

7.1 Status

Secondary students who want to become teachers have five options. To become a pre-primary teacher, they can enroll in a one-year program at the end of upper secondary school (11 + 1). To become a primary teacher they can enroll in a three-year training course at the end of lower secondary school (8 + 3 option) or they can enroll in a one-year training program at the end of upper secondary (11 + 1 option). To teach at the lower secondary level, they can enroll in a three-year teacher training program upon completion of upper secondary school (11 + 3 option). To teach upper secondary, they must enroll in the Faculty of Education at NUOL (11 + 4 option).

The consolidation and strengthening of teacher training has been a national priority throughout the 1990s, with considerable success. In the late 1980s, teacher training was provided by 59 small training schools that had little common curriculum and offered generally low quality preparation. In the mid-1990s, MOE raised the minimum educational requirements for primary and secondary teachers and began closing and consolidating these small schools into larger teacher training centers. These larger centers were able to achieve economies of scale and offer a stronger, more consistent training program. By 1998 the 59 schools had been reduced to 9 (plus the Faculty of Education at the university).

TTCs are under the general supervision of the Teacher Training Department within MOE. Each school has a director who oversees the operation of the school. The Faculty of Education at NUOL reports to MOE through the rector.

National Goals and Strategies

Among the goals established by Government in its Strategy for Educational Development by the Year 2000, and its subsequent amendments, one was to raise teacher quality through preservice and in-service teacher education. Implementation of strategies to reach this goal has been a centerpiece of Government education policy during the present five-year plan.

In the implementation of these goals, three urgent priorities in teacher training are in serious tension: ensuring a sufficient (and increasing) supply of teachers; increasing the minimum qualifications of those entering the field; and, controlling costs of teacher preparation. Success in any one of these three can jeopardize the other two. Yet, all three must be achieved together.

Student Enrollments and Characteristics

The preparation of pre-primary teachers is provided at one TTC which students can enter after completing upper secondary school. The preparation of primary and lower secondary school teachers is done in eight TTCs, most of which offer both

Figure 7.1
Teacher Training Institutions (1998)

	Pre- Primary Teachers	Primary Teachers		Lower Secondary Teachers	Upper Secondary Teachers
	11+1	8+3	11+1	11+3	11+4
Pre-primary Teacher Training College					
1) Dongkhamxang	x		x		
Primary Teacher Training Schools					
1) Dongkhamxang			x		
2) LuangNamtha		x	x		
3) Saravan		x	x		
Teacher Training Colleges					
1) BaneKeun, Vientiane Province			x	x	
2) Luangprabang		x	x	x	
3) Xiang Khouang		x	x	x	
4) Savannakhet			x	x	
5) Champassack			x	x	
National University of Lao					x

Source: Compiled from MOE data.

a three-year program for students who have completed grade 8 and a one-year program for those who have completed grade 11 (Figure 7.1). About half the school places are reserved for students admitted under the quota system, in which a fixed number of places are allocated to each province. The provincial education director in each province selects those who will attend, based on grade 8 or grade 11 examination scores, school recommendations, and other considerations. The remaining places are filled through a competitive entrance examination developed and administered by the Teacher Training Department. Admission to the Faculty of Education at NUOL follows a similar procedure of splitting admissions between quota and non-quota students.

One result of raising teacher qualifications and closing teacher training schools is that enrollment in three-year teacher training programs dropped sharply from about 6,000 students in 1993 to 3,000 students in 1997. Enrollment in the four-year program through the Faculty of Education at NUOL totaled 2,863 students for 1995/96 (MOE, 1996). Enrollment for 1996/97 was 1,509. However, intake of new students during 1998/99 dropped to 32 students, all of whom entered through the quota system. This dramatic drop in new admissions signals an emerging crisis in the supply of qualified upper secondary teachers, a topic discussed in greater detail later in this section.

In-service teacher training has been offered for three reasons. First, some teachers do not meet the minimum education requirements for the grade level at which they teach, in many cases because they were already employed when the minimum education requirements were raised in the mid-1990s. In 1993, 8.7 percent of lower

secondary teachers were untrained or had completed only five years of general education before entering teacher training. Second, virtually all teachers needed in-service training to learn how to teach the new integrated curriculum introduced in the mid-1990s. Third, faced with a teacher shortage, some schools have had to hire contract teachers who do not meet the minimum education requirements.

