Globally, the past decade has seen a surge of interest in early childhood education. Similarly, in Dubai, the education sector has seen a rapid growth in the past ten years. Overall, there is a high rate of enrollment of Emirati children in the kindergartens, with over 70% enrolled in the private sector, while only 5% of age-eligible Emirati children in Dubai are enrolled in nurseries. However, public provision of nurseries is more scarce, with only two nurseries catering to 43 Emirati children.

In its role as a regulator of the education sector in Dubai, the Knowledge and Human Development Authority (KHDA) has conducted an in-depth study of the early childhood education sector, on which this brief is based. The brief will provide a description of the pre-school educational landscape in Dubai, and the challenges facing its further development, along with policy recommendations to address the current needs in the sector.

Early Childhood Education

In Dubai

By Juman Karaman

Introduction

Early childhood is a critical period in the human development cycle. It has been defined by Shonkoff and Philips (2000) as the period from conception through age eight, when the foundations of physical, social, emotional and cognitive development are laid. In particular, the ages of 0-3 are critical for brain development, as this is when skills develop in a simultaneous and inter-connected fashion, with the development of each stage building on the capacities achieved in the previous stage, and setting trajectories in health, learning and behavior that can last throughout life (Shonkoff and Phillips 2000, McCain and Mustard 2002).

UNESCO (2006) defines Early Childhood Education and Care (ECEC) services as including “all arrangements that provide care and education for young children under compulsory school age, outside the home.” These services support children's survival, growth, development and learning - including health, nutrition and hygiene, and cognitive, social, emotional and physical development - starting from birth until they enter primary school. Early childhood education and care takes a variety of forms, ranging from parenting programs to community and home-based childcare, center-based provision, pre-primary education and after-school care, often in schools. Early childhood policies also include measures to support families, such as parental leave and childcare allowances.

The Knowledge and Human Development Authority (KHDA) considers that early childhood education includes services provided by kindergartens and nurseries prior to the commencement of compulsory primary school from age six. Children aged 4-6 may enroll at kindergartens, though this stage is not compulsory in the UAE, even though UAE Federal Law No.(9) of 1972 refers to kindergartens as “schools.” Nurseries may admit young children up to 4 years of age, and in Dubai, KHDA defines nurseries as educational institutes providing non-compulsory pre-school education for children through qualified teachers, health and safety professionals with the primary objectives of promoting structured educational experiences based on learning through play and facilitating social educational adjustment of children.

This policy brief will examine the case of Early Childhood Education in the Emirate of Dubai. It draws on a more extensive report written in 2009, as well as more recent data compiled by KHDA. It will first cover the international rationales.
regarding the importance and prevalence of early childhood education. It will then look at its history and development in Dubai, and will conclude with a discussion of the challenges facing this emerging and important education sector.

**Returns to Early Childhood Education**

Heckman and Masterov (2004) argue that there are clear returns to investment in early childhood care. According to their study, not only do children and families benefit, but so do governments. Governmental domains that gain from the widespread provision of early childhood education and care services include the following:

- the national economy (short term through the productive contributions of working women, and long-term through more effective human capital formation);
- health (better mental and physical health for children and families, less at-risk behaviors);
- social welfare and criminal justice (less dependency of families on social welfare);
- higher earnings for families;
- greater gender equality;
- reduced domestic violence and criminality; and
- education (better integration of at-risk young children into primary school, better grade progression, and less participation in special education).

The high rate of return on early childhood investment is illustrated in the much-publicized graph by Heckman, which shows that the rate of return on investment in human capital is greatest when the target age group is 0-3 years of age.

**History and Development of Early Childhood Education in Dubai**

The first kindergarten (KG) in the United Arab Emirates (UAE) was established in Abu Dhabi in 1972. Shortly afterwards, three KGs were established in Dubai. Before the creation of the first KG section at the Ministry of Education (MoE) in the UAE in 1980, the governance of all KGs in the UAE was managed by the Directorate of Education in Kuwait. In 1987, the MoE created a department jointly responsible for KGs and primary education. Ten years later, a separate department was established, the main responsibility of which was to inspect, set standards and develop the curriculum, as well as to hire and train KG staff. The sector grew from approximately 2000 children enrolled in 1972-73 to approximately 22,000 in 2004-05, and continues to grow (Badri 2005). From 1980 up to 2007, the MoE was responsible for public KGs, which included the

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**Table 1: Heckman’s Curve - Rates of Return on Human Capital Investment at Different ages**

<table>
<thead>
<tr>
<th>Age</th>
<th>Pre-school</th>
<th>School</th>
<th>Post-school</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>Programs targeted towards the earliest years</td>
<td>Schooling</td>
<td>Job training</td>
</tr>
</tbody>
</table>

*Source: Heckman and Masterov 2004*
Global Statistics on Early Childhood Education

In countries with extensive early childhood services, about 30% of children below the age of three are catered for, compared to between 80%-100% of children in the 3-6 age group.

