

A Mother Promotes Cognitive and Affective Outcomes Via Museum Education on Arab American Immigrants' Culture: A Vygotskian Perspective

Navaz Peshotan Bhavnagri and Suha Khalid Kamash

Abstract

A Chaldean Catholic immigrant mother from Iraq kept a journal about how her Arab American daughters (ages 9 and 15) visited museums for the first time and participated in museum-related activities that focused on them (1) understanding and developing empathy for all new immigrants coming to the U.S.; (2) understanding and developing appreciation of Arab American immigrants' culture; and (3) being exposed to limited Arabic vocabulary related to museum artifacts. The mother's anecdotal observations, informal conversational interviews, and photographs documented her daughters' learning processes and outcomes. The cognitive processes and outcomes (e.g., understanding, meaning making through personal memories, information-seeking skills, co-construction of knowledge, creative self-expression, new vocabulary) and affective processes and outcomes (e.g., empathy, appreciation, parent-child-sibling socioemotional collaboration) are discussed within a Vygotskian sociocultural framework. The mother scaffolded the girls to reach their upper Zone of Proximal Development (ZPD) using multiple Vygotskian cultural and physical tools (e.g., museum artifacts, visual and culinary arts materials, children's books, technology). Lastly in this report from the field, the lessons learned are discussed, including conclusions and recommendations for parents and teachers on museum education.

Key Words: mother's journal, Arab American immigrant culture, museums, Vygotsky, cultural, cognitive, affective outcomes, empathy, appreciation, family

Introduction

In 2016, nearly 1.2 million immigrants from the Middle Eastern and North Africa (MENA) region lived in the United States. From 2010 to 2016, the immigrant population from the MENA region increased by 36%, (i.e., from 861,000 to 1,167,000 individuals); out of 1,167,000 MENA immigrants, 810,000 (69.4%) were from the Middle East, and the remaining were from North Africa (Cumoletti & Batolova, 2018). Given that this large majority were Middle Eastern immigrants and that the Iraqis are the largest group who have immigrated recently from the Middle East (Cumoletti & Batolova, 2018), we examined the role of museums to promote, first, an understanding and empathy for new immigrants who arrive from various countries around the world, and second, the cultural heritage of two Iraqi Arab American children.

This article is unique in the following manner. First, according to our searches on the ERIC database (via ProQuest), there were more studies on teachers using museums to promote formal education and comparatively fewer studies and best practices published on parents using museums to promote informal education. This was particularly true regarding parents informally teaching about immigrants' experiences. Second, none of the references found on parent participation at the museums reported parents encouraging their children to use mobile technology. Third, none of the information on parents using museums was written from an insider's perspective, namely, the parent. Thus, this article addresses the above stated three gaps in existing scholarly literature by discussing (1) best practices for parents in promoting informal education and particularly informally teaching about immigrants, (2) parents using mobile technology not only during the museum visits but also before and after the visits, and (3) these experiences from the mother's own perspective.

First, we share Mrs. Suha Kamash's (i.e., the mother's) journal regarding an overview of Arab American thematic units which she and Dr. Navaz Peshotan Bhavnagri (i.e., her mentor) co-constructed collaboratively based on Mrs. Kamash's goals for her daughters' visits to the museums. Second, we discuss the Vygotskian conceptual framework. Third, we describe how the museum visits were implemented to understand and develop empathy for all new immigrants. Fourth, we describe how the museum visits were implemented to understand and appreciate Arab American immigrant's culture, in particular. Finally, we discuss the lessons learned, including recommendations for parents and teachers on museum education.

Mother's Journaling: Overview

The second author, who is a mother and an educator, kept a journal based on the advice from her academic mentor (the first author), whose expertise is on acculturation of immigrants, cross-cultural child rearing, and parent–community–school collaboration. First, given that this mother had never taken her children who were born and raised in the U.S. to any museums, her overall goal was to simply journal about this novel experience. Second, she planned to document how her two daughters' (1) cognitively understood and affectively developed empathy towards immigrants in general; and (2) cognitively understood and affectively developed appreciation of their Arab American immigrants' culture, in particular, including exposure to limited Arabic vocabulary. Third, she hoped to promote her professional growth by conceptualizing a museum as a community resource for informal education (Epstein, 2010; Epstein et al., 2009; National PTA, 2004).

This journal focuses on two sisters: Mina, 15 years old, who was in tenth grade, and Chelsea, nine years old, who was in fourth grade. (Note: Both the parents and their daughters have given permission to use their actual names.) Both girls speak, read, and write English fluently. They cannot read or write Arabic but occasionally speak very limited Arabic words and phrases at home. Their Chaldean Catholic parents immigrated from Iraq 16 years prior to the mother starting her journal. Their mother has a master's degree in education and has been working as a substitute teacher for multiple years. She is highly proficient in Arabic and English and taught English at a university level in Iraq.

The mother documented four weekly visits in her journal; three were to the Arab American National Museum and one to the Detroit Institute of Arts. The first visit was focused on developing an understanding and empathy for an immigrant individual's experiences in general. The next three visits focused on three components of Arab American cultural artifacts available at the museums, namely those representing their religious life, aesthetic life, and family life. Under her mentor's guidance and supervision, the mother planned pre-visit activities, museum visits, and post-visit activities; took anecdotal notes; informally interviewed her children in a conversational manner; and pictorially documented their learning. All her observations, interviews, and photographic documentation were recorded as suggested by Mukherji and Albon (2015) and are now reported in the implementation section. (Note: The parents have granted permission for publication of the photos from her journal.)

The mother's journal entries included her daughters' comments indicative of their understanding and empathy for immigrants in general, as well as understanding and appreciation of religious, aesthetic, and family life within

Arab American culture in particular. Given that Arabic language is an integral component of Arab American immigrant culture, the mother decided that her daughters should be exposed to 15 selected Arabic words related to these museum experiences. She identified those words and wrote them in her journal. They included three words on immigrant process, six words on religious life, three on aesthetic life, and three on family life. She first asked her daughters if they knew what those words meant. She wrote in her journal, “Mina knew two words, and they were *masbaha* [i.e., rosary], and *Al Matbakh Al Arabi* [i.e., Arabic Kitchen]; Chelsea only knew one, namely *masbaha* [i.e., rosary].”

Mrs. Kamash informally conducted eight conversational follow-up interviews where both her daughters were interviewed together. One interview was conducted after each of the four museum visits, and another interview was conducted after the completion of each of the four follow-up activities. Based on Ash’s museum study’s (2004) findings, the mother asked questions which linked artifacts and activities to meaningful past experiences, inviting explanations and observations, and expanding the daughters’ funds of cultural and household knowledge (Gonzalez, Moll, & Amanti, 2005). Her daughters’ responses to these interviews, additional informal conversations with the mother and the sibling, and participation in museum-related activities were reported in her journal and interpreted using Vygotsky’s conceptual framework, which is discussed next.

