as DLLs.

CHAPTER THREE

RESEARCH METHODOLOGY

This research explores non-Arabic-speaking preschool teachers' experiences in assessing Arabic-English Dual Language Learners (DLLs). I examined the accuracy in assessing and measuring young DLLs' actual knowledge and skills through teachers' perspectives and practices. Another purpose is to investigate the strategies and techniques these teachers employed while assessing Arabic-English Dual Language Learners. Also, this research aims to explore parents' experiences discussing these assessments and their perceptions of their role in supporting their child's development. The specific research questions to be addressed in this research study are:

Research Questions (Teachers):

1. What knowledge do preschool teachers have about Arabic-English DLL developmental characteristics?
2. How do preschool teachers describe their experience of assessing Arabic-English DLLs using an authentic observation-based assessment? In particular, what are their success and challenges?
3. What are preschool teachers' needs when assessing their Arabic-English DLLs?

Research Questions (Parents):

4. What are Arab parents' knowledge and concerns about children's development and school assessment?
5. What roles do Arab parents play in supporting their preschool children's teachers?

This chapter discusses the methodology that I used in this research study. I explain the research design, ethical considerations, researcher positionality, the research participants and sampling methods, recruitment and interview procedures, demographic questionnaire analysis, The Child Observation Record (COR) Advantage Tool, data collection and data analysis process, process of coding, and process of categorizing.

Research Design

As the literature review in Chapter Two revealed, in order to have more accurate assessments for young dual language learners, additional support is needed for teachers. To bridge this gap, this dissertation used a qualitative research design to investigate the experiences and perceptions of preschool teachers about assessing their Arabic-English DLLs and parents' opinions about these assessments, and their experiences and perceptions of their role in supporting their child's development. According to Creswell (2011), by using a qualitative research design, researchers focus their interests in understanding the lived experiences and practices of participants and exploring the meaning they give to their experiences. In conducting interviews, researchers often ask open-ended questions to explore views and opinions from the interviewees (Creswell, 2011). Through interviews with preschool teachers and parents, the study focused on teachers' thoughts on assessing young DLLs, challenges they have faced, and what methods or strategies they used to enhance their experiences. Also, through interviews with Arab parents of DLL children, the study focused on parents' thoughts and concerns about assessing their DLL children and how they can support their children's teachers for more accurate results. The selection of a teacher and a parent from the same classroom was intentional, so the interview responses could focus on a target child per teacher-

parent pair. The collected data from the interviews from the preschool teachers provided insights from their experiences of assessing Arabic-English DLLs. Also interviews with Arab parents provided insights from their perceptions of their role in supporting their DLL children's development and supporting their children's teachers.

Ethical Considerations

The research study was presented to the Oakland University Institutional Review Board (IRB) for preliminary evaluation and approval of the methods shortly after presenting the research proposal to the dissertation committee members on the 7th of November 2023. Furthermore, the consent form and the interview questions were reviewed by the IRB. The consent form obtains individuals' permission to collect their information and explain how their confidentiality will be protected by excluding any personal identifying information in the demographic survey or during the interviews. Moreover, to comply with ethical considerations in the research procedure, all participants were given an explanation of the study objectives. The IRB approval was granted for this study titled "Supporting Preschool Teachers in Assessing Arabic-English Dual Language Learners (DLLs) in Classrooms Using an Authentic Assessment" (IRB FY2024-131). The IRB approval was received on the 10th of November 2023 and this study was conducted from the end of November 2023 to the beginning of March 2024. The IRB approval letter is included in Appendix A.

Researcher Positionality

The data analysis from this research included the possible interpretations of preschool teachers' experiences based on my standpoint as an Arab American, female researcher who is familiar with the topic. As a preschool teacher in a state-funded

preschool program in the United States, I used an authentic assessment to assess Arabic-English DLL children in my classroom. Additionally, my colleagues have used authentic assessments, such as the COR Advantage assessment, to assess their DLL preschools including Arab children. However, I was unaware of non-Arabic speaking teachers' experiences and practices in assessing Arabic-English DLL children. I believe it would be worthwhile to search and collect a variety of strategies and practices that might assist preschool teachers assess their Arabic-English DLL preschools. I believe that Arabic language and culture are very different from English culture, and if the teacher were to learn more practices and information about Arab children, they will be able to assess them more effectively. I also believe, based on my experience, that authentic assessment is the best way to assess young children in general because it describes the event as it is. However, when a teacher evaluates DLL children, I believe that she needs to know the developmental characteristics of this child and also needs to apply practices and techniques that increase the effectiveness of her assessment. Based on my experience living in Michigan, which contains a large number of Arab parents, I have listened a lot to their concerns and worries about the development of their children. Also, as a teacher, I had a conversation with one of my fellow non-Arab teachers when she asked me about assessing an Arab child who could not pronounce the letter "P" in English and was writing her name in the opposite direction. I explained to her that the letter P does not exist in the Arabic language and the direction of writing in Arabic is from right to left. When the teacher understood this information, she realized the cultural difference and was able to develop strategies to determine the ideal time that the child might need to be

able to master the pronunciation of this letter and to capture the difference in the direction of writing.

The baseline information and beliefs of the researcher are an important component of grounded theory research, which was the methodology utilized for this research (Chun et al., 2019). It is likely that my Arab background and beliefs influence the way I read the data. To avoid speaking for the data, I tried to bracket existing preconceptions or biases. Notes were taken on any assumptions that arose regarding the study in order to bracket them and prevent bias during the data collection and analysis process.

Study Participants and Samples Selection

Table 3.1

Numbers of Participants from Each School

City	School	Teachers Participated	Parents Participated
City 1	School 1	3	3
City 2	School 2	2	2
City 3	School 3	1	1
City 4	School 4	1	1
City 5	School 5	1	1
Total	5 Preschools	8 Teachers	8 Parents

Sample selection in qualitative research is usually non-random, purposeful, and small (Palinkas et al., 2013). A purposeful sampling technique was used in this study to select participants based on their characteristics and the purposes of the current research

study. As Creswell (2011) stated, when employing this method, “Researchers intentionally select individuals and sites to learn and understand the central phenomenon” (p. 206). The total participant number for this study is 16 interviewees. Eight of the participants were non-Arab lead preschool teachers who were at time of the study teaching Arabic-English DLL child/children in schools that are using the COR Advantage assessment in the state of Michigan. The remaining eight were Arab mothers of Arabic-English DLL children who were in the teachers’ classes at the same school. All preschool teachers and parents who participated in the study came from five different preschools where I was granted permission to conduct the study. The numbers of participants from each preschool were varied since participation in the study was on a voluntary basis. Table 3.1 describes the number of the preschools as well as the number of participants from each school.

Recruitment and Interview Procedures

Study participants were recruited by sending introductory letters to the principals of five preschools who had Michigan’s state-funded prekindergarten classrooms for four year old, the Great Start Readiness Program (GSRP), and used the COR Advantage assessment. Those five preschools were located in different cities in Michigan so I could reach diverse Arab communities from different Arab countries. As mentioned in Chapter Two, there are 22 Arab countries and while they have major similarities they also have their differences, like education standards. In some Arab countries like Egypt, Syria and Jordan, they have very high and strict standards when it comes to their children’s education and tests results.

In the introductory letter, I asked the principals to reach out to all preschool teachers in their schools who were at the time of the study teaching Arabic-English DLL children to participate in the study. I contacted the principals and asked for their permission to contact the Arab parents of their Arab DLL preschoolers. Afterwards, I contacted the parents in person at the schools and introduced myself and my research topic, then I asked for their email addresses. Each parent who agreed to be part of the study was sent a written consent form to review their child's COR Advantage scores and asking them to read the form, sign it, and return it to me (see Appendix B). Each participant—whether a teacher or a parent—were sent a demographic questionnaire to fill in and they returned it back to me (see Appendix C & D). After completing the questionnaire, each participant was interviewed for about 30 minutes. For transcribing purposes, their conversations were audio recorded using Voice Memos digital application and then they were transcribed using the Dictate function in Microsoft Word. At the end of each interview, each participant received a \$15 gift card for participating in the study.

Demographic Questionnaire

I constructed and used a demographic questionnaire (see Appendix C & D) to gather background details for each participant, whether it was a teacher or a parent. It contained 10 questions related to the educational, professional, and personal backgrounds of the participants. As for the teachers' demographic questionnaire, it was related to the participants' age, years of experience, highest level of education completed, number of Arabic-English dual language children they currently taught, and whether they spoke another language. Parents' demographic questionnaire was related to the participants'

ages, highest level of education completed, their employment status, the number of children they have and their ages, and their country of origin.

A total of 8 teachers and 8 parents participated in this study. Three teachers and three parents were from the same school in City 1. Two teachers and two parents were from the same school in City 2. And the other three teachers and three parents were from other different schools in different cities of Michigan (Table 3.1). All teachers were females and all parents were mothers. The average age of participant teachers was 41 and the average age of participant mothers was 34. The highest level of education for both teachers and mothers was master's degree. Below are two tables demonstrating detailed information about teachers' demographic questionnaire (Table. 3.2) and Parents' demographic questionnaire (Table 3.3).

Table 3.2
Teachers' demographic questionnaire summary

Teacher's Initials	Age	Gender	Level of Education	Years of Teaching	Other Languages	DLL' Teaching Training	Number of Arab in class Now	Number of Arab in Class Usually
A.L.	45	F	Bachelor	10	-	no	2	0
S.F.	45	F	Master	10 years first grade 5 years GSRP	-	no	3	3
A.R.	34	F	Master	10 years	-	no	2	1 to 2
S.M.	50	F	Master	12 years	Hindi	no	4	0
M.O.	28	F	Master	8 years	Spanish	no	4	0
V.W.	62	F	Bachelor	26	Spanish	Yes	4	2
S.C.	28	F	Bachelor	3 years	-	Some	3	0
S.G.	36	F	Bachelor	4 years	-	no	1	0

Table 3.3
Parents' demographic questionnaire summery

Child's Initials	Parent Age	Mother or Father	Level of Education	Employment Status	Number of children	Country of Origin	Living in the US	Language at Home	Who speaks Arabic with the child
S.B.	24	M	Bachelor	Unemployed	1	Saudi	5 years	Arabic	Parents
H.M.	28	M	Master	Unemployed	2	Saudi	10 years	Arabic	Parents
B.A	30	M	Master	Unemployed	2	Saudi	1 year	Arabic	Parents
Y.R.	38	M	High school	Unemployed	3	Tunisia	7 years	English and Arabic	Mother
J & L.Y.	36	M	Bachelor	Full time	3	Iraq	10 years	English and Arabic	Mother and Grandmother
L.W	43	M	Bachelor	Unemployed	3	Iraq	12 years	English and Arabic	Mother
G.S.	33	M	Bachelor	Unemployed	3	Saudi	1 year	Arabic	Parents and Siblings
S.H.	40	M	Master	Unemployed	2	Saudi	1 year	Arabic	Parents

The Child Observation Record (COR) Advantage Tool

The HighScope Educational Research Foundation initially developed the COR Advantage Assessment tool in 1993 as an observational tool designed for teachers (Wakabayashi et al., 2019). The systematic assessment tool assesses the knowledge and abilities of young children in all of their developmental areas (Wakabayashi et al., 2019). COR Advantage entails teachers or caregivers' writing records that objectively portray the involvement of children in their daily activities. The small notes or anecdotes are then used in the assessment of children using the COR Advantage Assessment tool. The anecdotes are scored and classified into diverse categories, levels, and items of the COR

assessment tool to record each child's development and the group's advancement and gains. The COR Advantage assessment tool has been revised to document children's development and progression from birth to kindergarten. The system captures the developmental indicators of children with varied abilities and from various backgrounds. The revised version of COR Advantage now covers the whole range of young children from birth to kindergarten. The COR Advantage assessment tool is comprised of 34 items divided into eight major categories: physical development and health; approaches to learning; language, communication, and literacy; social and emotional development; mathematics; creative arts; science and technology; and social studies. There is also one more category specifically for English Language Learning (ELL) (Wakabayashi et al., 2019). The 34 items of the COR Advantage assessment tool are comparable to state and national standards. All the items apply the same 8-level continuum ranging from 0 to 7, with 0 as the simplest and 7 as the most complex. Each category consists of examples of anecdotes and illustrations to guide the teachers in conducting the valuation. The two items for ELL mirror the learning stages, not the age points, and are suitable for assessing children from the age of two to the kindergarten level. The 34 items and two ELL items that make up the COR Advantage assessment tool ensure the tool is easier to administer yet comprehensive, allowing levels to overlap within each item.

The COR Advantage assessment tool allows the accommodation of children with developmental delays and special needs, those with more advanced content in areas of learning than others, and children whose English is not their home language. The COR Advantage assessment tool is mainly a web-based assessment that can be accessed via computer, laptop, tablet, or a smartphone where teachers submit their daily observational

notes (Wakabayashi et al., 2019). Through the COR Advantage application, teachers can digitally document children's progress through audio, video recordings, and digital photographs of their actions, words, writing, and art samples and upload them as part of each child's portfolio. Teachers can assess and score children accurately and effectively based on each child's portfolio. Using each child's portfolio, teachers use the Scoring Bar on the online COR Advantage site, selecting a letter and number for their developmental level for each item. For example, the S letter represents the mathematics domain while the letter A represents the Approaches to the Learning domain, and the numbers 0-7 represent the child's developmental level. Each item or developmental level includes explanations teachers or caregivers can retrieve through a right-click on the Scoring Bar or a reference to the COR Advantage Scoring Guide.

In the COR Advantage assessment tool, a portfolio or anecdote can be scored under multiple domains or items based on the child's score during a specific period. Scoring each item or part within a particular period is based on the maximum level a teacher can award a child during the observational period. The program administrators determine the observational time applied in assessing a child using the COR Advantage tool although it usually lasts two to three months. After this period of time, the scoring is automatically closed, and the program will display a detailed report on each child's progress as well as his/her points of strength and weaknesses. At each COR Advantage level, a library of developmentally appropriate activities is aligned to the level, providing resources for supporting children's development (Wakabayashi et al., 2019). A variety of reports generated automatically from the COR Advantage site aid teachers in planning their instruction intentionally since they contain each child's profile of growth and the

account of the group's advancement. Moreover, this tool also offers a way to meaningfully involve parents as partners in recognizing and supporting their child's growth and development through the use of the COR Advantage report shared with families. Teachers provide parents each year with a report called *Your Child's Developmental Profile*, which summarizes and provides examples of their child's development.

