

South Asia Human Development Sector

Enhancing the Quality of Education in the Maldives
Challenges and Prospects

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Enhancing the Quality of Education in the Maldives

Challenges and Prospects

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ABBREVIATIONS AND ACRONYMS

CCE	Centre for Continuing Education
CFBS	Child-Friendly Baraabaruu Schools
ESDFP	Education Sector Development Framework and Program
GCE A/L	General Certificate of Education Advanced Level
GCE O/L	General Certificate of Education Ordinary Level
GOM	Government of Maldives
MNU	Maldives National University
MOE	Ministry of Education
SBT	School-based Teacher Training/Support
SEM	School Excellence Model
TA	Technical Assistance
TRC	Teacher Resource Center

ENHANCING THE QUALITY OF EDUCATION

INTRODUCTION

The quality of education is a major policy challenge facing the Maldives. The country achieved the first generation objective of providing universal access to basic education through rapid expansion of enrollment. As is frequently the case with such countries, the second generation challenge is to provide education of adequate quality. Evidence from a variety of sources shows that education quality in the Maldives is weak, and needs urgent improvement.

EDUCATION QUALITY AND PERFORMANCE

Learning outcomes in both primary and secondary education are modest. National assessments of learning outcomes at Grade 4 and Grade 7 show that learning levels are unsatisfactory [see Table 1 and Table 2]. The mean score for English among students at grade 4 is just 32 percent, and the mean score for mathematics is only 39 percent. At grade 7 the mean score for English is merely 29 percent, and the mean score for mathematics is just 30 percent. These are low average scores, and suggest that learning levels in both primary education and lower secondary education are weak.

Table 1. Results of National Assessments of Learning Outcomes in Grade 4, English and Mathematics, 2008

Grade and Subject	Mean (%)	Standard Deviation (%)	Median (%)	Number of Students Tested
English	32	18	29	5,503
Mathematics	39	18	38	5,686

Source: Report of Achievement in English and Mathematics at Grades 4 and 7, Ministry of Education.

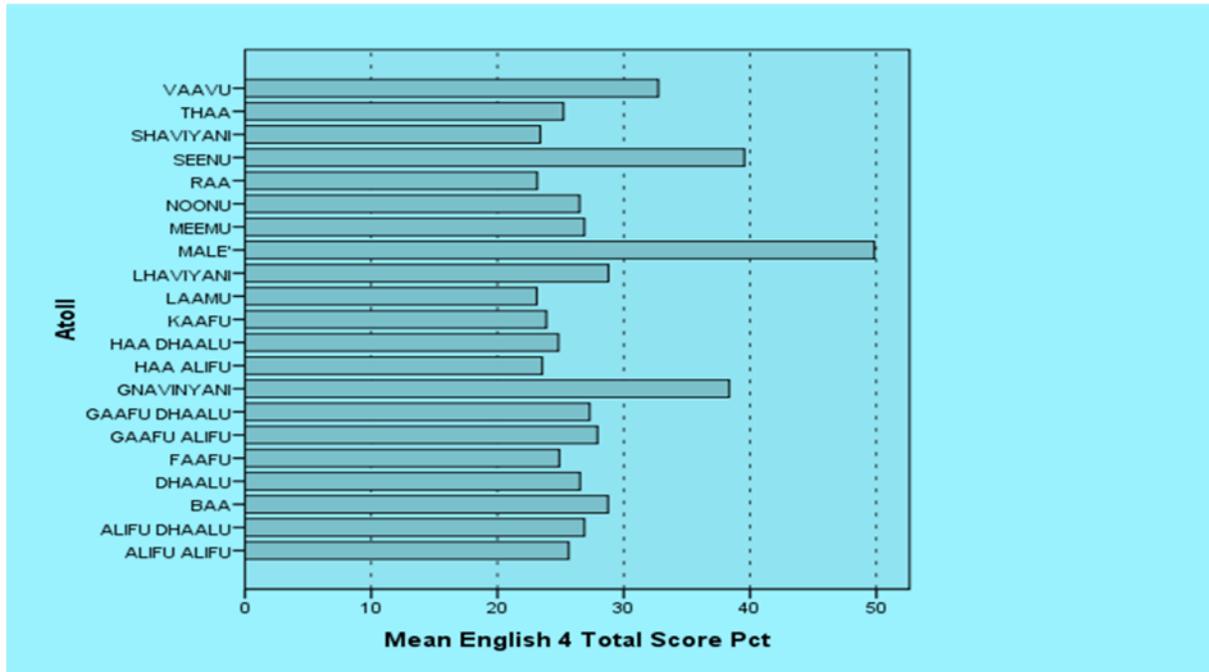
Table 2. Results of National Assessments of Learning Outcomes in Grade 7, English and Mathematics, 2008