Our Conceptual Framework: Vygotsky’s Sociocultural Theory

The mother’s mentor recommended that she use Vygotsky’s Sociocultural Theory, also called Sociohistorical Theory, as her conceptual framework because it considers social interactions and human activities with cultural and historical objects essential for promoting higher mental processes such as language and cultural understanding (Vygotsky, 1978, 1986). Given that museum visits are social, cultural, and historical experiences, multiple scholars in museum education acknowledge Vygotsky’s theory as a highly appropriate framework (e.g., Ash, 2003; Coffee, 2007; Mayer, 2005; Pierroux, 2003). Thus, the mother interpreted her journal entries using Vygotsky’s concepts of: (1) scaffolding, (2) the zone of proximal development which is promoted through Vygotskian interpersonal dialogue contributing to intrapersonal thought and is evaluated using dynamic assessment, and (3) physical and cultural tools contributing to mental tools, including language.

Scaffolding is the process of an expert (e.g., an adult) assisting a novice (e.g., a child; Jones, Rua, & Carter, 1998), but then the expert gradually reduces assistance as the novice gains competency (Berk & Winsler, 1995). According

to Vygotsky, learning happens during social conversations between an expert and a novice (e.g., this mother and her children; the older and younger sibling; Wink & Putney, 2002) resulting in what Vygotsky calls “distributed cognition,” “socially shared cognition,” and “co-construction” (Bodrova & Leong, 2007; Rogoff, 1990). Distributed cognition, socially shared cognition, and co-construction all refer to a joint activity where two or more parties share their thoughts resulting in totally transformative thinking among all those who participated in it. Thus, it is not a mere process of adding ideas but is instead changing existing ideas and generating totally new ones.

Vygotsky’s theory states that there is a zone of proximal development (ZPD) which is the distance between actual developmental level as determined by level of independent performance (i.e., lower ZPD) and the level of potential development as determined by assisted performance from a more knowledgeable peer or adult (i.e., upper ZPD; Rogoff & Wertsch, 1984; Vygotsky, 1978). Every child needs assistance with new concepts which are first understood within interpersonal dialogues—also referred to as public speech, external speech (Vygotsky, 1978, 1986), or intersubjectivity (Rogoff, 1990; Wood, 1980)—between the expert and novice, until it finally becomes internalized, intrapersonal dialogue, also called private speech or internal speech. Vygotsky’s dynamic assessment occurs when the child’s abilities are evaluated both at the lower and upper ZPD levels and when teaching and assessment are integrated, not considered two mutually exclusive tasks (McAfee, Leong, & Bodrova, 2016).

Vygotsky also recommended the use of physical tools contributing to a mental tool, such as language (Newman & Holzman, 1993), thus scaffolding and expanding human beings’ mental capacity (Bodrova & Leong, 2007). Furthermore, according to Vygotsky, cultural artifacts such as those seen at the museums are tools communicating social and linguistic practices of a particular time in history (Coffee, 2007). These cultural museum artifacts are best understood by bringing personal meaning to them, especially when that meaning is co-constructed through social discourse about them (Coffee, 2007; Pierroux, 2003).

Mrs. Kamash applied the three above stated Vygotskian concepts. For example, she scaffolded through interpersonal dialogues (i.e., co-construction of knowledge), using physical tools (i.e., whiteboards, notebooks, placards, sticky notes, story books, PowerPoint, tablet, smartphone) and cultural tools (i.e., examining cultural museum artifacts, constructing similar artifacts). She first dynamically assessed her daughters’ understanding and empathy for immigrants in general and next assessed their understanding and appreciation of Arab American culture, including Arabic vocabulary (i.e., mental tools), which are discussed in the two implementation sections that follow. These two dynamic

assessments were conducted during the implementation of museum visits as a community educational resource and are discussed in the next section.

Museum Education and Dynamic Assessment of Understanding and Empathy for New Immigrants

The purpose of the week one museum visit was to scaffold the girls to develop an overall understanding of the immigrant process and empathy for new immigrants coming from around the world.

New Immigrants From Around the World

During week one, the focus was on the Arab American National Museum's artifacts depicting the immigrant process for all immigrants from around the world and on the three Arabic words related to it: *hijra* (immigration), *jinseya* (citizenship), and *Al Watan Al Arabi* (the Arab World).

Before the Museum Visit

First, the mother and her daughters discussed immigrants being processed when watching an online video titled *Ellis Island: History of Immigration to the United States, 1890–1920* (Best Film Archives, 2013, <https://www.youtube.com/watch?v=8X4CypTaOOQs>). During her interpersonal dialogue with her daughters, she introduced *hijra*, the Arabic word for immigration, and encouraged them to repeatedly use it.

Next, the daughters were encouraged to role play as immigrants like the ones they had seen in the video. They had to construct a wish list of 10 items they might take with them when they immigrate. However, they then were asked to finally choose one item from their wish list. Mrs. Kamash's daughters found it difficult to decide what to list because they could not fully understand the immigrant's perspective. For example, they could not fathom what it really feels like to leave their country and home permanently, leave most of their physical belongings, and also leave family, friends, and sometimes one parent—then go and live in a strange new country and never return. Chelsea asked her mother, "It has to be 10? I could only think of two [items]." Mina chose money and children for her wish list. When the mother asked for her rationale, Mina answered, "Things that I need and are important."

Based on their lower ZPD performance, the mother then scaffolded her daughters to take on the immigrant's perspective by providing the specific sociocultural context they might confront as immigrants. She said, "I don't think you are getting this. So, we are leaving our house, and we can't take everything with us. We are going to live in a new country, a country where we don't know

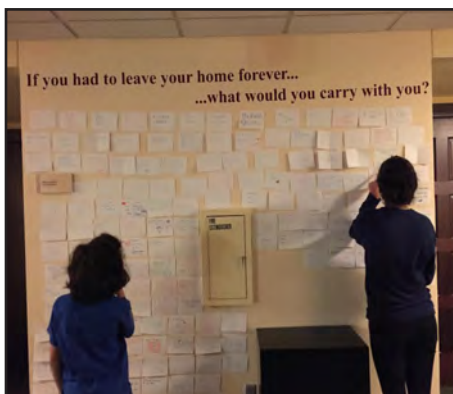
the language, we don't know the people, and we have no home there, and we are going to be all by ourselves. Can you imagine living like that? Can you put yourself in that situation?" She was attempting to help her daughters understand the totality of children's immigrant experiences (Bhavnagri, 2001), especially the inner needs and feelings of an immigrant child (Igoa, 1995), such as acculturative stress when uprooted (Sam & Berry, 2006). She thus used Vygotsky's interpersonal dialogue or public speech to bring about their intrapersonal thought. The mother next commented, "Now let's see what Chelsea has picked." Chelsea replied, "I picked parents and precious artifacts," thus creating a list similar to her older sister's wish list. The mother replied, "Parents are coming with you and Chelsea; parents are not things!" Mrs. Kamash, through this dynamic assessment, realized that her daughters had limited background knowledge; their first introductory activity of simply seeing a video was insufficient scaffolding for this empathetic role playing. Therefore, at this juncture, they could not easily take the perspective of an immigrant and make a personal connection to an immigrant's emotions and dilemmas.

