



THE EDUCATION SECTOR IN CAMBODIA A DIAGNOSTIC REVIEW FOR ESP / ESSP 2009-13



A REVIEW OF KEY TECHNICAL AND STRATEGIC ISSUES IN THE SECTOR SEPTEMBER 2009

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September 2009

Introduction and foreword

This analytical paper represents a diagnostic review of the Cambodian education sector in the run up to the formulation of the next ESP / ESSP 2009-13, and EC and other development partner planning for support programs over the period 2001-15.

It should be viewed as a companion analysis to the "Education Sector Reform Process in Cambodia 2001-08: Policy Development and Implementation Under Severe Financial Constraints" paper also produced in August 2009 by the same author. Where that paper gave greater focus to the constraints facing continued education sector development due to recurrent financing issues, this one focuses more on the potential areas for further reform that may be vying for these scarce resources.

That said, given the overriding importance of ensuring the sustainability of any portfolio of reforms, the section on the envisaged levels of government recurrent funding available has also been included in this paper for reference, and issues that are relevant to both papers have required some additional duplication to ensure readability.

The author has been fortunate enough to work closely alongside and for MoEYS for a number of years and in a number of roles, including project and program design, program management and policy advice. These roles have been supported by a number of development partners including EC, ADB and DfID. The views and analysis presented in this paper are based on these experiences and the supportive insights provided to me by Ministry leadership, numerous Ministry staff, development partner and NGO representatives, and the technical advisors the author has been fortunate enough to work with.

The analysis represents the author's understanding of the reform process to date, its impact on sector performance and the remaining challenges. Similarly, the recommendations are based on the author's understanding of the complex and often inter-linked policy decisions that will influence the next platform of reforms. This diagnostic analysis has attempted to be as comprehensive as possible in its coverage but given the scale and complexity of the issues, and the prevailing time and human constraints there will be many areas where additional perceptions, issues and other contributory factors will not have been sufficiently addressed.

In this respect the diagnostic analysis should in no way be seen as a blueprint for the reform agenda but as a contribution to informed discussion and further review of the potential areas of reform.

It should therefore be stressed that, the views presented in this paper may not reflect those of the Ministry of Education, Youth and Sport (MoEYS) nor of the European Commission (EC).

That said, it is hoped that this analysis will be a useful contribution to the continued development of education services in Cambodia over the next period of reform.

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Acronyms

ADB	Asian Development Bank
BMC	Budget Management Centre
CAR	Council for Administrative Reform
DoP	Department of Planning
DoPr	Department of Personnel
DoF	Department of Finance
DEO	District Education Office
DGAF	Directorate General for Administration and Finance
DGE	Directorate General for Education
DNFE	Department of Non-Formal Education
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EC	European Commission
ECCD	Early Childhood Care and Development
EFA	Education for All
EFA FTI	Education for All Fast Track Initiative
EMIS	Education Management Information System
ESP	Education Strategic Plan
ESSP	Education Sector Support Program
ESWG	Education Sector Working Group
ETCO	Education Technical Coordination Office
GER	Gross Enrolment Rate
HRM	Human Resource Management
HRMIS	Human Resource Management Information System
IAD	Internal Audit Department
ICT	Information Communication Technology
IFAPER	Integrated Fiduciary Assessment and Public Expenditure Review
JICA	Japan International Cooperation Agency
JFPR	Japan Fund for Poverty Reduction
MDG's	Millennium Development Goals
MoEYS	Ministry of Education, Youth and Sport
MoEF	Ministry of Economy and Finance
MoFAIC	
	Ministry of Foreign Affairs and International Cooperation
MoP	Ministry of Planning
MTR	Medium Term Review
MTEF	Medium Term Expenditure Framework
MTEP	Medium Term Expenditure Plan
NER	Net Enrolment Rate
NIE	National Institute of Education
NFE	Non-Formal Education
NGO	Non-Government Organization
NPAR	National Program for Administrative Reform
NPRS	National Poverty Reduction Strategy
ODL	Overseas Distance Learning
PAP	Priority Action Program
PBB	Program based budgeting
PIP	Public Investment Program
PETS	Public Expenditure Tracking Survey
PFM	Public Finance Management
PFMIS	Provincial Financial Management Information System
PMG	Priority Mission Groups
RGoC	Royal Government of Cambodia
Sida	Swedish International Development Agency
SWAp	Sector Wide Approach
SWPAM	Sector Wide Policy and Action Matrix
TA	Technical Adviser
TOR	Terms of Reference
TTC	Teacher Training College
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Mations United 5 Fund

1. Institutional and Capacity Strengthening at the Sectoral Level

Since the beginning of the education reform process around 2000-01, the MoEYS has focused on strengthening its own systems and on developing closer and more effective partnerships with development partners and other stakeholders.

There have been many positive achievements of which the ministry and its partners can be proud. The present systems within the sector for managing both government budgets and external support are much more comprehensive than at the start of the reform and more importantly many, many more children and adults are now accessing education services. Key institutional and policy led reforms include the development of¹:

- National education policies, strategies and priorities expressed in the ESP and ESSP, linked to the National Strategic Development Plan (NSDP) and national MTEF process, and in support of international development goals;
- A comprehensive framework of sectoral and operational indictors and targets, consistent with these plans and supported by a comparatively robust data management systems (predominately EMIS, but also HRMIS and PFMIS supporting personnel and financial data management);
- A robust and active partnership process with development partners and other stakeholders, through for example the JTWG and annual congress process.
- A comprehensive regulatory framework for the sector through the development and adoption of the Education Law
- Positive progress in respect to decentralization, including the establishment of school and institutional operating budgets, establishment of school management/support committees, continued deconcentration of core functions to provincial level (i.e. Provincial HRMIS)
- Strengthened organizational and operational capacity. Including: strengthened financial and human resource management; planning and analytical capacity; establishment of Internal Audit Department and functions; development of departmental and personal job specifications
- Strengthened service delivery capacity. Including: establishment of Early Childhood Department (ECD); rapid expansion of Higher Education through public-private approaches, adoption of policy on children with disabilities; strong and continuing emphasis on potentially disadvantaged children (gender, propoor, border area, remote area etc.).

Alongside these very positive achievements, the Ministry continues through both the congress and the regular JTWG meetings, to demonstrate its commitment to further reforms and institutional and programmatic strengthening in order to achieve its national and international objectives and commitments.

¹ A timeline providing more details on some of these developments is provided in Annex 1

2. Broad Sector Performance and Trends

The effect of these reforms and in particular the Ministry's abolition of formal primary school admission fees have led to the achievement of significant pro-poor and profemale gains within the sector but placed great strains on its recurrent budget. There are many indicators applied to the education sector and a review of the data over the last few years shows considerable progress in many areas, though some persisting areas of concern do remain. In reviewing the data, it should be noted that age based data in Cambodia is prone to inaccuracies and should be treated with some caution². To provide some perspective on the relative gains in performance within the sector the following table provides a summary of the increases in the number of successful graduates from the systems at different levels³.

		Total		Female			
Students successfully graduating from each sub-sector (outputs)	2000-01	2007-08	% increase over period	2000-01	2007-08	% increase over period	
Grade 6	139,076	275,853	98.3%	58,387	135,213	131.6%	
Grade 9	30,093	112,673	274.4%	8,668	48,550	460.1%	
Grade 12	17,713	39,726	124.3%	5,786	16,748	189.5%	

Table 1: Graduates by sub-sector

In comparing 2001 and 2008 there are:

- over 135,000 more children graduating from primary education;
- <u>over 82,000 more children graduating from lower secondary education</u>
- <u>over 22,000 more children graduating from upper secondary education</u>

In particular progress towards UPE, EFA and their related gender targets has been very positive. In basic terms within the formal system the achievement of UPE requires:

- **INITIAL ACCESS:** all children gain initial enrolment in primary school (at either correct age or overage).
- **PROGRESSION:** for some children progression through the school may entail repetition, switching schools, or even drop-out and re-entry
- **COMPLETION:** all children progress through and finally gain entry into the final grade 6 of primary school
- **LEARNING OUTCOMES:** during this process, all children should acquire knowledge, skills and appropriate attitudes to the best of their abilities.

² The new census in 2008 will assist in strengthening the accuracy of population based measures such as NER, GER and Gross completion rates. That said positive trends can still be detected ³ Reference "The Education Sector Reform Process in Cambodia 2001-09" an analytical review, D Quinn, ETCO team, August 2009

Initial Access to Primary:

In 2008-09, the Net Admission Rate (NAR) indicated that 92% of all 6 year olds enrolled in grade 1. Perhaps more importantly, a review of age based enrolment in 2008-09 shows that around 99% of the 7 year old population were enrolled in either grade 1 or 2. This information indicates that **initial enrolment is effectively universal**, albeit in some cases overage.

In addition, it should be noted that following their peak of nearly 190% in 2001-02, Gross Admission Rates (GAR) have averaged around 130% for the last 6 years. This means that around 11 age cohorts have entered the primary system in the last 8 years. It was originally anticipated that these presumably overage enrolments would decrease over time. Their persistence may suggest that under-age children (possibly 5 year olds) are entering grade 1 and perhaps then re-entering the next year. If true, this phenomenon would swell grade 1 class sizes potentially reducing the quality of education in grade 1. It could also account for the huge level of repetition in grade 1 and would effectively *"artificially*" reduce the survival rate.

This is an area that requires more in-depth study.

Primary Progression:

Age based enrolment figures in 2008-09 indicate that almost all children between the ages of 7 and 10 are enrolled in school in some grade or other (though the actual level of student daily attendance may of course be lower). However, by age 10 less than one third are in their age appropriate grade 5.

Drop-out appears to begin influencing student numbers at age 11 with just over 80% of 11 year old children remaining in school. By this stage less than $\frac{1}{4}$ are in their age appropriate grade 6 and more than $\frac{1}{4}$ of 11 year olds are still in grades 1 to 3.

One key reason for this is the persistence of the comparatively high repetition rates in primary education. The rate is highly variable from one school to the next suggesting it is predominantly dependent upon teachers' personal views rather than student ability.

