Rapid Appraisal of Reports on Multi Grade Teaching in Lao PDR from 2006- 2016

1 Introduction

A rapid information appraisal was conducted to determine the current available information and gaps about multi grade teaching (MGT) in Lao PDR. The results of the appraisal will support BEQUAL to make a decision about the focus of a proposed evaluative study on multi grade teaching. The objectives of the rapid information appraisal are:

- 1. To understand the information available about various aspects of multi grade teaching in Lao PDR.
- 2. To determine the gap in information about multi grade teaching.
- 3. To identify potential areas of study relevant to BEQUAL outcomes.

Ten publicly available reports from 2006 to 2016 were identified and rapidly appraised. Of these reports, two were focused on multi grade teaching in Lao PDR and the remaining eight reports were focused on teaching, basic education or teacher training in the country.

2 Multi grade teaching: some context

Multi grade teaching has been adopted in all provinces of Lao PDR, though at varying in the proportion of multi grade classes. The proportion of multi grade classrooms range from 5% in Vientiane Capital to 26% in Champassak, and to 62% in Houaphan in 2015. The average proportion of multi grade classrooms in Lao PDR was 27.8% in 2015 and 26.6% in 2007 (Fig.1, Annex 1).

There are nine provinces with at least 30% of multi grade classrooms, accounting for about half of total number of provinces. These provinces are unevenly distributed. Five of them are in northern part of Lao PDR, including Houaphan, Phongsaly, Luang Namtha, Luang Prabang, and Bokeo. Others are in central and southern parts of the country. These include Savannakhet, Khammouane, Saravan, and Sekong. In 2015, the highest proportion of multi grade classrooms was in Houaphan with 62%, followed by Phongsaly with 55% (Fig.1, Annex 1).

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¹ The threshold level of 30% is an average of the proportion of multi grade classrooms across all provinces.

The proportion of multi grade classrooms in provinces is changing over time. This change can be understood as two distinct groups. The first group of provinces appears to be actively expanding multi grade classrooms, which has resulted in an upward trend over the past nine years (2007-2015). This group includes Houaphan, Phongsaly, Luang Namtha and Savannakhet. In this group, Houaphan had the largest increase in multi grade classrooms from 45% in 2007 to 62% in 2015. The upward trend of multi grade classrooms may indicate that provincial education line agencies are using multi grade classrooms as a strategy to improve access to primary education (Fig.1, Annex 1).

The second group of provinces appears to have reduced multi grade classrooms. This group includes Sekong, Luang Prabang, Saravan, and Bokeo. In this group, Luang Prabang had the biggest drop of multi grade classrooms from 47% in 2007 to 36% in 2015. The downward trend may suggest that provincial education line agencies have an alternative strategy to promote access to primary education (Fig.1, Annex 1).

2.1 Multi grade classrooms and educational attainments

Districts (and provinces) with lower educational attainments are more likely to adopt the multi grade classrooms than those with higher educational attainments. Using cross-sectional data from 145 districts in 2015, the scatter plot in Fig.2a (Annex 1) shows that there is a downward linear relationship between the proportion of multi grade classrooms and net enrolment ratio in primary schools. That said, the proportion of multi grade classrooms is negatively correlated with net enrolment ratio, indicating that a district with low enrolment rate is more likely to have multi grade classrooms. In addition, the scatter plot in Fig.2b (Annex 1) illustrates that there is a positive correlation between the proportion of multi grade classrooms and student repetition rate. This may indicate that a district with a high repetition rate is more likely to adopt multi grade classrooms to accommodate students.

Summary of information available on MGT in Lao PDR

Multi grade teaching was presented and discussed in reports in context of teaching in remote and rural schools. While the results of the rapid appraisal of MGT reports focus specifically on this topic, it is worth keeping in mind that the reports do not locate the problem or solution for improved learning outcomes solely with MGT. Authors of reports acknowledged that the challenges with MGT is associated with poor teaching (teacher training and pedagogy) and limited resources. In this way, current understanding about the challenges with MGT is that it is symptomatic of broader issues with the education system and levels of poverty, rather than being the cause of poor learning outcomes.