Grade and Subject	Mean (%)	Standard Deviation (%)	Median (%)	Number of Students Tested
English	29	19	22	7,808
Mathematics	30	17	26	8,140

Source: Report of Achievement in English and Mathematics at Grades 4 and 7, Ministry of Education.

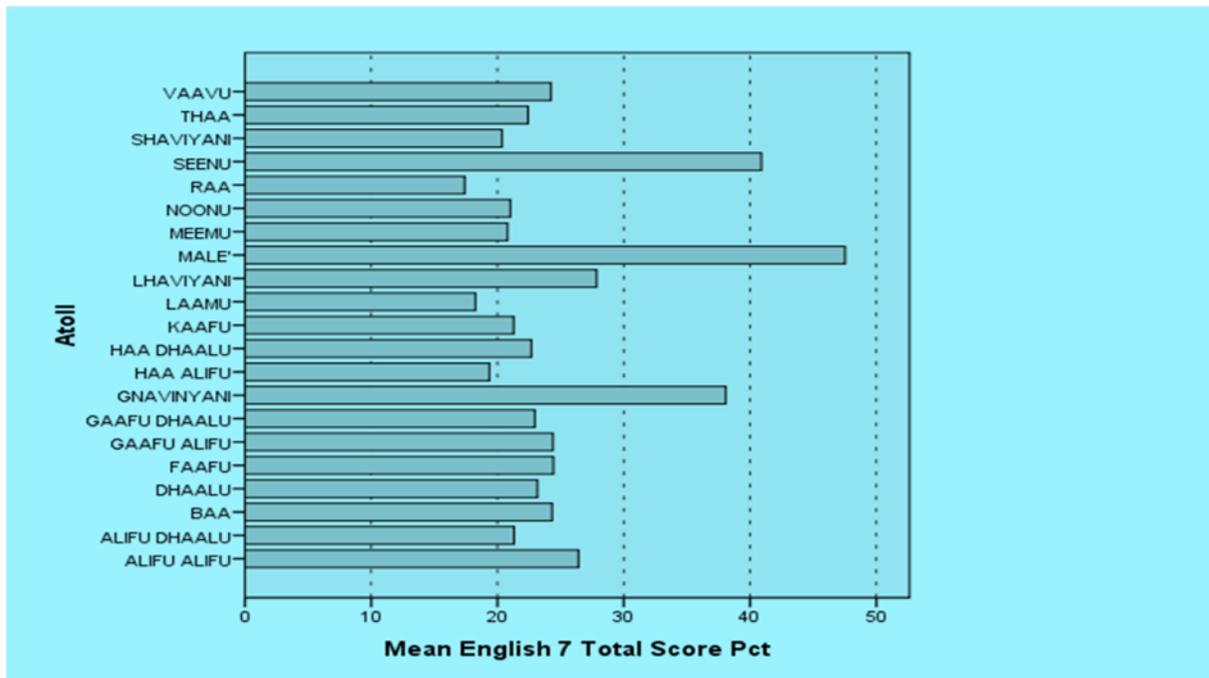
There are wide regional disparities in learning outcomes. Cognitive achievement levels in English language skills, at both grade 4 and grade 7, are considerably higher in the Male' atoll than elsewhere in the Maldives [see Figure 1 and Figure 2]. The Seenu atoll and the Gnaviyani atoll also possess English language skills well above the rest of the country. Most other atolls perform poorly, with the Raa atoll at the bottom. The difference in average test scores among students from the best and the weakest atolls, the Male' and Raa atolls respectively, is more than double.