International research suggests that even for struggling students' repetition is far less academically beneficial than promotion. Repetition is inefficient and highly expensive, potentially drawing out as much as 25% of the entire primary budget (\$12-15 million per annum), funds which could have been spent on effective quality improvement programs. Repetition will also have a corresponding impact on household expenditures on education. In addition, repetition swells class sizes which may be potentially detrimental to the learning of all students and is prone to demoralize the repeating students leading to low self esteem and falling achievements.

Finally, the parents of repeating students face the higher opportunity costs of these older students and are likely to view repetition as sufficient proof that their child will not succeed academically. In combination this may lead many parents to force their children to drop-out. The high correlation between repetition and drop-out rates found in international research appears to bear this out.

From an efficiency viewpoint the combined impact of high repetition and drop-out is that the MoEYS must provide nearly 10 years of educational inputs to secure a single successful graduate from a primary education system that should take 6 years. This is an inefficient process.

The key gender issue in respect to progression is that females tend to promote more than males, repeat less than males, and drop-out more than males. This is possibly due to families being less prepared to support females who repeat and so force them to drop out. This would indicate that high repetition may be hampering the gender equity policies. That said, the gender differences are fairly small and ultimately males and females are completing primary education at around the same rate.

Primary Completion:

For the achievement of UPE it is a necessary and sufficient condition that 100% of the age 11 population completes grade 6 over a sustained period of years⁴.

MoEYS's greatest achievement is in respect to the number of children that successfully reach the final grade 6 of primary schooling. It is therefore surprising that the Ministry's achievements in this area do not appear to have been more widely recognized.

In 2008 the number of children reaching primary grade 6 was **293,632** (142,555 females)⁵. This represents <u>over 100,000 more children entering primary education in</u> <u>2008 than in 2000</u>⁶. It is equivalent to 86% (88% female) of Cambodian children receiving complete primary education. Gender equity for students reaching grade 6 was first achieved in 2004 and continues to be maintained.

However, in the last two years grade 6 completion rates have leveled off and begun falling. Given the stable admission rates into primary education, the only way to reverse this trend is to reduce drop-out and/or increase student re-entry or equivalency programs

Policies and strategies to reduce repetition may be the most important reforms in primary education over the next five years, due to their potentially high impact and the potential savings they can bring to the sector's recurrent budget. Approaches such as reducing the number of incomplete schools and expanding ECCD provision will support this agenda but may not be sufficient on their own and the Ministry may need to be supported in developing and implementing a wider portfolio of interventions to achieve this goal.

The high levels of variability in repetition rates between schools (ranging from 0% to over 40%) suggests that a focus on teacher behaviour modification, enhanced school management and community engagement in school management may also be particularly important strategies.

⁴ Figures should include NFE equivalency students

⁵ Table 1, page 4, provides comparable data on graduate numbers

⁶ Grade 6 Entry is used as it is consistent with MoEYS indicator on 'completion'

Initial Access to Lower Secondary:

The potential number of children accessing lower secondary (LS) is dependent upon the number of children successfully completing grade 6 (*potential demand*) and the LS facilities available (*supply*). In 2008-09 a total of around 230,345 new students (111,635 female) enrolled in grade 7. This was down from 254,291 (122,945 female) in the previous year but still represented around 68% of the age 12 population, indicating that over two thirds of Cambodian children can now gain at least initial access to lower secondary education. Less than 30% of the new intake of students are 12 year old, the correct age.

Access to LS remains variable at the provincial level, with LS Gross Enrolment Rates (GER) ranging between 33% (Ratanakiri) and 97% (Phnom Penh). That said, the provinces with low GERs in LS tend to exhibit high transition rates from primary to LS. This would indicate that the most immediate issue that is hampering the expansion of LS education in those Provinces is the lack of sufficient primary graduates rather than a lack of LS facilities/places⁷.

Lower Secondary Progression:

Repetition rates in LS are comparatively negligible (less than 2%) but around 20% of students drop out in each of the three years. As a result less than 50% of the students entering LS are expected to complete the 3 years of study. As a result of the high dropout rate MoEYS has to provide around 5 years worth of educational inputs for every student who successfully completes the 3 year education program. As with primary education this is highly inefficient. Progression rates for males and females are not significantly different.

Lower Secondary Completion:

For the achievement of EFA it is a necessary and sufficient condition that 100% of the age 14 population completes grade 9 over a sustained period of years⁸.

Again it is the completion rates that show the greatest improvements in performance. In 2008 the number of new children reaching LS grade 9 was **165,342** (76,641 females)⁹. This represents **over 100,000 more children entering grade 9 education in 2008 than in 2000**¹⁰. It is equivalent to 44% (42% female) of Cambodian children receiving complete basic education. Gender equity for students at this level has improved year on year and is approaching parity.

Further improvements in completion rates can be expected over the next two years however, after that period the potential stagnation in the number of primary graduates

⁷ Though given the amount of time required to expand facilities, it may be prudent to conduct a progression planning analysis in each province

⁸ Figures should include NFE equivalency students

⁹ Table 1, page 4, provides comparable data on graduate numbers

¹⁰ Grade 9 Entry is used as it is consistent with MoEYS indicator on 'completion'

could potentially hamper further increases and may even result in a down turn in the number of students completing.

Policies and strategies to directly counter-act the pressures to drop-out will probably be the most important reforms in LS education over the period 2011-15. Scholarships have been shown to have a positive impact though the rate provided to students but may need to be reduced if an affordable expansion of the program is to be achieved.

Beyond basic education the MoEYS has also introduced a number of important reforms, which are summarized below:

Upper Secondary Education

Over the periods of the reforms upper secondary education has undergone a rapid expansion, which is likely to continue under the policy of establishing an upper secondary school in all districts. Student enrolment in the sub-sector has expanded with improved gender equity from 105,086 students (33,465 females) in 2000-01 to 292,423 students (123,334 females) in 2008-09. The number of successful grade 12 graduates has improved even more dramatically from 17,713 students (5,786 female) in 2000-01 to 51,565 students (22,394 female) in 2008-09.

Again, as with lower secondary education the key challenge is drop-out rates which persist at around 13% per grade. As a result less than two-thirds of grade 10 entrants successfully complete grade 12.

There are a number of policies that will have important repercussions in the sub-sector over the period 2011-15. Firstly, the envisaged expansion of upper secondary provision is likely to lead to further expansion of student numbers with the enhanced geographical coverage potentially offering greater access opportunities for poorer students. Secondly, policies and strategies to directly counter-act the pressures to drop-out particularly for poorer students may need to be more fully developed alongside the expansion, again with scholarship programs providing the most obvious approach despite their potentially high recurrent costs. Thirdly, the Ministry has recently drafted an ICT Master plan which includes a roll-out of ICT education to all upper secondary schools. This approach appears highly consistent with the broader government NSDP objectives and in many respects is a pressing necessity for the sector. The planned roll-out of ICT education is based on a comparatively low cost expansion, but it still likely to require an increase in unit costs of around 10%-15% at this level, which coupled with the envisaged expansion will place further strains on the recurrent budget.

Finally, and as a reflection of the policies outlined above there is a critical need to review the policies governing the size of the upper secondary sub-sector in respect to student numbers. Upper secondary education provides an important platform for students to access HE, TVET services and employment, potentially contributing to national economic development in line with NSDP goals. Potential access to upper secondary is also likely to support student retention at lower levels for students who aspire to further education.

However, given the competing demands on the Ministry's recurrent budget there may be a growing need to consider capping the number of students who can access this service at no cost. Such an approach would be likely to entail the introduction of cost-sharing measures alongside poverty and merit based scholarships (no-fee or no-fee plus financial assistance). It is likely such an approach would be politically challenging but it would enable continued expansion alongside pro-poor safety nets.

Early Childhood Education (ECCD)

The ESP prioritizes an expansion of equitable access to early childhood education (ECE) programs for 5 years-old children, targeting those communes with high new enrolment rates and high repetition rates in primary schools. Operationally, in the ESSP the Ministry also included a focus on 3-5 year olds as many NGO partners focused on this wider age range, particularly as the financing approach relied on a mixture of Ministry funding and community and NGO support¹¹, through public-private partnerships. This was an expedient move given the level of recurrent financing available through national sources.

Broadly, this approach has had some success and the national net enrolment of 5-year olds in pre-school facilities has increased. However, the rate of growth in this area has not wholly matched MoEYS expectations and is still less than 1/3 of the population. In addition, there appears to be indications that in areas where access to pre-schooling is limited a significant numbers of 5 year old are enrolling 'informally' into grade 1. This phenomenon is positive in that it demonstrates a commitment to access education facilities but it is also likely to provide a sub-standard pre-school experience for these children, and lead to overcrowding and a reduction in quality for students 'legitimately' attending grade 1.

An analysis¹² of student flow rates in primary schools with and without the availability of Pre-school facilities in a village shows a significant positive impact on the probability that a student will successfully complete and graduate from grade 6, with marginally greater improvements for female students. Specifically the probabilities for successful completion increased from 43.44% to 54.39% for all students and 43.07% to 54.80% for female students. In addition, the availability of pre-primary schools reduced the average number of years of input required to achieve each grade 6 graduate even after the additional years of pre-primary school are factored in. This reduction in years in school should support continued student retention beyond primary and indicates that that expansion of the program would be highly cost effective for the MoEYS and should produce significant savings at the household level. It should also be noted that the impact of ECCD services appeared to be greatest in poorer and more remote areas.

Overall, this analysis suggests that a major expansion of ECCD services would be comparatively low cost, high impact and pro-poor. That said, the analysis did not extend to a comparative assessment of the 3 types of ECCD provision and it is strongly recommended that such analysis is conducted as a pre-requisite to inform Ministry policy

¹¹ ECCD provision includes Kindergartens, community based, and Home based programs

¹² Impact Analysis of pre-school Provision 2006-07: ETCO team, 2008

makers of the relative potential impact of a significant expansion of the program through Ministry provision.