In-service training has been offered by (1) the Network Teacher Upgrading Centers (NTUCs), operated as a collaboration between MOE and UNICEF, Redd Barna, Catholic Relief Service (CRS), and Church World Service (CWS), aimed at upgrading unqualified and under-qualified teachers; (2) NRIES, to introduce teachers to the new curriculum; (3) the pedagogical advisers who were funded through the EDP to support teachers' use of the new curriculum, (4) the Teacher Development Center (TDC), to provide general upgrading of the teaching force; and (5) by international organizations (Redd Barna, Save the Children/UK) as part of their own collaborative programs with MOE. The training provided by NRIES and TDC was funded under the ADB-sponsored Education Quality Improvement Project. Curriculum development activities of the TDC were funded under EDP sponsored by the World Bank and managed jointly by the Department of General Education and the Teacher Training Department. While these various initiatives have each made a contribution, they have tended to operate as a patchwork of unconnected and uncoordinated activities. This will be discussed in more detail later in the Analysis section.

Teachers

While most teacher trainers meet the formal qualifications for their job, few have ever taught at the level of education for which they are training their students to teach. For example, in one TTC, only five of 31 instructors preparing lower secondary teachers had ever actually taught at the lower secondary level. Similarly, the Faculty of Education tends to hire its own graduates to prepare students to teach at the upper secondary level. Only one of the instructors has actually taught at that level. One implication is that teacher training tends to emphasize theory and is not well grounded in the practical realities of classroom instruction.

Curriculum

The TTC curriculum is out of phase with the curriculum and instructional materials being produced by NRIES for use in the schools. At the time of data collection for this study, the TTCs did not have sufficient amounts of the new school materials to distribute them to teacher trainees. For example, at the Vientiane TTC, each instructor received only five copies of the new integrated curriculum for their subject area; students did not receive copies of the curriculum, teachers' guide, or student textbook for the subject they would be teaching after graduation. Instructors placed some copies in the library for student use, but this meant that up to 100 students would have to share access to the materials they would eventually be expected to teach. As a result, instruction at the TTCs is not well aligned with what graduates will actually teach in the schools.

The 11 + 1 curriculum at the teacher training institutions teaches only pedagogical methods. Even in the 8 + 3 curriculum relatively little emphasis is given to

upgrading students' content knowledge in the subject areas they will teach. The TTCs assume that students already learned the needed content during their own secondary education. This assumption is questionable, given the low quality of the prior education many of the trainees received and the new content knowledge demands on teachers posed by the new integrated curriculum.

TTC officials observed that part of the problem was the integrated nature of the curriculum. TTC instructors were trained as subject area specialists. Many of them were unsure how to teach the integrated materials, because they, themselves, were unsure of the content. For example, the English text describes how to conduct a science experiment. If instructors do not have the necessary background in science, they risk embarrassment by being unable to respond to student questions.

The curriculum for in-service training is largely driven by the curriculum and textbook development activities of MOE. The focus of has also been on the pedagogical skills necessary to teach the new integrated curriculum. To date, in-service teachers have not received upgrading in the content knowledge necessary to teach the new curriculum.

Evaluation

Grade 8 and 11 graduates (non-quota) take an entrance examination as the basis of admission to a teacher training program. Progress through the program is based on the credit system. There is no overall final examination. Rather, students are graded in each course and each course is worth a designated number of credits. Eligibility to graduate is based on passing enough courses to accumulate a sufficient number of credits. However, districts generally require teachers to pass an examination as part of applying for a teaching position. Reports from the field indicate that, as schools are experiencing serious teacher shortages, districts are more flexible about the scores they will accept.

Facilities and Equipment

TTCs have received new facilities, upgrading of existing facilities, and new equipment through the Education Quality Improvement Project. However, TTC officials still express concern over the inadequate state of laboratories, libraries, and classrooms.

Costs, Financing and Donor Support

Teacher education is one of the most expensive programs offered by MOE (Table 7.1). The high unit cost is due, in part, to the cost of boarding the students at the teacher training institutes (Table 7.2). However, even if the boarding (student welfare) costs are removed, the unit cost of teacher training is still more than three times that of upper secondary.

Some of that cost can be justified, in that TTCs should have sufficient amounts of current instructional materials, a well-stocked library, and laboratories in which teachers can practice the demonstrations and experiments they will eventually do in their schools. However, if these conditions are not met and costs are still high, it poses a serious financial problem for MOE.