Data Collection Methods

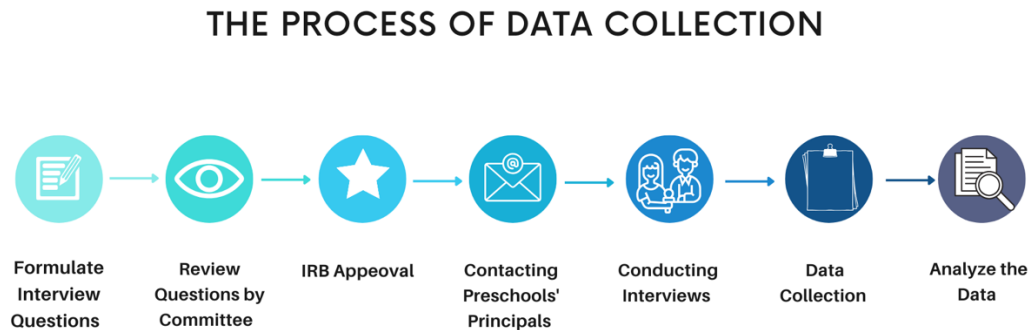
The study design utilized a narrative inquiry component as Arabic-English DLL preschool teachers shared in-depth stories during interviews of their experiences, needs, and ways to improve their Arabic-English DLL preschoolers' assessment. Also, through open-ended interviews, parents of the same Arabic-English DLL children shared their perceptions, concerns and roles in their children's development. My initial plan was to do a comparison between teachers' view about the child's developmental level in certain assessment domains and his parents' view of the same domains to compare their answers and get a clearer view if there is a gap between them. Yet, when I started conducting the parents' interviews, I realized that parents are not aware of their children's assessment details so they could not give a clear answer.

Open ended interview instruments are used by researchers who are interested in individuals' stories (Seidman, 2013). In education and human science sectors, it is not sufficient to assess the complexity and sensitivity of individuals' experiences with only statistics. Rather, through interviewing, and other types of qualitative data, scholars may more sufficiently understand the experiences and stories of individuals and thereby

adequately address many more educational and social issues (Seidman, 2013). Figure 3.1 outlines the process I followed to collect data.

Figure 3.1

Data Collection Process



Interviews with Preschool Teachers

Preschool teachers were invited to participate in 30-minute interviews. Before starting interviews, each preschool teacher filled out a demographic questionnaire and returned it to me. The demographic questionnaire had 10 questions related to the participants' age, years of experience, highest level of education completed, number of Arabic-English dual language children they currently teach, and whether they speak another language (see Appendix C). In the interview, I asked to take a look at the child's scores in some domains of the COR Advantage assessment after I received permission from the child's parent and asked the teacher about the easiest and hardest items to score and asked them open-ended questions related to the child's scores (Appendix C).

Interviews with Parents of Arabic-English DLL Children

Arab parents of DLL children were invited to participate in 30-minute interviews. Before starting interviews, parents filled out a demographic questionnaire and returned it to me. The demographic questionnaire had 10 questions related to the participants' ages, highest level of education completed, their employment status, the number of children they have and their ages, and their country of origin (see Appendix D).

Table 3.4 draws connections between the main research questions and both teachers and parents' interview questions.

Table 3.4

Formation of Interview Questions Pertaining to Research Questions

Research Questions	Interview Questions
Question 1: What knowledge do preschool teachers have about Arabic-English DLL developmental characteristics?	From Teachers' Interviews: ● Tell me about the child's personality? ● From your observations, what can the child do? Can you give examples? ● In your opinion, what are the child's strengths \ weaknesses?

Table 3.4 - Continued

Research Questions	Interview Questions
Question 2: How do preschool teachers describe their experience of assessing Arabic-English DLLs using an authentic observation-based teacher assessment? In particular, what are their success and challenges?	From Teachers' Interviews: • In the child's assessment process, which items were the easiest to score and which items were the hardest to score? Follow up Question: - Did you use any helpful strategies to have a more reliable assessment scores? • How have you communicated with the child's parents about the child's COR scores, and his/her progress? Follow up Question: - Did they have any concerns about their child's development? • So overall how would you describe your experience assessing Arabic-English DLL?
Question 3: What are preschool teachers' needs when assessing their Arabic-English DLLs?	From Teachers' Interviews: • What kind of support you need in assessing an Arabic-English DLL?
Question 4: What are Arab parents' knowledge and concerns about children's development and school assessment?	From Parents' Interviews: • Tell me about your child's personality? • From your observations, what can your child do? Can you give examples? • What are your child's strengths/weaknesses? Follow up Question: - Can you tell me more about it?
Question 5: What roles do Arab parents play in supporting their preschool children's teachers?	From Parents' Interviews: How do you communicate with the teacher?

Data Analysis Methods

Throughout the analysis stage, I used the grounded theory approach to analyze the transcriptions of the interviews data from the preschool teachers and parents of Arab English DLL children. I interviewed one parent from each teacher's classroom to create a teacher-parent pair for deeper analysis. The analysis was also conducted to explore 1) teachers' perspectives, 2) parents' perspectives, and 3) teacher-parent communication and the role of parents' support. The grounded theory approach includes methods consisting of structured, yet adaptable, rules for gathering and analyzing qualitative data in order to create theories that are "grounded" in the data itself (Charmaze, 2006). In qualitative research, grounded theory is a way to discover a theory that may emerge from the collected data (Charmaze, 2006). This approach provides explicit sequential processes of analyzing the collected data. These processes result in generating meanings from the narrative inquiry interviews of preschool teachers and parents and allow the creativity in producing concepts and theories (Charmaze, 2006).

Process of Coding

Upon completion of data collection, multiple steps were taken to organize and analyze the data. First, the voice recordings from both the preschool teachers' interviews and parents of Arabic-English dual language learner children's interviews were transcribed in Word documents, organized, and saved in my personal secured laptop. Second, I purchased and downloaded a qualitative analysis software ATLAS.ti version 24. This software program is used to help organize the analyzed data. I read each transcript several times to have a general sense and meanings of the interviews. Third, through reading line by line for each transcript, initial sets of codes were created using *in*

vivo coding. For example, the following quote is from a preschool teacher interview transcript: the teacher said, “He is so sweet he follows the rules and help his friends whenever they need help.” I highlighted the quotation and coded it as “Teacher thinks that DLL children are helpful and friendly.” In this process, I captured the exact words from the participants. However, I did some modification on other codes to give a clear meaning. For example, one preschool teacher said,

He can write first and last name because we need every day at the end of school they're starting to so if you look at the front board I had letter links with their names on it I've covered up the letter links and he can tell me everyone's name like he can he can piece together like my family's name starts with letter M so he knows that that's her name so he knows he's not in my small group but I'm aware that he knows almost all of his letters if not all of them um and he's even started to sound out like being able to write mom and dad like the beginning letter of mom makes them sound so it's letter M so like I said very advanced.

I coded this as “Teacher says that DLL child is academically developing well.”

All interview transcripts were coded in the same manner. This process resulted in 85 codes for the entire dataset.

Process of Categorizing

After I coded all the interview transcripts, I looked over all codes to find patterns to organize them into categories. During this process, I looked into codes that share similar meanings and frequency, to combine and categorize them and give them one category. For example, I combined the codes that have descriptions of DLL characteristics, such as “Teacher thinks that DLL child can control his emotions,”

“Teacher thinks that DLL child has leadership skills,” and “Teacher says that Arab DLL child is clean and healthy” to be under one category called “Arab DLL child’ characteristics.” This process resulted in 13 categories for the entire dataset.

CHAPTER FOUR

RESULTS

The primary purpose of this study was to explore preschool teachers' experiences in assessing Arabic-English dual language learners (DLLs) in classrooms using a well-established teacher scored authentic assessment of early childhood holistic development. This study focused on HighScope's COR Advantage assessment tool. Also, this study explored parents' experiences discussing these assessments and their perceptions of their roles in supporting their child's development.

Data were collected using interviews from 16 participants. Eight of them were preschool teachers and the other eight were Arab parents of Arabic-English DLLs preschoolers in those teachers' classrooms. The methodology entailed a grounded theory approach using an inductive reasoning to analyze the data, as discussed in chapter three. Five research questions guided this study:

Research Questions (Teachers):

1. What knowledge do preschool teachers have about Arabic-English DLL developmental characteristics?
2. How do preschool teachers describe their experience of assessing Arabic-English DLLs using an authentic observation-based assessment? In particular, what are their success and challenges?
3. What are preschool teachers' needs when assessing their Arabic-English DLLs?

Research Questions (Parents):

4. What are Arab parents' knowledge and concerns about children's development and school assessment?
5. What roles do Arab parents play in supporting their preschool children's teachers?

This chapter is organized by answering these research questions through participants' responses that were analyzed into codes and categories, and finally into general themes. The growth of themes from categories, and the development of categories from codes, is one of the ways to analyze data inductively (Creswell, 2011). In this study, data were assigned the codes; codes were progressed into categories by sorting them and looking for patterns. Categories then progressed to themes, and themes provided a more comprehensive concept than codes. Similarly, Merriam (2009) suggested combining data that seem to go together, clustering them, and giving the name to that cluster; this way, categories are formed. Then, categories are again clustered to develop superordinate themes. Using all patterns of categories, I combined those that shared the commonalities in order to make the final themes emerge. For example, I grouped the categories "Arab DLL child characteristics," "Arab DLL child developmental progress," and "Parents' Beliefs" to be grouped and then emerging into the following theme: "Arab Parents identified their knowledge and beliefs about their child's characteristics and development." This process resulted in nine themes for the whole dataset. There are more examples of the analyzing processes displayed through the analysis of the participants' interviews in this chapter. As noted earlier, the compilations of the data were conducted with the qualitative analysis software ATLAS.ti version 24.

The Nine Emergent Themes

1. Teachers Perceive Arabic-English DLL Children as Having High Levels of Self-Regulation and Mature Social Emotional Development.
2. Non-Arab Preschool Teachers Expressed Having Positive Perceptions of Arabic-English DLL Children in Their Classrooms, but Also Displayed Misconceptions about Arab Families and Arabian Culture.
3. Teachers Identified Non-Verbal Strategies and Families as Resources to More Accurately Assess Arabic-English DLL Children's Development.
4. Teachers Identified Challenges in Assessing Arabic-English DLLs.
5. Some Teachers Believed That English Proficient Arabic-English DLLs Require no Special Assessment Considerations.
6. Non-Arab Teachers Identified Needs for Additional Professional Development in both Context and Strategies for Assessing Arabic-English DLLs.
7. Arab Parents' Perceptions of Their Children's Experiences and Progress in Preschools Mostly Aligned with Non-Arab Teachers.
8. Arab Parents Expressed Concerns about Cultural and Linguistic Barriers, as Well as Racism.
9. Seems Like the Usual Communication Strategies Teachers use with Families were Effective, and Arab Parents Appreciated Translation of Assessment Results in Arabic.

Research Question One: What Knowledge do Preschool Teachers have about Arabic-English DLLs Developmental Characteristics?

Table 4.1

Grounded Representation of Themes Related to Research Question One

Third Iteration: Themes	
1. Teachers Perceive Arabic-English DLL Children as Having High Levels of Self-Regulation and Mature Social Emotional Development	2. Non-Arab Preschool Teachers Expressed Having Positive Perceptions of Arabic-English DLL Children in Their Classrooms, but Also Displayed Misconceptions about Arab Families and Arabian Culture
Second Iteration: Categories	
1A. Arab DLL Child Characteristics	2A. Teachers' Beliefs

Table 4.1 - Continued

First Iteration: Codes	
1A. Teacher thinks that Arab DLL child can control his emotions	
1A. Teacher thinks that Arab DLL child is inquisitive	
1A. Teacher thinks that Arab DLL children are helpful and friendly	
1A. Teacher thinks that Arab DLL child is sociable and interactive	2A. Teacher thinks that Arab DLL child's family has good values
1A. Teacher thinks that Arab DLL child is affected by her culture	2A. Teacher thinks that Arab girls are taught to be quiet and not speak up for themselves in their culture
1A. Teacher thinks that Arab DLL child doesn't speak up for herself	2A. Teacher didn't feel comfortable having an Arab child in her classroom because she was never around Arabian culture
1A Teacher says that Arab DLL child is clean and healthy	
1A. Teacher thinks that Arab DLL child has leadership skills	
1A. Teacher thinks that Arab DLL child doesn't feel different	

This research question investigated preschool teachers' knowledge and beliefs about Arabic-English DLLs developmental characteristics. Two themes emerged from the interview data to answer this research question:

1. Teachers Perceive Arabic-English DLL Children as Having High Levels of Self-Regulation and Mature Social Emotional Development.
2. Non-Arab Preschool Teachers Expressed Having Positive Perceptions of Arabic-English DLL Children in Their Classrooms, but Also Displayed Misconceptions about Arab Families and Arabian Culture.

In the first theme, teachers described Arabic-English DLL preschoolers' characteristics, their social behavior in the school and their lifestyle routine. Most of teachers noticed that Arabic-English DLL children were helpful, friendly, inquisitive and are able to control their emotions. For example, teacher three said about her Arab DLL student: "She's also very friendly everybody likes her everybody likes L you know because of her way of being very sweet and helpful." And teacher 4 said:

If he gets upset about something he'll try to regulate his emotions first and then very seldom, when I see him become upset, cry or I never seen him like do any form of aggression he's always very kind and gentle, so he regulates him himself emotionally very well.

Also, some of the teachers think that Arabic-English DLL children are affected by their culture. For example, teacher 2 said: "I think I can see it I can see it because I am originally from the eastern side of the world so I can see certain things she does is very culture specific." Those quotes were categorized under the category Arab DLL Child Characteristics.

In the second theme, teachers talked about their knowledge and beliefs about Arabian family and culture. Teacher 1 thought that Arab families have good values. As she stated:

Also guessed that they probably have good family values because she takes Thursday off just because her dad is home on Thursday, he does not work on Thursday so that just got me thinking that maybe it's important for them that they are all together on one day when the dad is available and that was kind of nice to know.

And teacher 2 mentioned that Arab girls were taught to be quiet and not speak up for themselves in their culture. She said: “Maybe that is cultural too because a lot of places women are quiet, they're taught to be quiet and not speak up for themselves.” Those quotes were categorized under the category Teachers’ Beliefs.

Table 4.1 presents grounded representation of themes related to research question one. Table 4.2 present the frequencies of each code related to theme one. Table 4.3 present the frequencies of each code related to theme two. Examples of the responses and codes representing those two themes are in Appendix E.

