Promoting education for all in Lao PDR: Increasing Access Through School Meals and Inclusion

Evidence-based Findings for a Food for Education Evaluation in Lao PDR

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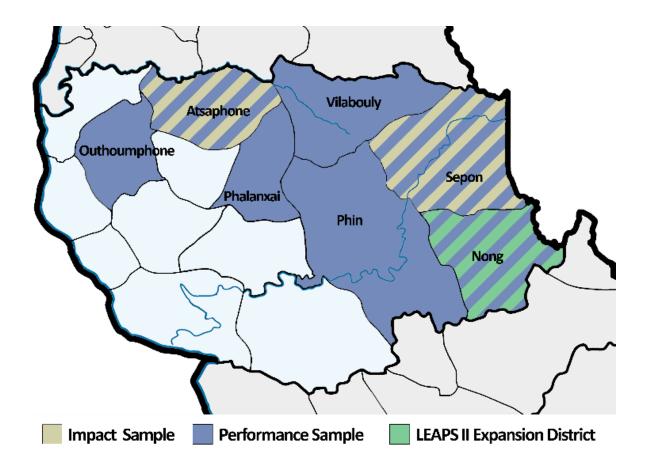






Background

- Impact and performance evaluation of the LEAPS II by IMPAQ
 - Baseline for performance (March 2017)
 and impact (September 2017)
 - Midterm performance and impact follow-up (March 2019)
 - Final performance (March 2021)



Midterm Evaluation Objectives

- Assess whether target beneficiaries are receiving services as expected
- Assess whether the project is on track to meet its stated goals and objectives
- Document initial lessons learned
- Discuss mid-course corrections and provide recommendations



- Relevance
- Efficiency
- Effectiveness
- Sustainability
- Impact



- Relevance
- Efficiency
- Effectiveness
- Sustainability
- Impact

"In what ways is the project increasing the capacities of MoES at various levels, teachers, administrators, and VEDC/communities?"

- Relevance
- Effectiveness
- Efficiency
- Sustainability
- Impact

"What mechanisms are in place for the local stakeholders (including VEDC) to continue school feeding after the duration of the project, and with high standards for health/dietary practices?"

- Relevance
- Efficiency
- Effectiveness
- Sustainability
- Impact

"To what extent, has students' level of reading and understanding of second-grade-level text changed?"



Performance Sampling & Design

- Quantitative Approach
- Qualitative Approach
 - Seven schools: One in each LEAPS II district
 - Best-worst case purposive sampling
 - Cooking Rates
 - Attendance
 - Attentiveness



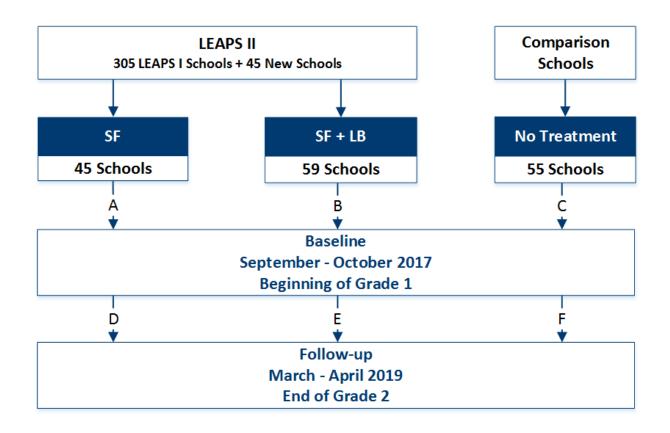
Performance Sampling and Design

Qualitative Approach

Interview Type	Number of Groups	Men	Women	Total Number of Individuals
Mothers FGD	7	N/A	41	41
Fathers FGD	7	33	N/A	33
VEDC FGD	7	26	2	28
Teachers FGD	7	3	10	13
Cooks FGD	7*	0	15	15
Students FGD	7	26	26	52
Principal KII	7	3	4	7
Pedagogical advisor KII	4	4	0	4
District Education and Sports Bureau KII	7	7	0	7
Provincial Education and Sports Service KII	1	0	1	1
Community literacy volunteer KII	4	3	1	4
Total		104	100	204