Figure 1. Average English Language Learning Outcomes at Grade 4 by Atoll, 2008



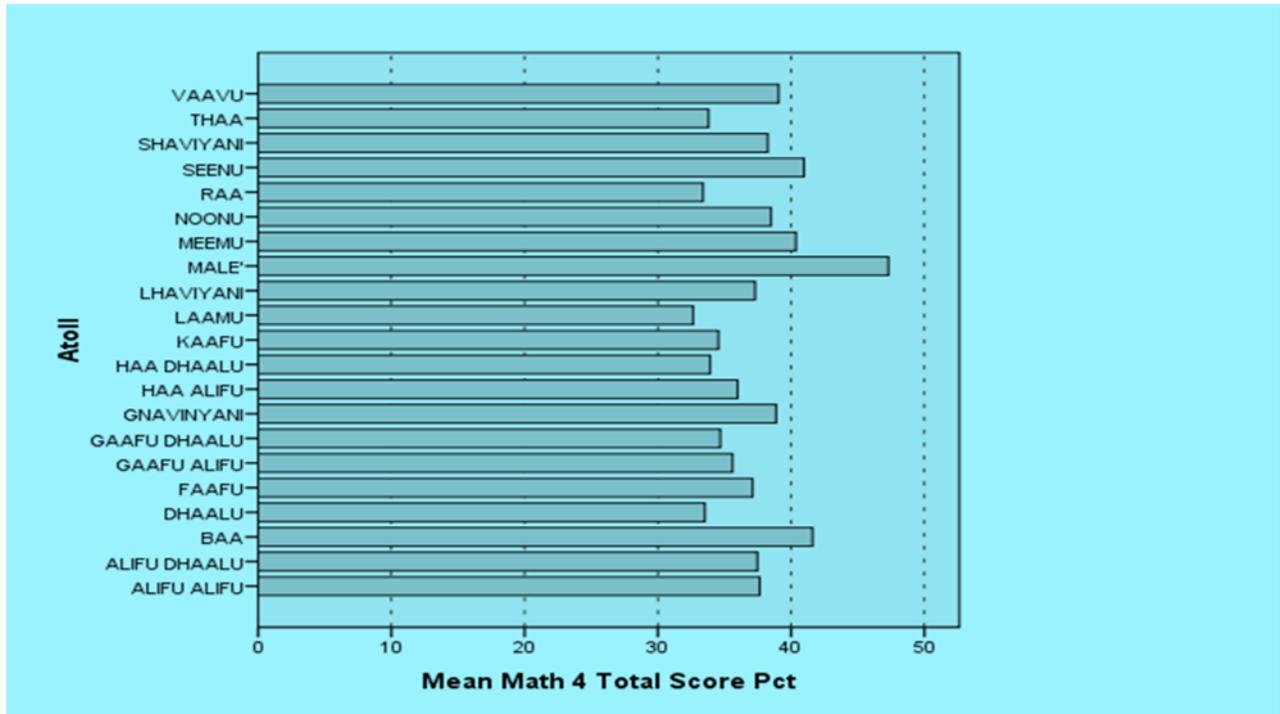
Source: Achievement in English and Mathematics at Grades 4 and 7, Ministry of Education.