Table 4.2

Theme 1: Teachers Perceive Arabic-English DLL Children as Having High Levels of Self-Regulation and Mature Social Emotional Development

Category	Code	Frequency
Arab DLL Child Characteristics	• Teacher thinks that Arab DLL child can control his emotions	4
	• Teacher thinks that Arab DLL child is inquisitive	7
	• Teacher thinks that Arab DLL children are helpful and friendly	10

Table 4.2 - Continued

Category	Code	Frequency
	• Teacher thinks that Arab DLL child is sociable and interactive	2
	• Teacher thinks that Arab DLL child is affected by her culture	3
	• Teacher thinks that Arab DLL child doesn't speak up for herself	2
	• Teacher says that Arab DLL child is clean and healthy	2
	• Teacher thinks that Arab DLL child has leadership skills	2
	• Teacher thinks that Arab DLL child doesn't feel different	1

Table 4.3

Theme 2: Non-Arab Preschool Teachers Expressed Having Positive Perceptions of Arabic-English DLL Children in Their Classrooms, but Also Displayed Misconceptions about Arab Families and Arabian Culture

Category	Code	Frequency
Teachers' Beliefs	• Teacher thinks that Arab DLL child's family has good values	1
	• Teacher thinks that Arab girls are taught to be quiet and not speak up for themselves in their culture	1
	• Teacher didn't feel comfortable having an Arab child in her classroom because she was never around Arabian culture	1

Research Question Two: How do Preschool Teachers Describe Their Experience of Assessing Arabic-English DLLs Using an Authentic Observation-Based Assessment? In particular, What are Their Success and Challenges?

Table 4.4*Grounded Representation of Themes Related to Research Question Two*

Third Iteration: Themes		
3. Teachers Identified Non-Verbal Strategies and Families as Resources to More Accurately Assess Arabic-English DLL Children's Development	4. Teachers Identified Challenges in Assessing Arabic-English DLLs	5. Some Teachers Believed That English Proficient Arabic-English DLLs Require no Special Assessment Considerations
Second Iteration: Categories		
3A. Successful Assessing Practices 3B. Teacher-Parent Communication	4A. Assessment Challenges 4B. Language Barriers 4C. Arab DLL Child Developmental Progress 4D. Teacher-Parent Communication	5A. Teachers' Opinions about Assessing Arab DLL 5B. Teachers' Beliefs 5C. Communication Skills of Arab DLL Children 5D. Arab DLL Child Developmental Progress

Table 4.4 - Continued

First Iteration: Codes		
3A. Teacher asks for help from Arabic speakers in the school	4A. Teacher thinks assessing an Arab DLL child in English is not accurate	5A. Teacher thinks that creative arts domain is the hardest to assess for Arab DLL child
3A. Teacher do multiple observations to assess Arab DLL child	4A. Teacher thinks that assessing an Arab DLL child needs more cultural and linguistic awareness and extra focus	5A. Teacher thinks that assessing an Arab DLL child is an interesting and enlightening experience
3A. Teacher tries to communicate with Arab DLL child in different forms to understand him and help him express	4A Teacher thinks that assessing an Arab DLL child is not as easy as assessing a monolingual child	5A. Teacher thinks that language domain is the hardest to assess for Arab DLL child
3A. Teacher tries to learn Arabic words and use them with Arab DLL child	4A. Teacher can't tell if the Arab DLL child poor social skills is due to language barrier or developmental delays	5A. Teacher thinks that math domain is the easiest to assess for Arab DLL child
3B. Teacher fixed the score on the Arab DLL child assessment after talking to his parent	4B. Teacher thinks that Arab DLL child limited English reduces his interactions with peers	5A. Teacher thinks that science is the hardest domain to assess for Arab DLL children
3B. Teacher reaches out to parents to have a better understanding of their Arab DLL child development	4B. Teacher thinks it's difficult when Arab DLL children speaks their home language	5A. Teacher thinks that not understanding the Arab DLL child could lead to inaccurate assessment
	4C. Teacher observed that Arab DLL children write from right to left	5A. Teacher thinks that math domain is hard to assess for Arab DLL children
	4C. Teacher observed that Arab DLL child can't pronounce the sound P and say B instead	5A. Teacher thinks that art is the easiest to assess because it requires less language
		5B. Teacher thinks that assessment difficulty is not

Table 4.4 - Continued

First Iteration: Codes		
	4D. Teacher have communication issues with the parents due to language barriers	about the child it's about the domains' popularity 5B. Teacher thinks that assessing an Arab DLL child is not as easy as assessing a monolingual child 5B. Teacher needs support from DLL child parents in practicing English at home 5B. Teacher thinks that assessing a Arab DLL child is somehow similar to assessing a monolingual child 5B. Teacher thinks that Arab DLL child who speaks a good English doesn't need to be assessed as English learner 5C. Teacher observed that Arab DLL child attempt to express his needs nonverbally 5C. Teacher observed that Arab DLL child uses Arabic and English words to express himself 5C. Teacher thinks that Arab DLL children expresses themselves easily in English 5D. Teacher thinks that Arab DLL child English

Table 4.4 - Continued

First Iteration: Codes		
		language is developing very well 5D. Teacher says that Arab DLL child is academically developing well 5D. Teacher observed that Arab DLL child is more advanced in numbers in Arabic 5D. Teacher observed that Arab DLL child's social skills is developing

This research question was designed to investigate preschool teachers experiences of assessing Arabic-English DLLs, along with the successful practices and strategies they have used and what are the challenges they have faced in the assessing process. Three themes emerged from the interview data to answer this research question:

3. Teachers Identified Non-Verbal Strategies and Families as Resources to More Accurately Assess Arabic-English DLL Children's Development.
4. Teachers Identified Challenges in Assessing Arabic-English DLLs.
5. Some Teachers Believed That English Proficient Arabic-English DLLs Require no Special Assessment Considerations.

In the third theme, teachers shared their successful practices and helpful strategies in the process of assessing Arabic-English DLLs. The majority of teachers mentioned that multiple observations is a very helpful method to raise accuracy level when assessing a DLL child. Teacher 5 stated: “Observing him so like not just like quickly watching but

like overtime so like multiple sessions of observation that's really helpful.” Moreover, they said that using different forms to communication was a good strategy to help the DLL child to understand and help him express as well. For example, teacher 7 said:

Then asking him in different ways multiple times so saying like if he tells me something and I don't understand what he's saying I'll say do you mean this or that and he'll tell me like no or yes and if he says no I'm like do you mean and then I'll ask it in a different way and then if he keeps telling me no then I'm like can you show me or can you point to it or trying to get like different forms of communication from him.

Some teachers said that they sought help from Arab/Arabic speakers, and it helped a lot. Teachers 3 and 4 mentioned that they reached out to parents to have a better understanding of their DLL children's development. As teacher 3 said: “Actually, having someone who speaks the child's language is really helpful.” These quotes were categorized under two categories: Teacher-Parent Communication and Successful Assessing Practices.

In the fourth theme, teachers discussed some of the challenges and difficulties they have faced in assessing Arab DLL children. Most teachers said that it is difficult when Arab DLL children speaks their home language and they said that assessing an Arab DLL child is not as easy as assessing a monolingual child. For example, teacher 1 stated: “I feel bad for J sometimes because I would like to help her more to express her needs but we don't know that language you know so it's hard to support them.” Some teachers said that assessing Arab DLL child in English was not accurate. For example, teacher 3 said: “And sometimes I feel really bad that I might have been unfair with him

because simply I didn't understand him enough because of his limited English.” Teachers 4 and 6 noticed that Arab DLL children wrote from right to left. Teacher 6 stated: “He can write his name but most of the time he writes it from right to left. And even his numbers he writes them backwards.” And teacher 5 mentioned that Arab DLL child cannot pronounce the sound P and say B instead. Those quotes were categorized under four categories: Assessment Challenges, Language Barriers, Arab DLL Child Developmental Progress and Teacher-Parent Communication.

In the fifth theme, teachers described their experiences, beliefs and opinions about assessing Arabic-English DLLs. The majority of teachers said that Arab DLL children were academically developing well. For example, teacher 4 said:

He's like academically and like the preschool life he's like he knows his numbers he knows how to count very to a high number he knows his English alphabet he knows his shapes he can use his fine motors like what we said with cutting or with writing and so academically he's very strong.

Also, most of the teachers observed that Arab DLL children attempted to express their needs nonverbally. Teacher 5 stated:

If I'm not understanding what he is needing or wanting he'll use a lot of nonverbal cues like pointing or like he'll take our hand and he'll walk us to the area that he wants to play in or need something and then he'll like get our attention and let us know what he needs nonverbally as well.

Teacher 3, teacher 6 and teacher 7 observed that Arab DLL children mix Arabic and English words to express themselves. Some teachers said that assessing an Arab DLL child is an interesting and enlightening experience because it challenged them to try

different and new practices in the assessment process other than what they are used to. Also, some of them thought that science is the hardest domain to assess for Arab DLL children because it contains some complicated vocabularies which could be difficult for them. Teachers 5 and 7 said that not understanding the Arab DLL child could lead to inaccurate assessment. On the other hand, teacher 1 and teacher 2 mentioned that assessing an Arab DLL child was somehow similar to assessing a monolingual child because, according to teacher 1, her DLL child has perfect English, and as for teacher 2 she said that she simply scored what she observed as it is:

So I believe that assessing a DLL child is somehow similar to assessing a monolingual child. It's all about providing the appropriate opportunities and measurements and doing your observations in a suitable environment and then score based on that as it is.

These quotes were classified under four categories: Teachers' Opinions about Assessing Arab DLL, Communication Skills of Arab DLL Children, Arab DLL Child Developmental Progress and Teachers' Beliefs.

Table 4.4 presents grounded representation of themes related to research question two. Table 4.5 present the frequencies of each code related to theme three. Table 4.6 present the frequencies of each code related to theme four. Table 4.7 present the frequencies of each code related to theme five. Examples of the responses and codes representing those themes are in Appendix E.

Table 4.5

Theme 3: Teachers Identified Non-Verbal Strategies and Families as Resources to More Accurately Assess Arabic-English DLL Children's Development

Category	Code	Frequency
Successful Assessing Practices	• Teacher asks for help from Arabic speakers in the school	4
	• Teacher does multiple observations to assess Arab DLL child	5
	• Teacher tries to communicate with Arab DLL child in different forms to understand him and help him express	5
	• Teacher tries to learn Arabic words and use them with Arab DLL child	2
Teacher-Parent Communication	• Teacher fixed the score on the Arab DLL child assessment after talking to his parent	1
	• Teacher reaches out to parents to have a better understanding of their Arab DLL child development	2

Table 4.6

Theme 4: Teachers Identified Challenges in Assessing Arabic-English DLLs

Category	Code	Frequency
Assessment Challenges	• Teacher thinks assessing an Arab DLL child in English is not accurate	3
	• Teacher thinks that assessing an Arab DLL child needs more cultural and linguistic awareness and extra focus	3
	• Teacher thinks that assessing an Arab DLL child is not as easy as assessing a monolingual child	6
	• Teacher can't tell if the Arab DLL child poor social skills is due to language barrier or developmental delays	1

Category		Code	Frequency
Language Barriers	•	Teacher thinks that Arab DLL child limited English reduces his interactions with peers	4
	•	Teacher thinks it's difficult when Arab DLL children speaks their home language	5
Arab DLL Child	•	Teacher observed that Arab DLL children write from right to left	2
Developmental Progress	•	Teacher observed that Arab DLL child can't pronounce the sound P and say B instead	1
Teacher-Parent Communication	•	Teacher has communication issues with the parents due to language barriers	1

Table 4.7

Theme 5: Some Teachers Believed That English Proficient Arabic-English DLLs Require no Special Assessment Considerations

Category		Code	Frequency
Teachers' Opinions about Assessing Arab DLL	•	Teacher thinks that creative arts domain is the hardest to assess for Arab DLL children	1
	•	Teacher thinks that assessing an Arab DLL child is an interesting and enlightening experience	3
	•	Teacher thinks that language domain is the hardest to assess for Arab DLL child	2
	•	Teacher thinks that math domain is the easiest to assess for Arab DLL child	1
	•	Teacher thinks that science is the hardest domain to assess for Arab DLL children	3
	•	Teacher thinks that not understanding the Arab DLL child could lead to inaccurate assessment	2
	•	Teacher thinks that math domain is hard to assess for Arab DLL children	2

Table 4.7 - Continued

Category	Code	Frequency
Teachers' Beliefs	Teacher thinks that art is the easiest to assess because it requires less language	1
	Teacher thinks that assessment difficulty is not about the child it's about the domains' popularity	1
	Teacher thinks that assessing an Arab DLL child is not as easy as assessing a monolingual child	6
	Teacher thinks that assessing an Arab DLL child is somehow similar to assessing a monolingual child	2
	Teacher thinks that an Arab DLL child who speaks a good English doesn't need to be assessed as English learner	1
	Teacher needs support from DLL child parents in practicing English at home	2
Communication Skills of Arab DLL Children	Teacher observed that Arab DLL child attempt to express his needs nonverbally	5
	Teacher observed that Arab DLL child uses Arabic and English words to express himself	3
	Teacher thinks that Arab DLL children expresses themselves easily in English	4
Arab DLL Child Developmental Progress	Teacher thinks that Arab DLL child English language is developing very well	5
	Teacher says that Arab DLL child is academically developing well	11
	Teacher observed that Arab DLL child is more advanced in numbers in Arabic	1
	Teacher observed that Arab DLL child's social skills is developing	1

Research Question Three: What are Preschool Teachers Needs When Assessing Their Arabic-English DLLs?

Table 4.8

Grounded Representation of Themes Related to Research Question Three

Third Iteration: Themes
Non-Arab Teachers Identified Needs for Additional Professional Development in both Context and Strategies for Assessing Arabic-English DLLs
Second Iteration: Categories
6A. Teachers' Needs 6B. Teacher-Parent Communication
First Iteration: Codes
6A. Teacher needs more cultural information form Arab DLL child' parents 6A. Teacher thinks that assessing an Arab DLL child needs more cultural and linguistic awareness and extra focus 6A. Teacher needs more time to assess an Arab DLL child 6A. Teacher needs support from Arab DLL child parents in practicing English at home 6A. Teacher need support from school side 6B. Teacher fixed the score on the Arab DLL child assessment after talking to his parent 6B. Teacher reaches out to parents to have a better understanding of their Arab DLL child development

This research question was designed to address preschool teachers' needed support in assessing Arabic-English DLL preschoolers. One theme emerged from the interview data to answer this research question which is theme number six:

6. Non-Arab Teachers Identified Needs for Additional Professional Development in both Context and Strategies for Assessing Arabic-English DLLs

Most of teachers mentioned that they need more cultural information from Arab DLL children's parents since they expect the parents to provide this information to them as a support. Teacher 8 stated: "I believe it would be more helpful if they could've taught me more about G's culture and home language as a support." They also said that assessing an Arab DLL child needed more cultural and linguistic awareness and extra focus. For example, teacher 6 said: "Assessing a child from a different background and a different home language needs awareness and some extra focus to be able to score fairly." Teacher 3 and teacher 5 said that they need extra time in assessing an Arab DLL child more than the time they usually need in assessing a monolingual child. In addition, teacher 6 and teacher 8 said that they need support from Arab parents in practicing English at home with their DLL child. Teacher 7 mentioned that she needs support from school side like offering translators, assistance and training programs. Those quotes were categorized under two categories: Teachers' Needs and Teacher-Parent Communication.