Impact Sampling & Design

A quasi-experimental design: combined propensity score matching and difference-in-differences



Impact Evaluation Measurement

$$\Delta SF = [D-A]-[F-C]$$

 $\Delta SF+LB = [E-B]-[F-C]$
 $\Delta LB = E-D$

Impact sampling & Design

- 52% attrition rate at follow-up
- Balanced sample using only students sampled at baseline and endline
- Unbalanced sample using all baseline students and tracked students at follow-up
- Full sample using replacement students to overcome attrition

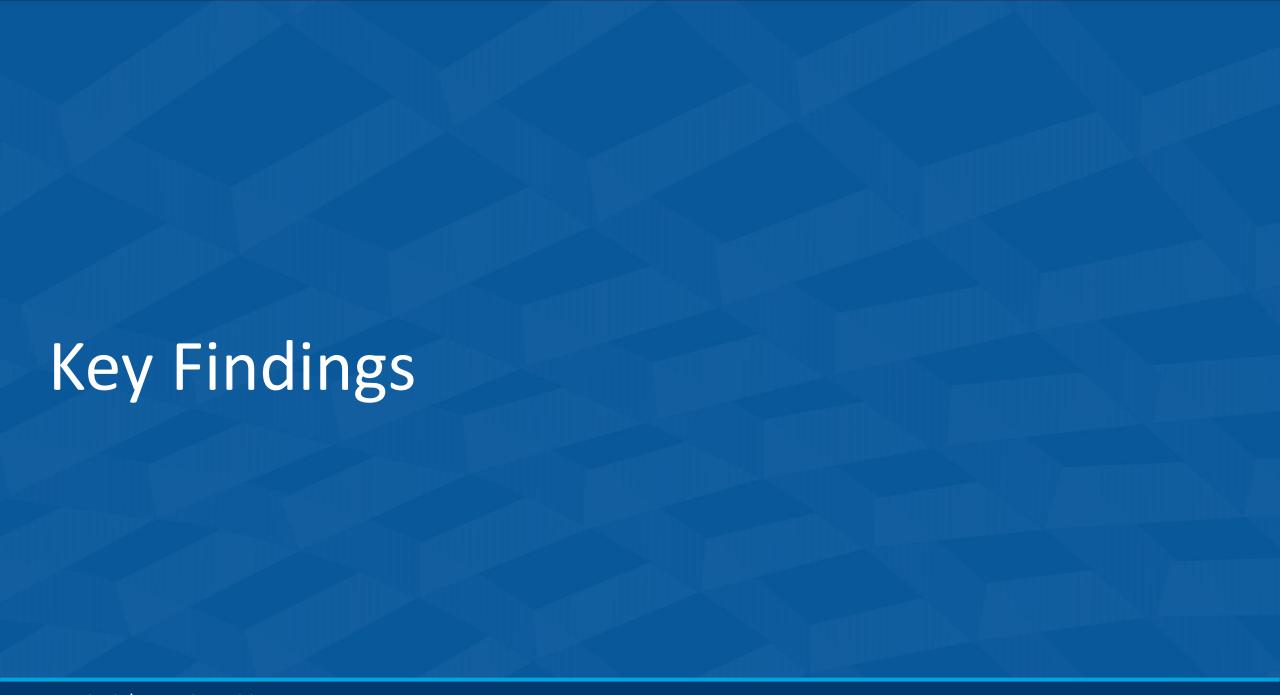
- Tracked student: Surveyed at baseline and follow-up
- Missing student: Only surveyed at baseline
- Replacement student: Only surveyed at follow-up