Table 1: Enrollment Rates in Early Childhood Education Centers in Selected European Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Enrollment Rate at 2 years</th>
<th>Enrollment Rate at 3-6 years</th>
<th>Fees as % of Average Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>21.2%</td>
<td>89.4%</td>
<td>9.1% (virtually free from age 3)</td>
</tr>
<tr>
<td>Italy</td>
<td>28.6%</td>
<td>99.4%</td>
<td>12% (free from age 3)</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>30% (full time equivalent)</td>
<td>58% (90% 4-6 years)</td>
<td>17.5% (free from age 4)</td>
</tr>
<tr>
<td>Spain</td>
<td>33.9%</td>
<td>97.7%</td>
<td>30.3% (free from age 4)</td>
</tr>
<tr>
<td>Sweden</td>
<td>44%</td>
<td>85.5%</td>
<td>4.5% (free from age 4)</td>
</tr>
</tbody>
</table>

Source: EUROSTAT 2009

In 2009, there were 82 private licensed nurseries with a total of 7,551 children of ages 0-4 enrolled, of whom 95.4% were expatriate children. In contrast, there were only two nurseries that were established in government ministries located in Dubai, catering to 43 children. In total, less than five percent of age-eligible Emirati children are enrolled in nurseries (Ministry of Social Affairs 2009), as the vast majority are raised at home up to the age of four years.

In contrast, 96.8% of Emirati age-appropriate children in Dubai were enrolled in kindergartens in 2009, surpassing the attendance rates of many OECD countries. Of the Emirati children, 70.3% were enrolled in private kindergarten services (Dubai Statistics Centre 2009), with only 26.5% in public KGs, and about 3% of all Emirati age-eligible children

Table 2: Nurseries in Dubai and Number of Children Enrolled

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Nurseries</th>
<th>Number of Children Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>27</td>
<td>1,911</td>
</tr>
<tr>
<td>2000</td>
<td>36</td>
<td>2,230</td>
</tr>
<tr>
<td>2004</td>
<td>55</td>
<td>2,540</td>
</tr>
<tr>
<td>2007</td>
<td>71</td>
<td>6,155</td>
</tr>
<tr>
<td>2009</td>
<td>84</td>
<td>7,594</td>
</tr>
</tbody>
</table>

Source: KHDA 2009
Table 3: Data on KGs & Nurseries in Dubai

<table>
<thead>
<tr>
<th></th>
<th>Nurseries (Age Group 0-4)</th>
<th>Kindergartens (Age Group 4-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of provider</td>
<td>Public</td>
<td>Private</td>
</tr>
<tr>
<td>Number of providers</td>
<td>2</td>
<td>82</td>
</tr>
<tr>
<td>Number of expatriate children enrolled</td>
<td>0</td>
<td>7,253</td>
</tr>
<tr>
<td>Number of Emirati children enrolled</td>
<td>43</td>
<td>341</td>
</tr>
<tr>
<td>Curriculum &amp; standards</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: KHDA 2009

not enrolled in kindergartens. This has led to the case where public kindergartens are increasingly serving low-and middle-income Emirati families, creating a gap in choices of access to quality education. Curiously, an annual 15% of Emirati children previously enrolled in private KGs then transferred to Grade 1 in public schools (KHDA 2010). The reason for their initial enrollment in private KGs could be due to insufficient capacity in the public KGs, or to their parents’ desire to provide their children improved English language instruction in private KGs. In public KGs, the language of instruction is Arabic. Since 2009, however, English language instruction has been introduced as well. While Ministry of Education regulations prescribe the use of English during one third of schooling hours, in reality the different public KGs vary in their provision of English as per the availability of teachers.

The “child-at-home” model for children below the age of four is common in the Gulf States and proliferates predominantly because of the availability of low-paid nannies/housemaids, who typically have no professional qualifications in child-care. According to a study conducted by Roumani (2005), 58% of children under the age of three in the Arabian Gulf are cared for by housemaids for 30-70 hours per week. This length of time is far greater than most institutional childcare hours in the US or Europe, which are increasingly criticized for being too long. Roumani considers that the time spent in the care of nannies or housemaids far exceeds the duration recommended by major studies (NICHD 2005, Belsky et al. 2007) to avoid harm to maternal attachment or prevent problematic behavior.