Figure 2. Average English Language Learning Outcomes at Grade 7 by Atoll, 2008



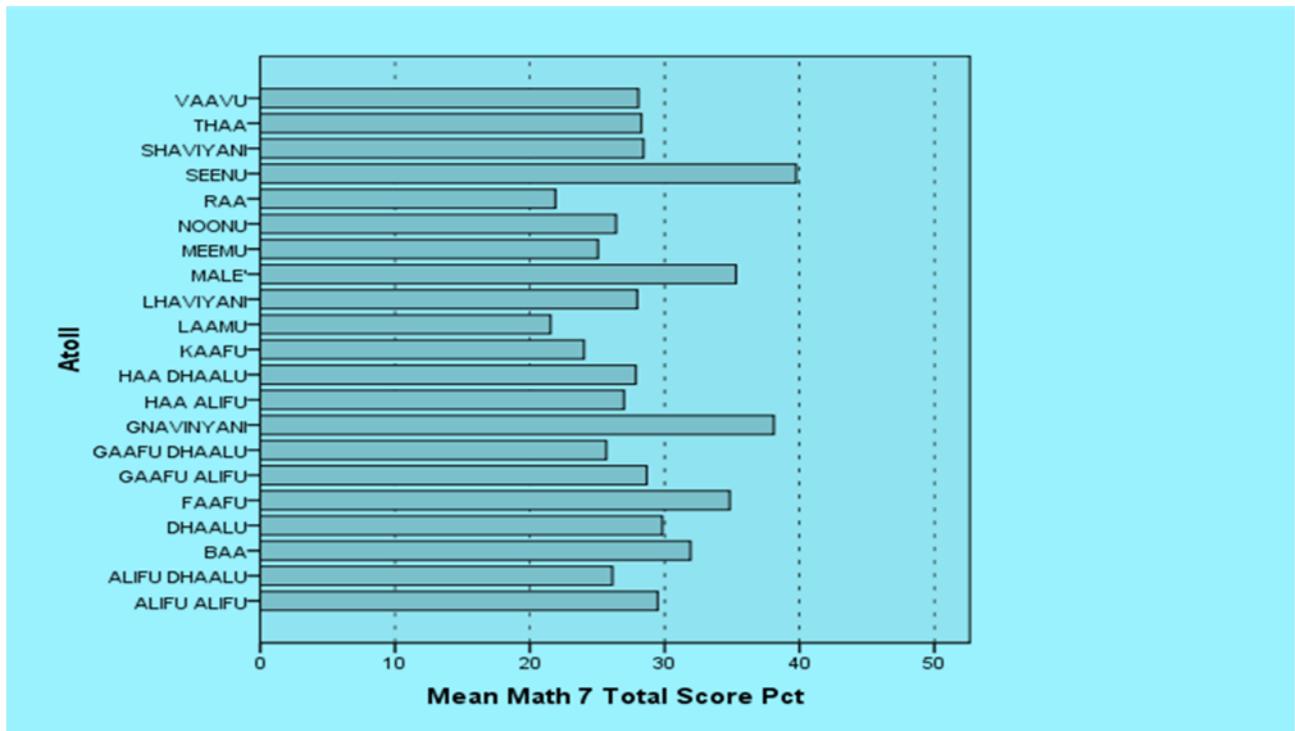
Source: Achievement in English and Mathematics at Grades 4 and 7, Ministry of Education.

Figure 3. Average Mathematics Learning Outcomes at Grade 4 by Atoll, 2008



Source: Achievement in English and Mathematics at Grades 4 and 7, Ministry of Education.

Figure 4. Average Mathematics Learning Outcomes at Grade 7 by Atoll, 2008



Source: Achievement in English and Mathematics at Grades 4 and 7, Ministry of Education.

In mathematics the regional disparities are less, although gaps among atolls still exist [Figure 3 and Figure 4]. The Male, Seenu and Gnaviyani atolls display the best performance in mathematics, along with other atolls such as Vaavu, Faafu and Baa. The Raa atoll shows the lowest learning levels in mathematics, too.

Examination pass rates at the General Certificate of Examination Ordinary Level (GCE O/L) are poor. In 2010 only 33 percent of boys and 37 percent of girls who appeared for the GCE O/L examination obtained five passes or more [Table 3]. This is a high failure rate, as it suggests that two out of every three students is unable to pass the examination. The time trend, however, has been positive. The GCE O/L pass rate among boys has risen from 26 percent in 2007 to 33 percent in 2010, and among girls from 25 percent in 2007 to 37 percent in 2010.¹

Table 3. Proportion of Students Passing the General Certificate of Examinations Ordinary Level (GCE O/L), 2007-2010 (percentage)

	2007	2008	2009	2010
Maldives	26	27	32	35
Boys	26	25	31	33
Girls	25	29	33	37

Source: Department of Examinations.

Note: A student is considered to have passed the GCE O/L if he or she passes in at least 5 subjects.

Examination pass rates at the General Certificate of Examination Advanced Level (GCE A/L) are low. In 2010 only 35 percent of boys and 43 percent of girls who took the GCE A/L examination were successful [Table 4]. This is an inadequate pass rate, as it suggests that two out of every three boys and three out of every five girls is unsuccessful at the examination. Given that the students who reach the GCE A/L stage are probably among the most intelligent in their age cohorts, this is a disappointing level of performance. The time trend has been somewhat positive among girls, with the GCE A/L pass rate among female students increasing from 38 percent in 2007 to 43 percent in 2010. However, among boys the time trend is less positive, with the GCE O/L pass rate only rising marginally from 33 percent in 2007 to 35 percent in 2010.

Table 4. Proportion of Students Passing the General Certificate of Examinations Advanced Level (GCE A/L), 2007-2010 (percentage)

	2007	2008	2009	2010
Boys	33	33	36	35
Girls	38	39	40	43

Source: Department of Examinations.