Non-Formal Education (NFE)

Non-formal education is one of the most challenging sub-sectors within the Ministry. The Department of NFE (DNFE) presently runs a wide variety of NFE programs including literacy, equivalency and re-entry programs.

NFE learners are the most diverse of any sub-sector. They are generally poorer than formal students, are of a wide variety of ages, demand NFE services for a variety of reasons and look to access these services through more open and flexible approaches. Moreover, the body of people looking to access NFE services changes with the prevailing economic conditions. A bad harvest or economic downturn may lead to some learners leaving formal education and looking to NFE alternatives, simultaneously existing NFE learners may find there conditions worsening and have to forego even NFE services in search of income. This makes it difficult to access and retain NFE learners.

The second challenge for NFE services is that there are limited institutional bases at the village level (unlike formal education which has schools to deliver its services), which can hamper service delivery. In some respects the emerging D&D agenda may provide an opportunity for more responsive delivery of services. Options such as establishing NFE funds holders at village or commune level (or even at school level as happened in the 1990's) could assist in strengthening the level of community engagement in NFE services through allowing them to use these funds to buy in the specific NFE services most appropriate to the communes circumstances. Such a program would require a significant institutional and financial management reform alongside strengthening of existing NFE services.

Finally, NFE successes do not always appear to be fully integrated into the wider MoEYS indicators (grade 6 and 9 equivalency students are not presently as contributing to UPE and EFA targets).

Higher Education (HE)

Between 2001-09 the MoEYS introduced policies to expand access to HE programs through public-private partnerships. In particular, these policies were operationalized through increasing the degree of autonomy of the public universities through supporting their establishment as 'Public Administrative Institutions' and through allowing the establishment of private universities alongside the existing public providers.

To respond to the need to ensure that sufficient graduates were enrolled in courses regarded as key to national development objectives and to ensure that poorer students would have some opportunity for accessing HE services, in itself a useful strategy for forcing up quality, the Ministry also stipulated that public HE institutions should offer a number of no-fee places to poorer prospective HE students. Funding for the public universities was provided as a block grant to cover core running costs which could be supplemented by income from fee paying students.

These policies have achieved some significant successes. There has been over 100% increase in the number of HE students, a wider variety of courses are now available, students have greater choice over the institution they attend, HE satellite campuses have been established in a number of in provincial towns, and the opportunity for higher level degrees is more widely available.

However, a number of concerns persist. In particular the academic quality of HE graduates is perceived as being very variable which may impact negatively on students and prospective employers' assessment of the value of university degrees, undermining the entire sector. In addition overall performance reporting from, in particular the private HE institutions is limited making assessments of the overall level of performance of the sub-sector challenging. Finally, partly due to the levels of under-reporting it remains unclear if the MoEYS policies are sufficiently robust to ensure that the HE sub-sector is supporting the twin NSDP goals of promoting national economic development and enhanced equity as effectively as possible.

One possible means of strengthening the linkage between the HE sub-sector and the goals of the NSDP would be through a revision of the present funding approach for HE institutions.

It is understood that the block grants provided to HE institutions are not conditional on specific objectives such as the number of scholarships or graduates in key areas. Such an approach does not establish the important connection between the level of provision of public funding and the level to which HE institutions meet the objectives of increased equity and graduate numbers in key areas. Under these circumstances some Universities may tend to view the scholarship (no fee) students as a burden drawing out resources rather than as a contribution to national development.

Moreover, it is not clear if the no-fee approach sufficiently satisfies the pro-poor agenda as some poorer but able prospective students may also require a scholarship grant to overcome the financial burden of attending university.

A financing modality that more closely links funding allocations to the NSDP goals may serve to overcome these issues. One such approach would entail replacing the block grants for HE institutions with **conditional block grants**. The conditions attached to these block grants could include mechanisms to ensure that national development goals were being served as a pre-requisite for determining the entitlement and level of government funding provided. This approach would introduce systematic incentives for HE institutions to support NSDP goals and ensure greater accountability of the subsector to MoEYS.

A more performance based financing mechanism that provides HE institutions with conditional block grants based on factors such as their size, the number of scholarships¹³ offered and successful graduate numbers may provide a more effective means of ensuring more effective HE expansion, equity and support to national development.

¹³ Possibly both no-fee, and no-fee plus student grant scholarships

Additional conditional clauses covering: the existence of accreditation from National Qualifications Assurance Committee (NQAC) / Department of HE (DoHE); and the provision to DoHE of comprehensive performance monitoring information could also be introduced as a means of ensuring that the quality of services provided meet national standards and that comprehensive monitoring information is made available to the Ministry, supporting more robust sector performance assessments¹⁴.

Teacher Training Services

Plans to upgrade significant numbers of primary teachers to basic level teachers offer strong opportunities to introduce professional upgrading and increased flexibility within the teaching service. International studies¹⁵ indicate that improving the quality of teachers is one of the most effective and cost-effective interventions for improving education services. This appears to be an area where further reforms and support are necessary.

In addition, to the general upgrading of teachers, a more systemic approach to the upgrading of school directors appears to be a important strategy to consider. The effective management and administration of all educational institutions is one of the most important means on ensuring the quality and efficiency of the education services. A small scale research program led by the inspectorate of general education conducted a sample survey which found that schools with high quality management¹⁶ had significantly lower drop out rates [40% lower in primary (50% for girls) and 30% in lower secondary (35% for girls)].

Given these potential gains and the expected increasing workload to be shifted to school managers under the Decentralisation and Deconcentration (D&D) reforms it would appear that strategies to strengthen school management should be more thoroughly investigated. In particular, at present there is no formal pre-service training provided to school directors before assuming their posts. Establishing such a program could be a potential highly effective and comparatively straightforward reform for the Ministry. Linking such a reform to salary increases and performance based pay would further enhance the effectiveness of school management improvement programs.

Technical and Vocational Education and Training (TVET)

Delivery of TVET services fall under the auspices of the Ministry of Labour (MoL). That said, the education sector plays an important role in preparing and channeling students into this field. There is also the opportunity for more co-operative programs between the two Ministries through developing complementary literacy, life-skills and equivalency programs alongside or within selected TVET programs. For example, the predominately young female workforce in the garment industry offers a prime example of one area where such approaches may be highly effective in supporting productivity, reducing

¹⁴ One option for the conditional clauses is provided in the MoEYS brief: "Strengthening the Alignment of HE services with NSDP goals", ETCO team, Aug 2009

¹⁵ E.g. "How the best-performing school systems come out on top", McKinsey & Company, OECD 2007

¹⁶ The study used student record keeping as a simple proxy indicator of school management

vulnerability (HIV/AIDS and maternal health programs and preparing workers for the potential negative impacts of a contraction in the industry¹⁷).

The NSDP indicates a focus on expanded TVET provision as a means of strengthening national economic development and offering alternate human capital development systems to the academic systems of MoEYS. TVET training services are often expensive and may have to rely on cost-recovery or public-private financing mechanisms. Presently TVET services offer limited access and places. It is not clear if this is because they are perceived as offering fewer employment opportunities, perceived as being lower quality, have higher costs, or do not have enough places.

Moreover, reports from meetings of the Cambodian industrial and commercial sector indicate that employer representatives feel that the skills provided are not meeting their employment needs, a statement they also echo in respect to the graduates from the academic services. Such statements are common from employer representatives in almost all countries but this does not mean the perception is inaccurate.

In many respects these negative views from employers are only likely to diminish if they themselves have a significant role in directing and supporting TVET provision. Such support could be through: formal representation in TVET policy and strategy meetings; representation on the boards of major TVET delivery institutions; training tithes¹⁸ on business and industries above a certain size; sandwich courses and work based training programs. Some of these may already exist in some places but a more systemic approach may benefit this key sub-sector.

From this view two initial key strategies appear most appropriate. Firstly, MoEYS could seek to develop a closer strategic and operational partnership with TVET to assess the feasibility of developing more effective TVET-readiness program and joint service delivery approaches where appropriate. Under the recent re-structuring process¹⁹ the MoEYS has established a Professional Orientation Department in the Directorate of General Education which now provides the institutional base for such support. It is unclear whether this new department receives any external support.

Secondly, MoEYS alongside MoL, MoEF and Ministry of Planning (MoP) could seek to develop a closer strategic partnership with commerce and industry partners, in order to more fully address their concerns about developing the appropriate skills base in graduates and trainees in order to meet the needs of the emerging and shifting economy.

Information Services (ICT)

These fall under the auspices of the Information and ASEAN Department which has recently established an ICT unit. One of the key priorities of this department is the continued implementation of the ICT Master plan for Education. The plan is undoubtedly a pressing necessity for both the sub-sector and wider national development as Cambodia increasingly enters international markets and the possibility of greater ASEAN integration moves closer.

¹⁷ ETCO Concept paper: "Expansion of NFE services into garment factories" Aug 2006

¹⁸ as applied in countries like South Africa

¹⁹ Praka 84, MoEYS, June 2009

The plan covers areas such as: ICT training for pre-service teachers, expansion of ICT education into Upper secondary, and in-service upgrading for teachers though Open and Distance Learning (ODL) approaches. The wide coverage of the plan will require strong coordination between the department and other relevant MoEYS departments such as Department of Secondary Education, TTD, PRD and Department of Personnel. There will also be a number of important recurrent costs implications particularly related to the expansion of ICT education into Upper secondary education despite the fact that the present plan is based on a very laudable and comparatively low cost approach.

A strong focus on supporting the department in its collaboration with other departments and in taking forward this important master plan is recommended.

In addition, the departments role in developing and disseminating IEC campaigns plays a critical role in publicizing and informing the populace about key national reforms in education. IEC campaigns can be used to generate demand for new and existing services and for informing students, parents and teachers, about their rights and responsibilities in respect to education services. This second approach can assist in ensuring greater compliance with national policies and regulations and strengthen accountability at decentralised levels. Campaigns to publicize the envisaged revision of repetition guidelines, or re-enforcing the illegitimacy of 'informal' fees paid to teacher's are two examples of such an approach.

