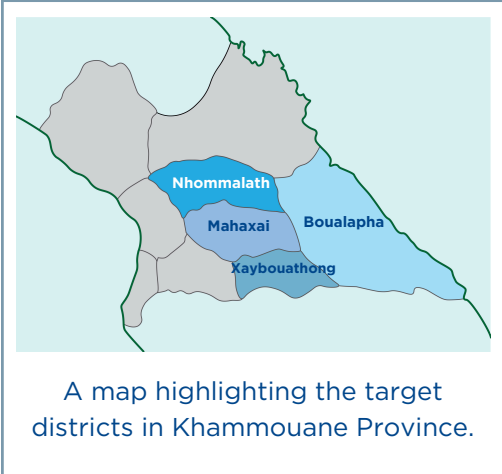




School Readiness Camp - Assessment Results



The School Readiness Camp is part of the School Lunch Project (2021-2025), funded by the United States Department of Agriculture and implemented by Catholic Relief Services (CRS) in Lao PDR in partnership with the Ministry of Education and Sports (MOES) and the World Food Programme. The camp occurs over 3 months, from June to August 2024, in remote and rural communities. It aims to enhance the Lao language skills of pre-primary children and familiarize these learners who will enter Grade 1 in September with a classroom environment. This is critical in the context of rural Laos, where many children do not speak Lao at home. This assessment focused on the language skills of children across 90 schools in Khammouane Province who participated in the third cohort of the School Readiness Camp.

Key findings

- The summer camp resulted in statistically significant improvements in language skills across gender, geographic location, and native language (whether Lao-speaking or non-Lao-speaking), as measured in four language domains: listening comprehension, receptive language, semantic fluency, and expressive language.
- Non-Lao-speaking children are catching up to their Lao-speaking peers.
 - Non-Lao-speaking children improved their performance over the four domains of a Lao language skills assessment by **20% - 35% in every domain**.
 - Across every domain, there was a **100% - 400% increase** in the number of non-Lao-speaking children scoring either very well or **answering every question correct**.
- In each domain, results show that overall improvements were broad based as a result of most learners being able to score significantly better at endline, not due to some learners improving while others were left behind.

Methodology

The Receptive and Expressive Language Module (RELM) was originally developed by USAID and the University of Notre Dame’s Supporting Holistic Action and Research in Education (SHARE) activity. In 2024, CRS Laos conducted an extensive four-month process to adapt and validate the RELM tool for the Lao context, with the SHARE team providing technical guidance. Humanity & Inclusion NGO and private publisher Sanfun were engaged to provide contextual and inclusive perspectives. This adapted tool was then used to evaluate the foundational literacy sub-skills of pre-primary children attending the camp at both the baseline (June 2024) and endline (August 2024). As the project partner, MOES validated the tool and supported field data collection.

THE QUANTITATIVE ASSESSMENT MEASURED:



Listening comprehension:

The ability to choose an image that matches a short story read aloud.



Receptive language:

The ability to choose an image that matches a singular spoken word.



Semantic fluency:

The ability to list as many words as possible when prompted with an image.



Expressive language:

The ability to name the noun or verb in a picture.

A robust random sampling approach was employed to eliminate sampling bias. Stratified random sampling was employed across all 90 schools in four districts (Bualapha, Mahaxay, Nhommalath, and Xaybuathong) with 6 learners randomly selected per school, while quota sampling for gender was also employed to ensure equal representation. This resulted in a random sample of 513 learners at baseline (253 boys and 260 girls) and 579 learners (270 boys and 309 girls) at endline. The total population served through the reading camps at these schools was 1,025 children. A multiple linear regression approach was utilized to control for any differences in baseline and endline samples, and was coupled with additional statistical analysis, including Chow tests, to ensure statistical significance, robustness, accuracy, and veracity. All improvements discussed below are statistically significant at a 99% confidence interval unless otherwise noted.

RESULTS



1. Listening Comprehension:

- **Improvement:** After controlling for gender and native language, the camp led to a 15.6% increase in Lao listening comprehension.
- **Distribution:** There was a notable shift in the distribution of scores, with more learners achieving similarly high scores. Following the camp, there was a 71.8% increase in the number of learners answering all questions correctly. There was also more than a 2-fold decrease (58.4%) in children only correctly identifying less than half of the correct answers. This signifies the overall improvements observed are due to most learners being able to score significantly better, not due to some learners improving while others are left behind.
- **Equality Impacts:** There was a 212.4% increase in the number of non-Lao-speaking children answering all questions correctly, compared to a 59.6% increase among Lao-speaking children. Non-Lao-speaking children also achieved greater increases in their average scores (25.7% increase) as compared to Lao-speaking children (11.6% increase).