Table 7.1
Estimated Recurrent Cost of Education by Level of Schooling

	Student Enrollment*		Unit Cost in kip		Unit Cost in Per Capita GDP	
	94/95	96/97	94/95	96/97	94/95	96/97
Pre-primary	27,658	29,799	39,627	44,800	0.15	0.10
Primary	696,706	770,702	19,839	24,524	0.08	0.06
Lower Secondary	110,593	136,312	43,601	46,129	0.17	0.11
Upper Secondary	42,352	47,755	48,403	55,282	0.18	0.1
Technical/Vocational	9,481	3,164	251,767	252,528	0.96	0.58
Teacher Training	4,065	3,006	313,899	237,192	1.20	0.54
Higher Education	6,936	11,978	247,116	182,508	0.94	0.42

* Note: Student Enrollment is for public schools only

Source: Mingat, A. (1998a).

Table 7.2
Allocation of Costs for Teacher Training, 1996/97

Category of Cost	Expenditure in kip	Percent
Teacher Salaries	97,804	41.2%
Non-teacher Salaries	38,922	16.4%
Operations and Pedagogical Cost	30,273	12.8%
Student Welfare	62,541	26.4%
Administration	7,652	3.2%
Total	237,192	100%

Source: Mingat, A. (1998a)

Another reason for the high cost is the low student/teacher ratio in TTCs, which averages about 8-10 students per teacher. In part, this is due to the need to have content specialists across all the subject areas. However, it means that teachers are sometimes under-utilized since there are not enough classes in each subject area to fill the entire teaching schedule. Increasing the enrollment at the TTCs (while maintaining current staffing levels) is one way to lower unit costs of instruction. However, TTC instructors also spend considerable time working with students on an individual basis. Careful attention should be given to whether student/teacher ratios could be increased without harming the one-to-one attention that some instructors give to their students.

7.2 Analysis

Internal Efficiency

a) Preservice

Despite the good intentions and dedication of the instructors at the TTCs, four factors suggest that the quality and relevance of instruction during teacher

training is low. First, students at TTCs do not have copies of the curriculum, teachers' guides, or student textbooks for the subjects they will eventually be teaching in the school. Second, the emphasis of the training is on pedagogical methods rather than on strengthening students' knowledge of their subject area. For example, in the 11 + 1 program, no attention is given to content preparation. In the 8 + 3 programs some attention is given to content but that is not well aligned with the content they will later teach in the schools. Third, TTC officials point out that instructors do not fully understand how to teach the new integrated curriculum. While both content and pedagogical methods are necessary, international experience suggests that strong subject area expertise is absolutely essential to effective teaching. Fourth, most TTC teachers have never taught secondary school and may not fully understand the practical issues associated with classroom management and delivery of instruction.

b) In-Service

The various in-service activities of MOE Teacher Training Department, NRIES, the Department of General Education, the pedagogical advisers, and various international agencies have tended to operate separately from each other, giving the appearance of a patchwork of unconnected efforts. With one notable exception, the internal efficiency of these training activities has been limited for reasons discussed below.

The most successful in-service program appears to be the collaborative effort of the Teacher Training Department of MOE and UNICEF in operating the NTUCs. There is now an NTUC in nine provinces. Each provides a two-year program in which under-qualified teachers attend a six-week training session in the first year and a four-week training session in the second year (scheduled for vacation periods). Between sessions they are visited by NTUC trainers who answer questions and advise the teachers and make sure teachers are completing assignments that were given out at the training sessions. The training uses materials specially developed by UNICEF which are tied to the new curriculum and provide upgrading in both subject content and teaching methods.

Participating teachers receive transportation and a small per diem (but no compensation for foregone income). As an incentive to the teachers' schools, UNICEF provides a small amount of roofing materials, nails, silk screens, or library boxes, depending on the need. The NTUCs are staffed by a total of about 400 trainers selected from their province on the basis of their own expertise as teachers. Evidence to date suggests this system has been successful. In this respect, it stands as an exception within the in-service efforts that have operated over the last five years. Other in-service efforts have encountered more difficulty.

c) NRIES

The in-service training offered through NRIES to introduce the new integrated curriculum is viewed by many (in the central ministry, the schools, and in other international agencies) as unsuccessful. The training attempted to cover seven subject areas in two weeks. This resulted in teachers having about 5-10 hours of instruction in how to teach a full year of material in each subject area. Many teachers did not have sufficient expertise in the content of the new materials and many teachers did not receive copies of the curriculum or textbooks on which they were being trained. The result is that, while many teachers received the training, it did little to improve their classroom instruction.