In light of this it is recommended that the opportunities for using IEC campaigns to complement and support key issues identified in the next platform of reforms are given strong consideration.

School Health and Inter-Departmental Committee on HIV/AIDS

With financial support from a number of partners, ICHA and SHD have run a very successful HIV/AIDS awareness program and a number of hygiene and health programs. At present the department does not have an operational budget under PBB which may place the sustainability of these programs at risk.

In addition, the feasibility of developing closer cooperation with other departments such as DNFE, ECCD (*for mothers*) and co-operative programs in the TVET sub-sector may present an important opportunity for expanding the reach of their existing programs

Pedagogic Research Department (PRD)

PRD led the development of the new curriculum and curriculum standards. It is understood that training in the new curriculum and the standards has not yet been provided nationally. This presents a major risk to the quality of education services delivered. Given the importance of this area additional support is strongly recommended.

3. Monitoring and Sector Assessment

To more effectively meet the reporting needs of PBB and NSDP, the MoEYS needs to ensure its core indicators respond to the national approach and framework for assessing progress in each sector. In particular, it is understood that for the next NSDP and Rectangular strategy, the Ministry of Planning (MoP) is planning to request that all Ministries focus more on a core set of indictors of output and inputs – and therefore less on throughputs. The emerging framework for PB reporting also focuses on outputs and how budget allocations for each activity support these overall outputs in order to provide overall and program-based assessments of the effectiveness of resource allocations to, and within the sector. The current set of core key indicators for MoEYS has a strong focus on throughput indicators like NER, GER, Survival rates, repetition and dropout.

These are clearly important in assisting the planning of further reforms and strategies and in providing projections of future outputs and resource requirements. However, they are less important than indictors related to sector and sub-sector outputs, such as the completion rates at different levels and national literacy rates.

For example, the continued attainment of 100% gross completion rate (GCR) grade 6 effectively represents the achievement of UPE which is becoming increasingly refereed to as Universal Primary Completion {UPC} and national policy goals for the sector. However, 100% achievement of grade 6 net enrolment is in itself neither necessary nor sufficient for the achievement of UPE.

Recommendations should be developed to ensure that overarching / core sector indictors respond to the need to prioritize the focus on outputs and thereby enable the sector to more effectively respond to PBB reporting requirements and the attainment of national and international policy goals.

Pro-poor impact Assessment

In accordance with the NSDP the MoEYS's ESP has a strong focus on pro-poor interventions and service delivery. Presently there are a number of approaches to measuring impact by poverty level that can be applied to the sector. However, these approaches are generally either: sub-national (*Mol/ MoP poverty ID approach with GtZ support*); out-dated (*WFP district disaggregation approach*); or provide limited information on actual outputs and impact (*the present NSDP provides Net enrolment as a key indicator which is an anti-poor indicator as overage enrolment proportionally effects more poorer children who are excluded then from the indicator in increasing numbers as they progress through education at present.*

Recommendations should be developed to ensure more effective monitoring of pro-poor outputs and outcomes within the sector.

Education Services for Children with Disabilities

For the first time in 2009, EMIS will be producing sector wide information on children with disabilities and children in difficult circumstances. Recommendations should be developed to assist MoEYS and development partners in more effectively responding to the educational needs of these children.

Decentralised monitoring approaches

The PFM and D&D reforms will over time assist in the provision of more effective planning, resource allocation and service delivery systems. However, to fully achieve this, the systems require more comprehensive and timely access to sub-national data and information for collation, processing and analysis. A number of such systems already exist within the sector and are established at central and provincial levels, including the EMIS, Public Finance MIS (PFMIS) and Human Resource MIS (HRMIS)²⁰. However, as the national PFM and D&D reforms progress continued review and strengthening of these systems may be required.

Moreover, as the two national reforms continue to roll-out it appears that there will continue to be an increasing focus on greater autonomy at provincial, district and school levels. This will have two major implications.

Firstly, there will need to be continued increased strengthening of decentralised analysis, planning and reporting skills. An initial step could be the development of provincial based performance targets that take countenance of the high levels of variability that exist nationally. These targets could be used to inform provincial performance assessments provided to the annual congress and support more targeted recurrent budget allocations. A similar approach of target setting could also be developed at the school level forming part of their annual development plan. Targets at this level would need to be limited to critical issues such as: gathering out of school youth; repetition / drop-put rates; and student completion numbers. The present EMIS system provides sufficient data with which to develop baselines for all schools on the second two of these areas.

Secondly, and complementary to this first recommendation, is the need to ensure that accountability mechanisms are in place to support this decentralisation. Provincial treasuries maintain a degree of influence over the allocation of funds to the PEOs and subsequently lower levels of the system. It would therefore appear prudent to establish a mechanism for ensuring that Provincial Governors are fully informed of annual provincial plans, provincial education targets and annual performance reports. This may maintain and strengthen their close engagement and direct support for the education reforms in their province, potentially crowding in additional support and political will for the reform process.

Accountability structures at the school level may also benefit from further strengthening. School management committees or school support committees (SMC) were established nationally during earlier reforms. These bodies provide a critically important accountability and local governance function. The existence of these bodies and their role in signing off on school budgets and expenditures may have been a critical

²⁰ A NFEMIS and HEMIS also exist and an AuditMIS may be under consideration

component in ensuring that the World Bank Public Expenditure tracking Survey 2005 (PETS) found that nearly 94% of funds allocated to primary schools through the PAP system actually reached the school.

That said concerns do persist that these committees do not have sufficient capacity, incentives and clarity of role to fulfil this important duty. Recommendations and operational strategies to overcome this issue could assist in strengthening this increasingly important function.

4. Quality Issues

Education quality is the most intractable challenge facing all education systems. Quality enhancement programs and access expansion programs are often in competition for the same scarce human, financial and institutional resources. From an effectiveness viewpoint, without a reasonable level of quality school attendance is a poor investment of students' time and government resources. Similarly without sufficient access, quality enhancement is an academic exercise serving only social elites, who no longer need to compete as hard in order to excel.

From an efficiency point of view, high quality education for 6 years may offer better educational outcomes than low quality for 12 years. This can tend to direct quality improvements towards lower levels of education. But the filtering process that restricts access to higher levels of education may indicate that national economic development (and the future tax base that will support all services) could be better served by strengthening quality at higher levels. In light of these competing demands, a balanced system wide approach catering to both issues simultaneously appears to be the most appropriate strategy.

A Perspective on the Assessment of Quality ²¹

There are three main groups that make potentially different assessments of education quality:

a) Students, families and communities

Parents and students make assessments – consciously or consciously, on what they perceive to be the quality of (and benefits arising from) education. If parents view the quality to be too low they may be unlikely to retain their child in school even if household income is sufficient to cover the costs. If students view education quality as being to low they may switch off from education or urge their parents to remove them from school to seek income generating opportunities.

It is therefore important that strategies are developed that increase students and family's perceptions of the quality of education. More positive perceptions may increase student motivation and encourage parents to retain their children in school longer. Parent's and communities may also become more willing to question the performance in their schools when it falls short of their perceptions and this engagement may in turn encourage schools and teachers to improve their performance.

b) Governments

All Governments are faced with difficult choices in how to allocate their budget. Competing demands from Education, health, infrastructure etc. are all reviewed against the overall national development strategies of the nation. Budget allocations to the education sector are at least in part influenced by decision makers perceptions on what the sector delivers as outputs: how many children complete each level of education and what is their view of the 'quality' of the education provided?

²¹ Summary extracts from MoEYS briefing "Who cares about quality?" ETCO 2009

If the government perceives that quality is low for the resources allocated – they may be more reluctant to commit increased resources. If they perceive quality is high given the resources provided they may be more willing to commit further resources, which in turn can be used to generate further quality improvements.

c) Education specialists, planners and academics

This group focus most closely on the actual learning outcomes of the students as a means to assess quality. However, even here there is not a consensus as to what education quality is or should be. Some may stress the importance of purely academic achievements - preparing children for higher and higher levels of education, some may stress ethics and good citizenship, some may stress life skills, others preparing for work and the job market. All are important to some degree.

In many (but not all) countries there is some growing consensus that every child should be assisted in achieving their potential (but potential for which of the above?). There is a greater consensus that literacy and numeracy skills (which form the foundation for all later learning – both formal and informal) are essential for all citizens.

However, it should be noted that whatever measures or standards are applied to assess the quality of children's learning at each grade or level, where an education service is universalised (*accessed by all*) there will be a significant proportion of children who fail to meet these standards. Even in countries with the highest performing education systems (well managed systems and highly resourced), some children can complete 12 or more years of education and still be functionally illiterate or innumerate.

It is possible to view these three groups hierarchically. If parents do not feel quality is sufficient they may not send their children, so no formal learning takes place. If parents' requirements are met but government considers the investment in education to be a low return then the subsequent low budget allocation can impede improvements in quality. Only if both these are met will education system policy-makers and planners have the resources to improve the systems, and the enrolled children with which to provide the improved quality education.

That said, the situation may be more complex, and these three groups may on occasions have competing views. Reforms to curricula or new pedagogical approaches aimed at improving quality may not be welcome by some parents who believe that the reforms will lower quality, particularly if it means a change from how they were taught, or if the reforms seem to challenge traditional values. In particular, where education services have gone from being highly selective to being universalised, parents and others may often feel that quality has diminished. This is because perceptions on the quality of the selective education services will be based upon the abilities or results of the few high achievers (and often wealthier) students that accessed services at that time. Whereas perceptions on the quality of universalised services will be based on the abilities and results of all students and not just on the abilities and results of same small proportion of highest achievers within the now universalised system.

In summary, in reviewing education quality issues cognisance of all three of the key groups mentioned above must be taken in the development and adoption of quality improvement strategies.

