

## Early Childhood Education Impact Evaluations for the Middle East and North Africa

Summary of workshop discussions for **MOROCCO**

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### Participants

1. Mohammed Anouar Boukili, Chef de Service/Direction des Curricula, Ministry of Education
2. Riane Rachid, Directeur Provincial, Ministry of Education
3. Sanaâ Targhalline, Statistician in the Methodology and Surveys Department, L'Observatoire National du Développement Humain
4. Muzahid Ali, Islamic Development Bank
5. Pamela Jervis, PostDoc Research Fellow, Centre for the Evaluation of Development Policies (EDEPo), The Institute for Fiscal Studies

### Policy problems

The delegates from Morocco had a clear idea about the main problems faced in terms of early childhood education in their country. They split these problems in two: Poor school Enrolment/Attendancy (grades 4 to 6) and poor quality pre-school education. The factors that contribute to both problems are many and varied. While for the first problem, pre-schools have limited influence over many of the factors that impact student enrolment/attendance understanding the cause of absences is critical to identifying the appropriate intervention, instead for the second problem, it is generally not one particular aspect of the service that results in poor quality pre-school education, but a combination of factors that have a negative effect on children's learning. The delegates suggested that working in partnership with students and their families as well as managers and educators are the most effective ways to manage poor enrolment, absences and disengagement so that patterns do not become entrenched.

Pre-school is particularly important in Morocco, where a third of the population is illiterate. Education is compulsory from the ages of six to 14. Access to pre-school education has significantly increased over the past decade (+10% increase between 2001 and 2013 for children aged 4-5) yet remains a luxury to many disadvantaged Moroccan children. Pre-school for four to six-year-olds is considered essential as a bridge between home and classroom, to prepare children for formal education. Pre-school has developed over the years mainly in urban areas and on the initiative of the private sector (with 60% enrollment in 2015-2016, and teach children the principles and moral values of Islam as well as the basics of literacy and numeracy), though the delegates mentioned the situation in rural areas is deprived. Despite constant demands, Morocco still has no state pre-school system. Those who can afford it pay for private pre-schools. Others must hope for a place in a pre-school run by religious or community groups or an NGO which normally is the case in urban areas. In 2015-2016, only 43% of Moroccan children aged 4-5 were enrolled in preschool and only 27.9% in rural areas. Poorest Moroccan children are much less likely (16%) to benefit from development activities compared to the richest (58%). Secondly, the quality of preschool education varies tremendously, and the lack of an effective quality-assurance mechanism at this level hinders substantial improvements in quality and consistency.

The delegates from Morocco expressed the factors that are behind the main problems. For Poor school Enrolment/Attendancy they mentioned the lack of awareness or interest of parents in the importance of primary education, resource-constraint families, and the lack of classrooms, in particular, in rural areas. For poor quality pre-school education they stated the low amount of qualify teachers as well as the low relationship between the number of students enrolled and the number of teachers in a pre-school (student-

teacher ratio), there is no single systematic framework (multiple programs and approaches), lack of necessary equipment (office and educational), and lack of good governance.

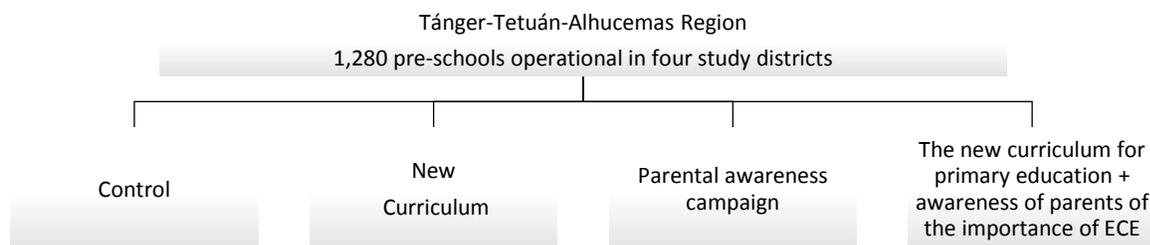
They delegates emphasize on several occasions that the weaknesses of the pre-school education system is based on the existence of a multiplicity of interlocutors and policy makers in the absence of unified reference frameworks and institutionalized coordination. Nevertheless, there was an initiative launched by UNICEF Morocco a couple of years ago which for the delegates is the first step for improving the pre-school system in Morocco. Indeed, UNICEF Morocco supported the development of the preschool national curriculum and norms (followed the launch of the new education strategy in 2015, which included one year of obligatory pre-primary education benefiting approximately 588,000 children), as well as the costing of the national pre-school strategy. To increase retention rates and facilitate school-to-work transition, life-skills and citizenship education programmes were developed targeting the most vulnerable children and adolescents in three regions. Piloted models were finalized, reaching 25,000 adolescents and children in 2016.