d) Teacher Development Center

Though the TDC has offered in-service training to teachers since it was started in 1992, its production of curriculum and instructional materials to support that training was delayed. Only in its final three months of operation in 1998 has it been able to send 259 titles to the printer. One concern is that current funding will end before those materials are distributed or teachers trained to use them and no recurrent budget (beyond staff salaries) has been provided to continue TDC activities. One consequence of the delay in preparation of their training materials is that the in-service activities of TDC have had a low profile among other groups working on in-service teacher training.

e) Teacher Training for Multigrade Classrooms

One of the main causes of student dropout at the primary level is incomplete schools. Up to 60 percent of primary schools offer only grades 1-3. Once students complete these grades, they do not have access to grades 4-5. One strategy for addressing this problem is to prepare teachers already in the incomplete schools to teach multigrade classes and then to shift one or more teachers to teach grades 4 and 5 curriculum while the others teach grades 2 and 3 curriculum. It may be necessary to reduce overall intake of grade 1 students to keep multigrade classes at a reasonable size. Alternatively, it may be possible for the district to assign an additional teacher to the school. If an incomplete school can be made complete school for only the cost of an additional teacher, this strategy offers MOE a cost-effective way to improve student flow through the system.

f) Relationship Between Teacher Training and Vocational/Technical Training

Officials in DVTHE have expressed interest in a long-term plan that would consolidate vocational/technical training and teacher training into the same facilities at the provincial level. While the arrangements offer cost savings, international experience suggests such an arrangement also has risk. It could further diminish the teacher supply. When Thailand merged vocational and

technical education and teacher training into the same institutions, it resulted in teacher trainees shifting to vocational tracks from a belief they were enhancing their career options. A similar pattern is observed at NUOL. The merger of the Institute of Pedagogy in 1996 into the larger university framework provided education students with a wider range of course options; however, enrollment in the Faculty of Education at the end of the Foundation Studies course dropped to 32 students in 1998.

External Efficiency

One of the most urgent issues in teacher training is the projected shortfall in the supply of qualified teachers. If urgent action is not taken, current projections suggest a shortfall of over 4,000 teachers by 2001/02. The following analysis provides the basis for that projection.

a) Teacher Supply and Demand

While overall teacher supply at the primary level appears to meet demand, there is a serious problem of teacher allocation. Some provinces are experiencing a teacher shortage while others have a surplus. If the growth in new grade one enrollment remains at its 1996/97 rate of 3.8 percent, teacher supply can probably keep up with demand if MOE can resolve the teacher allocation problem. One way to do this is to train only quota teachers from those provinces that have an undersupply so that when they return home at the end of training, they are returning to high need areas.

Serious teacher shortages are projected at the secondary level, due largely to the sharp increases in enrollment. From 1995/96 to 1996/97, new enrollment in lower primary increased by 21 percent while new enrollment in upper secondary increased by 27 percent.

b) Teacher Shortage at the Secondary Level

The current student progression rates (Table 7.3) can be used in combination with current primary school enrollments to estimate how many students will be entering lower and secondary school over the next 5-10 years. Projections of student enrollment increases at both lower and upper secondary levels for selected years between 1999 and 2005 are provided in Table 7.4. These estimates should be recalculated when 1998/99 data are available. Any successes MOE achieves in reducing grade repetition, lowering dropout, or improving examination pass rates will increase the estimated number of students with a corresponding demand for more teachers. The jump in projected enrollments in lower secondary in 2001/02 and in upper secondary in 2004/05 reflects the Government's success in increasing the percent of children enrolling in school (the participation rate) during the early 1990s.

Table 7.3
Student Progression Rates for Grades 1-11 (including examination pass rates)
(MOE Data through 1997/98)

Grade	1	2	3	4	5	6	7	8	9	10	11	Grad
Progression Rate (%)	100	86	78	87	85	65	94	61	55	72	72	91%
Cohort of 100	100	86	67	58	50	32	29	18	10	7	5	4.6

Source: Data for primary school progression rates and cycle to cycle transition rates (primary to lower secondary and lower to upper secondary) are from Mingat, A. (1998a). Data from lower and upper secondary progression rates was computed using data drawn from Annual Bulletins for 1993/94 through 1997/97 (MOE, 1998e) provided by the Statistics Department, MOE.