She thus solicited guidance from her mentor on how to promote perspective taking in her daughters. Her mentor scaffolded her to read sources on how children's literature—when supplemented with immigration-related activities—promotes understanding, empathy, and taking the perspective of immigrant children (e.g., Bhavnagri & Willete, 2011). Thus, her mentor suggested using books as physical tools and having interpersonal dialogues during interactive reading and follow-up activities to move her daughters to a higher level of ZPD on Selman's (1980) perspective taking (see, e.g., Mabry & Bhavnagri, 2012).

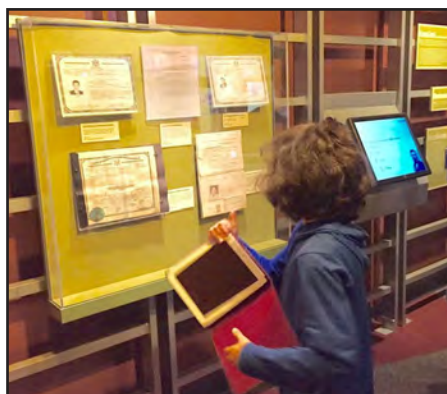
During the Museum Visit

At the Arab American National Museum, first, her daughters mused at the special exhibit labeled "What We Carried" and took pictures of framed photos of artifacts of what immigrants brought with them. Mina browsed and thoughtfully read the description of photos for each cultural artifact such as a rug, an Iraqi flag, and an Iraqi traditional hand fan. Chelsea, on the other hand, enthusiastically went around taking photographs on her tablet of artifacts that interested her. Thus, both daughters were expanding their cognitive capacities using Vygotskian physical tools, namely (1) placards for comprehension of the Arab American artifacts and artifacts brought by immigrants that arrived in the 21st century from the Middle East; (2) tablet and smartphone for searching out information and for documenting visual details with photos; and (3) an interactive map for identifying locations in the Middle East.

Second, her daughters were very excited to see a wall filled with sticky notes written by other museum visitors of things they would take with them should they have to leave their home. They found a couple of choices of other people that resembled theirs, such as phones and family photos. These sticky notes were physical tools that activated comparisons of similarities and differences in decision making and moved them toward their upper ZPD.



Daughters reading notes left by other museum visitors on what they will take with them when they immigrate



Chelsea getting ready to take a picture of a citizenship certificate with her tablet

Third, the mother scaffolded them by asking, “How many countries do you see on this map of the Arab World from where these immigrants came from?” After counting the countries on the map and researching the subject on their smartphone and tablet, they answered, “22.” Mrs. Kamash continued her interpersonal dialogue to promote her daughters’ intrapersonal thoughts by further asking them, “Who can remember the phrase Arab World in Arabic?” Both girls shouted out, “*Al Watan Al Arabi.*”

Fourth, the mother also reminded her daughters to take photographs of the naturalization certificate that they had talked about before the museum visit, thus scaffolding them to connect their abstract vocabulary with concrete historical and cultural artifacts. They excitedly took photographs of all the artifacts brought by various immigrants, such as a miniature flag, the traditional hand fan, and pages from an immigrant’s diary. Chelsea saw and recognized the citizenship certificate and enthusiastically shouted out, “Mom, I found it, *jinseya*. I am going to take some photos. Mina, come take some pictures of the *jinseya*.” As they took photos, they repeated the word in Arabic over and over. Hence, they seemed to intuitively know that their public speech, if sufficiently repeated, would be internalized and become Vygotskian private speech.

Fifth, the mother and daughters watched a short movie about Arab immigrants in the U.S. that was playing, *Arab American Road Movie* (Arab American

National Museum, 2010a, 2010b; Note: At the museum, this was presented as one film; however, for this article's references, we refer the reader to the YouTube version which is available in two sections, Part 1: https://www.youtube.com/watch?v=8dORIALA2_U, and Part 2: <https://www.youtube.com/watch?v=qBg4GqHVzM4&t=49s>). Both girls said that they enjoyed the short movie very much (i.e., affective outcome) because they could relate to the people who were speaking in the movie. The girls said, "They do things the same way that we do as a family—the big family gatherings, kissing every family member you meet on the cheek, the Arabic food we cook and eat," demonstrating understanding of their cultural practices and their own heritage. Thus, now they could take an immigrant's perspective, attributed to the following reasons. Now, they had themselves interacted with a plethora of museum artifacts and taken photographs of them. This movie depicted Middle Eastern immigrants and not European immigrants; also, the immigrants in this movie had arrived relatively recently (after 1960, approximately) and were thus more relatable, unlike the immigrants in the Ellis Island video the family viewed earlier. Finally, the movie had captured these immigrants participating in family interactions similar to their own. This perspective taking in turn contributed to developing empathy for the new immigrants.

After the Museum Visit

To promote further understanding and empathy, the mother chose three books about immigrant children facing hardships from an annotated bibliography chapter on children's literature on immigrants (Bhavnagri & Willete, 2011). They read these books together and also did related activities, which is discussed next.

The mother and daughters read *My Diary from Here to There* (Perez, 2013), in which Amada used her diary as a Vygotskian mental tool to self-reflect and thus cope with her stressors of relocation when immigrating and leaving her friends behind. Mina and Chelsea thus role played that they too were immigrating, and so they had to make a card to give to their best friend. Mina drew a cat on her card because her best friend loves cats. Chelsea drew a football because she loves to play football with her best friend. The girls seemed to enjoy making the cards for their friends. They both said they liked the story because it made them feel what that girl was feeling when she had to leave her home, thus showing empathy.

They also read together *A Piece of Home* (Levitin, 1996) which is a story about a little boy who is bewildered and scared about his parents moving to the U.S. and is tormented by the choice of only one personal item that he is allowed to take with him. He finally settled on a baby blanket that his grandmother

gave him; it acted as a Vygotskian tool reminding him of fond memories of his grandmother and thus gave him emotional comfort throughout his transition. The mother hence asked the girls, "If you have to choose one thing to take with you, what would it be and why?" Mina reflectively responded that she would take her friend's names and phone numbers, and also family photos and videos because they reminded her of the happy times she spent with them. Chelsea said she would take photographs because they would remind her of her family members who she has left behind.

The mother recorded Vygotskian dynamic assessment when she wrote that her daughters, after their museum visit, had selected thoughtfully and provided rational explanations. She determined that they had reached their upper ZPD with plenty of assistance, such as watching the video, seeing the movie and artifacts at the museum, and listening to stories upon returning from the museums. It was unlike their list before the visit, where they had hurriedly written two items. That was their lower ZPD, for they had not yet had the participatory experience of a museum visit and related activities.