Below is a summary of report content about MGT as they relate to the three BEQUAL outcomes: Participation, Effective Teaching and Resourcing. The key results from the reports presented here represent the views of the authors and not necessarily the views of LADLF. The full details of report findings and references can be found in Annex 2.



PARTICIPATION

- Ineffective MGT and Lao language teaching are important barriers to ethnic student participation in schools. Student's experience of learning in multi grade classes are described as disruptive, poor instructions provided by the teacher and lessons are not interactive. Where teaching quality is poor in mono grade classes, it appears that student learning experiences is worsened in multi grade classes (Bokeo province examples).
- Ineffective MGT reduces confidence among VEDCs, parents and teachers in school participation. Multi grade classrooms are perceived by many in remote and rural communities as a substandard learning environment.

EFFECTIVE TEACHING

- Skills in MGT and Lao language teaching are significantly needed for pre-service and inservice teachers. Lao language teaching and resources was often mentioned in discussions about MGT. The reports recognised that MGT in remote and rural parts of Laos occurred in ethnic communities where Lao language acquisition is part of the classroom learning.
- Ineffective teaching can produce poorer learning results in multi grade classrooms than in mono grade classrooms (see Palme and Hojlund 2013 for Bokeo province examples).
- Learning outcomes for multi and mono grade classrooms have not been widely investigated in developing countries, including Laos.
- The system for teacher training in MGT is ineffective. There is limited focus on MGT in the
 in-service training modules (MoES); limited practicum time for pre-service teachers (actual
 practicum time is less than the stipulated 320hrs); teaching resource training is poor; there is
 limited follow up support after training by DESBs; three days training on MGT is not
 adequate (five days is preferable by teachers); and PESS and DESB staff are not
 adequately experienced or skilled in MGT to support teachers.
- A system for teacher training in MGT needs a long term commitment. A mixed mode of theory and practicum (1 semester each) was effective with ethnic student teachers in the Laos-Australia Basic Education Project (LABEP 1999-2007). However, commitment to maintain the professional development of teachers is needed to sustain effective teaching. Five years after LABEP, 87% of ethnic teachers recruited by the program have remained in the teaching service but teachers did not receive further training after the project. Pedagogical Advisors (PA) provided important support to remote and rural teachers on MGT, however after funding for school visits ceased under LABEP, PA visits reduced to levels before the project.

RESOURCING

• There are institutional challenges with implementing effective MGT. 1) The MoES is faced with demand to expand education facilities and the need to effectively utilise its human resources. 2) Better data management on MGT is needed across the education system. 3) The lack of commitment to recurrent non-salary funding contributes to the slow pace of



- change in MGT training effectiveness beyond program funding (e.g. LABEP, Plan projects). Willingness by GoL to finance and provide for MGT is needed to improve resourcing.
- Appropriate human resource development is needed. Skilled student teachers and in-service teachers need effective on-going MGT pedagogy training. The provision of training and resources to teachers needs to account for teacher's lack of experience, capacity to manage the complexity of multi grade teaching and limited teaching resources.
- DESBs need to provide and support MGT pedagogy by linking with development partners; by holding annual joint conferences with Teacher Training Centres; establishing demonstration schools in the district for training under real teaching conditions; and to work with PESS and MoES to incorporate strategies for MGT and teaching Lao language in the teacher training curriculum.
- Targeted recruitment and deployment of ethnic teachers in remote and rural schools have demonstrated to be successful in supplying these schools with teachers equipped to teach in multi grade classrooms (e.g. LABEP).
- An inefficient supply and deployment of teachers for MGT worsens effective teaching. There
 is an under supply of teachers in remote and rural schools which means a classroom can
 have 50 to 60 students.
- The balance between effort and incentives in MGT is uneven. Teachers receive 25% loading for teaching two grades and a 50% loading for teaching three grades on top of their base salary. In addition, teachers receive a 'hardship' allowance for working in remote schools. There is a low demand from non-local teachers to be placed in remote and rural schools. Non-local teachers are aware of the challenges of working in remote and rural schools, such as language barriers, MGT and lack of support. These are important disincentives for teachers working in remote and rural schools.