Table 4.8 presents grounded representation of theme related to research question three. Table 4.9 presents the frequencies of each code related to theme six. Examples of the responses and codes representing those two themes are in Appendix E.

Table 4.9

Theme 6: Non-Arab Teachers Identified Needs for Additional Professional Development in both Context and Strategies for Assessing Arabic-English DLLs

Category	Code	Frequency
Teachers' Needs	Teacher needs more cultural information form Arab DLL child' parents	4
	Teacher thinks that assessing an Arab DLL child needs more cultural and linguistic awareness and extra focus	3
	Teacher needs more time to assess an Arab DLL child	2
	Teacher needs support from Arab DLL child parents in practicing English at home	2
	Teacher need support from school side	1
Teacher-Parent Communication	Teacher fixed the score on the Arab DLL child assessment after talking to his parent	1
	Teacher reaches out to parents to have a better understanding of their Arab DLL child development	2

Research Question Four: What are Arab Parents' Knowledge and Concerns About Children's Development and School Assessment?

Table 4.10*Grounded Representation of Themes Related to Research Question Four*

Third Iteration: Themes	
7. Arab Parents' Perceptions of Their Children's Experiences and Progress in Preschools Mostly Aligned with Non-Arab Teachers	8. Arab Parents Expressed Concerns about Cultural and Linguistic Barriers, as Well as Racism
Second Iteration: Categories	
7A. Arab DLL Child Characteristics 7B. Arab DLL Child Developmental Progress 7C. Parents' Beliefs	8A. Communication Skills of Arab DLL Children 8B. Language Barriers 8C. Parents' Concerns
First Iteration: Codes	
7A. Parent says that her DLL child is independent 7A. Parent says that her Arab DLL child can control his emotions 7A. Parent says that her Arab DLL child can't defend himself 7A. Parent claims that her DLL child has a very strong memory and fast learning abilities 7A. Parent claims that her DLL child has insistence 7A. Parent says that her DLL child is sociable and friendly at school 7B. Parent says that her DLL child is eager to learn new words in English	8A. Parent says that it was difficult for her DLL child to communicate at school 8B. Parent thinks that her Arab DLL child is still struggling at school because of language barriers 8B. Parent is unsatisfied about the meeting with her child's teacher due to language barriers 8C. Parent has concerns about her DLL child' assessment because of language barriers not because of his abilities 8C. Parent had concerns about racism towards Arab

Table 4.10 - Continued

7B. Parent claims that her DLL child knows how to count up to 40 in both languages	8C. Parent is worried that her DLL daughters will get confused when they learn two languages at the same time
7B. Parent claims that her DLL child can write numbers and his name and he recognizes the letters	8C. Parent was concerned that her child's teachers would have difficulties understanding her
7B. Parent thinks that her DLL child has improved	
7B. Parent claims that her DLL child know the adverbs like yesterday and tomorrow in Arabic	
7B. Parent claim that her DLL child doesn't mix Arabic and English	
7B. Parent says that her DLL child writes letters backwards	
7C. Parent says it feels comfortable to have other dual language children in her child's class	
7C. Parent thinks that her DLL daughters' level is higher than their age	
7C. Parent wants more challenges and assignments for her DLL daughters	

This research question investigated the knowledge and concerns of Arabic-English DLL children's parents about their children's development level and assessment accuracy. Two themes emerged from the interview data to answer this research question which are theme number seven and eight:

7. Arab Parents' Perceptions of Their Children's Experiences and Progress in Preschools Mostly Aligned with Non-Arab Teachers.

8. Arab Parents Expressed Concerns about Cultural and Linguistic Barriers, as Well as Racism.

In the seventh theme, Arab parents shared their beliefs and knowledge about their DLL children's characteristics and their level of development. All participant parents mentioned that their children are sociable and friendly at school. For example, parent 3 said: "She loves drawing, loves others, she is sociable, and makes friends easily.". Most parents also said that their children have improved academically. Parent 6 stated: "I noticed that he acquired the American accent from his teacher. His language developed a lot since we came to the US." Moreover, most of them also claimed that their children can write their names and recognize their numbers and letters. Some of parents said that their children were eager to learn new words in English. Parent 1, parent 3 and parent 7 described their children as independent. Also, parent 2, parent 3 and parent 4 claimed that their children have a very strong memory and fast learning abilities. Parent 2 stated: "He has a fast-learning ability. He memorizes things easily, such as the flags of countries. He memorizes them from the first time" These quotes were categorized under three categories: Arab DLL Child Characteristics, Arab DLL Child Developmental Progress and Parents' Beliefs.

In the eighth theme, Arab parents discussed their concerns and worries about their children's development and assessment scores. Parent 4 and parent 5 were concerned about their children' assessment because of the language barriers not because of their abilities. Parent 5 said: "I had some real concerns when I received the report. I was afraid to find low numbers. I am sure of my child's abilities, but I also know that he might not be able to deliver them in English." In addition, parent 3, parent 4 and parent 8 said that it

was difficult for their children to communicate at school. Parent 5 and parent 7 were worried that their children will get confused when they learn two languages at the same time. As parent 7 said: “I’m not very keen on teaching her Arabic now, I’m afraid she’ll get confused.” Also, parent 1 and parent 5 said that they feel comfortable when they know that there are other Arab children in their children’s class. Parent 8 had concerns about racism towards Arab. She stated: “I was afraid of racism since we are Arabs.” Those quotes were categorized under three categories: Communication Skills of Arab DLL Children, Arab DLL Child Developmental Progress and Parents’ Beliefs.

Table 4.10 presents grounded representation of theme related to research question four. Table 4.11 present the frequencies of each code related to theme seven. Table 4.12 present the frequencies of each code related to theme eight. Examples of the responses and codes representing those two themes are in Appendix E.

Table 4.11

Theme 7: Arab Parents' Perceptions of Their Children's Experiences and Progress in Preschools Mostly Aligned with Non-Arab Teachers

Category	Code	Frequency
Arab DLL Child Characteristics	• Parent says that her DLL child is independent	3
	• Parent says that her Arab DLL child can control his emotions	2
	• Parent says that her Arab DLL child can't defend himself	3
	• Parent claims that her DLL child has a very strong memory and fast learning abilities	3
	• Parent claims that her DLL child has insistence	2

Table 4.11 - Continued

Arab DLL Child Developmental Progress	•	Parent says that her DLL child is sociable and friendly at school	11
	•	Parent says that her DLL child is eager to learn new words in English	5
	•	Parent claims that her DLL child can write numbers and his name and he recognizes the letters	7
	•	Parent thinks that her DLL child has improved	9
	•	Parent claims that her DLL child know the adverbs like yesterday and tomorrow in Arabic	1
	•	Parent claim that her DLL child doesn't mix Arabic and English	2
Parents' Beliefs	•	Parent says that her DLL child writes letters backwards	1
	•	Parent says it feels comfortable to have other dual language children in her child's class	2
	•	Parent thinks that her DLL daughters' level is higher than their age	1
	•	Parent wants more challenges and assignments for her DLL daughters	1

Table 4.12

Theme 8: Arab Parents Expressed Concerns about Cultural and Linguistic Barriers, as Well as Racism

Category	Code	Frequency
Communication Skills of Arab DLL Children	• Parent says that it was difficult for her DLL child to communicate at school	3
	• Parent thinks that her Arab DLL child is still struggling at school because of language barriers	1

Table 4.12 - Continued

Category		Code	Frequency
Language Barriers	•	Parent is unsatisfied about the meeting with her child's teacher due to language barriers	1
Parents' Concerns	•	Parent has concerns about her DLL child' assessment because of language barriers not because of his abilities	4
	•	Parent had concerns about racism towards Arab	1
	•	Parent is worried that her DLL daughters will get confused when they learn two languages at the same time	2
	•	Parent was concerned that her child's teachers would have difficulties understanding her	1

Research Question Five: What Roles do Arab Parents Play in Supporting Their Preschool Children's Teachers?

Table 4.13

Grounded Representation of Themes Related to Research Question Five

Third Iteration: Themes
Seems Like the Usual Communication Strategies Teachers use with Families were Effective, and Arab Parents Appreciated Translation of Assessment Results in Arabic
Second Iteration: Categories
9A. Successful Assessing Practices 9B. Teacher-Parent Communication 1C. Teachers' Needs 1D. Parents' Role

Table 4.13 - Continued

First Iteration: Codes
9A. Parent reached out to an Arab teacher for an accurate assessment of her child
9A. Parent thinks that it was helpful when she received her DLL child' assessment in Arabic
9B. Teacher and parents has positive interactions
9B. Parent is satisfied about the communication methods with her DLL child' teacher
9B. Parent is satisfied about the assessment method
9C. Teacher needs more cultural information form DLL child' parents
9D. Teacher says that DLL children' parents support them at home
9D. Teacher thinks that lack of English practice at home slow down the DLL child progress
9D. Parents helps their Arab DLL child to develop his English language at home

This research question was designed to identify the role of Arab parents in supporting their preschool children's teachers. One theme emerged from the interview data which was the ninth overall theme:

9. Seems Like the Usual Communication Strategies Teachers use with Families were Effective, and Arab Parents Appreciated Translation of Assessment Results in Arabic

Most Arab parents described their interactions with their children's teachers as positive. Most of them said that they are satisfied about the communication methods with the teacher and satisfied with their child's assessment method, they said that it is

descriptive and easy to understand. For example, parent 7 said: “Communication is easy via school app or at the drop off and pick up times, as well as in the parent conferences every semester.” Parent 5 said: “I also liked that they sent me the assessment in Arabic, and this made me feel comfortable and that I could understand my child’s developmental process better since I do not speak English fluently.” Parent 3, parent 4 and parent 6 mentioned that they help their children to develop their English language at home. Teacher 4, teacher 6 and teacher 7 said that it is helpful when parents support their children at home. Those quotes were categorized under four categories: Successful Assessing Practices, Teacher-Parent Communication, Teachers’ Needs and Parents’ Role.

Table 4.13 presents grounded representation of theme related to research question five. Table 4.14 present the frequencies of each code related to theme nine. Examples of the responses and codes representing this theme are in Appendix E.

Table 4.14

Theme 9: Seems Like the Usual Communication Strategies Teachers use with Families were Effective, and Arab Parents Appreciated Translation of Assessment Results in Arabic

Category		Code	Frequency
Successful Assessing Practices	•	Parent reached out to an Arab teacher for an accurate assessment of her child	1
	•	Parent thinks that it was helpful when she received her DLL child' assessment in Arabic	1
Teacher-Parent Communication	•	Teacher and parents has positive interactions	10
	•	Parent is satisfied about the communication methods with her DLL child' teacher	4
	•	Parent is satisfied about the assessment method	7

Table 4.14 - Continued

Teachers' Needs	•	Teacher needs more cultural information form DLL child' parents	4
Parents' Role	•	Teacher says that DLL children' parents support them at home	3
	•	Teacher thinks that lack of English practice at home slow down the DLL child progress	1
	•	Parents helps their Arab DLL child to develop his English language at home	3

CHAPTER FIVE

DISCUSSION

The primary purpose of this qualitative study was to understand the challenges of scoring an established authentic assessment for DLLs when teachers do not speak the child's home language, and to identify strategies they use or could use to overcome those challenges. By talking with parents as well, I further explored the validity of scores generated by teachers and compared teachers' and parents' perspectives on children's developmental levels. In the process, I was able to identify successful strategies, but also, teachers' misconceptions about Arabic-English DLLs, and also further confirmed the importance of family engagement.

In this final chapter, I will discuss the findings and how they relate to and connect with the existing literature and theories. I will also address the implications and limitations of the study, draw conclusions about the study, and make recommendations for future research. Notably, the following five questions directed this study:

Research Questions (Teachers):

1. What knowledge do preschool teachers have about Arabic-English DLL developmental characteristics?
2. How do preschool teachers describe their experience of assessing Arabic-English DLLs using an authentic observation-based assessment? In particular, what are their success and challenges?
3. What are preschool teachers needs when assessing their Arabic-English DLLs?

Research Questions (Parents):

4. What are Arab parents' knowledge and concerns about children's development and school assessment?
5. What roles do Arab parents play in supporting their preschool children's teachers?

To answer these questions, 30-minute interviews were conducted with 16 interviewees. Eight were non-Arab lead preschool teachers and eight were parents of Arab-English DLL children in the participating teachers' classrooms. The classrooms were located in multiple cities across Southeast Michigan.

Interpretations of the Findings**RQ1: What is Preschool Teachers' Knowledge about Arabic-English DLLs****Developmental Characteristics?**

This research question investigated preschool teachers' knowledge and what are their beliefs about Arabic-English DLLs developmental characteristics. The findings related to research question one were extracted from the data collected through preschool teachers' interviews.

Theme One: Teachers Perceive Arabic-English DLL Children as Having High Levels of Self-Regulation and Mature Social Emotional Development

Preschool teachers believe that Arabic-English DLL children are helpful, friendly, inquisitive and are able to control their emotions. Teachers reported that Arab children are sociable and like to help their teachers and peers whenever they are in need. Moreover, teachers mentioned that their Arab preschoolers are always eager to learn new

words and new concepts. They also stated that their Arab children show a high level of self-regulation as one teacher said about her Arab DLL preschooler:

If he gets upset about something he'll try to regulate his emotions first and then very seldom when I see him become upset cry or I never seen him like do any form of aggression he's always very kind and gentle, so he regulates him himself emotionally very well.

When looking back at the reviewed literature in Chapter Two, there were earlier studies that highlighted these exact characteristics of young DLL's. For example, Barac et al. (2014) mentioned that children who develop dual languages show advancement in self-regulation such as working memory, inhibitory control, and cognitive flexibility. And they justified this that bilingualism enhances set shifting, one of the core executive functions, which in turn enhances self-regulation development. In addition, Halle et al (2014) stated that dual language learning has been associated with social-emotional development in that preschool DLLs have indicated high levels of self-control and low levels of problematic behaviors. And as for Arab children, this is related to their culture. Arab people generally share a strong moral code and cultural values, such as loyalty to their community and respecting their elders. Furthermore, ethics and regulations of monotheistic religions have a great impact on Arab society and the way they raise their children.

Theme Two: Non-Arab Preschool Teachers Expressed Having Positive Perceptions of Arabic-English DLL Children in Their Classrooms, but Also Displayed Misconceptions about Arab Families and Arabian Culture

The second theme that arose from my study centers around teachers' knowledge and beliefs about Arabian culture. Findings from this theme helped to answer part of the first research question. The main finding of this theme is that some preschool teachers believe that Arab girls are taught to be quiet and do not speak up for themselves. Some teachers in the current study revealed that they sometimes explain their Arab female behaviors based on assumptions that Arab families teach women to be quiet, voiceless, and submissive to males.