Operation of Early Childhood Education Centers in Dubai

Governance

At a federal level, the responsibility for early childhood education lies with three ministries. First, the Ministry of Social Affairs (MoSA) governs licensing of nurseries. Second, the Ministry of Education (MoE) sets the curriculum and standards for public KGs. Third, the Ministry of Health (MoH) monitors pre- and post-natal health issues.

In Dubai, where early childhood education is primarily provided by the private sector, other local government institutions are also involved, resulting in a fragmented regulatory environment. KHDA supplies licensing, quality assurance, policy development, and support; the Department of Economic Development (DED) issues the required commercial licenses to all nurseries and KGs in the private sector; Dubai Women’s Establishment (DWE) monitors early childcare standards; and the Community Development Authority (CDA) provides parenting services and support for children with special needs. This split in the monitoring of nurseries and KGs results in an uneven set of administrative rules, regulations, requirements, standards, pay structures, curriculum and goals. This leads to a more costly impact on the economy, with gaps as well as overlaps in responsibilities. Also, inconsistencies appear regarding the alignment of curriculum to standards, resulting in a reduced quality of services provided, and hence compromising on learning outcomes.

When compared with other countries, Dubai seems to lack the variety of other government-provided
ECE services, such as family day-care homes, drop-in services, parent support groups for stay-at-home mothers, play groups, or family centers.

**Financing**

Most OECD countries adopt a funding-to-services model. That is, through their education ministries, governments fund those services that deliver the national curriculum and achieve certain quality levels. This ensures equity, the promotion of national identity and language, and gives governments more control over quality, curriculum and teacher training.

From the perspective of most governments, early childhood education financing policies seek a balance between quality, efficiency, choice and equity (Dubois 2007).

Overall, government financing of early childhood education is minimal in Dubai, due to the fact that the majority of ECEC centers are privately owned and adopt a for-profit model. While over 90% of Emirati children aged 4-6 are enrolled in kindergartens, 70.3% of them attend private kindergartens. This leaves the government with only 26.5% of Emirati children in that age group attending public kindergartens.

There are few requirements placed on private early childhood education providers, in particular in nurseries, in terms of minimum qualifications of educational staff, standards and content of educational programs, professional development and staff salaries, as well as ratios (children/teacher; square meters per child; children per group). Dubai could greatly benefit from a balance of quality, equity, and efficiency when it comes to early childhood education.

**Quality of teachers**

In Dubai, the percentage of teachers with a specialized graduate qualification is highest in the public kindergartens. KHDA data on the 15 public kindergartens show that in 2008, 12% of teachers had a diploma and 88% of teachers held a B.A., usually in Early Childhood Development. All staff had received pre-service training in kindergarten teaching, although ongoing training is – according to the principals – unsatisfactory, due to the lack of funding. For private KGs, no information is available on whether graduate teachers hold a specialization in early childhood education.

In contrast, staff in nursery settings are more likely to have varied educational backgrounds, ranging from no training whatsoever to a graduate degree. The responsibility for training is left to each center, which, in a for-profit system, may lead to its neglect. According to nursery operators3, only a few nurseries provide an entitlement to in-service training for their staff.

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1 This information was gathered from a focus group meeting of nursery managers organized by KHDA in 2009.
For staff in public kindergartens and schools, the Ministry of Education appoints only holders of a bachelor’s degree for the post of a teacher, regardless of the stage they will teach, whether KG or upper grades. The Ministry of Education also sets the minimum monthly salary for public sector teachers and principals, with a salary rate that distinguishes between Emirati and expatriate staff, as can be seen in Table 5.

Of all the elements likely to raise the quality and outcomes of an early childhood education system, Bowman et al. (2000) have identified the quality of the staff employed as having the greatest influence (OECD 2006). Research consistently shows the link between strong training and support of staff – including appropriate pay and conditions – and the quality of early childhood education services (Bowman et al. 2000, EC Childcare Network 1996a, Sylva et al. 2004, Peeters 2009). In particular, staff who have more formal education and more specialized early childhood training have been found to provide more stimulating, warm, and supportive interactions with children.

Challenges for Early Childhood Education in Dubai

The need for quality assurance systems for nurseries

More than 90% of age-eligible children in Dubai are enrolled in KG; comparatively, few are enrolled in nurseries. This could be because of parent concerns over the quality of services provided, or due to accessibility issues. In addition, the national culture in Dubai is based on extended families and homecare services, provided by maids that usually hold no qualification for childcare and cost considerably less than the fees for a nursery place.