Table 7.4
Projected Enrollments in Lower and Upper Secondary Schools
1999/00 to 2004/05

Year	Projected Enrollment Lower Secondary	Projected Enrollment Upper Secondary
1996/97 (actual)	133,891	46,269
1999/00	155,894	38,185
2000/01	159,492	39,133
2001/02	201,742	41,595
2002/03		44,063
2003/04		44,673
2004/05		58,068

Source: Computed using 1996/97 enrollment statistics from MOE and grade progression rates reported in other tables in this section.

These enrollment projections are used to estimate the number of teachers who will be needed each year over the next 5-10 years. However, teacher supply is influenced by two main factors: the number of teachers who leave teaching each year due to such factors as retirement, death, or accepting a new job; and, the number of new teachers graduating from teacher training programs each year who then go into teaching. Informal evidence suggests that teacher attrition has increased sharply during the 1998/99 school year in response to the delays in salary payments and the 100 percent inflation during 1998.

The number of new teachers entering teaching each year based on the number of graduates from teacher training institutions is hard to estimate. In 1996/97, there were 498 graduates of the 8+3 programs and 370 graduates of the 11+1 programs. Conversations with MOE and teacher training officials indicate that over half of these 868 graduates never enter teaching, but choose to take other employment. For purposes of projecting teacher supply, only half of the graduates were assumed to enter teaching. Furthermore, not all will go into lower secondary; most will enter primary teaching. Since lower secondary enrollments are 23 percent of the combined primary and lower

secondary enrollment, it was assumed that 23 percent of these graduates would go into lower secondary teaching. This means that about 150 new qualified teachers would enter lower secondary teaching each year.

The overall impact of new teachers entering the profession is offset by the number leaving each year. For purposes of this projection it was assumed that the number of teachers leaving each year can be distributed across the levels of the education system in the same proportion as the percent of the teaching force currently working at that level. That means that about 172 of those leaving each year would be from the lower secondary level. When the number of new teachers (+150) is adjusted for the number of those leaving (-172), it appears that the number of qualified teachers is declining by about 22 teachers a year.

The most immediate impact is that the number of students per lower secondary teacher will increase. If no policy intervention occurs, the ratio could go from 17:1 in 1996/97 to 26:1 by 2001/02. If MOE wanted to increase the number of students per teacher to 20/1 and then maintain that level through the year 2001/02, it would need to have 10,087 teachers by that year or 2,357 more than are estimated to be available from the present teacher training system. Even if all graduates of teacher training schools entered the profession, the estimated number of available teachers in 2001/02 would only be 8,330, still a shortage of over 1,750 teachers. This indicates a serious problem in teacher supply at the lower secondary level over the next five years. Since it takes at least three years to train a new secondary teacher, teachers who will enter the teaching force in 2001/02 would have had to enter a teacher training program by 1998.

At the upper secondary level, the same type of estimation suggests that the teaching force will grow by 124 new teachers each year, more than enough to keep up with rising student enrollments. At that rate of increase, the number of students per teacher is likely to drop from 16:1 in 1996/97 to about 12:1 in 2001/02, but then climb to 15:1 by 2004/05 as the larger student enrollments start to enter upper secondary. Potentially, some upper secondary teachers could be redeployed to the lower secondary level to handle the projected shortage there.

However, the sharp drop in intake of new students at the Faculty of Education (only 32 new students in 1998/99) suggests the estimates of teacher supply are overly optimistic. While MOE has been trying to raise the student/teacher ratio in upper secondary, a ratio of 25:1 is probably too high (since it is an average and some classes are likely to be much larger). Current projections suggest that schools will end up with larger class sizes than are intended under MOE policy.

One reason for the projected teacher shortage at the lower secondary level is that the conditions of service are widely seen as unattractive. Salaries are low compared to other jobs needing similar or less education, salaries are not

always paid on time, teachers can be assigned to remote locations away from family and friends, and teachers can not resign without permission from MOE.

Access and Equity

The quota system has been important in helping to assure access to teacher training opportunities to students from across the country. Within provinces, however, the allocation of quota places is not always equitable but is subject to a range of other influences. For example, one senior secondary school in Vientiane Province received two quota places while another school of comparable size but closer to the PES received 15. While the overall system serves an important purpose, it may be possible to improve the allocation of quota positions within provinces.

The distribution of teachers by ethnic minority status is not available. However, school visits indicate that teacher assignment works best if communities receive teachers from their own ethnic minority. Since some ethnic minority areas are those with the greatest need for additional teachers, it is important that TTCs concentrate on recruiting and training ethnic minority students who can most successfully serve these areas. There are now enough ethnic minority students graduating from secondary school to make this feasible. This will be one of the issues addressed in the Basic Education (Girls) Project.