To design an evaluation during the workshop, the delegates decided to focus on the implementation of the new curriculum developed by UNICEF Morocco and the improvement of parents awareness of the importance of primary education. The aim of these policies is to improve children’s readiness for primary education.

**Summary of evaluation design**

The team proposed to asses, using a Cluster Randomized controlled trial, the effectiveness of teacher training in the implementation of a new curriculum at rural pre-schools on early childhood development and primary school readiness complemented with parents’ awareness of the importance of primary education. Several studies have demonstrated the effectiveness of improving/enhancing pre-school curriculum in the classroom quality as well as the importance of parents’ involvement in their children’s cognitive development. This was the main reason stated by the delegates for choosing to implement both programs together and for taking advantage of their complementarities and reinforcing factors.

The proposal made by the team is a Cluster Randomized controlled trial with four arms: a control group and three treatment arms, all of which are described in the diagram below which summarizes the basic experimental design that was discussed during the workshop. The delegates suggested to pilot the program in Tánger-Tetuán-Alhucemas Region which is representative of the whole country, comprises two prefectures and six provinces. Four provinces representing all twelve regions of Morocco were chosen by the team. Then in each province, 16 communes and 20 villages in each commune will be chosen. For this, a full listing of all pre-schools in the four provinces eligible to receive the intervention will be produced. Once the listing is done, sample size calculations for a cluster-randomized trial will be calculated to show a minimum detectable difference of 0.25 standard deviations between any two study arms for a standardized child assessment assuming an intra-cluster correlation of 0.1, 95% confidence and 80% power.



The villages will be randomly selected under one of the four treatment methods:

- New curriculum: number of villages benefiting from the national reference framework for pre-primary education;
- Awareness of parents of the importance of ECE: a number of villages benefit from awareness campaigns;
- The new curriculum for pre-primary education + awareness of parents of the importance of ECE;
- Control: villages not benefiting from the program

The team propose all the preschools in the villages to be chosen as in average there is currently one preschool present and children will be randomly selected from the group of children attending the preschool centres (an average of 20 per pre-school), aged 4-5 years old at the beginning of the study and their parents.

The potential risks of this study are dropouts, absence, non-involvement of teachers, high staff turnover, parents' failure to respond and contamination (spillovers effects) effects among others.

The main outcome of interest would be children's readiness for school as well as preschool enrolment/attendance. There will be three waves of data collection (baseline, midline after 12 months and endline after 24 months) for assessing cognitive, motor and psychosocial development on children, socioeconomic data on households, family environment, classroom environment, program monitoring among others as well as attendance and enrolment of children using administrative data.

### **Relevance to ongoing World Bank operations**

The Bank is preparing a new education operation, which is likely to include an ECE component. Negotiations with the government are still ongoing.

### **Client interest**

The delegates were very enthusiastic and open to learn form the new concepts explained during the workshop.

### **Next steps**

To get a serious start on this evaluation, it would be important to complete the following next steps within the next few months:

1. Review the evidence from the development of the preschool national curriculum and norms developed by UNICEF Morocco for designing a new curriculum program to be implemented in rural areas.
2. Generate a full listing of all pre-schools in the four provinces eligible to receive the intervention. Once the listing is done, sample size calculations for a cluster-randomized trial will be calculated to show a minimum detectable difference of 0.25 standard deviations between any two study arms for a standardized child assessment assuming an intra-cluster correlation of 0.1, 95% confidence and 80% power.
3. Review of evidence of these types of programs keeping in mind the the potential risks involved in this study like dropouts, absence, non-involvement of teachers, high staff turnover, parents' failure to respond and contamination (spillovers effects) effects among others.
4. Review of the measurement (child learning outcomes) that should be used for child development, school readiness, home and class environment.