Funding and federal government support

In 2005, the UAE spent proportionately less on education than any other Arabic-speaking country, with only 1.3% of GDP (UNESCO 2011) (EU average 4.72%, and MENA average of 5.3%), of which it is estimated that less than 0.1% of GDP is being spent on early childhood education and care, either as a human or financial investment.

At the local and federal government levels, policymakers are seeking to support and consolidate the early learning sector. However, both human and financial investment levels show a low level of commitment: Less than 2% of nurseries and 10.2% of kindergartens in Dubai enjoy public funding. With low state expenditure and few requirements placed on early learning providers, both quality and equity may be weak.

Apart from the small public kindergarten network, the sector is generally private, with wide differences between private kindergartens, where annual fees (2008-09) range from AED 1,500 to AED 71,000. In nurseries, annual fees range from AED 5,000 to AED 50,000, depending on the number of hours being used (DubaiFAQs.com 2009) and the type of services offered. In sum, equity, access and inclusion are areas that require both balance and development.

Concerns about national identity

An important element in the curriculum is the language used in ECE centers. In nurseries, over 90% of nursery staff are expatriate, and only 5.4% are Arabic-speaking (Ministry of Social Affairs 2008-09), giving reason to believe that Arab children’s development in Arabic is overlooked. For children reared at home up to the age of three, excessive exposure to a second language can result in affecting the acquisition of first language if the housemaid’s first language is different than that of the child.

For children reared at home up to age 2-3, housemaid care (which is provided primarily by non-Arabic speaking persons) exceeding the duration recommended may affect maternal attachment and language acquisition, besides causing problem behaviors.

Policy Recommendations

Therefore, when evaluating early childhood education systems, different aspects of quality need to be
examined in the Dubai context. These include licensing and accreditation standards; defining system goals; learning environment standards; process quality and its measurement; curriculum; the creation of a culture of quality, attention to parents; and staffing standards. In addition, the warmth of a “relationship quality” between children and educators plays a key role in maximizing child development outcomes. In order to address the existing gaps in quality early childhood education in Dubai, the following measures are recommended:

1. **Raise public awareness:** The rate of return on investment in human capital is greatest during the first three years of childhood, a period that falls under Early Childhood Education. Therefore, raising the awareness of the benefits is key among parents, policy makers and the public.

2. **Increase parent awareness:** The development of the child’s first language is critical during the first year of life. Therefore, parental awareness about their key role during that first year is vital. So, too, is their understanding of the influence of maids who speak in a different language.

3. **Build stronger stakeholder alignment:** Currently there are multiple local and federal organizations that have an involvement in early childhood education. This offers a unique opportunity for these stakeholders to align and identify synergies at various levels.

4. **Prepare a short framework document,** in consultation with major stakeholders, outlining the main goals and standards for nurseries and kindergartens in Dubai. This would include appropriate staff qualifications and staffing levels.

5. **Ensure that adequate financing is allocated** to implement the framework document, with a balance in investment efficiency, high quality, equity of access, and choice.

6. **Ensure that measures of quality assurance** are followed up quickly and effectively by pedagogical advice and support.

7. **Examine current service mapping** and undertake a comprehensive needs assessment of families from different areas and backgrounds in the Emirate as soon as possible.

8. **Raise the profile of the ECE sector to attract more qualified graduates,** particularly amongst female Emiratis, to enhance national identity.

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**Table 5: Pay Scale for Public School and Kindergarten Teachers and Principals**

<table>
<thead>
<tr>
<th>Post</th>
<th>Total Monthly Salary (AED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emirati starting teacher</td>
<td>11,180</td>
</tr>
<tr>
<td>Emirati starting principal</td>
<td>11,780</td>
</tr>
<tr>
<td>Maximum for Emirati principal</td>
<td>13,250</td>
</tr>
<tr>
<td>Expatriate starting teacher</td>
<td>8,360</td>
</tr>
</tbody>
</table>

**Source:** Decree of Federal Law No. (11) of 2008 regarding human resources in the federal government

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References


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*See, for example, Tietze and Cryer 2002, OECD 2006.*

*See, for example, NICHD 2004.*
Juman Karaman is Head of Projects at the Knowledge and Human Development Authority (KHDA) in Dubai.

Editors: Samar Farah, Natasha Ridge, Stephen Brannon

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