They next read *Lights for Gita* (Gilmore, 1995) in which Gita from India experienced acculturative stress because she was finding it hard to adjust to her new home and missed the participation of cultural practices with her extended family. Lighting the Diwali candles called "diyas" on the festival of lights, called Diwali, is a Vygotskian physical tool which empowered Gita to cope with her acculturative stress. It promoted resiliency to overcome her despair.

The mother asked her daughters what Gita was thinking of all the time as she is walking home. Mina answered, "Back home and how they do things in India, how they celebrated together as a big family, not just herself and her mother and father." Now, Mina could take the perspective of Gita's Vygotskian interpersonal dialogs. Chelsea stated, "She was sad, and then she kinda felt better because the power went out, and she lighted all the candles they made for Diwali, and these candles lit up the room." With this answer Chelsea recognized Gita's acculturative stress and her resiliency to cope with it using cultural tools symbolized here by the candles, which lit up her currently gloomy immigrant life. Chelsea's response portrays her moving towards her upper ZPD, with assistance from interactive reading. Both daughters recognized the change in Gita's feelings, and Chelsea said that, "Gita felt warmth and happiness and also her friend coming over made her happy." When their mother asked them what they liked about the story, Mina said, "I liked how she wanted to recreate her experience from back home in her new home and not let it die out and how she was trying to keep her Indian culture just like us when we gather with our uncles and aunts during holidays and eat our traditional foods." Chelsea said, "I liked how she didn't try to give up how she celebrated her own culture."

Hence, both daughters appreciated Gita's resiliency in sustaining her minority ethnic culture and found it similar to their minority ethnic immigrant identity. Thus, the mother's Vygotskian interpersonal dialogue promoted intrapersonal understanding and empathy towards Gita.

Gradually, the girls started taking the perspective of immigrants and how it felt to leave familiar surroundings and go to unfamiliar locations. For example, Mina told her mother, "But I know how they feel...I felt the same when we moved from Detroit to our new home. I was scared, and I didn't know what to do, and I didn't know how to fit in. I moved from a private school to a public school, and things that I had to learn that were different, and none of my friends were there. It was very difficult for me." Thus, the discussion led by the mother of the books on immigrants, which were used as physical tools, facilitated both the girls advancing to their upper ZPD.

Museum Education and Dynamic Assessment of Understanding and Appreciation of Arab American Immigrant's Culture

For the next three weeks, the mother and children visited the museums to understand and appreciate Arab American immigrants' culture through their religious, aesthetic, and family life.

Arab American Immigrants' Religious Life

During week two, the focus was on the Detroit Institute of Arts' religious artifacts and the six words related to them: *Al Islam* (Islam), *Al Maseehiya* (Christianity), *Masbaha* (rosary), *Sibha* (prayer beads), *Injeel* (Bible), and *Quraan* (Koran).

Before the Museum Visit

Mrs. Kamash and her daughters watched a YouTube video about five children going to their individual places of worship titled *5 Enfants, 5 Religions* (Mercadante, 2015, <https://www.youtube.com/watch?v=YxucjtnR45I>). They next watched another YouTube video titled, *The Five Major World Religions* (Bellaimey & TED-Ed, 2013, <https://www.youtube.com/watch?v=m6dCxo7taE>). These videos were physical tools that expanded the girls' ZPD, namely their cognitive understanding, by noting similarities and differences existing between three Middle Eastern religions, as evidenced in their following remarks. Both daughters stated that the children in the first video "were all going to pray," and Chelsea acknowledged that not everyone prays the same, "One was making hand movements; another was burning a piece of stick." Mina

added, “One bowed down to pray. They were all praying, but they were praying in different ways.”

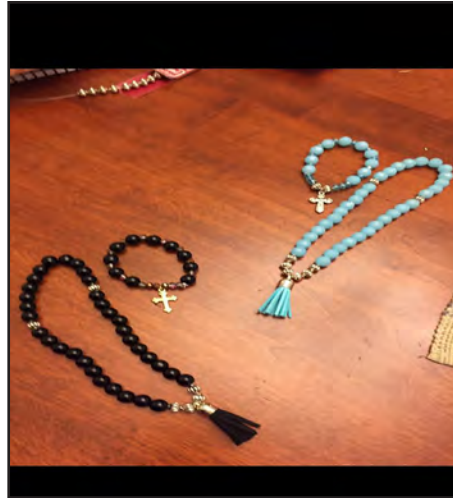
After the second video, the children pinpointed the three major religions in the Middle East, when the mother asked, “What religions do people follow in *Al Watan Al Arabi*?” Mina answered, “Islam, Christianity, and Judaism.” The mother next asked, “Which religions were followed by the greatest number of people living in all the Arabic countries combined?” Mina correctly answered, “Islam and Christianity.” Mother went on to ask, “Do you know how religion is said in Arabic?” to which both girls answered “No.” So Mrs. Kamash stated, “Religion is *deeyana* in Arabic. Do you want to write that down girls? *Dee-ya-na*. There is another word for it, *deen*. So, *deyana* and *deen* both mean religion in Arabic.” While her daughters wrote both words in their notebooks, the mother wrote the following words on a whiteboard: Christianity, *Al-maseehiya*, Islam, *Al-islam*. She went on to introduce the Arabic translations for the artifacts for each religion: Bible, *injeel*, Koran, *quraan*, rosary, *masbaha*, and prayer beads, *sibha*. Thus, she used social interactions and new vocabulary as a Vygotskian tool for thinking of religious artifacts in Arabic language to move her daughters from their lower ZPD to their upper ZPD. The mother was writing words on a whiteboard, which is a Vygotskian physical tool to help them pronounce the words. She was at the same time having the girls repeat each word over and over again as they were writing them down in their notebooks. The mother was applying a Vygotskian approach to help her daughters to internalize words as mental tools for thought process by external repetition. Then the girls wrote the Arabic names of artifacts on pictures of the artifacts they had printed out earlier. Thus, the mother was not only facilitating the internalization of the new Arabic vocabulary through external speech but was then having the children further produce and express those thoughts through writing.

During the Museum Visit

Since they had visited the Arab American National Museum once earlier, now the girls were clearer regarding their roles in this museum. Hence, with intentionality, they promptly started searching for Christian and Islamic religious artifacts, took photos of the *injeel*, *masbaha*, *quraan*, and the *sibha* on their own initiative, read information on the accompanying plaques, and said the Arabic names of these artifacts, without parental prompts. All these self-initiated steps of searching, reading, and saying Arabic names is evidence that their earlier mother–child interpersonal dialogues were by then internalized into their intrapersonal cognitive problem-solving thoughts and private speech. Thus, these behaviors are evidence of cognitive outcomes from the previous visit that were then applied to their current visit.