Administration, Management and Financing

The administration and management of TTCs has been streamlined over the last five years by the consolidation of 59 training institutions down to nine. This has been an important and largely successful effort to increase the efficiency of teacher training.

The impact of teacher training on the education budget of most countries is dramatic. Not only is the initial training expensive, but it increases the recurrent education budget as teachers, once trained, are eligible for increased salaries. If the training is effective and results in improved teaching and learning, the investment may be worthwhile. If the training is not effective, its impact on the recurrent budget can do more harm than good to the education system. Lao PDR has an advantage in preservice teacher training. Its relatively flat salary structure means that the recurrent cost implications of teacher training are not as great as in many other countries. Training teachers does not result in large increases in recurrent cost.

Nonetheless, the initial cost is high and made higher by the proportion of graduates who do not go into teaching. Serious consideration needs to be given to how the training system can become more cost-effective. One way is to increase the quality of the instruction without a concomitant increase in costs. This could be done by: having students directly work with the materials they will eventually be required to teach in the schools; spending more time upgrading students' content knowledge, thereby better preparing them to handle the content demand of the new curriculum (this would not lower costs, but might result in more value for the money being spent); implementing mechanisms to assess teacher performance as a way of identifying those that should be given special in-service support; or, training principals in effective instructional supervision.

A second approach would be to increase student/teacher ratios at the TTCs. This would lower unit costs, though it would not necessarily improve the quality of instruction. Nonetheless, given the projected teacher shortage, this option needs to be seriously considered. A third approach to improve the return on the investment in teacher training is to help ensure that those who graduate go into teaching. With up to half the graduates not entering teaching, the cost per graduate for those actually entering teaching is high. Strategies for accomplishing this are discussed in the recommendation section below.

Perhaps the most serious cost problem at present is the drop in new intake at the Faculty of Education at NUOL. Efforts to increase enrollments need to be accelerated. If the Faculty of Education continues to attract low numbers of entering students, it will be hard to justify continued funding of such an expensive program. At that point the upper secondary teacher training program might be moved to the TTCs and the Faculty of Education facilities reallocated to higher demand areas of study at NUOL. Other faculties of NUOL might still provide some specialized courses for upper secondary teacher preparation.

The financing of in-service education is a central concern of MOE. MOE recognizes its importance but is unable to provide recurrent budget support to continue some of the current MOE-based initiatives. One area of optimism, however, is that one of the least expensive in-service programs appears to be one of the most effective. The NTUC program operated by the Teacher Training Department and UNICEF keeps costs down by using master teachers already in the provinces as trainers, keeping most of the program administration and delivery of training located in each province, and providing school incentives that meet other educational needs (roofing materials, etc.). The collaboration with UNICEF has provided a stable mechanism for oversight of field operations and offers a model that should be considered in designing future in-service initiatives.

While the TDC appears to have developed useful materials, it has not had the intended impact on improving the quality of classroom instruction in the schools. After six years of operation, its training materials were still not available for use in the schools. The TDC experience raises two issues in project planning and implementation relevant to preparation of the next five-year plan. First, the delay in producing training materials until the last three months of external funding suggests that the emphasis of the TDC was on designing materials rather than on getting them into use. While some of the problem was a result of delays in the delivery of equipment; some of the problems appear to be in the management of the work flow. Second, the lack of recurrent funds to continue the effort suggests a lapse in MOE planning, or an MOE judgement that in-service is not an urgent need or a MOE assessment that the TDC was ineffective. The reasons for the delay in materials production and use need to be clarified before seeking further external funding for TDC activities.

7.3 Suggested Priorities and Recommendations

Priority 1 Strengthen and Expand In-Service Teacher Training

If instructional quality is to improve in primary and secondary schools, it will need to be through the upgrading of teachers already in the schools. Four factors make this urgent. First, the intake of new teachers into the system is too slow to have a meaningful impact on instructional quality. If instructional quality is to improve during the next Five-Year Plan period, in-service training will need to play an important role. Second, the preservice training that teachers have received emphasized pedagogical methods but did not give much attention to strengthening teachers' knowledge of content. Since many teachers had academically weak primary and secondary education, they remain weak in the subject matter they are supposed to teach. Third, the recent introduction of the new primary and lower secondary curriculum has pushed teachers to teach materials they do not fully understand and efforts to prepare teachers to teach the new curriculum are widely considered unsuccessful. Fourth, some teachers who entered the system before MOE raised teacher entry qualifications still have not received sufficient upgrading.