Note: Pass at the GCE A/L is defined as 2 Edexcel E's + 1 HSC C or 2 HSC C's + 1 Edexcel E or 3 Edexcel E's.

The low level of learning outcomes and the wide regional disparities in learning are a serious deficiency, as the cognitive achievement of students is central to the performance of

¹This increase in the GCE O/L pass rate over time may be over-estimated, as in recent years there appear to be some schools which have kept back their weaker students from sitting the GCE O/L in order to raise their overall pass rates. Such a practice would artificially increase the GCE O/L pass rate.

an education system. Furthermore, the economic development of countries is closely related to the cognitive skills of the labor force [Hanushek and Welch (2006), Hanushek and Woessmann (2008)]. Hence, the poor cognitive performance of students, especially in the lagging atolls, will hamper the future economic competitiveness and prospects of the country.

RAISING EDUCATION QUALITY: PROMISE AND POTENTIAL

There are several dimensions of education quality which Maldivian policy makers consider to be of vital importance. Among these, the quality of school teachers is central to the improvement of education quality. Hence, the Ministry of Education (MOE) is concerned to develop the skills, motivation and performance of teachers. A second key policy initiative is the establishment of a sound quality assurance framework for the school system. The MOE has developed a quality assurance mechanism, which now needs to be pilot tested, refined and scaled up throughout the country. A third strategic policy initiative is the development of a system of regular national assessments of learning outcomes, which can then feed into policy formulation and program development. These three strategic policy initiatives are discussed in the subsequent sections of this report.

ENHANCING THE SKILLS AND PERFORMANCE OF TEACHERS

The quality of teachers is of central importance to the performance of schools. Teachers play a dominant role in what, how, and how much, students learn [OECD (2005), Hanushek (2011)]. The performance of teachers depends on a variety of factors [Alemano *et al* (2011)]. A three-level model of teacher competencies is presented in Figure 5 below. The first level covers pre-service teacher education. The second level consists of teacher induction. The third level is professional development. The latter can be divided into two further categories: off-site teacher training opportunities, such as in teacher centers; and opportunities for on-site school based teacher development.

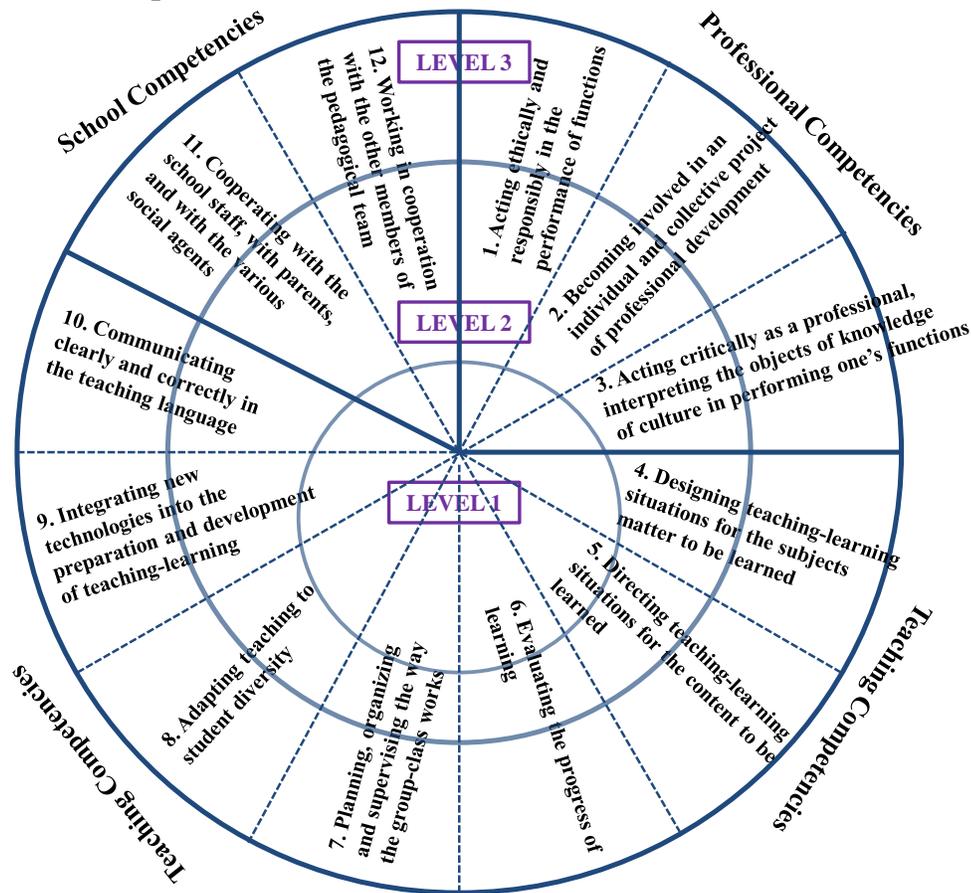
The Maldives has a high proportion of untrained primary school teachers. Approximately 23 percent of primary school teachers are untrained [Table 5]. Hence, the first level of an adequate pre-service teacher education has not been completed in the country. Further, as these untrained teachers are in primary schools any learning deficiencies of students will have a cumulative effect further up into the secondary education system as well.

