This snapshot summarizes preliminary findings related to child development from the Early Childhood Education (ECE) Study in Lao PDR. The ECE Study was initiated to evaluate the Early Childhood Education Project. The results presented here represent data collected on the status of child development prior to the implementation of the project. Data will be collected again after the project has finished to see if the project has improved outcomes for children. This snapshot highlights that children in Northern Lao PDR are developing poorly, with disparities in child development across different ethnic groups and family backgrounds. In particular, Lao-Tai children are developing better than Khmun and Hmong children, and children of parents with some education are doing better than children of parents with no education. Results also reflect very low rates of parent-child interaction and opportunities for children to learn, and this appears to be having a negative impact on child development.

Early childhood development is generally defined as the holistic development of children from conception. Development is the result of the process of change in which the child comes to master increasingly complex levels of moving, thinking, feeling and interacting with people and objects in his/her environment. There are various aspects of development, such as physical, social and emotional, language and cognitive development. Early childhood development is considered to be the most important phase in life, which determines later health, wellbeing, learning, behavior and achievements across the life course. It is a time of both opportunity and vulnerability and each child’s development is dependent on a combination of biological and environmental factors.

Especially important for healthy development is the stimulation, support and nurturing a child experiences in his/her family and care environments. When children do not have adequate opportunities to play and learn, they are unable to develop to their full potential.
THE EARLY CHILDHOOD EDUCATION PROJECT

The ECE Project seeks to support the expansion of quality ECE services with the objective of improving the overall development and school readiness of children aged 3-5 years in disadvantaged villages across the country (for further information, refer to Snapshot One: Project Background and Baseline Data Demographics). New buildings to be used for early education will be constructed and community groups will be created, complementary support services will be put in place, and teachers, parents and the wider community will be educated to increase knowledge and understanding of the importance of ECE. Community education will include the importance of the first 1,000 days of a child’s life, parenting skills and age-appropriate stimulation, as well as health, nutrition and hygiene. By intervening in the early years, the project seeks to strengthen the foundations for healthy physical, cognitive, emotional and social development of children in Lao PDR, in turn improving the country’s overall human development.

Prior to the implementation of these interventions, baseline data was collected from 7,520 children and their caretakers to describe the current state of development and school readiness of young children across Northern Lao PDR.

This snapshot report provides some indicators of how children in the northern provinces of Lao PDR are faring across different domains of development, and how child development varies based on gender, ethnicity and family background.

The indicator used to measure overall child development is based on the Early Human Capability Index which has been used internationally. The index provides a score for each child ranging from 0 to 1, (where 1 is the best result) and is calculated on the basis of questions asked to the primary caregiver about their child’s physical, social and emotional development as well as their communication, early literacy and early mathematics skills.
INDICATORS OF EARLY LITERACY SKILLS

Being able to read and write is crucial for children to be able to further develop and learn at school. Although many caretakers believed children should start reading and writing by the age of 3 years (43% and 32% respectively), early literacy skills among children were poor.

Only 12% of children aged 2-5 years were able to recognize and name a letter of the alphabet. No children were able to correctly write their name, with only 3% being able to write some letters when asked to write their name. Overall, less than half of children were able to open a book correctly (41%) and few children had knowledge of reading direction (left to right, top to bottom). Less than 1% of 2 year olds knew this, 2% of 3 year olds, 4% of 4 year olds and 11% of 5 year olds.

Figure 1 below shows that when examining early literacy skills in more detail, there are disparities across age, gender, ethnicity and family background. Specifically, more Lao-Tai children knew how to open a book than Khmun and Hmong children and children of other ethnicities, while children whose caretaker had attended school did better than those whose caretaker had never gone to school.
INDICATORS OF EARLY MATHS SKILLS

Basic maths skills, such as being able to recognize a number and count, are important for children to be ready to learn at school. Overall, 18% of children aged 2-5 years were able to recognize and name at least one number, while 39% were able to count to at least three. Among 5 year olds, 59% could count to three, 43% could count to six and 29% could count to 14. When asked to add 2 + 3 together, 15% of children correctly answered 5.

Figure 2 shows that when examining indicators of early maths skills more closely, there are disparities across age, ethnicity and family background. Lao-Tai children were better able to perform simple addition than Khmun and Hmong children and children of other ethnicities, while children with educated parents answered this question correctly more often than children whose parents did not go to school.

INDICATORS OF EARLY SOCIAL AND EMOTIONAL DEVELOPMENT

Social and emotional skills are important as they help children get along with others and form healthy relationships throughout life. One indicator of these skills is being able to share; encouragingly, 78% of children were happy to share their toys with others. Another indicator of social and emotional skills is the ability to...
consider other people’s feelings or to have empathy. Overall, 21% of children showed empathy.