Mina taking pictures of Koran and Bible at AANM



Rosaries and prayer beads made by the daughters

Chelsea looked at a large *sibha* and asked, “Mom, why do we display a *sibha* on one of our end tables in the living room at home if the *sibha* is for Muslim people and we are Christians?” Her mother answered, “Some artifacts are not only religious, but they are also related to our culture, and *sibha* is one of them. So, we display the *sibha* in our house as a cultural item rather than Muslim prayer beads.” Here, the mother acted as an expert and used social interactions to move Chelsea, who is a novice, to her higher ZPD. Mom and her daughters then together read the plaques. Those plaques served as Vygotskian physical tools reinforcing the mother’s explanation of the religions and culture.

After the Museum Visit

The children made a Christian rosary, a *masbaha*, and Muslim prayer beads, *sibha*, as follow-up activities. Before starting, Mina said, “Mom, I know that the 10-bead rosary needs 10 similar beads for the Hail Marys and one different for the Our Father prayer, but I am not sure how many beads we need for the *sibha*.” Chelsea added, “I don’t know either; I think we need to Google it on our iPad.” However, Mina chose to research it on her smartphone, while Chelsea used her tablet. They found that they needed 33 beads and two dividers for the *sibha*. They thus used their electronic devices as physical tools for researching new knowledge, which then moved them to their upper ZPD. Both were happy, excited, and proud that they made the *masbaha* and the *sibha* themselves. While making it, they would say the name of the artifact in Arabic over and over again to keep remembering it, which suggested that they were motivated to learn the new Arabic words. In this anecdote, both daughters understood that words represent objects, thus applying Vygotsky’s theory

by intuitively linking words with artifacts. After the activity, Mina said that she was going to present her *sibha* as a gift to her Muslim friend in school.

Arab American Immigrants' Aesthetic Life

During week three the focus was on Arab American visual arts and three related Arabic words: *fusayfasa* (mosaic), *al-khat al-Arabi* (Arabic calligraphy), and *khazaf* (clay).

Before the Museum Visit

The daughters saw a PowerPoint constructed by their mother on the varieties of Middle Eastern mosaic tiles and architectural structures decorated with mosaic tiles (e.g., mosques, museums, mansions, palaces). The mother first used PowerPoint as a physical tool to scaffold her daughters to start a dialogue, next scaffolded them with additional prompts until they co-constructed meaning, and finally concluded that mosaic is an art form in which small pieces of glass are glued together. The mother lastly explained that it is called *fusayfasa* in Arabic. Her daughters next researched information and photos on five different types of Arabic calligraphy, namely Kufi, Thuluth, Naskh, Traditional, and Modern. The girls next examined examples of each type of calligraphy online as an art form and then described its specific shapes. The mother then realized she needed to scaffold them to connect the different shapes in calligraphy with their Arabic names. She next introduced the Arabic word for clay. The daughters made simple clay containers that they would later reshape and embellish after seeing clay pots at the museum.

During the Museum Visit

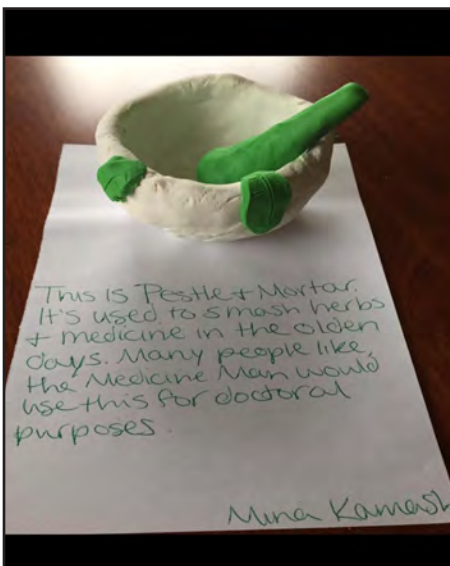
Upon their arrival at the Detroit Institute of Arts, the mother encouraged her daughters to take photos of aesthetic Islamic artifacts they had discussed earlier. They closely examined a Mosaic blue tiled wall dating back to the Babylonian Empire decorated with serpent-headed creatures (ancient Babylonia is now modern Iraq). Regarding calligraphy, Mina concluded, "Calligraphy does not have to come by itself. I see it in the prayer books, on pottery, on paper, and on a ceramic tile." Chelsea, on the other hand, was excitedly recognizing, naming, and pointing to the different types of calligraphy done on historical-cultural museum artifacts: "Mom, this is Kufi, and this is Thuluth. Wow." Mina invited her mother and Chelsea to watch a short movie about calligraphy. Given that her daughters were unfamiliar with calligraphy writing, the mother drew their attention to the details in the movie as well as in the calligraphy artifacts such as specialized writing utensils, the intricate and flourishing fonts in Arabic letters, and the mastery needed in writing. When the movie ended, Mina said, "Wow! Calligraphy is beautiful and complicated art at the

same time. I really enjoyed seeing how it is done.” Chelsea too was awestruck. She said, “Mom that was awesome! I loved it.” Thus, both daughters expanded their ZPD by coming to understand the concept of calligraphy and appreciate the intricacies of calligraphy art.

Regarding the pottery section, both daughters noticed that pots were not only made of clay, but also of metal. Mina told Chelsea, “Look at how all the pots look different. Some are clay; others are metal; some are used for food, and others are just for decoration.” She was thus appreciating that cultural tools such as pots have various functions.

After the Museum Visit

The girls wrote the Arabic names in English and descriptions next to their photographs of museum artifacts. Next, they finished working on their clay pots. Right away, Chelsea replicated a decorated clay pot seen at the museum. Mina was unsure how to complete her clay pot and almost gave up. Mrs. Kamash, through her interpersonal dialogue, scaffolded her by saying, “Mina, think of the pots you saw at the museum. Try to remember their shapes and what they were used for. Maybe that can help you make up your mind about how you want to shape your pot.” Mina finally decided to make her clay pot functional by making it a mortar and pestle like those used for medicinal purposes in the past.



Mina's mortar and pestle clay pot

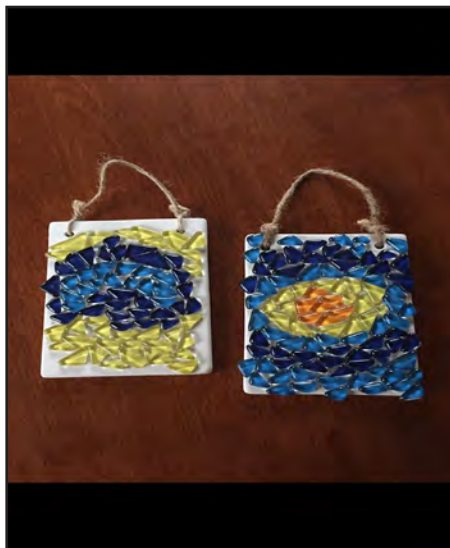


Chelsea's clay pot with the design of the sun

The two girls next constructed mosaic tile designs by gluing real glass pieces on a blank tile. They used their smartphone and tablet as physical tools to generate creative ideas as to how to decorate their tiles. Mina designed a sun, and Chelsea designed a moon. Both girls stated that they enjoyed making the pots and mosaic tiles.