Recommendations

1. **Implement a Large-Scale, In-Service, Teacher Training Program:** It is recommended that MOE implement a large-scale, in-service, teacher training program aimed at upgrading both teachers' content knowledge and pedagogical practice. In doing so, MOE is encouraged to give particular attention to the feasibility of extending NTUCs as the primary mechanism for delivery of in-service teacher training. The NTUCs are one of the least expensive in-service programs and appear to be one of the most effective. The collaboration with UNICEF has provided a valuable arrangement for ensuring adequate oversight of field operations. The NTUC program offers a model that should be considered in designing future in-service initiatives.

Other options for the delivery of in-service training should also be examined. For example, the TTCs might expand their current role in in-service training. This poses logistical and cost issues since: the TTC in-service has generally involved teachers coming to the TTC rather than the TTC faculty going to the schools; TTC instructors already complain about their workload; and, most TTC instructors lack practical experience teaching in the schools.

2. **Assess the Feasibility of Extending Support to the TDC:** The TDC has already developed a substantial amount of in-service training materials that are aligned with the new curriculum. However, to date the TDC does not appear to have had the intended impact on improving the quality of classroom instruction in the schools. It is recommended that MOE assess whether the TDC can play a more effective role in the delivery of in-service training and, if so, whether a higher priority can be given to its

continued funding. It is further recommended that, as part of that study, MOE examine ways the TDC can effectively support the TTC and NTUC program to design the in-service curriculum that is already underway.

3. Make the TDC a Unit within the Teacher Training Department: The TDC, responsible for development of in-service teaching training material, has operated as a unit of NUOL. The Teacher Training Department within MOE is responsible for the delivery of in-service teacher training. At times this division of responsibility has resulted in delays in the delivery of needed training. It is recommended that the units of MOE responsible for curriculum development and for curriculum implementation need to be more closely linked. At present MOE has determined that the TDC should remain a part of NUOL, since the affiliation with the university might make it easier for the TDC to award certificates to teachers who complete in-service training.

Other ways to improve coordination between the TDC and MOE might be to: (1) shift the TDC to become a unit within the Teacher Training Department of MOE; or (2) have the Teacher Training Department of MOE establish a secretariat within one TTC in Vientiane municipality for coordinating in-service teacher training. MOE should carefully monitor the continued function of the TDC to determine if its placement as a unit of NUOL is working effectively or whether one of these other options should be implemented.

Priority 2 Increase the Relevance of Preservice Teacher Training

Recommendations

1. Provide TTC Students with Copies of the Curriculum and Instructional Materials they will Eventually Teach in the Schools: It is recommended that preservice teacher training give more attention to preparing trainees to teach the national curriculum and the instructional materials that MOE now requires at the primary and lower secondary levels. Two of the most direct ways to increase the relevance of teacher training are to provide all TTC students with a set of the curriculum guides, teacher guides and student textbooks that are now required to be used in the school, and to provide instruction during their TTC training that ensures they become fully familiar with those materials.
2. Strengthen the Content Knowledge of Future Teachers: There is considerable evidence that many teachers do not have the content expertise needed to effectively teach the new integrated curriculum. This results from weaknesses in their own secondary education and the lack of sufficient attention to upgrading content knowledge during teacher training. It is recommended that the training curriculum be improved to provide increased emphasis on strengthening the content knowledge of future teachers.

3. Provide Opportunities for TTC Instructors to Teach in Primary and Lower Secondary Schools: A widespread observation of educators in Lao PDR is that the TTC instructors lack practical experience of teaching in a primary or lower secondary school. As a result, their TTC instruction tends to be theoretical and lacks grounding in the realities of the classroom. One low-cost way to remedy this situation is to provide opportunities for TTC instructors to teach for a year in a school. This might be accomplished by having instructors from the Faculty of Education (which is over-staffed, given the low enrollments) teach for one year on a rotating basis while selected TTC faculty use the year to teach at the level schooling for which they prepare TTC students. It is anticipated that the relevance of TTC instruction could be meaningfully affected if only two-three instructors per year from each TTC participated in this arrangement over a three-year period.