Information Gaps

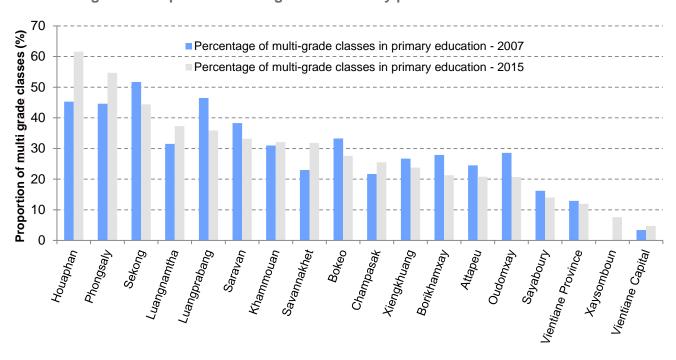
Information 'known' from the rapid appraisal of MGT reports are summarised in the table below. Potential areas of information gaps are identified for further discussion with BEQUAL leaders and MoES/ ESRC.

BEQUAL Outcomes	Known	Gaps
Participation	 Negative perception of multi grade classrooms by community. Negative experience of learning in multi grade classrooms by some students (e.g. study two districts in Bokeo province). 	 Student learning experience in multi grade classrooms in Laos PDR. Multi grade classrooms with one teacher teaching three to five grades.
Effective Teaching	 Challenges with MGT for teachers. One-off and short MGT training is ineffective for improving quality teaching. Teacher training system on MGT needs improvement across all levels of government. 	 Strategies to co-ordinate the teacher training system for effective MGT. Needs of PESS and DESBs to improve performance and support to teachers for MGT. A comparison of student learning outcomes in multi grade and mono grade classrooms. Identify ways MGT and Lao language teaching can be incorporated in the curriculum for teacher training.
Resourcing	 6. Institutional and budget constraints in MGT resourcing. 7. Weaknesses in teacher supply and deployment to remote and rural schools where MGT is often the norm. 8. Incentives and disincentives for non-local teachers to work in remote and rural schools. 9. Poor data about MGT and classrooms. 	 6. Capacity of MoES to support PESS, TTCs and DESBs to improve MGT in schools. 7. Teaching resources to improve MGT and Lao language learning.



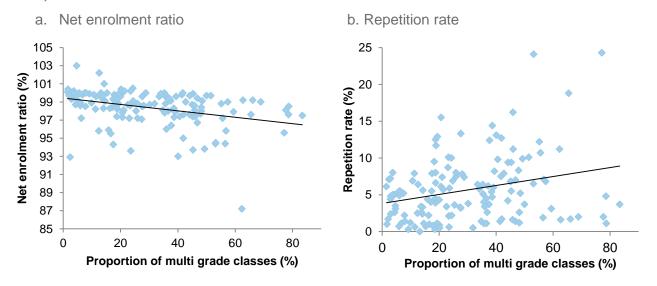
ANNEX 1

Fig.1: Development of multi grade classes by provinces in 2007 and 2015



Source: Authors' calculation based on Edulnfo database.

Fig.2: Correlation between multigrade classes and basic educational attainments at district level, 2015



Source: Authors' calculation based on Edulnfo database.



ANNEX 2 Multi grade teaching in Laos PDR: Synopsis of information from reports for the period of 2006-2016.

			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
1	UNESCO, 2015		Institutional challenges: The challenge for MoES is how it can focus on quantitative expansion of education facilities and effectively utilise its human resources. Supply of appropriate human resource development is needed: Teachers skilled in multi grade pedagogy are needed to improve quality of education.	
2	EU, 2015	Ineffective MGT and Lao language teaching are important barriers to student participation: Ineffective multi grade teaching pedagogy, lack of learning materials, ineffective teaching in Lao language and cultural issues contribute to the high dropout rates of ethnic students.	Inefficient supply and deployment of teachers for MGT: There is an oversupply of teachers in urban areas, in remote areas, classes with 50 or even 60 pupils with teachers delivering multi-grade classes is not unusual. The uneven distribution of teachers indicates a high level of inefficiency and inequity in the teachers' deployment system. The balance between effort and incentives in MGT is uneven: The challenges of living and working in remote villages is well recognised – language barriers	Skills in MGT and Lao language teaching are significantly needed for pre-service teachers: Pre-service teacher training should focus more on multi grade teaching methodologies, teaching Lao language and reading pedagogy.