Quality improvement strategies

There are many opinions on the most effective means of improving quality and this is an area that will stimulate significant discussion. This paper will restrict itself to presenting the findings from a single but very informative study: '*How the best-performing school systems come out on top*'²². A briefing on the report is provided *as Annex 2*, though a review of the full document is recommended. An additional briefing on repetition taken from a CfBT study is also provided *in Annex 3*²³. These research papers provide a useful starting point and raise the following key questions:

- How can the teaching service attract higher quality teacher training students;
- Can the salary structure be reviewed to support increased attractiveness of the profession;
- Are fewer, but higher quality teachers a viable option, if so how many and what support strategies may be necessary (multi-grade, multi shift ...).
- What strategies can be adopted to develop these people into effective instructors. Key approaches may include:
 - Building practical skills during the initial training by moving more and more of the initial period of training into the classroom;
 - Placing (or selecting and developing) coaches in schools to support teachers, through focused one-on-one and on-the-job coaching in the classroom;
 - Selecting and developing effective instructional leaders.
 - Enabling teachers to learn from each other rather than work alone.
- What strategies will support systems and targeted support to ensure that every child is able to benefit from excellent instruction. Key approaches may include:
 - Enhanced examination systems;
 - Enhanced and independent school reviews, or inspections
 - Enhanced school-based struggling student identification and remedial support
 - Effective and applied curriculum standards which set clear and high expectations for what students should achieve, but do not overload the curriculum;
 - An enhanced focus on numeracy and literacy in the early years.

Finally, and in particular respect to primary education what measures are operationally and politically viable to reduce or eliminate repetition without undermining quality assurance.

²² McKinsey & Company, OECD, 2007

²³ Grade Repetition in Primary Schools in Sub-Saharan Africa, S Ndaruhutse et al; CfBT Education Trust (2006)

5. Education Sector Financing ²⁴

In considering any technical analysis of potential education reforms it is imperative to also review the potential recurrent financial resources that will be available to support the reform agenda and sustainable delivery.

The annual recurrent budget for the education sector has increased significantly year on year and according to MTEF 2008 is projected to increase even further until 2011. As a proportion of Government recurrent budget allocation the broad trend is positive. In 2000, the education sector was allocated 13.6% of recurrent government expenditure. During the period 2002 to 2009 this fluctuated between 17% and 19. Internationally, the EFA secretariat suggest a benchmark of around 20% as being appropriate.

Education Sector	Budget			Est. Exp.	Budget Law 2009	MTEF Projections		
Selected Years	2000	2002	2004	2006	2008	2009	2010	2011
Recurrent expenditure billion Riels	183.2	286.2	368.7	445.6	622.0	754.4	914.9	1091.0
Approx value in US \$ Million: (1\$ = 4,200 Riel)	43.6	68.1	87.8	106.1	148.1	179.6	217.8	259.8

Education Budgets 2000- 2011

A comprehensive analysis of the sub-sectoral allocations and salary to non-salary expenditures is not feasible within the scope of this analysis. It is anticipated that the Integrated Fiduciary Assessment and Public Expenditure Review (IFAPER) to be conducted in mid 2009 within MoEF and MoEYS will provide a more robust view and analysis of this situation, and in particular should bring to light a more informed assessment of comparative unit costs.

That said, findings from the previous IFAPER in 2003 and a broad comparison with international benchmarks appears to provide sufficient evidence that the pattern of financial allocations within MoEYS is not overly skewed in any particular area. Salary and administrative costs do not appear overly burdensome in comparison to program costs, and estimates of financial and human allocations to each sub-sector (primary, lower secondary etc.) appear broadly consistent with a balanced education system.

However, it should still be noted that the overall financing envelope is under extreme pressure, particularly as a result of the expansion in education services and enrolment over the last few years²⁵. An estimate of unit costs suggests that public kindergarten unit costs maybe around \$25; primary around \$28: lower secondary around \$70; and upper secondary unit costs around \$80 per child per annum²⁶.

²⁴ This section is taken from: The Education Sector reform Process in Cambodia 2001-09, MoEYS Briefing paper, ETCO August 2009

²⁵ Nearly ¼ of all Cambodians receive education services at present, over 1/6 in primary alone.

²⁶ These unit costs are based in internal analysis by EC Financial management TA.

Despite the significant increases in budget allocation the sector continues to operate with severely constrained recurrent funds. The FTI / UNICEF report "*Financing Quality Education At Cambodia*"²⁷ provided an assessment of the 'Financing Gap' in education in Cambodia. Different projections based on low, medium and high quality; and low, medium and high gross enrolments (GER) were produced. Government funds, household expenditures and development partner contributions were all included in the calculations. The figures are slightly dated and would benefit from updating, but the projections of government budget allocations have remained fairly robust.

The projected funding gap for Low Quality and Low GER for 2008-10 is around \$145,000,000 per annum. This is broadly equivalent to the entire government expenditure on education in 2008. For medium quality the gap is over \$500,000,000 per annum.

\$ Millions	Year	Costs	Gov	Donor	Household	GAP
Financing Gap LOW-GER and <u>LOW-Quality</u>	2008	492.8	160.5	11.0	189.6	131.7
	2009	514.9	162.3	6.7	197.8	148.2
	2010	527.9	165.8	3.4	204.3	154.4
Financing Gap LOW-GER and <u>MED-Quality</u>	2008	877.0	160.5	11.0	189.6	515.8
	2009	916.4	162.3	6.7	197.8	549.7
	2010	939.6	165.8	3.4	204.3	566.1

Source: Financing Quality Education At Cambodia, Merged tables from pg 35

Clearly these recurrent costs cannot be met by RGoC over the medium term. Moreover, the extent of the funding gap would indicate that in order to effectively progress further towards EFA the following measures appear necessary:

External Measures

- <u>Increased funding from RGoC.</u> The percentage already allocated is close to international benchmarks and so significant increases are only likely to be available through continued improvements in government revenue generation.
- <u>Increased support to recurrent budget from development partners</u>. A number of partners will be reviewing their support to MoEYS for the period 2011-15 presenting a potential opportunity for increased support to recurrent funding.

Internal Measures

 Increased Efficiency within the sector. Repetition and drop-out lead to wasted resources. That said, it is important to consider that programs and approaches that reduce repetition reduce costs and release funds for other activities. Whereas programs that reduce drop-out reduce the wastage of funds <u>but incur</u> <u>the additional cost of retained students</u>.

²⁷ Financing Quality Education At Cambodia, Ninasapti Triaswati, UNICEF December 2005

 <u>Adoption of low recurrent cost approaches</u>. The FTI projections show that MoEYS is a long way from having sufficient recurrent funds to even provide "low quality" EFA as defined by the FTI analysis. Programs and approaches with low recurrent costs appear to be the only sustainable option.

This final point is perhaps the most challenging and requires that the recurrent cost implications for all new programs should be examined very carefully within the wider financing framework. This is particularly true for many projects and programs financed by Development partners. Some of the issues surrounding this are explored in the "*The Education Sector reform Process in Cambodia 2001-09, MoEYS Briefing paper, ETCO August 2009*" cited.

Emerging Challenges to Sector Financing.

In addition, to the existing recurrent funding gap there are a number of emerging challenges for recurrent sector financing identified in this paper. Most importantly, the Ministry must navigate through some potentially competing demands from the NSDP.

Specifically, the NSDP provides a strong pro-poor focus, highlighting the need for universalizing basic education. Given the present achievements within the sector, where UPE is potentially feasible, and EFA remains highly challenging, this suggest a strong focus on enhancing formal and non-formal basic education provision and related programs such as ECCD.

However, the NSDP also stresses the need for the education sector to contribute to enhancing the economic development of the nation. In some respects enhanced basic education may be viewed as a vehicle for economic development, but a strong case can be made for viewing this as advocating for greater education investment in upper secondary, HE, and TVET services. This tension is also mirrored in development partner support within the sector which shows some signs of shifting from basic education to these other areas.

It is envisaged that the IFAPER report will provide the government and MoEYS with a review of the existing sub-sector allocations and recommendations for future allocations based on the policies in the NSDP. What support to this process can development partners provide and what procedures can they put in place in order to ensure that their future programs reflect and support these recommendations. In addition, what procedures or commitments can development partners make to ensure that their support to programs and projects does not lead to unsustainable recurrent cost burdens for the sector. In addition to this key issue there are a number of other challenges to be faced.

Firstly, how can the envisaged expansion of upper secondary be sustainably financed. This section also presents some of the related recurrent financing challenges that may result from the introduction of ICT education into upper secondary.

Secondly, the persistent high levels of drop out in primary, lower and upper secondary pose a serious challenge. In the primary sub-sector, this paper asserts that programs that reduce the repetition rate will have a knock on effect of reducing drop-out. If such

programs are sufficiently low cost²⁸ then the potential savings from reduced repetition may be sufficient to off-set the additional costs of providing the programs and of retaining students in the system. Effectively, these programs could be budget-neutral with high impact in respect to student retention.

Reduced repetition rates in primary could also lead to a general reduction in students' ages at higher levels. Given that students' age is a major determinant of drop-out rates it is highly feasible that these programs in primary education could in turn lead to a fall in drop out at the higher levels.

That said, there may still be the need for additional programs at these levels to further reduce drop-out. As mentioned elsewhere the provision of scholarships is an effective albeit expensive long term strategy to sustainably achieving this goal.

In this respect it is critically important that if scholarship programs are to be developed or expanded they should be designed with a view to sustainable financing. Given the projected budgets for MoEYS this means quite simply, the scholarship provided should be as low as possible.

A clear lesson learnt from the analysis of the scholarships program in lower secondary (JFPR and others) was that the higher rates of scholarship had less impact than the lowest one (of \$30 per annum). In fact, given the high success rate of the \$30 scholarship it appears that an even lower amount could have had even more overall impact. Put simply, half the rate of the scholarship means double the number of poor students receiving the scholarship and requires only half the success rate to be as effective.

²⁸ Such approaches could include: regulatory reforms (abolition, restricting repetition to grades 3 and 6, school based caps on repetition); teacher behaviour modification programs and enhanced school management programs

6. Financial Management Issues

The PFM and D&D reforms have a primary focus on improving service delivery. However in some respects they pose challenges to the education sector in these very same areas. In particular, the recent introduction of the program based budgeting (PB) approach (platform 1) has highlighted some competing tensions within the procedural approach. The need for strengthened fiscal discipline and accountability has, at this stage, led to the development and implementation of procedures that may be considered more centralized and less flexible than the previous PAP system in the education sector, where schools had greater flexibility in allocating their own budgets.