District	Students Surveyed at Baseline			Students Surveyed at Follow Up			
	SF	SF+LB	Comparison	SF	SF+LB	Comparison	
Atsaphone	248	345	298	211	288	213	
Sepon	353	398	542	284	219	342	
Overall	601	743	840	495	607	555	
Overall		2,184			1,657		

Data Sources

- Student survey
- Literacy Boost Reading Assessment
- Classroom Observation
- Key Informant Interviews
- Focus Group Discussions





Finding 1 – Performance Qualitative Findings

- Effectiveness
 - School meals as an incentive for attendance and improved attentiveness

When I eat at school...it
helps me to concentrate on
studying. When I am hungry,
I cannot concentrate, and I
only want to go home and to
get something to eat.

- Student

Finding 1 – Performance Qualitative Findings

- Effectiveness
 - Increased capacity for VEDC and other stakeholders

The most important thing is getting along well with the VEDC members because otherwise nothing gets done. They are the command center.

- CRS Community Mobilizer

Findings 2 – Performance Qualitative Findings

- Sustainability
 - VEDCs' commitment is vital to sustainability

Where VEDCs are more active, cooks prepare meals better and more regularly

- Community Mobilizer

Findings 2 – Performance Qualitative Findings

- Sustainability
 - LEAPS II been successful in providing school meals

We need to work closely with the local government.
They need to be a key partner.

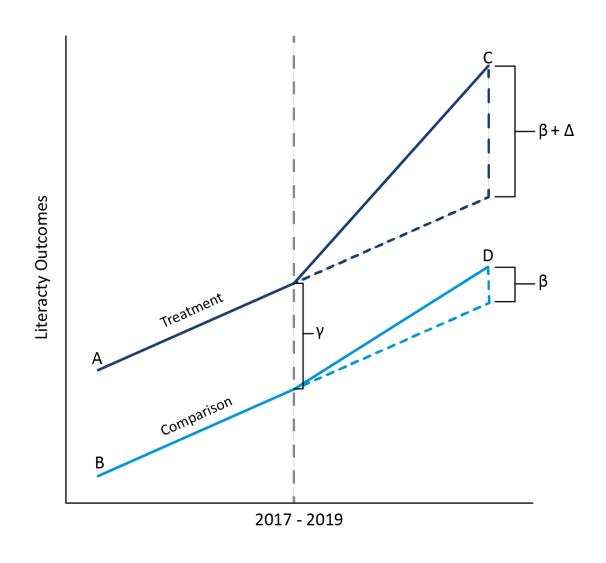
- CRS

Balance

- The SF+LB group was made up of more girls (51%) than the comparison group (45%)
- SF students were less likely to repeat a grade (23%) than the comparison group (33%)
- No differences for socioeconomic index, age, ECD/preschool attendance, Lao speakers, or availability of books at home

Regression analysis

- For three samples: Full, unbalanced, and balanced
- Disaggregated by gender and ethnic background
- Impact evaluation outcomes for SF and SF+LB:
 - Letter Recognition
 - Reading comprehension



- ► SF
 - No evidence of an impact in the SF group
 - No differences in gains made by each of the subgroups

Letter Recognition

Variables		Balanced Sample Unbalanced Sample Coefficient (SE) Coefficient (SE)		Full Sample Coefficient (SE)		
	1	II	III	IV	V	VI
Treatment*Post	0.033	0.027	0.034	0.030	-0.014	-0.011
(DID)	(0.062)	(0.062)	(0.067)	(0.065)	(0.060)	(0.058)
Tractment	-0.030	-0.023	-0.025	-0.013	-0.026	-0.010
Treatment	(0.043)	(0.038)	(0.032)	(0.027)	(0.033)	(0.029)
Deat	0.440***	0.425***	0.475***	0.439	0.484***	0.451***
Post	(0.043)	(0.041)	(0.047)	(0.045)	(0.044)	(0.042)
Controls	No	Yes	No	Yes	No	Yes
N	1,344	1,325	2,113	2,054	2,490	2,426

^{*}Source: Student survey; authors' calculations; p-value < 0.1 ** p-value < 0.05 *** p-value < 0.01; Standard errors shown in parentheses are clustered at the school level. All regressions include cluster level fixed effects.