In contrast, certain literature indicated that these are huge misconceptions in the western world about Arabian culture. According to Hamdan (2014), based on the stereotypical view presented by the media, the West views Arab women as male dominated, voiceless and unidentifiable beings. These are huge misconceptions caused by biased assumptions and individuals, and a lack of cross-cultural awareness (Hamdan, 2014). In Arabian culture, women are as respected and appreciated as men. This realization led us to realize that these quiet Arab girls mentioned above could be having issues in social integration, but due to such misconception, their behaviors are justified as behaviors related to their Arab culture, and therefore they are not provided assistance.

RQ2: How do Preschool Teachers Describe Their Experience of Assessing Arabic-English DLLs Using an Authentic Observation-Based Assessment? In Particular, What are Their Success and Challenges?

The purpose of this research question was to know more about preschool teachers' experiences in assessing Arab DLLs using observation-based assessment, as well as what successful practices and challenges they have faced in this journey. The

findings related to research question two was extracted from the data collected through preschool teachers' interviews.

Theme Three: Teachers Identified Non-Verbal Strategies and Families as Resources to More Accurately Assess Arabic-English DLL Children's Development

The main findings of this theme was the most common successful practices that were shared by the interviewed teachers. The first finding focused on doing multiple observations for the DLL child's assessment is a helpful strategy to raise the level of accuracy of the child's scores. Teachers mentioned that they applied this strategy with their DLL students to ensure their scores were reliable and described the child's actual developmental level. The second helpful practice was using different forms of communication with the DLLs children, like nonverbal communication. Teachers mentioned that they allowed their Arab DLLs children to communicate nonverbally to expand their expression options and to overcome any language barriers they might face. The third main finding of this theme was the importance of knowing more about the Arab DLL child's developmental level, Arabic language, and Arabian culture from the child's family. Some teachers shared how helpful it was when they learned a few Arabic words from the child's parents. And one teacher even gave the child a higher score in math after discussing his level with his parents, which represents the importance of utilizing authentic resources. Teachers can also encourage parents to participate and interact in COR advantage assessment app. COR is not just an observational instrument, but evidence/anecdotes can be collected from classrooms as well as from families/homes.

Developmental and cultural considerations were discussed in research studies that were reviewed in Chapter Two. Karem and Washington (2021) conducted a study to

investigate the appropriateness of standardized English assessments in a sample of 176 preschool-age Jamaican-English dual language learners and 33 Jamaican -English speaking adults aged 24–51 years who were from the same linguistic community as the children. Classroom assessment' scores can be termed reliable, accurate, and valid when they consider the preschool DLLs' linguistic and cultural aspects related to them through the administration, interpretation, and design of the procedures (Karem & Washington, 2021).

Theme Four: Teachers Identified Challenges in Assessing Arabic-English DLLs

There were two main challenges for teachers in terms of assessing Arabic-English DLL's. The most common challenge that non-Arabic speaking teachers have faced is when their Arab DLL students answer in Arabic or use some Arabic words in their conversations. They mentioned that it is challenging for them to understand what they are trying to say. Therefore, as the teachers said, it is unfair to assess Arab DLL children only in English. This is connected to what I reviewed in Chapter Two. Méndez et al. (2019) conducted a study that examined the relationship between early numeracy skills in Spanish and English and the expressive vocabulary and grammatical comprehension skills of preschool DLLs in those languages. The researchers found children's expressive vocabulary and grammar comprehension in each language explained a significant amount of the variation in the early numeracy skills in each language. This implies a relationship between early numeracy development within the same language and vocabulary and grammatical proficiency in both languages. Therefore, early numeracy skills in the same language depend on strengthening children's total language skills in each language (Méndez et al., 2019).

In addition, when dual language learners are evaluated in only one language, their overall vocabulary knowledge is frequently underestimated. DLLs frequently know some vocabulary in their first language and other vocabulary in their second language (Méndez et al., 2019). Moreover, another study that agreed with this finding was conducted by Fernandez et al. (1992) to investigate receptive vocabulary in English and Spanish by using complementary measures of receptive vocabulary. Nearly 400 (N=396) Hispanic children, ages 3 years and 0 months to 5 years and 11 months, were recruited from preschools in economically diverse neighborhoods of Miami. Researchers discovered that assessing students' vocabulary in only one language strongly undercounted the preschool dual language learners' real vocabulary knowledge. In their research, preschoolers only knew a vocabulary term in both languages about half the time, but they knew it about a third of the time in either their native language or their second language (Fernandez et al., 1992).

The second main challenge is that teachers may not recognize the structural differences in Arabic and English and how that could lead to negative language transfer. Some teachers shared that through their experiences teaching Arab children, they have noticed that most of those children write from right to left and they also are most likely to pronounce the letter P as B. Only one teacher mentioned that she thought it might be related to Arabic language, which was indeed true. Those common interferences are totally understandable for any Arabic speaker. As I mentioned in Chapter Two about Arabic language characteristics, according to Abdelgafar (2014) Arabic language writing direction is from right to left. Moreover, the letter P does not exist in the Arabic language and a lot of Arabs mistakenly pronounce it as B instead.

Theme Five: Some Teachers Believed That English Proficient Arabic-English DLLs Require no Special Assessment Considerations

All interviewed teachers ended their interviews describing their experiences and beliefs assessing Arab-English DLLs. The main finding here show that preschool teachers believe Arab-English DLL children are developing well academically. They mentioned that most Arab children progress very well and are able to recognize their letters and numbers and their English vocabulary knowledge grow rapidly. As I reviewed in Chapter Two, Reyes and Azuara (2008) conducted a study of 12 DLL children whose first language was Spanish, and second language was English. The study showed with time and meaningful opportunities, DLLs increase their vocabulary in English as they increase its use in school. Their mastery of their home language affords them time to learn comprehensively new vocabulary. According to Barnett et al (2007), when preschool DLLs attend English-immersion settings, their first or home language abilities diminish and their English language proficiency does not increase as quickly as it would in bilingual programs. Therefore, it has been demonstrated that English immersion programs limit DLL preschoolers' ability to become bilinguals at an early age while failing to accelerate their English acquisition.

The second main finding in this theme is that some preschool teachers believe that assessing an Arab-English DLL child does not require any special considerations if he is proficient in English. Some teachers explained that if the Arab child in their classroom was speaking clear and correct English, they thought he should be treated and assessed as a monolingual child. According to work by Cummins (1980), which involved an analysis of more than 400 teacher referral forms and psychological evaluations performed on

English as a second language (ESL) students in a large Canadian school system in 1980, teachers and psychologists frequently assumed that children had overcome all challenges with English when they could communicate comfortably in the language. Despite this assumption, these children typically scored poorly on English academic activities in the classroom as well as on the verbal scales of the cognitive ability test conducted as part of the psychological assessment. Many children were labeled as having language or communication disabilities despite having only been in Canada for a short period of time (e.g., 1-3 years). As a result, the confusion of second-language (L2) conversational fluency and (L2) academic performance directly contributed to the incorrect placement of bilingual children in special education programs (Street & May, 2019). Unfortunately, some teachers still want to know the full picture of children's development at a very young age when the child's brain is in the stage of progressing and building, leading us to the importance of building strong foundation in the child's first language. DLL children's native language allows for increased proficiencies in English, academic achievement, and social skills (Oades-Sese et al., 2011).

The final finding illustrated that teachers believed that it was helpful when parents practiced English language with their child at home. This finding shows that the focus is on English learning, not dual language learning, which is unsupported by literature that indicates the benefit of 1) home language as a foundation, and 2) bilingualism. Halle et al. (2014) indicated in their study about the social-emotional development of dual language learners that the use of home language by family at home can act as a protective aspect for DLL children's home language. Maintaining one's

home language while learning a second language promotes cultural identity, self-concept, and metalinguistic skills in addition to preserving familial and cultural relationships.

RQ3: What are Preschool Teachers Needs When Assessing their Arabic-English DLLs?

This research question was designed to understand the support preschool teachers' need in assessing Arabic-English DLL preschoolers. The findings related to research question three were extracted from the data collected through preschool teachers' interviews. As it was indicated in Chapter Four, when reflecting on the third question, one major theme emerged.

Theme Six: Non-Arab Teachers Identified Needs for Additional Professional Development in both Context and Strategies for Assessing Arabic-English DLLs

One of the main interview questions the teachers were asked was about the support they might need to assess Arabic-English DLLs. The top needed support that teachers mentioned was cultural information from the Arab-English DLL child's parents. Most of the teachers mentioned that they need to know more about their Arab child's culture and language, especially from the child's parents, to increase their overall cultural competency and best support DLL students. They also mentioned they had never asked them for this kind of support. As one of the teachers noted, "I believe it would be more helpful if they could've taught me more about G's culture and home language, but to be fair, I never asked them to." The lack of parent-teacher communication leads us to the argument that teachers need professional development to be better prepared to communicate with Arab parents. This argument is supported by López's (2012) findings.

She mentioned that sometimes, school staff members failed to communicate with parents effectively or provide them with accurate information or ask them about cultural information, which caused misunderstandings and made it difficult for parents to make wise choices (López, 2012).

The second major support that teachers mentioned was the need for specific training and guidance in assessing Arabic-English DLLs. One of the teachers mentioned that she felt very uncomfortable when she was informed that she was going to have an Arab child in her class, and the reason behind her feelings was her lack of training and experience. This issue was addressed in Chapter Two by Asare and Afriyie (2023), who mentioned that preschool teachers are frequently asked to perform assessments of DLL children in their classrooms without receiving the necessary training or assistance, which is a problem in the early childhood education field where licensing and training standards are already limited (Asare & Afriyie, 2023).

RQ4: What are Arab Parents' Knowledge and Concerns about Children's Development and Assessment?

This research question investigated the knowledge and concerns of Arabic-English DLL children's parents about their children's development level and assessment accuracy. As it was indicated in Chapter Four, two themes emerged with regard to this fourth question.

Theme Seven: Arab Parents' Perceptions of Their Children's Experiences and Progress in Preschools Mostly Aligned with Non-Arab Teachers

This theme centers around Arab parents' knowledge and beliefs about their children's level of development, especially social-emotional development. The first

finding of this theme was that Arab parents believed their preschool children were independent, sociable, and friendly at school. The majority of the interviewed parents mentioned that their children loved to depend on themselves, to interact with others, and to help their friends when they were in need. The second finding of this theme was that Arab parents believed their children had strong learning abilities and were developing very well academically in U.S. classrooms.

The connections between cognitive development and social interactions were discussed in many research studies that were reviewed in Chapter Two. One important relevant theory is Vygotsky's (1978) sociocultural theory, which is focused on the role that social interaction plays in cognitive development. Vygotsky (1978) assumed that interaction and play with peers enhances children's abilities in language, problem solving, and in overall language competence. Central to Vygotskian theory is the Zone of Proximal Development (ZPD), which focuses in on what individuals can accomplish by themselves and what they can accomplish with help and support from others. In a case of DLL children, with help and support from parents, teachers, and peers, DLLs learn and master new skills.

Moreover, other literature from Chapter Two agrees with Arab parents' beliefs about their children's social-emotional development and their cognitive skills. For example, two studies, one by Barac et al. (2014), and another by Halle et al (2014). Also, parents' viewpoints were very similar with what the teachers said, as shown in the first theme. They both mentioned that Arabic-English DLLs were sociable, friendly, and eager to learn.

Theme Eight: Arab Parents Expressed Concerns about Cultural and Linguistic Barriers, as Well as Racism

Approximately 50% of the Arab parents interviewed expressed concerns about their children's development and assessment due to cultural and linguistic barriers, as well as racism. The first finding showed Arab parents were concerned about their children's assessment because of the language barriers, not because of their abilities. Some parents mentioned that their children would be scored low in subjects like science and math because of their poor English. This concern aligns with teachers' assessment challenges, as they mentioned that it was unfair to assess Arab DLL children only in English while they were trying to answer in their native language. This concern was already reviewed in Chapter Two, namely in the study of Brebner et al. (2016). They mentioned that parents of young DLLs frequently worried about their children's assessments. They were concerned that the assessments being used would not produce a reliable judgment of their child's actual ability and knowledge, and that these assessments may produce inaccurate results due to linguistic and cultural barriers if they are not supported by other crucial data. These data include the child's performance in all the languages he or she speaks while taking into account data from case history interviews, parent reports, and/or standardized questionnaires about the child's language environment, patterns of language use and language dominance, first language skills, and developmental history (Brebner et al., 2016).

In addition, parents expressed misconceptions about their children's dual language learning. I found that Arab parents were worried that their children would get confused when they learned two languages at the same time, and that doing so would

cause them developmental delay. This concern was addressed by King and Fogle (2007), as mentioned in Chapter Two. King and Fogle (2007) interviewed 24 bilingual families in Washington, D.C. They mentioned that many of the parents they interviewed thought that their children's dual-language schools had caused or would cause language delays. Yet, according to the researchers, there was no concrete proof, that bilingualism caused any kind of language delay (King & Fogle, 2007). Moreover, according to Kohnert (2010), numerous children around the globe started speaking two or more languages at a young age without displaying any symptoms of language disorders or delays. As I mentioned in Chapter Two, studies show that the capacity to transition between languages, also known as translanguaging, is an indication of language mastery rather than confusion, and that children as young as two can code-switch in socially acceptable ways (Smolak et al., 2019). While this misconception was prevalent in parents, but not in teachers, this may be an important point for teachers to discuss with parents.

Furthermore, one Arab mother expressed her concern that her child would face racism as an Arab in his preschool. She later admitted that she did not notice any racist behaviors towards him and that he felt so welcomed from his peers and teachers. This concern may have built up in parents from misinterpreted behavior from a teacher. This finding again points to the need for professional learning about effective communication between teachers and Arab parents.

RQ5: What Roles do Arab Parents Play in Supporting their Preschool Children's Teachers

This research question was designed to identify the role of Arab parents in supporting their preschool children's teachers. As was indicated in Chapter Four, one theme emerged to reflect on this fifth question.

Theme Nine: Seems Like the Usual Communication Strategies Teachers use with Families were Effective, and Arab Parents Appreciated Translation of Assessment Results in Arabic

The findings of this theme were derived from both teachers' interviews and parents' interviews. The first main finding was that Arab parents found it helpful when they received their child's assessment in Arabic. Some Arab parents mentioned that it made it so much easier when they received the assessment translated into Arabic since their English was limited. The second finding emerged from both teacher and parent interviews. I found they were satisfied with the positive communication they had with each other and that it played an important role in the child's development. The majority of parents mentioned that their child's school offered multiple ways for parents to communicate with their child's teacher via school app, email, parent conferences, drop-off or pick-up times, etc. Also, the majority of teachers said that most of the parents were cooperative and interested in communicating, which helped a lot.