Some examples of these challenges include: schools without electricity and running water are assigned budgets for these utilities; vierment or transferring between budget codes requires central authorization which is at very least time consuming and leads to under-utilization of resources in a timely fashion; the chart of accounts has numerous (possibly too many) sub-codes and there has not been sufficient direction on how to apply these codes to expenditure items. In addition, the quarterly release approach has assisted in improving the predictability of fund allocation at central level but has presented some significant challenges for schools and other sub-national units particularly those with low budget allocations. For example:

There are unconfirmed accounts that some pre-schools with small operating budgets do not collect their funds from district offices as the cost of collection is higher than their value. In addition small remote schools with small annual operating budgets (say under \$500) may be facing a similar dilemma.

Collecting the funds requires 4 or more visits to the DEO per year (more than 4 visits are required when expenditure is less than 25% which is a prudent management approach given the potential delays in receiving the next tranche). Similarly reporting on liquidation requires 4 or more visits. In remote schools such return visits can take 2 or more days travel and require funds for both transportation and living costs and accommodation. These expenditures can significantly reduce the effective value of the operating budget provided.

This situation highlights some areas where service delivery under the new reforms may be being undermined at least during this transition period. It is critically important that MoEYS and MoEF jointly review this situation with a view to developing efficient, feasible and acceptable approaches that will overcome these operational difficulties to support more effective implementation of these important PFM reforms.

Internal Audit Issues

Related to financial management issues but also encompassing broader management and internal control issues is the role and function of the internal audit department.

Reporting directly to HE the Minister and working in liaison with the national Audit authority (NAA) the department is responsible for ensuring the appropriateness, adequacy and effectiveness of: resource utilization; internal administration; management; and monitoring systems of central and decentralized education sector departments, institutions, offices and schools. Its assessments, reports and recommendations are used to support the sector and its staff in improving the effectiveness of internal systems within the Ministry

This is an on-going process supporting incremental improvements in the system. However, the introduction of the new PBB approach has presented a more immediate challenge. In response, Internal Audit Department (IAD) has embarked on developing effective and cost efficient approaches that enable a rigorous assessment of institutional compliance with the new PBB procedures. This is a critical and challenging process and the department will require some support in taking this agenda forward.

In addition, in support of the aid effectiveness agenda a number of development partners may be giving higher consideration to greater use of Ministry systems for channeling their support. Some development partners have in the past expressed concerns over the level of internal system performance within the sector. One approach which could assist in overcoming this challenge is the joint development of a series of agreed benchmarks for IAD and internal system performance that would allow development partners to then migrate to using national financial and operational management systems.

7. Personnel, Staffing and HRM issues

The education sector is the largest employer in Cambodia and MoEYS staff represent one of its key resources. It is envisaged that this will also be a key area of analysis for the IFAPER team and it is envisaged this report will shed light on the following key issues:

Staffing levels:

Overall does the sector have sufficient staff to effectively deliver its' services. Are these staff allocated appropriately by sub-sector and role (service provision by teachers, administrative and management functions by non-teaching staff) in order to most effectively ensure improved service delivery. In particular, some analysis of the balance between teaching and non-teaching staff (T/Non-T) is required. The analysis should be cognizant of the implications for staff allocation of both the PFM and D&D reforms. Both these reforms appear to be increasing the duties of planning reporting, administrative and management staff. Based upon the upcoming IFAPER analysis, recommendations will be required on how the system can best respond to this challenge.

Staff deployment:

The decentralized HRMIS offers significant opportunities to more effectively plan for the recruitment and deployment of teaching and non-teaching staff particularly in respect to subject specialism (ICT, foreign language, sciences) and emerging areas of teacher demand such as Pre-primary and upper secondary. In addition, secondary pre-school training now ensures that all newly trained teachers are competent in two subject areas, a strategy that should support more effective placement and deployment of teachers. That said, some concerns persist that many teachers are unwilling to teach in their second subject and strategies or incentives to overcome this reluctance may be required.

Despite these advances many schools and areas continue to suffer from staffing shortfalls in certain areas. What are the recommendations for strategies to more effectively redeploy and/ or recruit staff (both geographically and by duty). In particular, which strategies will most effectively support the D&D agenda and enable the sector to more effectively respond to sub-national HR needs and provide them with greater decision making functions in this respect. Again, based upon the upcoming IFAPER analysis, recommendations on the strategies to overcome this challenge alongside analysis of the capital and recurrent financial implications of such strategies are required.

Salaries and remuneration:

Over the last few years there have been significant increases in the base rate of teacher's salaries and future increases are also envisaged. In order ensure that these increases have the desired effect of improving education service performance it is important to develop strategies and systems that will link future increases to improved performance or at least to expanded roles and duties. If under such an approach teacher performance was seen to be improving this would also provide a strong rational basis for requesting further salary increases.

As well as the base salaries, there are a number of allowances that can be paid to teachers and other education sector staff. The present system of allowances appears to be over-complicated and in some areas to be linked more to a welfare approach rather than a performance or duty-based approach. Simplifying and re-structuring the basis for these allowances so they were more closely related to professional competencies and specific duties could further assist in strengthening the performance management systems in the Ministry. If such reforms were to be implemented strategies to compensate or placate the potential 'losers' from the new system would be required.

It is understood that there may be some constraints governing the appointment of new staff to MoEYS. For example, in the appointment of auditors, accounts staff, ICT staff etc. MoEYS has relied upon appointing and training up existing staff, who essentially were all initially trained as teachers. As the system continues to expand and become more complex it would appear to be prudent to give an increased focus on filling certain posts with staff already trained in the required area of expertise. It is not clear what barriers may exist to the adoption of this approach and further investigation is required.

In addition, if staff can be recruited from outside the Ministry for these specific roles, a review of the salary structures and incentives in key areas may be required in order to ensure they can be retained.

Staff Performance and Assessment:

The Ministry has recently completed the development of comprehensive Job descriptions and Job Specifications (JD & JS) for all non-teaching staff. The next stages in developing a more performance orientated systems are the development of performance standards and performance assessments systems. Within the Directorate of General Administration and Finance (DGAF) a review of how such national systems can be developed and implemented is in process. However, this is a highly challenging area of reform and significant support will be required to enable this important reform process. Given the present focus of some development partners on Merit Based Pay Initiatives (MBPIs) it is strongly recommended that these partners work alongside DGAF to ensure that a single unified and sustainable system of performance assessment is developed for the Ministry.

Institutional mandates for staff – Functional Analysis:

MoEYS's institutional framework has developed incrementally as it has expanded and improved its services. Given the size and complexity of the organization it would appear prudent to consider conducting a comprehensive functional analysis of the entire sector. Such a process may assist the Ministry in further improving its effectiveness and efficiency in respect to line management functions, staffing levels and departmental mandates. Key steps in this process such as: the development of job descriptions and specifications; the establishment of new department and institutional mandates covered in Praka 84; and the initial focus on the development of performance standards and performance assessments systems are already in place or on-going.

However, conducting and then implementing the recommendations from a full functional analysis is a daunting task and could potentially be viewed as an unwelcome and

demoralizing process for some MoEYS staff, as it will be perceived as a threat to their existing roles, mandates and even their jobs. If a full functional analysis is to proceed MoEYS will require extensive support in ensuring that these potentially negative impacts are counteracted in order to make this a politically and operationally viable process.

Responsibility for responding to many of the issues outlined above fall across many departments and organisations including: Department of Personnel (DoPr), TTD, Department of Finance (for sector financing issues) and wider government bodies such as CAR and Function Publiqué. In this respect high level governmental review and agreement on appropriate strategies would be required to overcome many of these challenges. That said, given its lead role in Human Resource Management (HRM) issues within MoEYS the DoPr would be called upon to play a major role in supporting many of these HRM related reforms. Given that this department is also leading on issues pertaining to D&D it is clear that this department would require significant support in taking forward any policy reforms highlighted in the areas above.

8. Decentralisation and Deconcentration

Again this is an area where it is envisaged the IFAPER report will provide comprehensive guidance. In addition, some of the issues have been mentioned in section 3, under the heading 'Decentralised monitoring approaches'. The key issues are as follows:

Firstly, the extent to which the D&D agenda will compel reforms through the Ministry is yet to fully emerge. That said, effective decentralization is heavily reliant upon the development of reliable and robust accountability and governance structures and reporting and information systems.

These are likely to emerge as the key areas requiring strengthening irrespective of the form the agenda eventually takes. In this respect, the staff performance management issues, the school management issues, and the enhanced information and monitoring systems all mentioned early may play a key role.

The potential albeit challenging opportunities for enhancing NFE delivery (also covered earlier) could also be an important an effective area for pursuing the D&D agenda.

Finally, it is worth stressing that the strengthening of the role and capacity of school management committees is likely to prove pivotal to D&D's success. Such an approach would strengthen accountability structures at the point of service delivery. School directors and teachers who are finding themselves becoming increasingly accountable to their local communities are much more likely to ensure the school is run effectively, that regulations are complied with and that school operating budgets and annual plans are more responsive to local needs. Stronger school management committees can in effect become the first line of performance and management audit for Ministry systems.

This strengthening of SMCs may be most effective if it is accompanied by an increase in their mandate and responsibilities for annual planning and reporting on school operations. This could be further supported through increasing school operating budgets and allowing them to cover expenditures such as text book purchasing²⁹ and the potential provision of computer equipment in upper secondary, in support of the proposed in the ICT master plan.

²⁹ as recommended by the MoEYS textbook decentralisation policy 2002

9. Recommendations

The recommendations within the report are numerous and represent only one perspective. They are intended to stimulate discussion on the key issues rather than present a single viable solution to the issues identified. Those wishing to focus on particular recommendations are directed to the section in which they were presented. More importantly, collectively they are possibly too numerous to be taken forward given the finite capacity to reform within the Ministry, the scarce recurrent resources and the time frame available.