Table 5. Proportion of Untrained Teachers by Stage of Education, 2010

	Primary Education		Lower Education	Secondary	Higher Education	Secondary
	Total Teachers	Untrained Teachers %	Total Teachers	Untrained Teachers %	Total Teachers	Untrained Teachers %
Male'	775	10	570	5	140	0
Atolls	2,817	27	2,515	2	262	5
Total	3,592	23	3,085	2	402	3

Source: Ministry of Education Statistics.

Figure 5. Teacher Competencies



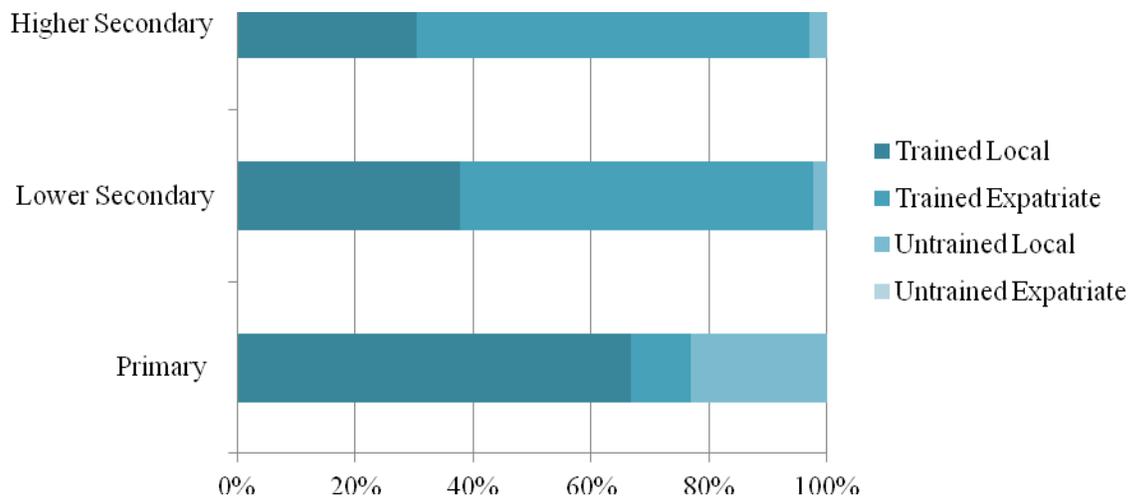
Source: World Bank (2005), based on Martinet *et al* (2001).

Note: Level 1: Initial Teacher Education. Level 2: Teacher Induction. Level 3: Professional Development.

The proportion of untrained teachers in atolls is higher than in Male’. While 10 percent of primary teachers in Male’ are untrained, 27 percent of primary teachers in atolls are untrained. Trained teachers are more interested in residing in Male’ than in the outer atolls. However, this creates an imbalance in the quality of education between Male’ and the rest of the country. The differences in teacher quality will be partly responsible for the weaker learning outcomes of students in atolls compared to students in Male’.

A shortage of adequately qualified teachers has necessitated the employment of a large number of expatriate teachers for secondary education. Approximately 60 percent of teachers at lower secondary and 67 percent of higher secondary teachers are expatriate teachers [Figure 6]. Most expatriate teachers are deployed in the atolls, especially as qualified Maldivians are reluctant to take up positions in the remote islands. Among expatriate teachers, 87 percent at lower secondary, and 64 percent at higher secondary level are deployed in the atolls.

Figure 6. The Composition of the Teacher Stock, 2010



Source: Ministry of Education Statistics.