Implications of the Findings

The findings of this research study were composed for each research question and helped to accomplish the study purposes: exploring preschool teachers' experiences in assessing Arabic-English dual language learners (DLLs) in classrooms using a well-

established teacher scored authentic assessment of early childhood holistic development; and exploring Arab parents' experiences discussing these assessments and their perceptions of their role in supporting their child's development.

The findings of this research study will be beneficial to preschool teachers, parents of Arabic-English DLL children, administrators, and policymakers in providing useful information on supporting preschool teachers in assessing Arabic-English DLLs in the classroom. The outcomes from this study could be a guide to the teachers to use the helpful strategies regarding assessing Arabic-English DLLs. The teacher participants discussed many strategies they apply with Arab DLL children to gain a more accurate scoring like multiple observations and nonverbal communication.

In addition, based on the findings, Arab parents' role was crucial in supporting their child's teacher and that discussed by the teacher participants as needed support. Therefore, this study encourages Arab parents to engage more in their child's developmental process and to provide teachers with support and additional knowledge about Arab culture and Arabic language.

Moreover, there are different kinds of support that preschool teachers mentioned in this study, and this could be a helpful reference for administrators and policymakers to provide this support for their own teachers. For example, teachers mentioned that they needed extra time, an Arabic translator, training for assessing DLLs, etc.

Recommendations for Administrators and Teachers

- Professional learning for teachers to qualify them to communicate effectively with Arab parents.

- Building Arabian cultural awareness from authentic sources
- Acquiring helpful strategies to assess Arab DLLs, such as multiple observations, non-verbal communication and extra assessing time.
- Learning a few basic Arabic words like greetings.
- Supporting child's native language
- Encouraging parents to communicate and interact via COR advantage assessment

Limitations of the Current Study

The first limitation of this study involves the parent participants' nationalities. As I mentioned in Chapter One, there are 22 countries in the Arab world. My sample was from three Arab countries only: Saudi Arabia, Iraq, and Tunisia. I intentionally chose SE Michigan as a target because there is a large Arabic population; however, findings may be different when conducted in areas where teachers (and peers) have less exposure to Arabic families. Moreover, this limited parent sample make it inappropriate to generalize the findings since some Arab countries, like Egypt, Syria, and Jordan, have very high and strict standards when it comes to their children's development. Parents from such nations may have different opinions and concerns about their children's assessments due to their high cultural expectations.

Conclusion

This study explored preschool teachers' experiences of assessing Arabic-English DLLs in classrooms, as well as parents' experiences and their perceptions of their roles in supporting their child's development. Each question was answered through themes and

the examples provided in the categories. The findings were summarized by displaying the connection with the previous literature and theories.

Data gathered in this study identified teachers' needed support in assessing Arab DLL children and what could be done to achieve more accurate scores. Study findings elaborate on the types of helpful strategies teachers apply on their Arab DLL children in order to have a reliable assessment, like conducting multiple observations, non-verbal communication, etc. Moreover, the findings emphasize the importance of teacher-parent communication, leading to the recommendation that schools and administrators develop a professional development for teachers to help them better understand Arabian culture, as well as how to effectively communicate with children from this background.

Finally, my focus was on assessment, and not on a more holistic best practices in classroom teaching. However, assessment does touch upon many aspects of teaching, and how this study showed the importance of accurate and valid assessment that does not just focus on scoring but truly understanding each child's development that is especially important for DLLs.

Directions for Future Research

The findings from the current study provide many routes for future research in the area of supporting teachers in assessing Arabic-English DLL children. In the present study, I did not acquire a wide range of Arab nationalities to examine their experiences and opinions about their children's development. Further investigation among a more diverse sample of Arab nationalities is essential. Also, the study sample was limited to female participants; it would be important to explore the perception of male teachers and fathers, as well.

Additionally, a longitudinal study could be a very good suggestion for this topic. Researchers could start a study monitoring Arab child assessment from the beginning of the school year until the end. This study could also involve a comparison between the teachers' view and the parents' view since the researchers could engage the parents in the assessment details from the start. In general, I would ensure parents are well oriented to the assessment from the beginning of the year regardless of being in a research study. A last suggestion for future work is to develop a professional development for teachers based on the recommendations I listed and test its impact on assessment accuracy.

APPENDIX A
IRB APPROVAL



Institutional Review Board

Date: November 10, 2023 **Study #:** IRB-FY2024-131

Study Title: Supporting Preschool Teachers in Assessing Arabic-English Dual Language Learners (DLLs) in Classrooms Using an Authentic Assessment

Submission Type: Initial

IRB Decision: Exempt

Research Team: Latifah Alremai Tomoko Wakabayashi

Based on applicable federal regulations, the above referenced study has been determined to be Exempt, with the following categories:

Category 1. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or

Notes for Researcher(s):

This submission includes the following approved documents:

- Email recruitment messages for Parents and Principals
- Parents recruitment script (for 40 minute interview) Teacher Consent Form V 11/10/23
- Parent Consent Form V 11/12/23
- Data Collection Tools (i.e., Interview and Demographics Interview Questionnaires for Parents and Teachers)

APPENDIX B

CONSENT FORMS FOR PRESCHOOL PARENTS

Parents' Consent Form for Exempt Research

Supporting Preschool Teachers in Assessing Arabic-English Dual Language Learners (DLLs) in Classrooms Using an Authentic Assessment

Introduction

You are being asked to be in a research study that is being done by Latifah Alremai, a doctoral candidate in Early Childhood Education, under the direction of Dr. Tomoko Waskabayshi, an associate professor in Early Childhood Education and the faculty advisor for this project.

What is the purpose of this study?

The purpose of this research study is to learn about Arabic-English dual language learners parents' experiences about their children's assessments and their perceptions of their role in supporting their child's development. Dual language learners are defined as children who learn a language other than their home language, or learning English as a second language.

COMPLETED BY PARENT

I give my permission to the researcher to review my child's COR assessment scores for the benefit of this research.

Print name of participant

Signature of participant

Date

APPENDIX C
PRESCHOOL TEACHERS DEMOGRAPHIC QUESTIONNAIRE AND INTERVIEW
PROTOCOL AND QUESTIONS

Preschool Teacher Demographic Questionnaire and Interview Protocol and Questions

Hello. Thank you for agreeing to meet with me for an individual interview. As you know, the purpose of this study is to explore preschool teachers' experiences in assessing Arabic-English dual language learners (DLLs) in classrooms using a well-established teacher scored authentic assessment of early childhood development. And to explore parents' experiences discussing these assessments and their perceptions of their role in supporting their child's development. To protect your identity, your information will be confidential, and you will not be identified individually. You will be asked several open-ended questions. There are no right or wrong answers. Please try to give as much information as possible in your response; however, you do not need to answer a question if you feel uncomfortable or are not interested in addressing a specific question. First, you will be asked to fill in the demographic questionnaire, and then, we will start the interview session. The interview will be audio recorded for transcribing purposes. Do you have any questions or concerns about the research or interview before we begin? If you have not yet signed the consent form, please sign it and return it back to me. Please complete the demographic questionnaire.

Demographic Questionnaire for Preschool Teachers

Please tell me about yourself:

1. 1) Your name _____
2. 2) Your age _____
3. 3) Your gender _____

☐ Male

☐ Female

☐ Non-binary

☐ Prefer not to say

4) What is your highest level of education completed (check ONE of the following)?

c Undergraduate Degree (e.g., BA, bachelor's degree) please specify the degree:

c Graduate Degree (e.g., master's, Ed Specialist degree, doctorate)

please specify the degree: _____

c Other - please specify: _____

5) How long have you been teaching? _____

6) How many years at which grade? _____

7) Do you speak a language other than your primary language?

☐ No

☐ Yes, please specify _____

8) Have you had a special training in teaching dual language learner children?

☐No

☐Yes, please specify _____

9) How many Arabic-English dual language children do you currently have in your classroom? _____

10) How many Arabic-English dual language children have you had in your classroom on average prior to this year? _____

Interview Questions for Preschool Teachers

I will start the discussion with the teacher by asking him\her to show a copy of the child's scores in five domains of the COR Advantage assessment (Social and Emotional Development, Language, Literacy, and Communication, Mathematics, Creative Arts and Social Studies) and discuss with the teacher about these scores.

Discussion Questions:

- Tell me about the child?
- From your observations, what can the child do? Can you give examples?
- In your opinion, what are the child's strengths \ weaknesses?
- In the child's assessment process, which items were the easiest to score and which items were the hardest to score?
- How have you communicated with the child's parents about the child's COR scores, and his/her progress?

APPENDIX D
PARENTS DEMOGRAPHIC QUESTIONNAIRE AND INTERVIEW PROTOCOL
AND QUESTIONS

Parents Demographic Questionnaire and Interview Protocol and Questions

Hello. Thank you for agreeing to meet with me for an individual interview. As you know, the purpose of this study is to explore preschool teachers' experiences in assessing Arabic-English dual language learners (DLLs) in classrooms using a well-established teacher scored authentic assessment of early childhood development. And to explore parents' experiences discussing these assessments and their perceptions of their role in supporting their child's development. To protect your identity, your information will be confidential, and you and your child/children will not be identified individually. You will be asked to assess your child and answer some open-ended questions. There are no right or wrong answers. Please try to give as much information as possible in your response; however, you do not need to answer a question if you feel uncomfortable or are not interested in addressing a specific question. First, you will be asked to fill in the demographic questionnaire, and then, we will start the interview session. The interview will be audio recorded for transcribing purposes. Do you have any questions or concerns about the research or interview before we begin? If you haven't signed the consent forms already, please sign it and return it back to me. Now, please read and answer the demographic questionnaire that is given to you before we start the interview.

Demographic Questionnaire for Parents

Please, answer each question below.

1. 1) First Name: _____
2. 2) Your age: _____

3. 3) You are:

☐ A father

☐ A mother

4) What is your highest level of education completed (check ONE of the following)?

☐ Some High School-No Diploma

☐ High School or General Educational Development (GED)

☐ Associate Degree (e.g., two years degree or two years college)

☐ Undergraduate Degree (e.g., BA, bachelor's degree)

☐ Graduate Degree (e.g., master's, Ed Specialist degree, doctorate)

☐ Other - please specify: _____

5) Which of the following describes your employment status (check ONE of the following)?

☐ Full Time Type of work, title: _____

☐ Part Time Type of work, title: _____

☐ Student Major area or degree you are seeking: _____

☐ Self-employed Type of work: _____

▼
☐ Not currently employed

▼
☐ Other, please specify _____



6) How many children do you have and their ages (check ONE of the following)?

☐ One child

☐ Two children

☐ Three children

☐ Four children

☐ More than four children, how many: _____ ages: _____

7) What is your country of origin? _____

8) How long have you been living in the U.S.? Please specify: _____

9) What languages do you use at home? _____

10) Who speaks which language to the child? _____

Interview Questions for Parents

I will start the discussion with the parent by asking them to assess their child skills using the COR assessment in five domains which are the same domains that were filled in by the child's teacher (Social and Emotional Development, Language, Literacy, and Communication, Mathematics, Creative Arts and Social Studies) and discuss with the parent about the child's development.

Discussion Questions:

- Tell me about your child.
- From your observations, what can your child do? Can you give examples?
- What are your child's strengths/weaknesses?

Follow up Question:

- Can you tell me more about it?
- From these assessment items, which items do you think are the easiest to score and which items do you think are the hardest to score?
- How have your child's teacher communicated with you about your child's COR scores, and his/her progress?

APPENDIX E
QUOTATIONS TABLES

Examples of the Quotes and Codes from Theme One: Teachers Perceive Arab-English DLL Children as Having High Levels of Self-Regulation and Mature Social Emotional Development

Quotation	Code
“If he gets upset about something he'll try to regulate his emotions first and then very seldom when I see him become upset cry or I never seen him like do any forms of aggression he's always very kind and gentle, so he regulates him himself emotionally very well”	Teacher thinks that DLL child can control his emotions
“Umm as I mentioned S is eager to learn he asks about new words all the time and he loves to explore”	Teacher thinks that DLL child is inquisitive
“She's also very friendly everybody likes her everybody likes L you know because of her way of being very sweet and helpful”	Teacher thinks that DLL children are helpful and friendly
“She likes to play with other kids she does not like to play alone like she's not the person who will go to a side and just play by herself she likes to be part of the group”	Teacher thinks that DLL child is sociable and interactive
“I think I can see it I can see it because I am originally from the eastern side of the world so I can see certain things she does is very culture specific”	Teacher thinks that Arab DLL child is affected by her culture
“But I can say one thing though we we've had to tell her to speak up like if anybody is doing something not appropriate like if she doesn't like something that somebody is doing she would just in the beginning you know be quiet so we have had to teach her to speak up for herself”	Teacher thinks that DLL child doesn't speak up for herself
“She's very independent knows everything that is required to be clean you know all of that what's healthy what's not”	Teacher says that Arab DLL child is clean and healthy

Quotation	Code
“Her strengths are like I said she's very smart she has leadership skills”	Teacher thinks that DLL child has leadership skills
“In my opinion he does not feel different from others”	Teacher thinks that Arab DLL child doesn't feel different

Examples of the Quotes and Codes from Theme Two: Non-Arab Preschool Teachers Expressed Having Positive Perceptions of Arab-English DLL Children in Their Classrooms, but Also Displayed Misconceptions about Arab Families and Arabian Culture

Quotation	Code
“Also guessed that they probably have good family values because she takes Thursday off just because her dad is home on Thursday, he does not work on Thursday so that just got me thinking that maybe it's important for them that they are all together on one day when the dad is available and that was kind of nice to know”	Teacher thinks that Arab DLL child' family has good values
“Maybe that is cultural too because a lot of places women are quiet, they're taught to be quiet and not speak up for themselves.”	Teacher thinks that Arab girls are taught to be quiet and not speak up for themselves in their culture
“At first, I didn't feel comfortable because I have never, I was never around Arabic culture unfortunately”	Teacher didn't feel comfortable having an Arab child in her classroom because she was never around Arabian culture

Examples of the Quotes and Codes from Theme Three: Teachers Identified Non-Verbal Strategies and Families as Resources to More Accurately Assess Arab-English DLL Children's Development