Daughters using small glass pieces and internet on phone for ideas for mosaic tiles



Moon and sun tiles constructed by the daughters

Arab American Immigrants' Family Life

During week four the focus was on Arab American culinary arts and the three words related to it: *al-matbakh al-Arabi* (the Arabic kitchen), *fattoush* (i.e., vegetable salad with fried Arabic flat bread), *baba ghanoush* (i.e., an egg-plant appetizer).

Before the Museum Visit

At the Arab American Museum library, the children researched the available library books on cooking and then further researched information unavailable in the books regarding the role of the kitchen among Arabic families using their smartphone and tablet. Since Chelsea found it difficult to find the information, Mina did the research and shared her findings with her little sister. Vygotsky states the expert can be an older child, which was the case here. The mother, also as an expert, then further scaffolded Chelsea by reading and explaining the information to her, which Chelsea then jotted down.

Mrs. Kamash elaborated that, in Arabic culture, when you invite someone to eat you say, “*taffadhal*,” which means help yourself, and after you have eaten and you are full, you say “*alhamdulillah*” which means “thank God.” She reminded her daughters that these phrases have been said when their guests have come over for dinner. The mother next asked, “Why do you think Arabic people love their kitchens?” Mina replied, “Because they like to cook.” Chelsea added, “Because they like to eat.” The mother then asked, “How important is our kitchen in our lives?” Chelsea answered, “It is important because you cook for us in it,” and Mina said, “It is a place where we can talk and engage in and make food together.”



Mina browsing through the cookbooks at AANM library



Daughters examining the Arabic foods in the refrigerator at the AANM kitchen

During the Museum Visit

They visited the kitchen exhibit at the Arab American National Museum. When the girls checked out the stove, shelves, drawers, cabinets, and the refrigerator, they said, “This is just like our kitchen,” and “Mom, we have this in our kitchen, too.” Thus, they were using these Vygotskian physical and cultural tools to retrieve their memories. Their mother then scaffolded them to closely examine and selectively list those Arab American culinary artifacts similar to items at home. They listed traditional metal tea pot, traditional small glass cups that their mom uses to serve tea to their guests, can of chick peas, pickled cucumbers, hummus, and replicas of falafel, pita, olives, labna (yogurt), and baklava.



Traditional clear glass
teacup set with kettle



Two kleicha stamps (left) and
a metal falafel press (right)

The mother then extended the girls' focus to a falafel press and kleicha stamp, cultural tools they had overlooked, thus expanding their upper ZPD. A falafel press is a scoop with a handle that pushes out the falafel paste, and a kleicha stamp is a scoop with an embossed design on the bottom used to push out a pastry filling by hitting the stamp on the table. Kleicha is specially served during cultural, religious, and family festivities. When Mina looked at the photos of Arabic families dining in the kitchen, she said, "We cannot seem to be able to bond unless we are eating or sharing food together." Thus, she concluded the importance of the kitchen for Arabic culture.

At the museum, the mother and girls watched the movie titled *Arab American Road Movie* for the second time (Arab American National Museum, 2010a, 2010b). This time they focused on how many interviews took place in the kitchen and in other locations where food is prepared and served. Mrs. Kamash scaffolded the girls to count the number of interviews because she wanted to heighten their awareness that the kitchen is typically the hub of all social activities. Chelsea tally marked and said, "Wow, mom, seven of the interviews took place in a kitchen. Mom, it looks like all Arabic people sure love to always be in their kitchens, just like you!" This tally mark sheet was a physical tool which facilitated accuracy in counting with rapidly changing scenes. Her daughters also noted that four additional interviews took place while food was being served or made in locations other than the kitchen in the home: one in the dining room, two in a restaurant, and one at the park where people were making tabbouleh

salad. Thus, her daughters realized the importance of the kitchen and food as the central focus of family life among Arabic people.

After the Museum Visit

After the museum, the mother took her daughters to an Arab American restaurant named Ishtar (Ishtar is the name of the Babylonian goddess of fertility, love, and war). Her daughters immediately noticed oil paintings of Iraqi scenes, a map of Iraq, cultural decorative artifacts displayed in a glass showcase, and replicas of artifacts from ancient Babylonia, which is now modern Iraq. For example, they saw the lion of Babylon and blue gate of Ishtar with small serpent-headed creatures decorating it, resembling the large serpent-headed creature decorating the blue tiled wall at the Detroit Institute of Arts museum. Chelsea excitedly kept drawing her mother’s attention to it, thus providing evidence of her memorable learning at the museum.



Blue Ishtar Gate with serpents at Ishtar restaurant



Lion of Babylon at Ishtar restaurant



Museum artifact of serpent headed creature at the Detroit Institute of Arts (DIA) resembling the serpent-headed creature on the blue Ishtar gate

When the daughters looked at the menu, Mina said, “Mom, rice is with almost with every dish; it seems that Arabic people love to eat their rice just as we do at home!” The mother also asked her daughters to try and guess the ingredients of their fattoush salad, hummus, and baba ghanouch. Mina named chick peas and eggplants, while Chelsea identified the tangy taste of the lemons. Thus, the mother’s interpersonal dialogue with her daughters heightened their awareness of foods from their culture. Also, plaques and artifacts at the restaurant served as physical tools that enabled both girls to activate their visual memory and revisit the rich cultural artifacts they had seen at the museum.

Mrs. Kamash suggested to her daughters to start thinking of a dish or salad that they would want to make to learn more about Arabic culinary arts and the value of the kitchen in Arabic culture. After Vygotskian interpersonal dialogue, her daughters decided to make fattoush salad. They used their tablet as a physical research tool to identify a recipe online, and together they made the salad. Mina said, “Making the fattoush was a lot of hard work, but I really enjoyed it.” Chelsea echoed, “Me, too.” Her daughters not only enjoyed preparing Arabic cuisine, but it was an active sensory–motor participatory learning experience.



Mother scaffolding Chelsea,
the younger daughter



Daughters cutting pita bread and
peeling cucumbers for fattoush

All these experiences increased Mina’s interest to learn more about her cultural heritage. So she said, “Mom, I think you should start teaching us how to read and write Arabic! And you should also talk to us more about our culture and where we are from.” This initiative from her daughter is an authentic piece

of evidence that this mother was successful in motivating her daughter to develop her cultural identity so as to further understand what it is to be an Arab American immigrant.

Lessons Learned: Recommendations to Parents and Teachers on Museum Education

We state our recommendations on the role of adults and objects in museum education within a Vygotskian framework. Each of our specific recommendations is buttressed below with (1) scholarly evidences of best practices, and (2) our empirically grounded practical experiences documented in the mother's journal.