			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
			(for non-local teachers), lack of resources and support, and the extra workloads associated with teaching multi-grade classes - all serve to act as a disincentive for non-local teachers to be deployed into remote schools.	
3	UNESCO, 2014	Ineffective MGT contributes to low community confidence in school participation: Some parents in remote and rural communities do not perceive the importance of education.	Inefficient supply and deployment of teachers for MGT: Teacher deployment remains an important challenge. Primary teacher workforce has expanded leading to a decline in the average pupil-teacher-ratio (PTR) from 31.3 in 2009 to 24.2 in 2013, moving further away from the ESDP target of 34.1. There is under supply of teachers in remote rural schools due to a high level of inefficiency and inequity in the teachers' deployment system. There is a low demand from teachers to teach in MGT and remote settings: Maintaining qualified teachers in remote areas is a challenge. Lack of teachers in these locations contributes to the "incomplete" schools throughout the country. The challenges— language barriers (for non-local teachers), lack of resources and support, and the extra workloads associated multi-grade teaching environments - all serve to act as a disincentive for non-local teachers to be	Learning outcomes for multi and mono classes has not been widely investigated: Ineffective multi-grade teaching and pedagogy classes, lack or learning materials is a challenge for achieving learning outcomes in multi grade teaching classes. Learning outcomes for mono and multi grade classes are not well understood. EGRA report, 2013 did not disaggregate results for students by class mode. ESQAC study of 2 districts in Bokeo found grade 3 students taught in mono grades performed better than those in multi grade classes. Pedagogical challenges with MGT: > Teachers struggle with time management in multi grade classrooms to conduct learning activities. > Teachers have limited knowledge and skills to teach content in depth and to



			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
			deployed into these areas. Context for MGT in BEQUAL provinces (EMIS 2010-2011): > 45% of schools in Phongsaly province have 1 teacher teaching Grades 1 to 5. > 28% of schools in Luangnamtha province. > 33% in Khammouane province, > 37% in Savannakhet and > 36% in Saravan provinces.	provide a student centred learning environment. > Teachers struggle with lesson planning and preparation for MG classes, particularly those operating in Lao and an ethnic language. > Teachers struggle with integrating students in lower primary school grades into a classroom environment. Children who have not attended preschool need more support to become socialised into the school environment. > Teachers surveyed had a negative perception of MGT because of the associated challenges.
4	Palme and Hojlund (Plan Laos) 2013		Supply of appropriate human resource development is needed: The report recommended that DESBs (including PAs) should play a greater role in: > Working with development partners to take a phased approach to change teaching practices. > Creating a demonstration school in the district to try new teaching strategies. Use the school to train teachers from within the district to observe and learn from a real teaching condition. A pedagogical mentor	Ineffective teaching can produce poorer learning results in multi grade classes than in mono grade classes: Multi grade classrooms and schools are the norm rather than the exception in many provinces. There is limited research comparing student learning outcomes in multi or mono grade classrooms around the world. The literature on effective teaching in developing countries demonstrate that the lack of school resources, lack of support and training for



			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
			should support PAs and accompany DESB staff on school visits to follow up. > Establishing institutional links with Teacher Training and Education providers to hold annual conferences for student teachers and in service teachers about classroom pedagogy. > Working with Ministry and Provincial government to incorporate strategies for teaching Lao as a second language in the curriculum in ethnic mono and multi grade classrooms.	teachers, dilapidated school environment and low student attendance lead to poor student outcomes in mono grades. 20 schools in Pha Oudom and Pak Tha districts, Bokeo province demonstrate that ineffective teaching exacerbates poor student performance in multi grade classrooms. Performance assessment was based on ASLO used with grade 4 students, classroom observations and interviews with students and teachers. Teachers reported that learning decreased with multi grading. Teachers acknowledged they need more in-service training to develop skills and knowledge to teach in the various subjects; to use more student focused techniques and to properly assess and diagnose student performance in this setting. Skills in MGT and Lao language teaching are significantly needed for inservice teachers:
				Multi grade teaching with ethnic students is more challenging. Lessons are usually