The high dependence on expatriate teachers is controversial. Critics argue that expatriate teachers are inadequately aware of the local culture, and that these teachers are not committed to the Maldivian schools, resulting in rapid turnover. The cost of expatriate teachers, too, is higher. The counter-arguments made against the critics are that: (a) there is a shortage of educated Maldivians willing to become teachers; (b) foreign teachers are willing to serve in schools in remote islands that Maldivians are not; and (c) expatriate teachers bring new ideas and cultural diversity to the education system of the country.

Policy Options for Teacher Development

Successful achievement of a high quality of education will depend on the availability of professionally educated and competent teachers at all levels. Pre-service teacher education is offered by several institutions in the Maldives, including the Faculty of Education and the Centre for Open Learning of the Maldives National University, as well as private higher education institutions such as Mandhu College and Villa College. The number graduating from these institutions, however, is too low to meet the needs of the system. Pre-service teacher education opportunities need to be expanded sharply to ensure a fully trained cadre of school teacher. A program to provide professional skills and competencies to the stock of untrained primary school teachers is needed especially urgently.

In-service teacher training needs to be further developed. The government has established a professional development policy for teachers. The professional hubs for teacher development in the Maldives are the Centre for Continuing Education (CCE) at the central level and Teacher Resource Centers (TRCs) at regional levels, respectively. In-service teacher training is aimed at the following categories of teachers: (a) unqualified teachers (mainly certification courses); (b) teachers requiring skills upgrading; (c) teachers needing preparation for new roles, such as

teacher educators or principals; and (d) curriculum related, particularly when there are curriculum changes in the system, when teachers require refresher courses. The in-service teacher training programs are mainly off-site programs, delivered through the TRCs or in Male'. Off-site in-service teacher training is known to have limited impact internationally [Harris and Sass (2011)]. Hence, off-site teacher training will need to be supplemented with other models of teacher development.

School-based teacher development is a promising initiative for policy makers to consider.

School-based teacher development has been noted globally for its effectiveness [Allemano *et al* (2011)]. In the Maldives it would involve the active participation of school principals and teachers, and atoll and island level officials. The range of activities under school-based teacher development could cover school-based mentoring, peer learning, peer coaching, individual consultations, and visits to classrooms in other schools and islands. It would also suit the geography of the Maldives, with its widely dispersed small populations, as it would reduce travel costs and minimize the time that teachers need to be away from their schools. Box 1 provides examples of school-based teacher development, in the context of school-based management, in Egypt.

Box 1. Strengths of School-based Teacher Training/Support (SBT) Program in Egypt

Egypt has implemented school-based teacher training/support (SBT) program for English teachers. This school-based teacher training and support takes place at the school site. The strengths of this program include:

- Teachers receive training without having to take time off work or travel long distances;
- Teachers receive useful materials on teaching techniques and observe demonstrations;
- Teachers can practice and discuss new techniques and new materials with colleagues and senior teachers on a daily basis;
- The senior teachers can give classroom demonstrations using SBT activities;
- The SBT activities increase communication and sharing of ideas among teachers;
- The SBT provides a positive focus for inspectors' school visits, classroom observation, and meetings with teachers;
- Senior teachers monitor teachers using SBT activities on a daily basis and can thus better assist inspectors on their observation visits; and
- The SBT can serve as a link between a centralized type of in-service training program and specific teacher needs.