Figure 3 shows that when examining indicators of early social and emotional development in more detail, there are small disparities across age, gender, ethnicity and family background, but these differences are a lot smaller than those observed above for literacy and maths skills.

**INDICATORS OF EARLY EXECUTIVE FUNCTIONING**

Good executive functioning is important for children to be able to remember, plan, solve problems and complete tasks. Children were asked to solve a simple picture puzzle – a task indicative of these skills. No 2 year olds were able to solve the puzzle, less than 1% of 3 year olds could solve it, 5% of 4 year olds could solve it and 11% of 5 year olds were able to solve the puzzle. Children were also asked to play a game testing their executive functioning skills, and only 7% were able to play the game correctly.

When examining indicators of early executive functioning in more detail, there are disparities across age, gender, ethnicity and family background, as shown below in Figure 4. Again, Khmun, Hmong and children of other ethnicities performed worse than Lao-Tai children, and children whose caretaker did not attend school performed worse than children of parents with some education.

**FIGURE 4. CHILDREN WHO COULD SOLVE A PICTURE PUZZLE**
**HOME STIMULATION**

A nurturing home environment that provides safety, love and opportunities to learn, explore and play is essential for healthy child development. It is important for parents to tell stories, sing and play with their children, as this provides children with stimulation and opportunities to learn. Caretakers were asked about seven different activities that families commonly engage in with their children, and if they had undertaken any of these activities with their child in their home over the past week. Rates of caretaker and child interaction were very low, with 71% of caretakers not having read a book to their child, 75% had not told their child a story, 70% had not engaged in drawing with their child, 71% of caretakers had not listened to music, sung or danced with their child, 82% of caretakers had not played any games with their child, 75% of children had not participated in housework (e.g., cooking, cleaning), and 76% of caretakers had not engaged in any outdoor activities with their child in the last seven days.

Each of the seven parent-child engagement activities had a significant positive relationship with the child’s overall development. As demonstrated in Figure 6 below, the children of parents who had read a book to their child, told their child a story, drawn with their child, listened to music, sung or danced with their child, played games with their child, participated in housework with their child, or engaged in outdoor activities with their child in the last seven days all had better development than children whose parents had not engaged in these activities with them in the past week.

**Figure 5** shows that better educated parents and Lao-Tai parents were more likely to have played games with their child in the past week. Parents who had not attended any school were much less likely to have played with their child.

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**Figure 5. Percentage of children who were played with in the last 7 days.**

![Graph showing percentage of children played with in the last 7 days by gender, age, ethnicity, and caretaker's education.]

**Figure 6. Relationship between home learning activities and child development.**

![Graph showing the relationship between home learning activities and child development scores.](https://example.com/figure6.png)
KEY FINDINGS AND RECOMMENDATIONS

A healthy start to life is the major building block for adult health, wellbeing and productivity. Consequently, early childhood development outcomes have become important indicators of not only the welfare of children but also predictors of future health and human capability. Accordingly, the importance of child development is reflected in the new Sustainable Development Goals (SDG). Compared to the previous Millennium Development Goals, we now see a shift from measures concentrating on child survival and school attendance to measures indicating how well populations of children are developing. SDG 4.2 asks that by 2030 all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education. All countries adopted the SDGs in a bid to end poverty, protect the planet and ensure prosperity for all. Additionally, in 2009, Lao PDR signed the Convention on the Rights of the Child, accepting responsibility for providing children the opportunities necessary to develop physical, cognitive, social and emotional capacities in early life (Convention on the Rights of the Child, 1989).

The results presented both here and in the second snapshot report indicate that overall, children in Northern Lao PDR have poor health and development, particularly children from non Lao-Tai families with no or little education. Compared to other countries, these results indicate that children in Northern Lao PDR are receiving very low levels of stimulation and support for their development in their home environments.

The ECE Project has the potential to support improvements through a range of interventions, including the establishment of new community learning opportunities and the training of parents, teachers and the wider community to increase knowledge and understanding of the importance of good health, nutrition and age-appropriate stimulation to promote a child’s health and development. The project will also implement complementary support services such as disability screening and the provision of school meals to promote attendance and healthy eating. For these interventions to be successful, it will be extremely important that the education of parents, teachers and community members is implemented effectively, and that the key messages around improving child development are delivered clearly and successfully to families living in the communities of Northern Lao DPR.
FUNDING FOR THIS INITIATIVE:

Funding for the ECE Project is provided by the World Bank Group through an International Development Association (IDA) Grant and Credit under the Early Childhood Education Project (P145544). Further funding to support the production of this series of snapshot reports has been provided through a partnership between the World Bank, Plan International and Save the Children International as part of the Lao Educational Access, Research and Networking (LEARN) Project, with funding from Dubai Cares under Externally Financed Output (EFO) Agreement EFO 990. The findings, interpretations and conclusions expressed in this brief do not necessarily represent the views of the Government of Lao PDR or the World Bank Group.

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