Instead this diagnostic analysis will provide a summary recommendation in the form of a process for further deliberation on the next platform of reform. The process outlined below can assist in providing rigor and focus to the joint deliberations on the next platform of reforms for the sector. The process requires both high level deliberations on policy reform and intensive technical review. In this respect it is recommended that a joint technical secretariat would need to be formed to support the process.

Process map for reviewing policy options

1. Define the key outcomes to be achieved

The National Strategic Development Plan (NSDP) and CMDGs provides clear guidance on the national priorities and their relationship to the education sector. Complementary national reforms such as Public Finance Management reforms (PFMR); the Decentralisation and Deconcentration (D&D) agenda; and Public Administrative Reforms (PAR) also provide guidance on the key national outcomes to be achieved.

2. Define the key sector outputs that will support these outcomes

Examples may include:

- increased completion rates in primary education (ECCD, Lower and upper secondary, HE)
- Improve the academic quality and relevance of primary education (ECCD, Lower and upper secondary, HE as measured by standardized assessments
- More effective financial management and reporting;
- increased autonomy over planning, decision making and resource allocation at decentralized levels alongside establishing targets for decentralized entities;
- Increased staff performance in delivering and supporting education services.

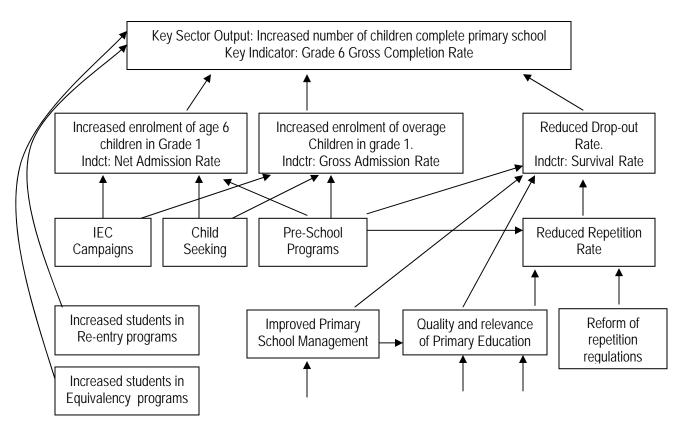
3. Define the next tier of outputs that will support these sector outputs

For example, some of the outputs will support increased completion rates in primary, include: reducing primary drop, increasing admission rates (including correct age admission rates), reducing repetition rates, improved school management, increasing reentry opportunities, increasing access to equivalency programs and so on. This approach should then be repeated iteratively to highlight even lower outputs that contribute to these intermediate outputs.

This process can initially look complex as there are often many inter-related outputs contributing sometimes to more than one sectoral outcome. It is recommended that a hierarchical map of the relationships is a good approach to map out these factors as far as possible. An, albeit potentially incomplete, example is provided below:

Example: Increased Gross completion Rate grade 6.

Contributing Strategies and indicators in a relationship map



And so on...

4. Based on the mapping process, the key policy reforms and program strategies that would produce these intermediate outputs should be established.

This will involve reviewing existing MoEYS strategies and programs that need to be expanded, strengthened or more effectively targeted, as well as brainstorming innovative approaches. As many ideas and approaches as possible should be generated

5. Each of these policies and strategies should then be assessed against four critical factors:

- What will be the envisaged level of impact on the key sector output?
- What are the envisaged recurrent cost implications?
- What are the envisaged human resource implications?
- What are the implications in respect to institutional change and capacity development?

In respect to recurrent cost implications it is important to consider not just the potential costs of the policies or strategies but also any potential savings. For example reducing repetition rates will free up recurrent resources for use elsewhere.

Where possible these assessments should be based on existing analysis. Where necessary support may need to be provided to Department of Planning or other assigned bodies to develop appropriate analysis.

6. Iteratively whittle down the portfolio until it is feasible within the national resource constraints (*recurrent budget, human resources and capacity for institutional change*), whilst offering the maximum potential impact.

This is a difficult process as there may be competing views on the potential levels of impact and resources requirements. It is therefore important that a joint, but Ministry–led process is used to reach the final decisions on the priority policies and strategies.

It can be useful to also apply some risk analysis to this process. For example, a program that devolves control to commune level over the decisions on which NFE programs and services to receive may appear to have the potential for high impact at reasonably low recurrent human and financial costs, but it also may be deemed to have a higher risk that a more centrally managed approach.

Given these potential risks and the difficulties in fully quantifying all the resource requirements it may be prudent to first consider developing a core priority portfolio of policies and strategies for immediate implementation with a ceiling accounting for 80-90% of potential resources.

Alongside this should be the development of a second level of priority policies and strategies that would push the resource envelope to the maximum and which could also be developed for implementation should circumstances allow.

7. Assess the levels of risk associated with each policy and strategy

- What external and internal factors may undermine the effectiveness of each policy or strategy reform?
- What is the level of risk associated with these factors?
- What additional strategies may assist in overcoming this risk?

8. Review the overall platform of core priority policies and strategies for coherence

- Will the platform collectively support the sector outputs intended?
- Are there overlaps to be removed?
- Are there opportunities for collaboration across the portfolio?
- Are the approaches fully embedded in MoEYS institutional structures and procedures and in accordance with wider RGoC regulations and procedures?
- Are there clear mandates for which MoEYS department or entity will take the reform forward?
- Are there any additional procedural or systemic reforms required to enable the reforms to be implemented more effectively?
- Are there any scheduling issues such as one policy reform that must precede another?

If substantive issues arise from this review, they should be rectified and if they cannot the iterative process may need to be re-started.

9. Set realistic targets for each policy and strategy and overall sector outputs

Based on the analysis of potential impact, the scheduling of the reforms, and the present situation, set ambitious but realistic targets for each intermediate policy and strategy. Use these targets as the basis for determining the overall targets for the sector outputs.

10. Combine the capacity development and institutional strengthening issues into a sectoral capacity strengthening plan

Finally, it should be noted that the process of assessing the implications in respect to institutional change and capacity development for each of the components of the overall portfolio will provide the basis for a comprehensive sectoral capacity building plan to which the Ministry and all partners can align their support.

This process map may at first appear complex and will take time to complete comprehensively. However, it will support the MoEYS in developing the most effective platform of reforms given their severely constrained resources. Moreover, it is very much the sort of process that will be required as the PFM reforms move forward in Cambodia.

Annex 1: Summary of some key MoEYS reforms, and their relationship to Paris Declaration Commitments and the Accra Agenda for Action:

- Year Key Reform
- MoEYS developed national education policies, strategies and priorities expressed in the ESP and ESSP through a broad consultative process. Ownership and Mutual Accountability
- The ESP and ESSP expressed policies and strategies as prioritized resultsorientated programs with overall financing allocations that were linked to the national budget and MTEF. Predictability
- The ESP and ESSP introduced Priority Action Programs (PAP) which were linking public budget allocations and expenditure to results and national targets for measuring impact. Managing for Results
- An integral part of the development of the ESP and ESSP is the mapping out of the Core Policy Action Matrix (CPAM) also referred to as the Sector Wide Policy Action Matrix (SWPAM). This provides the basis for more effective development partner co-operation and a framework for agreeing joint undertakings. Harmonization, Alignment and Conditionality
- In co-operation with MoEYS, development partners developed a set of partnership principles to support more co-operative and transparent working practices. Aid fragmentation
- A joint high level MoEYS and development partner working group is formed to discuss key reform processes This is later re-named the Joint Technical Working Group (JTWG) Transparency, and Aid fragmentation
- MoEYS establishes school management (*or support*) committees to provide community input and oversight of the use of decentralized school operating budgets. Ownership and Managing for Results
- MoEYS establishes the first annual joint review process. Ministry, development partners and other stakeholders jointly review progress within the sector and jointly agree key revisions to the ESP and ESSP policies and strategies and to strengthen the procedures and operational plans for implementing them. From 2002 onwards this process is held annually. Ownership and Managing for Results
- Ministry begins developing an approach and the analytical capacity to enable it to conduct its own comprehensive reviews of the annual performance within the sector. Managing for Results
- The MoEYS begins submitting annual progress reports against the NSDP to the Royal Government of Cambodia. Transparency
- MoEYS develops its EFA master plan, consistent with ESP ESSP but with a

more detailed focus on basic education Ownership

- Ministry develops and trains staff in the use of national financial management manual for PAP funds. Strengthened Country Systems
- Public Finance Management (PFM) platform 1 supports an increasingly strong MTEF process allowing for increasingly greater predictability of government budget and sector allocations. Predictability
- 2002 Development partners support a number of diagnostic reviews of national systems including external audits of financial practice, providing MoEYS and Ministry of Economy and Finance (MoEF) with important information relating to performance and areas for further strengthening Strengthened Country Systems
 - Annual external audits from both EC and ADB who have used national systems have provided recommendations for further strengthening and have not reported any misuse of funds Strengthened Country Systems and Transparency
 - Public Expenditure Tracking Survey 2005in the primary sub-sector showed that around 94% of all budgets allocated to primary schools were received by the schools. <u>This remains the highest result achieved internationally in a PETS</u>. Strengthened Country Systems
- Ihe establishment and on-going strengthening of the first internal audit department in Cambodia. Strengthened Country Systems and Transparency
- Incremental strengthening of MoEYS management information systems, including: the continued strengthening of the Education Management Information System (EMIS), and the development, decentralization and training in the use of Financial Management Information System (FMIS) and Human Resource Management Information System (HRMIS); Strengthened Country Systems and Managing for Results
- MoEYS takes greater ownership and control over the annual performance reporting process, which now has much less external TA support. Ongoing strengthening within MoEYS continues. Ownership
- The annual ESP review process and annual education sector congress merge into a single annual sector review, reducing transaction costs and ensuring greater consistency across the sector Managing for Results
- The development and adoption of the National Education Law provided the regulatory framework for education services and personnel. This also provided the platform for developing professional codes of conduct for education staff. Strengthened Country Systems and Transparency
- Annual review processes established at the provincial level. These reviews support improved decentralized accountability mechanisms for the sector. Ownership and Mutual Accountability

- 2007 International community formally approves FTI status for Cambodia. Transparency
- MoEYS hosts an external (EC) review of aid effectiveness within the sector. This provided a useful foundation for further discussion on aid effectiveness with the JTWG. Partnerships
- Ministry develops and trains staff in the use of national internal audit manual consistent with national guidelines Country Systems
- Public accounts training provided for staff in all provincial and district offices.
 Strengthened Country Systems and Transparency
- PFM platform 2 begins the incremental introduction of Program based budgeting (PB). Over the next few years as this approach develops it will further strengthen the linkage between resources, activities, outputs and targets. Predictability.
- The establishment and strengthening of an annual operational planning process linking budgets to activities and also encompassing external development partner assistance in all departments. Strengthened Country Systems and Transparency
- Comprehensive job descriptions for all non-teaching posts were developed providing a critical platform for more effective human resource management and planning, and individual and institutional capacity building. Strengthened Country Systems Transparency and Managing for Results

Annex 2: Brief - How do the best systems improve their quality?