Role of Adults in Museum Education

First, we recommend that parents and teachers have Vygotskian interpersonal dialogues with children in which the adults actively and intentionally scaffold Vygotskian intrapersonal thoughts to illuminate connections between the artifacts at the museum and the children's personal lives. They also need to supplement children's meaning making with new concepts promoted through questions and comments about the artifacts, thus scaffolding them to their upper ZPD. Scholars view museum visits as a meaning-making process where visitors make connections between their lives and the objects they encounter at the museums (e.g., Hein, 1998; Hooper-Greenhill, 2007; Mayer, 2005; Pierroux, 2003; Roberts, 1997; Wolf & Wood, 2012). Studies have also shown that learning is more likely to occur with adult-child interactions than without (Puchner, Rapoport, & Gaskins, 2001) and that the exhibits hold the most attraction and power when interpreted by expert adults (Boisvert & Slez, 1995). Ash's 2004 museum study reported that parents sustained their dialogues by asking three types of questions, those that: connected to personal meaningful experiences and prior knowledge, invited explanation, and observed and matched children's current ZPD and then expanded that ZPD. Ash's earlier study (2003) reported that parents communicated thematic content of the exhibits primarily through the process skill of questioning; however, they also used other inquiry skills such as observing, interpreting, comparing, and contrasting. Despite these multiple positive outcomes of adult involvement in encouraging children's participation, Patterson (2007) has reported that some adults regretfully truncated children's inquiry and suppressed children's conversations, while Fasoli (2014) reported that parents overlooked that it was their scaffolding that contributed to their children's learning at the museum, even though they were continuously doing

so when playfully interacting at the museum. Thus, parental involvement within the museum can make a difference. However, not all parents are always fully aware of their active role; hence, our above stated recommendation.

This mother also sustained her dialogues with her daughters by scaffolding them to attach personal meaning to the historical and cultural artifacts (e.g., video of Arab American immigrants; prayer beads; plethora of kitchen tools, utensils, and food at the museum observed as being the same as in their own home). As a result, the children better understood, enjoyed, and appreciated the cultural significance of those museum artifacts. To move them to their upper ZPD, the mother too extended their meanings by providing enriching content, relating new facts linked to a plethora of exhibits based on her funds of knowledge and experience (Gonzalez et al., 2005). Throughout the entire project, she actively and intentionally made comments, asked questions, and used process skills as stated in Ash's studies (2003, 2004).

Second, we recommend that parents and teachers visit museums multiple times with children to reinforce concepts and engage in rich interpersonal discussions and scaffolding activities before and after each of those visits. Researchers (Crowley & Seigler, 1999) and scholars (Richter, 1997) have reported that when children visit museum exhibits multiple times, they then have a deeper understanding of facts. Furthermore, they can then focus more time on the exhibit itself, instead of figuring out what the accepted behaviors during museum visits are and the location of amenities (Falk & Dierking, 1992). When children go and discuss the visits for several weeks, researchers call it a "spacing effect," and these discussions before and after the visits increase their retention (Richter, 1997).

This mother planned multiple visits with interpersonal discussions and activities before and after each of the visits. Since she conducted her visits over a period of several weeks, this "spacing effect" helped her daughters to gain more in-depth understanding. As noted above, during the second visit, her daughters were more comfortable and had familiar expectations when compared to their first visit. Since they had seen mosaic artifacts at the Arab American National Museum and then again at the Detroit Institute of Arts, it facilitated them in developing a deeper understanding of that concept.

Role of Objects in Museum Education

First, we recommend that parents and teachers together with children systematically examine and discuss the various features of the museum artifacts, for they are cultural tools that mediate knowledge. Vygotsky's sociocultural theory views artifacts in the museum as objects coded by cultural, social, historical, and linguistic practices and activities, mediating knowledge and meaning within a society (Pierroux, 2003). Scholars on museums have devoted scholarly treatises

to the central role of objects in learning through various features of the museum artifacts (e.g., Paris, 2002) and conversations (e.g., Leinhardt, Crowley, & Knutson, 2002). Freidus (2010) recommends that museum objects be discussed by: describing it in words or pictures; explaining why a particular object was chosen; telling what thoughts or feelings the object evokes; posing questions brought to mind by the object; and identifying possible ways to answer these questions. Meanwhile, Davies (2001) recommends a close examination and discussion of an object regarding its use, significance, production, and the materials. Crowley et al. (2001) reported findings that when parents actively and intentionally commented about the objects (e.g., describing evidence relevant to the artifact, giving directions on object explorations, explaining underlying principles objects signify), then their children had longer, broader, and more focused and relevant comparisons than children who engaged in the object without the parents' involvement.

This mother too viewed museum artifacts from a Vygotskian perspective for they spoke to her of the religious, aesthetic, and daily family life activities within the Arab American culture. Thus, she used these cultural tools to mediate knowledge to her daughters. She also asked five types of probing questions and comments similar to those proposed by Freidus (2010) as described above. First, she encouraged her daughters to verbally describe artifacts, take photos, and then write descriptions next to the photos. Second, the mother encouraged her daughters to pretend that they are about to immigrate, then select objects that they would like to take with them to their new country, and finally explain their reasons behind their choice. Third, she continuously solicited their thoughts and feelings regarding objects at the museum. Fourth, she posed comments and questions that brought to their mind how the museum objects were related to their own lives, the lives of the immigrant children in the stories they read, PowerPoints, and YouTube videos/movies they had viewed at home and at the museums. Fifth, she helped her daughters identify ways to answer their own questions by reminding them to continuously research on their electronic devices for facts and photos available on the internet. She additionally followed specific strategies that Davies (2001) and Crowley et al. (2001) have recommended (as mentioned above) when examining objects, and she used the Vygotskian pedagogy of linking objects to new Arabic words.

Second, we recommend that parents and teachers integrate the use of ubiquitous mobile technology (such as smartphones and tablets) as physical tools before, during, and after the museum visits with their children to scaffold them to their upper ZPD. We found no studies or scholarly essays on parents using mobile technology, such as smartphones (e.g., iPhones) and/or tablets (e.g., iPads), to teach their children content about the exhibits when visiting museums.

However, there were studies on museums using technologies (e.g., videos, augmented reality devices, mobile phones, other multidirectional communication technologies) and on visitors using websites, microblogging, social media, and augmented reality to complement the static artifacts exhibited at the museums. These technologies resulted in children's: (1) cognitive outcomes, such as developing a greater understanding and recall of content; increasing their explorations of static artifacts; and enhancing creativity, ability to explore new knowledge, problem-solving ability, and conceptual development; and (2) affective outcomes, such as promoting socioemotional collaborative interactions between children and between parents and children; being motivated, interested, and engaged for longer periods of time; and creating joint communication activities and shared meaning (Charitonos, Blake, Scanlon, & Jones, 2012; Chen & Huang, 2012; Sung, Hou, Liu, & Chang, 2010; Yoon, Elinich, Wang, Steinmeier, & Tucker, 2012; Yoon & Wang, 2014).