Quotation	Code
“Actually, having someone who speaks the child’s language is really helpful”	Teacher asks for help from Arabic speakers in the school
“Observing him so like not just like quickly watching but like overtime so like multiple sessions of observation that's really helpful”	Teacher do multiple observations to assess Arab DLL child
“Then asking him in different ways multiple times so saying like if he tells me something and I don't understand what he's saying I'll say do you mean this or that and he'll tell me like no or yes and if he says no I'm like do you mean and then I'll ask it in a different way and then if he keeps telling me no then I'm like can you show me or can you point to it or trying to get like different forms of communication from him”	Teacher tries to communicate with Arab DLL child in different forms to understand him and help him express
“Sometimes we ask them about words in Arabic what dose this and that called in Arabic you know”	Teacher tries to learn Arabic words and use them with Arab DLL child
“So he has scored higher when his father told me about his level in math and what he knows”	Teacher fixed the score on the Arab DLL child assessment after talking to his parent
“I would talk to his father and ask like where he's at developmentally in different areas so then I can have a better understanding of him more”	Teacher reaches out to parents to have a better understanding of their Arab DLL child development

Examples of the Quotes and Codes from Theme Four: Teachers Identified Challenges in Assessing Arabic-English DLLs

Quotation	Code
“And sometimes I feel really bad that I might have been unfair with him because simply I didn’t understand him enough because of his limited English”	Teacher thinks assessing Arab DLL child in English is not accurate
“I wish I knew Arabic, so I could be more, umm, confident with teaching and assessing Arab children.”	Teacher thinks that assessing an Arab DLL child needs more cultural and linguistic awareness and extra focus
“And I’m not saying here that it’s an easy task at all. It’s such a challenging process to teach them, observe them and assess them”	Teacher thinks that assessing an Arab DLL child is not as easy as assessing a monolingual child
“I believe social and emotional development is also difficult to score because I’m not sure is he not expressing his emotions due to language barriers or due to social emotional delays”	Teacher can't tell if the Arab DLL child poor social skills is due to language barrier or developmental delays
“I think that he if he had more flowing English he would be able to interact with his peers more because he does do a lot of independent play and he'll occasionally try to play with children that are already in the play setting but sometimes I in my opinion and from what I've observed I think that if he had more English language than he could be able to communicate with his peers better”	Teacher thinks that Arab DLL child limited English reduces his interactions with peers
“I feel bad for J sometimes because I would like to help her more to express her needs but we don't know that language you know so it's hard to support them”	Teacher thinks it's difficult when Arab DLL children speaks their home language

Quotation	Code
“He can write his name but most of the time he writes it from right to left. And even his numbers he writes them backwards”	Teacher observed that Arab DLL children write from right to left
“He can’t pronounce the sound of the letter P when he say it, it sounded more like B instead.”	Teacher observed that Arab DLL child can't pronounce the sound P and say B instead
“Yeah yeah we had a parents’ conference and his mom came. The challenge that I face with her is communicating because she doesn’t understand English just some few simple words. And we don’t have interpreters on-hand all the time. So, we have to schedule interpreters if it’s possible and most of the time it’s not!”	Teacher have communication issues with the parents due to language barriers

Examples of the Quotes and Codes from Theme Five: Some Teachers Believed That English Proficient Arab-English DLLs Require no Special Assessment Considerations

Quotation	Code
“Well I would say It hasn’t been an easy journey but it’s interesting and enlightening at the same time you know”	Teacher thinks that assessing an Arab DLL child is an interesting and enlightening experience
“As for the hardest I would say maybe like the reading and language you know maybe because it's a different language maybe it's hard for them to read books”	Teacher thinks that language domain is the hardest to assess for Arab DLL child

Quotation	Code
“The math section is always very easy to score”	Teacher thinks that math domain is the easiest to assess for Arab DLL child
“The hardest I would say science”	Teacher thinks that science is the hardest domain to assess for Arab DLL children
“This is not the child it is what happens in these areas like especially social studies is a not a very popular area so do for assessment teachers do the popular areas very fast and they can see it happening right like even when standing in line OK count sometimes or the teacher says how many kids do we have and then you can so math science language is very easy to assess but things like social studies and that's where you see and you know”	Teacher thinks that assessment difficulty is not about the child it's about the domains' popularity
“So I believe that assessing a DLL child is somehow similar to assessing a monolingual child. It's all about providing the appropriate opportunities and measurements and doing your observations in a suitable environment and then score based on that. But of course there will always be some considerations with DLL children you know.”	Teacher thinks that assessing an Arab DLL child is somehow similar to assessing a monolingual child
“We do have that one but for Heba she knows English. You wouldn't really know the difference”	Teacher thinks that an Arab DLL child who speaks a good English doesn't need to be assessed as English learner

Quotation	Code
“If I'm not understanding what he is needing or wanting he'll use a lot of nonverbal cues like pointing or like he'll take our hand and he'll walk us to the area that he wants to play in or need something and then he'll like get our attention and let us know what he needs nonverbally as well”	Teacher observed that Arab DLL child attempt to express his needs nonverbally
“He's able to communicate what he wants and he does lots of he's verbal so he'll use Arabic and English with us”	Teacher observed that Arab DLL child uses Arabic and English words to express himself
“He's like academically and like the preschool life he's like he knows his numbers he knows how to count very to a high number he knows his English alphabet he knows his shapes he can use his fine motors like what we said with cutting or with writing and so academically he's very strong”	Teacher says that Arab DLL child is academically developing well
“He was talking in Arabic to his father and I said you know like what's going on like tell me like what is he talking about and so his dad informed me that he was matching the numbers and that he was counting all the numbers and that he was counting like the Bunny rabbits like up to 20 and so he was well advanced past the point that I thought that he was”	Teacher observed that Arab DLL child is more advanced in numbers in Arabic

Examples of the Quotes and Codes from Theme Six: Non-Arab Teachers Identified Needs for Additional Professional Development in both Context and Strategies for Assessing Arabic-English DLLs

Quotation	Code
“I believe it would be more helpful if they could've taught me more about G's culture and home language”	Teacher needs more cultural information form Arab DLL child' parents

“Assessing a child from a different background and a different home language needs awareness and some extra focus to be able to score fairly”

Teacher thinks that assessing an Arab DLL child needs more cultural and linguistic awareness and extra focus

“I think we really need time for assessment”

Teacher needs more time to assess an Arab DLL child

“Well yeah of course it would be so helpful if they could practice the language with him at home and show some support you know”

Teacher needs support from Arab DLL child parents in practicing English at home

“I also wish to have more support from both school side and parents’ side that would be so helpful.”

Teacher need support from school side

Examples of the Quotes and Codes from Theme Seven: Arab Parents' Perceptions of Their Children's Experiences and Progress in Preschools Mostly Aligned with Non-Arab Teachers

Quotation

Code

“He likes to do things by himself and prove himself. He does not like to depend on anyone.”

Parent says that her DLL child is independent

“He knows how to control his feelings”

Parent says that her Arab DLL child can control his emotions

“She is too peaceful and does not defend herself if someone takes something from her.”

Parent says that her Arab DLL child can't defend himself

Quotation	Code
“He has a fast-learning ability. He memorizes things easily, such as the flags of countries. He memorizes them from the first time”	Parent claims that her DLL child has a very strong memory and fast learning abilities
“He has insistence on what he wants to do, so if he wants something, he will do it, no matter how difficult, easy, or forbidden, he will do it”	Parent claims that her DLL child has insistence
“She loves drawing, loves others, she is sociable, and makes friends easily”	Parent says that her DLL child is sociable and friendly at school
“He asks me how do I say this thing in English? So he could say it tomorrow at school and keeps repeating the sentence until he fell asleep so he wouldn't forget it and say it tomorrow to his friends”	Parent says that her DLL child is eager to learn new words in English
“He can write numbers, write his name and recognizes the letters when we are on the street”	Parent claims that her DLL child can write numbers and his name and he recognizes the letters
“I noticed that he acquired the American accent from his teacher. His language developed a lot since we came to the US”	Parent thinks that her DLL child has improved
“I never noticed that he mixed the two languages. He separated them completely”	Parent claim that her DLL child doesn't mix Arabic and English
“J writes the letters backwards”	Parent says the her DLL child writes letters backwards

Quotation	Code
“I liked that there are Arab children in the class with J this made me feel comfortable”	Parent says it feels comfortable to have other dual language children in her child's class
“I feel their level is older than their age due to their presence and interaction with their older sisters most of the time”	Parent thinks that her DLL daughters’ level is higher than their age
“I hope they challenge them more in school. I feel that the curriculum is easy for them. They know all the letters and numbers. I asked the teachers to give them more assignments and to move from letters to writing words”	Parent wants more challenges and assignments for her DLL daughters

Examples of the Quotes and Codes from Theme Eight: Arab Parents Expressed Concerns about Cultural and Linguistic Barriers, as Well as Racism

Quotation	Code
“It was difficult for her because she did not know how to communicate with them because she did not know the English language”	Parent says that it was difficult for her DLL child to communicate at school
“I feel that he is still struggling in school and sometimes they do not understand what he means and what he needs, and I do not want him to go through such a situation”	Parent thinks that her Arab DLL child is still struggling at school because of language barriers
“The meeting wasn’t as successful as I hoped for it to be. She tried to show me the assessment standards and how the process goes, and she told me that my child may have developmental delays. I was so angry and I couldn’t express what I really wanted to say because my English is so poor and there wasn’t any interpreter to translate”	Parent is unsatisfied about the meeting with her child's teacher due to language barriers

Quotation	Code
“I had some real concerns when I received the report. I was afraid to find low numbers. I am sure of my child’s abilities, but I also know that he might not be able to deliver them in English”	Parent has concerns about her DLL child' assessment because of language barriers not because of his abilities
“I was afraid of racism since we are Arabs”	Parent had concerns about racism towards Arab
“I'm not very keen on teaching her Arabic now, I'm afraid she'll get confused”	Parent is worried that her DLL daughters will get confused when they learn two languages at the same time
“I am surprised that they never mentioned that they did not understand what she meant or something like that because I expected that one day they would mention this point to me, given that I speak to her in Arabic and I expected that they would ask me about something she said that they did not understand, but they never mentioned any of that”	Parent was concerned that her child's teachers would have difficulties understanding her

Examples of the Quotes and Codes from Theme Nine: Seems Like the Usual Communication Strategies Teachers use with Families were Effective, and Arab Parents Appreciated Translation of Assessment Results in Arabic

Quotation	Code
“That discussion led me to take my child to an Arab preschool teacher to ask her if she could assess my child and tell me if he’s having any developmental delays. And yeah she did assess him in Arabic and she told me that he has no delays at all and he is even advanced for his age. So yeah I don’t think this assessment process that they apply in his school is fair at all”	Parent reached out to an Arab teacher for an accurate assessment of her child
“I also liked that they sent me the assessment in Arabic, and this made me feel comfortable and that I could understand my child’s developmental process better since I do not speak English fluently”	Parent thinks that it was helpful when she received her DLL child' assessment in Arabic
“The parents conference was positive and they told me that my girls are role models in the class”	Teacher and parents has positive interactions
“Communication is easy via school app or at the drop off and pick up times, as well as in the parent conferences every semester”	Parent is satisfied about the communication methods with her DLL child' teacher
“I saw her assessment report and her progress and the skills she has acquired, and I saw that she is developing according to the standards, and since I am a pediatrician, I found that her language development is normal in terms of the number of words with her age”	Parent is satisfied about the assessment method
“Her mom is a big supporter of us and really want Heba to succeed”	Teacher says that DLL children' parents support them at home
“With J they only speak Arabic with her I guess so that's why you know like she doesn't practice the English as much”	Teacher thinks that lack of English practice at home slow down the DLL child progress

Quotation

Code

“His father and I also help him with that. He practices the language and what he learned in school at home”

Parents helps their Arab DLL child to develop his English language at home

REFERENCES

- Abdelgafar, G. M., & Moawad, R. A. (2014). Executive function differences between bilingual Arabic–English and monolingual Arabic children. *Journal of Psycholinguistic Research*, 44(5), 651–667. <https://doi.org/10.1007/s10936-014-9309-3>
- Aikens, N., West, J., McKee, K., Moiduddin, E., Atkins-Burnett, S., & Xue, Y. (2020). Screening approaches for determining the language of assessment for dual language learners: Evidence from Head Start and a universal preschool initiative. *Early Childhood Research Quarterly*, 51, 39-54.
- Asare, E., & Afriyie, E. (2023). Barriers to basic school teachers’ implementation of formative assessment in the Cape Coast Metropolis of Ghana. *Open Education Studies*, 5(1). <https://doi.org/10.1515/edu-2022-0193>
- Bagnato, S. J., Goins, D. D., Pretti-Frontczak, K., & Neisworth, J. T. (2014). Authentic assessment as “best practice” for early childhood intervention: National consumer social validity research. *Topics in Early Childhood Special Education*, 34, 116-127. doi:10.1177/0271121414523652
- Ballweg, J., Cortada, J., Cammilleri, A., Holmes, R., & Trembley, J. (2014). *Wida the early years: Dual language learners - university of wisconsin ... WIDA2*. <https://wida.wisc.edu/sites/default/files/resource/FocusOn-EarlyYears.pdf>
- Bandel, E., Atkins-Burnett, S., Castro, D. C., Wulsin, C. S., & Putnam, M. (2012). Examining the use of language and literacy assessments with young dual

- language learners (Final report). Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute, CECER-DLL.
- Barac, R., Bialystok, E., Castro, D. C., & Sanchez, M. (2014). The cognitive development of young dual language learners: A critical review. *Early childhood research quarterly*, 29(4), 699-714.
- Barnett, W. S., Yarosz, D. J., Thomas, J., Jung, K., & Blanco, D. (2007). Two-way and monolingual English immersion in preschool education: An experimental comparison. *Early Childhood Research Quarterly*, 22(3), 277–293.
<https://doi.org/10.1016/j.ecresq.2007.03.003>
- Barrueco, S., Lopez, M., Ong, C., & Lozano, P. (2012). Assessing Spanish-English bilingual preschoolers: A guide to best approaches and measures. Baltimore, MD: Brookes.
- Barron-Hauwaert, S. (2004). *Language strategies for bilingual families the one-parent-one-language approach*. Multilingual Matters.
- Bedore, L. M., Peña, E. D., Summers, C. L., Boerger, K. M., Resendiz, M. D., Greene, K., Gillam, R. B. (2012). The measure matters: Language dominance profiles across measures in Spanish- English bilingual children. *Bilingualism: Language and Cognition*, 15(3), 616-629.
- Berk, L. E. (2012). *Infants, children, and adolescents* (6th ed.). Boston, MA: Allyn & Bacon.
- Bialystok, E. (2017). The bilingual adaptation: How minds accommodate experience. *Psychological Bulletin*, 143(3), 233–262.
<https://doi.org/10.1037/bul0000099>

- Bodrova, E., & Leong, D. J. (2015). Vygotskian and post-Vygotskian views on children's play. *American Journal of Play*, 7(3), 371-388. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1070266.pdf>
- Boyle, B., & Charles, M. (2014). What is formative assessment? *Formative Assessment for Teaching & Learning*, 6–33. <https://doi.org/10.4135/9781526401861.n2>
- Brebner, C., McCormack, P., & Rickard Liow, S. (2016). Marking of verb tense in the English of preschool English–Mandarin bilingual children: evidence from language development profiles within subgroups on the Singapore English Action Picture Test. *International Journal of Language & Communication Disorders*, 51(2), 31-43.
- Budiman, A. (2020, May 7). *Asian Americans are the fastest-growing racial or ethnic group in the U.S. electorate*. Pew Research Center. <https://www.pewresearch.org/short-reads/2020/05/07/asian-americans-are-the-fastest-growing-racial-or-ethnic-group-in-the-u-s-electorate/>
- Butler, Y. G. (2012). Bilingualism/multilingualism and second-language acquisition. *The Handbook of Bilingualism and Multilingualism*, 109–136. <https://doi.org/10.1002/9781118332382.ch5>
- Castro, D. C. (2014). The development and early care and education of dual language learners: Examining the state of knowledge. *Early Childhood Research Quarterly*, 29(4), 693-698.
- Charmaze, K. (2006). *Constructing a grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Sage Publications, Inc.