			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
				teacher-centred where the class teacher organises the grades to face in different directions in the room. Lessons have a staggered start, with one grade 'on hold' while the teacher gives instruction to the other grade. This staggered approach reduces the amount of learning time. For ethnic students there is little or no time spent on learning to acquire Lao language as the class time is dedicated to learning the content in the text book.
				In multi grade classrooms with smaller numbers of students, the teacher will organise students into small groups and give instructions to complete an exercise in the grade text books. This arrangement can be more efficient than the staggered approach and the group work should provide students with more interactive learning. However the studies in Bokeo province found group work learning to be more passive than individual learning.
				Students in grades 1 and 2 seem to struggle more in completing tasks in both mono and multi grade classes as they require more individual attention from the teacher to learn a second language and adjust to classroom behaviour. The teacher's attention is often focused on



			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
				managing the classroom and most teachers seem to lack the confidence and skills to teach in the multi grade mode.
5	Howe and Holt (Plan Laos), 2012	Ineffective MGT and Lao language teaching are important barriers to student participation: The experience of learning in a multi grade class from children's perspective: lessons are disruptive, not enough time for activities, not enough attention from teacher, poor instructions given by the teacher. 12 of the 124 schools in the Plan Lao project were evaluated in two districts in Bokeo province. Ineffective MGT reduces community confidence in school participation: VEDCs have a negative perspective of multi grade classes as they are seen as	Institutional challenges: A system for collecting data at the district level is ineffective. Poor data on MGT is maintained by DESBs. Data did not align with village level data. Supply of appropriate human resource is needed: Teachers are rotated by DESB between mono and multi grade classes. Teachers would like to be skilled in teaching in both types of classes.	The system for teacher training in MGT is ineffective: MoES in-service MGT training module is inadequate (1 activity and few handouts). Pre- service training on MGT is also limited to theory. Teaching practicum is not provided according to guidelines for TTC. One week or less of practicum (instead of the 320hrs). Bokeo PESS and DESB staff training teachers are not adequately experienced, skilled or knowledgeable about MGT. Their training on the subject is limited. 5 days training of MGT theory and practice seems to be useful to teachers. 3 days is not enough. Resources (books, handouts etc) need to be integrated into the training. Otherwise teachers are not confident to use the resources. Follow up and post training support are needed by remote and rural teachers. PAs
		substandard learning		and principals are not able to provide adequate support as they also lack



			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
		environments for children.		knowledge and skills in MGT. Uptake of lesson plan template provided by the Plan Laos project was the most effective element of the training. One-off training (3-5 days) had produced little to no change in the classroom teaching. Pedagogical challenges with MGT: > Teaching is teacher-centred; > Student learning mostly passive; > Grades are taught separately and in
6	Walsh, 2012		Supply of appropriate human resource is necessary:	order. Children are left idle while waiting for the teacher. > Combined activities conducted for music, art or crafts only. A system for teacher training in MGT needs a long term commitment:
			Supply under LABEP program: > 4112 ethnic student teachers recruited, trained and deployed in their village schools. All received one-off training on MGT. > 87% of ethnic teachers trained and deployed have remained in the teaching service. Of this 75% have remained in remote schools. > 1548 ToT in- service training (Pas, TTC lecturers and MoES staff) to use LABEP	Mixed mode pre-service training of ethnic student teachers was effective in achieving student learning of theory and practice. One semester at TTC and one semester teaching practicum in village school. Although student teachers need more support during practicum. Ethnic teacher graduates felt 'minimally' competent after teacher training and MGT training. 5 years post LABEP 'there is no evidence' of that these teachers have



			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
			supplementary materials. > 77 PAs trained to support MGT and received transport funds for school visits. 71% of recruited PAs have remained in their position 5 years after LABEP. > 600,000 copies of 21 book titles distributed to schools in 51 districts. Includes MGT resource. > 2000 teaching and learning kits distributed to schools. Includes a guide on MGT.	received further training to increase their competency.
			Institutional challenges: MGT is an important part of teaching in remote rural schools. MGT needs to be part of the education policy, resourced as genuine teaching methodology during in-service if it is to be effective.	
			Lack of recurrent funding could not sustain the quality of supply for effective teaching. Supplementary materials for teaching (kits and books) were not used after LABEP as funds were not allocated to continue print runs for damaged materials. Unused materials were stored as teachers did not receive training on how to them. PA visits reduced back to the same frequency before LABEP as DESBs did not have the funds to continue funding transport for school visits.	