Reading Comprehension

Variables	Balanced Coefficie		Unbalanced Sample Coefficient (SE)		Full Sample Coefficient (SE)	
	1	II	III	IV	V	VI
Treatment*Post	0.026	0.024	0.029	0.029	0.019	0.021
(DID)	(0.042)	(0.043)	(0.042)	(0.043)	(0.035)	(0.035)
.	-0.003	-0.004	-0.005	-0.007	-0.002	-0.003
Treatment	(0.015)	(0.017)	(0.009)	(0.011)	(0.010)	(0.011)
D+	0.092	0.096	0.089	0.089	0.093	0.094
Post	(0.031)***	(0.033)***	(0.030)***	(0.031)***	(0.026)***	(0.026)***
Controls	NO	YES	NO	YES	NO	YES
N	1,344	1,325	2,113	2,054	2,490	2,426

^{*}Source: Student survey; authors' calculations; p-value < 0.1 *** p-value < 0.05 **** p-value < 0.01; Standard errors shown in parentheses are clustered at the school level. All regressions include cluster level fixed effects.

- ► SF+LB
 - The impact of LEAPS II on letter recognition is positive and significant in each sample
 - Subgroup analysis shows strong positive results for girls, boys, Lao, and non-Lao speakers

Letter Recognition

	Balanced Sample		Unbalance	ed Sample	Full Sample	
Variables	Coefficient (SE)		Coefficient (SE)		Coefficient (SE)	
	- 1	II	III	IV	V	VI
Treatment*Post	0.429	0.430	0.407	0.410	0.407	0.404
(DID)	(0.045)***	(0.045)***	(0.051)***	(0.049)***	(0.046)***	(0.045)***
Traatmont	0.011	0.020	0.007	0.010	0.000	0.003
Treatment	(0.032)	(0.029)	(0.022)	(0.021)	(0.024)	(0.023)
Post	0.440	0.429	0.479	0.451	0.486	0.463
Post	(0.045)***	(0.041)***	(0.048)***	(0.045)***	(0.043)***	(0.041)***
Controls	No	Yes	No	Yes	No	Yes
N	1,472	1,437	2,318	2,226	2,743	2,646

Source: Student survey; authors' calculations; p-value < 0.1 ** p-value < 0.05 *** p-value < 0.01; Standard errors shown in parentheses are clustered at the school level. All regressions include cluster-level fixed effects.

Reading Comprehension

	Reading Comprehension						
Variables	Balanced Sample Coefficient (SE)		Unbalanced Sample Coefficient (SE)		Full Sample Coefficient (SE)		
	- 1	II	III	IV	V	VI	
Treatment*Post	0.043	0.041	0.044	0.043	0.041	0.039	
(DID)	(0.039)	(0.039)	(0.038)	(0.038)	(0.035)	(0.035)	
T	-0.001	-0.000	-0.002	-0.003	-0.011	-0.012	
Treatment	(0.018)	(0.019)	(0.011)	(0.011)	(0.012)	(0.013)	
Post	0.092	0.091	0.090	0.086	0.094	0.094	
Post	(0.031)***	(0.033)***	(0.030)***	(0.031)***	(0.026)***	(0.025)***	
Controls	NO	YES	NO	YES	NO	YES	
N	1,472	1,437	2,317	2,226	2,742	2,646	

^{*} Source: Student survey; Authors' calculations; p-value < 0.1 ** p-value < 0.05 *** p-value < 0.01; Standard errors shown in parentheses are clustered at the school level. All regressions include cluster level fixed effects.

Discussion & Conclusion

- Sustainable pathways to supplementing school meals
- Important role of VEDCs
- Importance of school meals on other outcomes



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