Hence, this mother used technology such as PowerPoints and YouTube movies to educate her daughters and to help them to enjoy the museum experience. Additionally, she actively and intentionally encouraged her daughters to use mobile technology as physical tools to research new information through print and photos (e.g., Arabic countries from where immigrants came, Muslim prayer beads versus Christian rosary beads, five variations of calligraphy, creative mosaic designs on tiles, Arabic recipes and Arabic kitchens) and to create photographic documentation of their positive emotive responses to artifacts (e.g., citizenship certificate). As a result, her daughters had (1) positive cognitive outcomes, such as a greater understanding because they researched a certain subject and a greater recall of subject matter whenever they took photographs using their mobile technology; and (2) positive affective outcomes, such as the children explicitly reporting more enjoyment when technology was integrated with their museum experience (e.g., movies on Arab Americans and on calligraphy) and when they played games related to exhibits, which were offered at both museums.

Third, we recommend that parents and teachers also use other nontechnological interactive objects (e.g., art materials, culinary ingredients and tools, children's books) in enjoyable participatory activities, such as visual arts (e.g., children creating replicas of museum artifacts), culinary arts (e.g., food preparation), literary arts, and performing arts (e.g., role playing the immigrants from children's books) to scaffold children to their upper ZPD. Studies have shown that when children were actively involved in educational, investigative, sensory-motor, interactive, and multiple modalities activities (Melber, 2006), it led to significant gains in children's vocabulary and concepts (Judson, 2012) and to children reciting facts and history talk related to the artifacts (Tenenbaum, Prior, Dowling, &

Frost, 2010). Additionally, when these supplementary participatory materials and activities were provided, then the parents were mobilized to ask more questions of their children and parent–child dyads spent more time being engaged together with the exhibit (Tenenbaum et al., 2010). Children who were “experts” on the content knowledge about the museum artifacts had parents who provided them with significantly more objects (e.g., books, games, toys) related to those exhibits at home when compared to the parents of children who were “novices” on their content knowledge regarding those same museum artifacts (Palmquist & Crowley, 2007). Sutton (2006) links cooking, material objects, and museums as sensory experiences of high cultural value that evoke memories and practical knowledge. Davies (2001) recommends role playing historical enactments as an effective participatory activity for children to better understand the context when examining ancient artifacts at the museums. Creech and Bhavnagri (2002) have demonstrated that role playing elements of a story was effective in scaffolding young children to better understand the structure of a story.

Both daughters participated in interactive motor activities using visual art materials for making three-dimensional replicas of historical and cultural artifacts seen at the museum, namely rosaries, prayer beads, clay pots, and mosaic tiles. They also participated in culinary arts actively by using ingredients and tools which heightened their sensory–motor learning, practical knowledge, and cultural identity when preparing an Arab American dish and evoked personal memories when viewing culinary artifacts at the museum. The mother also had interactive parent and child reading sessions using children’s books on immigrant experiences, thus participating in literary arts. Her daughters participated in some elements of performing arts when they identified with immigrants and their cultural materials and when role playing on immigrants’ decision-making process, coping mechanisms, and resiliencies that were related to the museum displays and written immigrant stories. Her daughters explicitly stated they enjoyed highly participatory activities (i.e., making pots and mosaics, preparing Arabic cuisine) when using these nontechnological objects. These various arts activities cumulatively scaffolded both the daughters to their upper ZPD to better understand and appreciate their Arab American culture.

Conclusion and Replication

The above dynamic assessments demonstrate that both daughters developed: (1) understanding and empathy for all immigrants in the U.S.; and (2) understanding and appreciation of their Arab American immigrant culture (i.e., Arab American religious, aesthetic, and family life), including exposure to 15

Arabic words (i.e., language, a Vygotskian tool for thought) related to the museum experience. The mother's Vygotskian interpersonal dialogue and cultural and physical tools (e.g., museum artifacts, visual and culinary arts materials, children's books, technology) scaffolded the children to reach their upper ZPD in their cognitive outcomes (e.g., comprehension, meaning making through personal memories, information-seeking skills, co-construction of knowledge, creative self-expression, new vocabulary) and affective outcomes (e.g., empathy, appreciation, parent-child-sibling socioemotional collaborations).

As educators and immigrants, we worked together and used our indigenous funds of knowledge (Gonzalez et al., 2005) beside formal, western, and structured knowledge to create these culturally sensitive museum education experiences to address the gaps existing between the children's formal schooling and home culture. The knowledge gained from this report from the field could contribute to others building similar bridges between culture at home and the culture at school.

Therefore, in the future, parents and teachers can replicate similar experiences to (1) promote multicultural understanding of various immigrant groups; (2) develop children's personal cultural identity regarding their ethnic heritage; and (3) facilitate national American identity in new immigrants in a variety of formal and informal educational settings. Here are some examples:

- Community recreational agencies could run summer camps focusing on multicultural museum field trips with accompanying activities similar to ours.
- Schools' parent-teacher associations, school improvement programs, and curriculum committees could replicate our museum education report from the field, which promotes multicultural education, cultural identity, immigrant identity, national American identity, civics, history, and home-school-community relationships. They could also offer museum education as parent-teacher workshops for strengthening social studies curriculum.
- Public libraries could offer free suggestions on parents' role during museum visits based on our experiences. Their communication could include easy to read handouts, newsletters, and websites in English and other languages for parents with limited English proficiency. Furthermore, similar to our museum-related activities (art, music, food), they could suggest free community ethnic art, music, and food festivals. Museums, along with community ethnic festivals, could promote their children's cultural identity intertwined with national American identity.
- Community programs on citizenship education for new immigrant families could use museum education to teach English words, similar to how the mother taught Arabic words within the museum context.

- Ethnic immigrant associations and clubs could also replicate our museum education to intertwine cultural identity with national American identity (e.g., Arab American, Chinese American, Japanese American, Vietnamese American, Mexican American, and so on).

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Navaz Peshotan Bhavnagri is an associate professor of early childhood education at Wayne State University, Detroit, Michigan. Her teaching, empirical and historical research, publications, and grants include family–community–school partnerships, social services for immigrants, immigrant parenting, museums and immigrant mother–child dyads, children’s literature on immigrants, cross-cultural child rearing, and multicultural education. Correspondence concerning this article may be addressed to Dr. Navaz Peshotan Bhavnagri, College of Education, Wayne State University, Detroit, MI 48202.

Suha Khalid Kamash has a master’s of education with a concentration in English as a second language from Wayne State University in Detroit, Michigan and a master’s in English literature, liberal arts from Baghdad University, Iraq. She taught courses on English conversation to non-native speakers of English, Arabic to English-speaking students, and has been a substitute teacher in the United States.