In considering in how to improve the quality of the education sector it is appropriate to review the strategies adopted by the best performing and most improving education systems internationally. This brief draws mainly from the research paper: '*How the best-performing school systems come out on top*' by McKinsey & Company for the OECD in 2007, which studied 25 of the world's best performing (or best improving) school systems. The policies and strategies outlined below are the ones identified by the study as having the greatest impact on improving the systems. Though the systems viewed already had much lower class sizes than Cambodia.

Key findings:

A common strategy for improving quality is reducing class sizes. However, the report found that <u>except at the very early grades</u>, class size reduction does not have much <u>impact on student outcomes</u>

The most important factor in improving the quality of students learning is the quality of the teacher.

- The negative impact of low-performing teachers is severe, and largely irreversible, particularly during the earlier years of schooling.
- To improve instruction, high-performing school systems consistently do 3 things well:
 - 1. They get the right people to become teachers (the quality of an education system cannot exceed the quality of its teachers).
 - 2. They develop those people into effective instructors (the only way to improve outcomes is to improve instruction).
 - 3. They put in place systems and targeted support to ensure that every child is able to benefit from excellent instruction (the only way for the system to reach the highest performance is to raise the standard of every student).

1. Get the right people to become teachers

The best performing systems:

- Make entry into Teacher training highly selective, recruiting their teachers from the top third of each cohort graduating from their school system.
- Conduct rigorous selection procedures (including: qualifications in top 30% of age cohort; numeracy and literacy tests, interviews to assess motivation and communication skills) before assigning them to teacher training courses. This ensures training funds are not wasted on low quality trainees

In Singapore of 100 candidates only 20 are offered places in Teacher Training. This attracts high-performers. In combination with their larger class sizes (and 2 shift teaching), Singapore is able to spend more on teacher training (per student) and offer good starting salaries. – **Effectively fewer, but higher quality teachers**.

- Implement strategies that raise the status of teachers. These include good starting salaries, the rigorous selection procedures and using marketing techniques to support recruitment.
- Develop and implement processes to remove low-performing teachers from the classroom soon after appointment. Delay making teachers permanent (titular) for 2-4 years after they begin teaching and ensure their performance is assessed during that time.
- Provide good starting pay, relative to GDP per capita (95%-99% of GDP per capita). This attracts high performers. Later increases in salary can be kept small to ensure overall costs do not escalate, as is the case in Finland.

2. <u>Develop those people into effective instructors</u>

The report cites that:

⁶By age nine, "the achievement gap within a single class may span five or more years of schooling. Teachers need to be able to assess precisely the strengths and weaknesses of each individual student they teach, select the appropriate instructional methods to help them to learn, and deliver instruction in an effective and efficient manner³⁰.

At the teaching level, this means individual teachers need to:

- become aware of specific weaknesses in their own practice.
- gain understanding of specific best practices, through on-the-job demonstration of these practices in a classroom setting. (training conducted outside of the classroom has little impact – almost all other professions conduct their training in real life situations).
- <u>be motivated to make the necessary improvements</u>. Such changes come about when teachers have high expectations, a shared sense of purpose, and above all, a collective belief in their common ability to make a difference to the education of the children they serve.

The four core strategies for achieving these outcomes:

1. Building practical skills during the initial training by moving more and more of the initial period of training into the classroom;

Alongside this England has also introduced an induction year, during which new teachers are given increased support and supervision, a reduced teaching load that allows extra time for planning and training, and a regular performance review to highlight areas requiring improvement.

2. Placing (or selecting and developing) coaches in schools to support teachers, through focused one-on-one and on-the-job coaching in the classroom;

³⁰ Having children of multiple ages in each class may make this ability range even wider

These coaches can support improved teaching of new and more experienced teachers. In addition, they can be specialised. England has trained numeracy and literacy coaches in every primary school resulting in a significant improvement in outcomes over just three years

3. Selecting and developing effective instructional leaders.

<u>Research</u> suggests that school leadership through effective instructional leaders is second only to classroom teaching as an influence on learning.

The evidence also suggests that the following is needed to develop this:

• Getting the right teachers to become principals and developing instructional leadership skills

High-performing school systems provide the incentives to get the best teachers to apply for leadership positions, and implement processes effective in selecting the best of those who apply. This requires higher salaries, a rigorous selection procedure, specific leadership training (preferably on-the-job), and continuous assessment to weed out weaker applicants.

• Focusing each principal's time on instructional leadership, not on school administration.

Principals in small schools spent 80 percent of the school day focused on improving instruction and demonstrating a set of behaviours which build the capacity and motivation of their teachers to constantly improve their own instruction. This approach uses principals as drivers of reform.

4. Enabling teachers to learn from each other rather than work alone.

In most systems teachers work alone, in the best systems they work in groups. In Japan and Finland, teachers work together, plan their lessons jointly, observe each others' lessons, and help each other improve. This group work can also be supported by the instructional leaders (principals). This enables teachers to develop continuously.

3. <u>Put in place systems and targeted support to ensure that every child is</u> <u>able to benefit from excellent instruction</u>

Ensuring that every child benefits from high-quality instruction is not only an important end in itself, the evidence from international assessments suggests that strong performance for the system as a whole depends on it. The best systems:

- locate the processes for monitoring and intervention in the schools themselves, to identify students in need and provide support on a continuous basis;
- have curriculum standards which set clear and high expectations for what students should achieve, but do not overload the curriculum;
- all place a strong focus on numeracy and literacy in the early years;

- perform less monitoring in schools which perform well, and subject schools which perform poorly to more intensive scrutiny;
- use two mechanisms for monitoring the quality of teaching and learning:
 - Examinations test what students know, understand and can do, providing an objective measure of actual outcomes at a high level of detail. Examinations also have a powerful effect in driving the performance of any school system;
 - School reviews, or inspections, assess the performance of a school against a benchmark set of indicators. They measure both outcomes and the processes which drive them, and can help schools and systems identify specific areas which are in need of improvement.
- have an 'independent' inspectorate responsible only for monitoring and a separate system or approach for supporting improving outcomes in schools;
- make school performance assessments and reports public;
- may divert additional funding to schools in need of improvement:
- intervene to replace or improve leadership in schools;
- use the results of monitoring and intervention to identify best practices, which can then be spread throughout the system;
- monitor and intervene at the level of individual students, providing remedial support, or special education on a one-to-one basis or in small groups, mainly on literacy and numeracy.

Annex 3: Assess the impact of repetition

Of the five countries obtaining the best results on the PISA tests, only one (Ireland) uses repetition and it does so sparingly with a repetition rate of only $2\%^{31}$.

Repetition is applied as a 'quality control' measure that ensures students do not progress until they have a particular level of education attainment. It can be applied to each grade or to certain stages in the education process. i.e. prior to graduation from a particular sub-sector. It is often adopted in systems that wish to filter out low performing students and ensure only the most academically able progress to higher levels where the costs of education are progressively higher. This may make it a detrimental approach to systems pursuing universal education for the following reasons:

1. International evidence indicates it is not an effective quality control measure:

Decisions made on which students should repeat are not done objectively³² and repetition is not guaranteeing the selection of the weakest pupils³³

2. International evidence indicates that a grade repetition strategy does not improve quality, it reduces it

- from all the available evidence, grade repetition is not an effective way of improving student learning³⁴
- repeaters are learning less than promoted students³⁵ •
- The majority of studies suggest that [repetition] does more harm than good³⁶ •
- 3. International evidence indicates there are strong links between repetition and dropout, with repeating students being more likely to drop out of school in later years³⁷.

³¹ Bernard, J-M, Simon, O and Vianou, K. (2005). Le Redoublement: Mirage de l'Ecole Africaine? Programme d'analyse des systèmes éducatifs de la CONFEMEN. CONFEMEN, Dakar.Bernard, J-M, Simon, O and Vianou, K.

³² Meuret, D. (2002). Le Redoublement est-il Efficace? Les Réponses de la Recherche en Education. Version of a paper given on 16 January 2002 before teachers at the Versailles Academy, at UFM Cergy-Pontoise ³³ Bernard, J-M, Simon, O and Vianou, K. (2005) - see note 1

³⁴ Verspoor, A. (2006). Effective Schools for Sub-Saharan Africa: Conditions and Factors of Effective Schools in Africa. Paper prepared for Plenary Session 3 of the ADEA Biennale on Education in Africa, Libreville, Gabon, March 27-31, 2006. ADEA, Paris

³⁵ Bernard, J-M, Simon, O and Vianou, K. (2005) - see note 1

³⁶ Kelly, K. (1999). Retention vs. Social Promotion: Schools Search for Alternatives. Harvard Education Letter.

³⁷ Grade Repetition in Primary Schools in Sub-Saharan Africa, S Ndaruhutse et al; CfBT Education Trust (2006)

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