Overall Improvement:

15.6%



Distribution: all questions correct

71.8%



Equality Impacts: all questions correct

212.4%

Non-Lao-speaking children

59.6%

Lao-speaking children



2. Receptive Language:

- **Improvement:** While learners already scored high in this domain at baseline (85% correct, on average), the endline saw a marked 9.8% increase in receptive Lao language skills after controlling for gender and native language.
- **Distribution:** There was a notable shift in the distribution of scores, with more learners achieving similarly high scores. Following the camp, there was a 57.5% increase in the number of learners answering all questions correctly. There was also an almost 2-fold decrease (47.6%) in children identifying less than half of the correct answers.
- **Equality Impacts:** There was a 407.3% increase in the number of non-Lao-speaking children answering all questions correctly, compared to a 47.3% increase among Lao-speaking children. Non-Lao-speaking children also achieved greater increases in their average scores (20.8% increase) as compared to Lao-speaking children (5.4% increase).



Overall Improvement:

9.8%



Distribution: all questions correct

57.5%



Equality Impacts: all questions correct

407.3%

Non-Lao-speaking children

47.3%

Lao-speaking children



3. Semantic Fluency:

- **Improvement:** After controlling for gender and native language, the camp led to a 26.7% increase in the number Lao words spoken by children when prompted to describe an image.
- **Distribution:** There was a notable shift in the distribution of Lao words used, with more learners achieving similarly high number of words. Following the camp, there was a 46.6% increase in the number of learners able to recall and use 10+ Lao words. There was also an almost 2-fold decrease (43.8%) in children that only used less than 5 Lao words.
- **Equality Impacts:** There was a 99.5% increase in the number of non-Lao-speaking children using 10+ Lao words, compared to a 48.9% increase among Lao-speaking children. Non-Lao-speaking children also achieved greater increases in their average number of words used (35.7% increase) as compared to Lao-speaking children (24.6% increase).



Overall Improvement:

26.7%



Distribution: 10+ Lao words

46.6%



Equality Impacts: 10+ Lao words

99.5%

Non-Lao-speaking children

48.9%

Lao-speaking children





4. Expressive Language:

- **Improvement:** There were more Lao-speaking learners in the baseline sample than the endline sample. These Lao-speaking children scored comparatively well on expressive language at baseline (86% correct, on average), which rendered improvements at endline not statistically significant. As such, we controlled for this phenomenon and measured improvements for solely non-Lao-speaking children. After doing so, we found they achieved an impressive 30.5% increase in their expressive language skills.
- **Distribution:** Due to the issue detailed above, we controlled for the high baseline scores of Lao speakers and examined effects among non-Lao-speaking children. There was a notable shift in the distribution of scores, with more learners achieving similarly high scores. Following the camp, there was a 132.5% increase in the number of learners scoring 75% or more on the test. There was also more than a 2-fold decrease (53.5%) in children identifying less than half of the correct answers.
- **Equality Impacts:** Lao-speaking children already scored very high at baseline, scoring 86% on average. As such, they had a non-statistically significant improvement of 1.55%. Meanwhile, as detailed above, Lao-speaking children improved significantly. The narrowing gap between Lao and non-Lao-speaking children's scores is evident in the 20.1% decrease in the spread of scores when comparing across the groups, as measured by the inter-group standard deviation. This indicates that non-Lao speakers caught up to Lao-speakers and scored more similarly, illustrating that the camp was particularly beneficial for non-Lao-speaking children.



Overall Improvement:

30.5%



Distribution: over 75% correct

132.5%



Equality Impacts: reduced gap in scores

20.1%

Decrease in the gap between Lao-speaking and non-Lao-speaking children's scores



5. Gender and District Analysis:



- **Gender:** Girls scored slightly higher than boys across all language domains and improved marginally more than boys (ranging from 0.2% - 2.8% better), but never in a way that was statistically significant. This indicates that balanced improvements are occurring across genders.
- **District:** Consistent improvements occurred across districts, suggesting the project was effective across a range of varied geographical contexts. The lowest scoring district, Bualapha, made the largest improvements of any district in 3 out of 4 of the language subtasks, indicating the camp helped children here to catch up to children in other districts.

CONCLUSION

The School Readiness Camp improved the Lao language skills of pre-primary, incoming Grade 1 children in a statistically significant way, demonstrating its potential to enhance educational outcomes. The camp also effectively bridged the linguistic gap between Lao-speaking and non-Lao-speaking children, and the geographic gap for lower scoring districts, thereby enhancing equality for disadvantaged learners.