		BEQUAL Outcomes		
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
			Supply of appropriate human resource development is needed:	
			DESB units desire to develop management and administration skills as their responsibilities are increasing under the decentralisation policy. Including how to manage grants and activities for education.	
7	ADB, 2011		The balance between effort and incentives in MGT can be achieved:	
			Teacher incentive and salary package under EQUIP (incl. 30% loading for multi grade teaching) contributed to maintaining teacher numbers in remote communities.	
8	ADB, 2008		Supply of appropriate human resource is necessary:	A system for teacher training in MGT needs a long term commitment:
			 Supply under BEGP and LABEP: 4112 teachers and principals were trained in multi grade teaching, teaching in Lao Language and delivery of life skills across 52 districts (LABEP). The project supported 2 weeks of overseas training on management, EMIS, multi grade teaching, and monitoring and evaluation for MOE and provincial officials. 57 five-classroom and 455 multi grade schools constructed and equipped (BEGP). 	77 pedagogical advisers were recruited and trained to provide onsite advisory services to multi grade schools. In addition, techniques of micro-teaching using local model schools were introduced to the three project-supported TTCs and the 11 project provinces. Problems with language, logistics, and unfamiliarity with new pedagogical approaches required a longer training period for all levels of staff to meet the



			BEQUAL Outcomes	BEQUAL Outcomes	
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			> 436 provincial pedagogical advisers and more than 500 school principals trained in supervising teachers in multi grade teaching (LABEP).	Training and support to teachers during LABEP had a generally positive impact on increasing effectiveness in teaching.	
9	Benveniste et		Institutional challenges:	Pedagogical challenges with MGT:	
	al, 2007 (WB)		Multi grade teaching is crucial for expanding access in remote areas, particular where populations are disperse and density is low. It enlarges the possibility of grade progression within an incomplete school. Furthermore, it allows for a more efficient allocation of limited human and financial resources by assigning one teacher to multiple grades where pupilteacher ratios are low or, as is the case in Lao PDR.	Multi grade classes are most often found in rural areas. Multi grade instruction presents challenges for teachers who have not received proper training to deal with multiple ability settings or able to tailor their teaching to different grades.	
			Supply of appropriate human resource development is needed:		
			Multi grade teaching is more difficult, these classrooms are usually led by teachers with the least experience or capacity. Rural and remote communities have the highest concentrations of contract teachers who lack basic training and are most ill-prepared to manage the multiple demands imposed by multi grade teaching. Moreover, school facilities usually lack essential materials and teaching aids to		



			BEQUAL Outcomes	
No.	Author(s), Yr	Participation	Resourcing	Effective Teaching
10	Noonan and Xaiyasensouk		In significant parts of the country, teachers face an undue burden with very large numbers of students in their care. Constraints in teacher supply—particularly in rural and remote areas—are an important factor in hampering the reduction in class size. There is a low demand from teachers to teach in MGT and remote settings: Difficulties in attracting teachers to less than desirable posts also pose an important obstacle to the implementation of official regulations and aspirations on appropriate class sizes. This exacerbates ineffective multi grading teaching. Institutional challenges:	Skills in MGT and Lao language teaching are significantly needed for
	2006		The 'needed' curriculum and teacher training for multi grade teaching and Lao language teaching must be matched by a 'provided' curriculum reflecting the GoL's willingness to finance and provide for this need. Salary incentives are provided to teachers for teaching 2 grades (25% loading) and 3 grades (50% loading). Teacher education curriculum has improved substantially (at the time of this report).	pre-service teachers: Multi grade teaching is taught in teacher training centres as supplementary modules to the core program. Training of student teachers from remote communities should focus on professional needs, "especially multi grade teaching methods" Greater support is also needed for teaching children whose first language is not Lao.



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