Priority 3 Increase the Supply of Trained Teachers

Between 1995/96 and 1996/97 new enrollment in primary school increased 3.8 percent; new enrollment in lower secondary increased by 21 percent; and, new enrollment in upper secondary increased by 27 percent. Teacher supply is moving in the other direction. From the late 1980s to the late 1990s there has been a precipitous drop in the number of graduates from teacher training (due largely to the drop in TTC enrollments in the mid-1990s). The education system will suffer a severe teacher shortage within the next five years if actions are not taken immediately to increase the recruitment and retention of teachers.

Recommendations

1. Raise Teacher Compensation: One reason for the low intake to teacher training is that grade 8 and 11 graduates do not see teaching as an attractive career. Teachers receive low pay, salary payments are sometimes delayed, and teachers are sometimes assigned to less desirable, remote locations. A regulation is expected from the Prime Minister's office for special compensation of teachers who teach in remote and difficult areas. However, the issue of adequate compensation relates to all teachers.

Non-monetary incentives, such as professional recognition and effective supervision, are often useful in motivating teachers but international experience suggests that such incentives only matter when a basic threshold of adequate compensation is achieved.

2. Improve Deployment of Teachers: While overall teacher supply at the primary level appears to meet demand, there is a serious problem of teacher allocation across provinces. Similarly, there are serious imbalances in teacher deployment across provinces at the secondary level. Some provinces are experiencing a teacher shortage while others have a surplus. One way to address the imbalance is to train quota teachers only from

under-supplied provinces so that, when they return home at the end of training, they are returning to high need areas. It is recommended that MOE study the feasibility of concentrating and limiting teacher training to those provinces that will have a teacher shortage.

3. **Revise and Enforce the Contract that Commits Graduates of Preservice Teacher Training to Enter Teaching:** One important way to improve the return on Government's investment in teacher training is to find more effective ways to ensure that those who graduate from teacher training actually go into teaching. With up to half the graduates not entering teaching, the cost per graduate for those actually entering teaching is unacceptably high. The contracts that quota students sign as part of receiving their bursary is not enforced effectively. A three-part strategy might be considered. First, modify the present contracts to make them more attractive to students. Instead of committing a graduate to go into teaching position from which they might not be allowed to resign, a more flexible contract might be developed in which graduates agree to three years of teaching service for every year of TTC or University training. Second, make it clearer to entering students that their contract will be enforced and that the graduate who does not complete the required three years of service will have to repay the cost of the training. Third, require all students who receive free tuition (this would include non-quota students) to teach for a fixed number of years following graduation.

Priority 4 Prepare Primary Teachers to Teach Multigrade Classes

Recommendation

1. **Train Primary Teachers to Teach Multigrade Classes:** One of the main causes of student dropout at the primary level is incomplete schools. More than 60 percent of primary schools offer only grades 1-3. One strategy for addressing this problem is to prepare teachers already in the incomplete schools to teach multigrade classes. It may be necessary to reduce overall intake of grade 1 students to keep multigrade classes at a reasonable size. Alternatively, it may be possible for the district to assign an additional teacher to the school. If an incomplete school can be made complete for only the cost of an additional teacher, this strategy offers MOE a cost-effective way to improve student flow through the system.

Priority 5 Lower the Cost of Preservice Teacher Training

Recommendations

1. **Encourage More Teacher Training Graduates to Enter Teaching:** The cost of preservice teacher preparation is high, and made higher by the proportion of graduates who do not go into teaching. It is recommended that MOE conduct a study of ways to encourage more graduates to enter

teaching. One possibility is to revise and then enforce the current contract requiring quota students following graduation.

2. Identify Ways to Increase Enrollment in the Faculty of Education or, Alternatively, Assess the Feasibility of Using the Faculty of Education Facilities for Higher Demand Activities: Only 32 students entered the Faculty of Education at NUOL during the 1998/99 academic year. This low intake falls far short of meeting the demand for upper secondary teachers and results in high unit cost for upper secondary teacher training. It is recommended that NUOL give the Faculty of Education two-three more years for enrollments to stabilize and a clear pattern to emerge. Since the Faculty of Education is new, it may take time for the program to develop and for enrollments to grow. However, the low enrollment may represent an early warning signal. NUOL may need to take aggressive action to increase enrollments. One strategy would be to limit the ability of students entering the university to study education to transfer to other faculties. A second strategy would be to increase the attractiveness of teaching as a career, for example, by raising teacher salaries.

If Faculty of Education enrollments remain low, NUOL would need to consider alternatives such as closing the Faculty of Education, transferring upper secondary teacher training to the TTCs, or reallocating facilities to higher demand areas of study.