- Choi, J. Y., Van Pay, C. K., & Beecher, C. C. (2023). Preschool language exposure and use: A comparison study of dual-language learners and English monolingual children. *Infant and Child Development*, 32(3). <https://doi.org/10.1002/icd.2420>
- Chun Tie, Y., Birks, M., & Francis, K. (2019). Grounded Theory Research: A design framework for novice researchers. *SAGE Open Medicine*, 7, 205031211882292. <https://doi.org/10.1177/2050312118822927>
- Creswell, J. W. (2011). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Upper Saddle River, NJ: Merrill.
- Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the Optimal Age Issue. *TESOL Quarterly*, 14(2), 175. <https://doi.org/10.2307/3586312>
- Cummins, J. (1983). Heritage language education: A literature review. Publication Sales, Ontario Institute for Studies in Education, 252 Bloor St. West, Toronto, Ontario M5S 1V6 Canada.
- Cummins, J. (1999). BICS and CALP: Clarifying the Distinction. ERIC. <https://doi.org/https://files.eric.ed.gov/fulltext/ED438551.pdf>
- Cummins, J.: 2001, *Negotiating identities: Education for empowerment in a diverse society*. (2nd edition). Los Angeles, CA: California Association for Bilingual Education.
- De Lamo White, C., & Jin, L. (2011). Evaluation of speech and language assessment approaches with bilingual children. *International Journal of Language and Communication Disorders*, 46(6), 613-627.

- Fernandez, M. C., Pearson, B. Z., Umbel, V. M., Oiler, D. K., & Molinet-Molina, M. (1992). Bilingual receptive vocabulary in Hispanic preschool children. *Hispanic Journal of Behavioral Sciences*, 14(2), 268–276.
<https://doi.org/10.1177/07399863920142006>
- Fellure, J. M., & Thornton, B. (2009). The Nations, their histories, and their conflicts: The Middle East. New York: Fall River Press.
- FRANCESCHINI, R. (2011). Multilingualism and multicompetence: A conceptual view. *The Modern Language Journal*, 95(3), 344–355.
<https://doi.org/10.1111/j.1540-4781.2011.01202.x>
- García, O. (2009). *Bilingual education in the 21st century: A global perspective*. Malden, MA: Wiley/Blackwell.
- García, O., & Leiva, C. (2014). Theorizing and enacting translanguaging for social justice. In A. Blackledge & A. Creese (Eds.), *Educational Linguistics book series, Heteroglossia as practice and pedagogy* (pp. 199–218). Boston, MA: Springer.
- Genesee, F., Paradis, J., & Crago, M. B. (2004). *Dual language development and disorders: A handbook on bilingualism and second language learning*. Baltimore, MD: Paul Brooks Publishing.
- Grisham-Brown, J., & Pretti-Frontczak, K. (2011). *Assessing Young Children in Inclusive Settings: The Blended Practices Approach*.
- Grosjean, F. (2008). *Studying bilinguals*. Oxford, England: Oxford University Press.
- Guzman-Orth, D., Lopez, A. A., & Tolentino, F. (2017). A framework for the dual language assessment of young dual language learners in the United States. *ETS Research Report Series*, 2017(1), 1-19.

- Hakuta, K., Butler, Y., & Witt, D. (2000). How Long Does It Take English Learners to Attain Proficiency? *The University of California Linguistic Minority Research Institute Policy Report*.
[https://doi.org/https://web.stanford.edu/~hakuta/Publications/\(2000\)%20-%20HOW%20LONG%20DOES%20IT%20TAKE%20ENGLISH%20LEARNERS%20TO%20ATTAIN%20PR.pdf](https://doi.org/https://web.stanford.edu/~hakuta/Publications/(2000)%20-%20HOW%20LONG%20DOES%20IT%20TAKE%20ENGLISH%20LEARNERS%20TO%20ATTAIN%20PR.pdf)
- Halle, T. G., Whittaker, J. V., Zepeda, M., Rothenberg, L., Anderson, R., Daneri, P., ... & Buysse, V. (2014). The social-emotional development of dual language learners: Looking back at existing research and moving forward with purpose. *Early Childhood Research Quarterly*, 29(4), 734-749.
- Hamdan, A. (2014b). Muslim women stereotyped. *American Journal of Islam and Society*, 31(1), 70–96. <https://doi.org/10.35632/ajis.v31i1.294>
- Hammer, C. S., Hoff, E., Uchikoshi, Y., Gillanders, C., Castro, D. C., & Sandilos, L. E. (2014). The language and literacy development of young dual language learners: A critical review. *Early Childhood Research Quarterly*, 29(4), 715-733.
- Hassoun, R. J. (2005). *Arab Americans in Michigan*. Michigan State University Press.
- HighScope (2013). COR advantage. *ReSource*. Retrieved 2024, from https://highscope.org/wp-content/uploads/2018/08/Winter2013_150.pdf.
- Joubert, I. 2015. Assessment of EFAL (Chapter 9). In: N. Phatudi. (Ed.). *Introducing English as First Additional Language in the Early Years*. Cape Town: Pearson.
- Karem, R. W., & Washington, K. N. (2021). The cultural and diagnostic appropriateness of standardized assessments for dual language learners: A focus on Jamaican

- preschoolers. *Language, Speech, and Hearing Services in Schools*, 52(3), 807-826.
- King, K., & Fogle, L. (2007). Bilingual parenting as good parenting: Parents' perspectives on family language policy for additive bilingualism. *International Journal of Bilingual Education and Bilingualism*, 9(6), 695–712.
<https://doi.org/10.2167/beb362.0>
- Kohnert, K. (2010). Bilingual children with primary language impairment: Issues, evidence and implications for clinical actions. *Journal of Communication Disorders*, 43(6), 456–473. <https://doi.org/10.1016/j.jcomdis.2010.02.002>
- López, L. M., & Tápanes, V. (2011). Latino children attending a two-way immersion program in the United States: A comparative case analysis. *Bilingual Research Journal*, 34(2), 142–160. <https://doi.org/10.1080/15235882.2011.598087>
- López, L. M. (2012). Assessing the phonological skills of bilingual children from preschool through kindergarten: Developmental progression and cross-language transfer. *Journal of Research in Childhood Education*, 26(4), 371–391.
<https://doi.org/10.1080/02568543.2012.711800>
- Magruder, E. S., Whitcomb, W. H., Espinosa, L. M., & Matera, C. (2013). Many languages, one teacher: Supporting language and literacy development for preschool dual language learners. *Young Children*, 68(1), pp. 8–15.
- MARCHMAN, V. A., FERNALD, A., & HURTADO, N. (2010). How vocabulary size in two languages relates to efficiency in spoken word recognition by young Spanish–English bilinguals. *Journal of Child Language*, 37(4), 817–840.
<https://doi.org/10.1017/s0305000909990055>

- Méndez, L. I., Hammer, C. S., Lopez, L. M., & Blair, C. (2019). Examining language and early numeracy skills in young Latino dual language learners. *Early Childhood Research Quarterly*, 46, 252-261.
- Michigan legislature. (2022). THE STATE SCHOOL AID ACT OF 1979 (EXCERPT) Act 94 of 1979. Retrieved November 14, 2022, from [http://www.legislature.mi.gov/\(S\(byllob3hfoxh3f3yzfdo3qw2\)\)/mileg.aspx?page=getObject&objectName=mcl-388-1641#bottom](http://www.legislature.mi.gov/(S(byllob3hfoxh3f3yzfdo3qw2))/mileg.aspx?page=getObject&objectName=mcl-388-1641#bottom)
- Mooney, C. G. (2000). *Theories of childhood: An introduction to Dewey, Montessori, Erikson, Piaget & Vygotsky*. St. Paul, MN: Redleaf.
- Moslimani, M. (2023). *5 facts about Arabic speakers in the U.S.* Pew Research Center. <https://www.pewresearch.org/short-reads/2023/05/18/5-facts-about-arabic-speakers-in-the-us/>
- National Academies of Sciences, Engineering, and Medicine. (2017). *Promoting the Educational Success of Children and Youth Learning English: Promising Futures*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24677>.
- National Council of Teachers of Mathematics. (2007). *What does research say the benefits of formative assessments are?* Reston, VA.
- Nydell, M. K. (2012). *Understanding Arabs: A contemporary guide to Arab society*. Boston: Intercultural Press.
- Oades-Sese, G. V., Esquivel, G. B., Kaliski, P. K., & Maniatis, L. (2011). A longitudinal study of the social and academic competence of economically disadvantaged bilingual preschool children. *Developmental Psychology*, 47(3), 747–764. <https://doi.org/10.1037/a0021380>

- Office of Head Start Administration for Children and Families. (2013). *Report to Congress on Dual Language Learners in Head Start and Early Head Start Programs - report_to_congress.pdf*. Retrieved from http://www.acf.hhs.gov/sites/default/files/opre/report_to_congress.pdf
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2013). Purposeful sampling for qualitative data collection and analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Palmer, B. C., El-Ashry, F., Leclerc, J. T., & Chang, S. (2007). Learning from Abdallah: A case study of an Arabic-speaking child in a U.S. school. *The Reading Teacher*, 61(1), 8–17. <https://doi.org/10.1598/rt.61.1.2>
- Paradis, J., Emmerzael, K., & Duncan, T. S. (2010). Assessment of English language learners: Using parent report on first language development. *Journal of Communication Disorders*, 43(6), 474-497.
- Peets, K. F., & Bialystok, E. (2015). Academic discourse: Dissociating standardized and conversational measures of language proficiency in bilingual kindergarteners. *Applied Psycholinguistics*, 36(2). <https://doi.org/10.1017/s0142716413000301>
- Piaget, J., & Inhelder, B. (1969). *The psychology of the child Jean Piaget and Bärbel Inhelder ; translated from the French by Helen Weaver*. Routledge & Kegan Paul.

- Pool, J. L., & Hampshire, P. (2019). Planning for authentic assessment using unstructured and structured observation in the preschool classroom. *Young Exceptional Children*, 23(3), 143–156. <https://doi.org/10.1177/1096250619846919>
- Reyes, I., & Azuara, P. (2008). Emergent biliteracy in young Mexican immigrant children. *Reading Research Quarterly*, 43(4), 374-398.
- Samson, J. F., & Lesaux, N. K. (2009). Language-minority learners in special education. *Journal of Learning Disabilities*, 42(2).
<https://doi.org/10.1177/0022219408326221>
- Schunk, D. H. (2012). *Learning Theories, an Educational Perspective* (6th ed.). Boston, MA: *Pearson Education Inc.*
- Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. (4th ed.). New York, NY: Teachers College Press.
- Shannon, S. M., & Milian, M. (2002). Parents choose dual language programs in Colorado: A survey. *Bilingual Research Journal*, 26(3), 681-696.
- Snow, C. E., & Hoefnagel-Hohle, M. (1978). The critical period for language acquisition: Evidence from Second language learning. *Child Development*, 49(4), 1114.
<https://doi.org/10.2307/1128751>
- Snow, C. E., & Van Hemel, S. B. (2008). *Early childhood assessment: Why, what, and how*. Washington, D. C.: *The National Academies Press*.
- Smolak, E., de Anda, S., Enriquez, B., Poulin-Dubois, D., & Friend, M. (2019). Code-switching in young bilingual toddlers: A longitudinal, cross-language

- investigation. *Bilingualism: Language and Cognition*, 23(3), 500–518.
<https://doi.org/10.1017/s1366728919000257>
- Street, B., & May, S. (2019). *Literacies and Language Education*. Springer International Publishing.
- Sugarman, J., & Geary, C. (2018). *English learners in Michigan*. Migration Policy Institute. https://www.migrationpolicy.org/sites/default/files/publications/EL-factsheet2018-Michigan_Final.pdf
- Thordardottir, E. (2015). The relationship between bilingual exposure and morphosyntactic development. *International Journal of Speech-Language Pathology*, 17(2), 97-114.
- Thomas, W., & Collier, V. (2002). *A National Study of School Effectiveness for Language Minority Students' Long-Term Academic Achievement*.
<https://doi.org/https://files.eric.ed.gov/fulltext/ED475048.pdf>
- U.S. Department of Health and Human Services. U.S. Department of Education. (2017, January). Policy statement on supporting the development of children who are dual language learners in early childhood programs. Retrieved from
https://www.acf.hhs.gov/sites/default/files/ecd/dll_policy_statement_final.pdf
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wakabayashi, T., Claxton, J., & Smith Jr, E. V. (2019). Validation of a revised observation-based assessment tool for children birth through kindergarten: The COR advantage. *Journal of Psychoeducational Assessment*, 37(1), 69-90.

- Wijayanti, A., Wekadigunawan, C., & Murti, B. (2018). The effect of parenting style, Bilingual School, social environment, on speech and language development in preschool children in Surakarta, Central Java. *Journal of Maternal and Child Health*, 03(03), 184–196. <https://doi.org/10.26911/thejmch.2018.03.03.03>
- Winsler, A., Burchinal, M. R., Tien, H. C., Peisner-Feinberg, E., Espinosa, L., Castro, D. C., ... & De Feyter, J. (2014). Early development among dual language learners: The roles of language use at home, maternal immigration, country of origin, and socio-demographic variables. *Early Childhood Research Quarterly*, 29(4), 750-764.
- Yoo, K., Welden, R., Hewett, K., & Haenlein, M. (2023). The merchants of Meta: A research agenda to understand the future of retailing in the metaverse. *Journal of Retailing*, 99(2), 173–192. <https://doi.org/10.1016/j.jretai.2023.02.002>