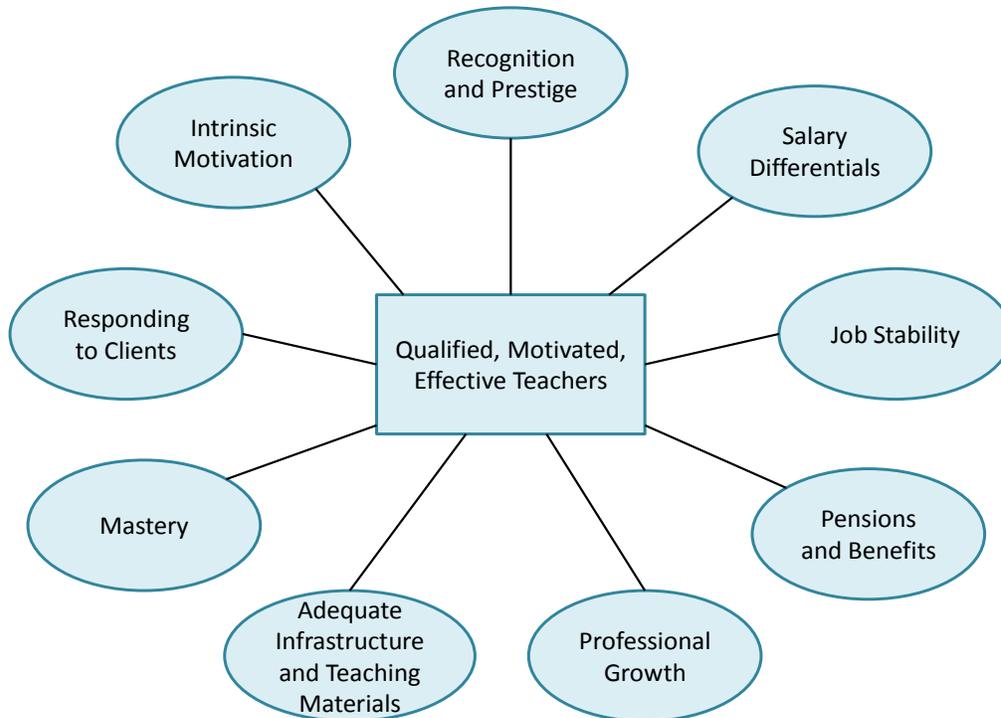
Source: Allemano *et al* (2011).

Improving Teacher Motivation and Performance

Attracting qualified individuals into the teacher profession field, retaining the qualified teachers, and motivating them to work hard, is a critical challenge for the Maldives. Policy makers in the MOE are keen to strengthen the motivation and incentives for teachers to perform well. For instance, a hardship allowance was introduced in 2005 in order to promote local teachers in the atolls. This incentive encouraged some local teachers and principals to work in schools in remote atolls. The government now needs to develop a systematic set of policies to strengthen teacher motivation and performance.

Countries around the world have tried a wide array of monetary and non-monetary incentives to improve teacher quality and performance. These include internal motivation, recognition and prestige, salary differentials, non-salary benefits, professional growth, adequate school infrastructure and teaching materials, mastery, and responding to clients [see Figure 7]. The evidence from several studies suggests that a well-designed incentive system is important to attract promising young people into the teaching profession, retain good quality teachers over the career-cycle, and motivate teachers to perform well in classrooms [Bruns *et al* (2011)].

Figure 7. Types of Teacher Incentives



Source: Vegas (2005).

In the Maldives the salaries of teachers have declined relative to the salaries of other government services such as the civil service, and the private sector. In consequence, the most promising school completers and young graduates are reluctant to enter the teaching profession. Also, in mid-career capable teachers leave for more attractive jobs in the private sector and elsewhere in the government.

Policy Options for Improving Teacher Education and Training, Motivation and Performance

The Maldives needs to consider a package of policy initiatives to develop the teacher system. This package should cover: (a) providing a benefit package that attracts bright young people into the teaching profession and retains them over the career cycle; (b) producing a sufficient number of qualified teachers over time; (c) the equitable deployment of teachers to the atolls; and (d) the development of pre-service teacher education and professional development

opportunities during the career cycle. The main policy alternatives open to the Government of Maldives (GOM) are summarized in Table 6.

Table 6. Key Policy Options to Strengthen the Teacher System

Policy Objectives	Areas for Strategic Intervention
(a) Make teaching an attractive career choice and increasing the number of young Maldivian teachers	<ul style="list-style-type: none"> - Improve the competitiveness of teaching salaries - Establishing professional standards for new teachers - Improve the image and status of teaching - Evaluate and reward effective teaching
(b) Extending and strengthen pre-service teacher education	<ul style="list-style-type: none"> - Strengthen the relevant higher education institutions providing teacher education courses and programs, especially in learner-centered teaching methods and subject content knowledge
(c) Upgrade the skills and competencies of the existing unqualified teachers	<ul style="list-style-type: none"> - Develop and implement teacher training programs for these teachers
(d) Improve professional development opportunities of teachers	<ul style="list-style-type: none"> - Establish a program of School Based Teacher Development - Strengthen the off-site teacher training programs

QUALITY ASSURANCE

Quality assurance has assumed prominence among education policy makers around the world in recent years. Quality assurance provides a framework for the systematic review and monitoring of an education system to determine whether an acceptable standard of quality is being achieved over the medium-term, and enhanced over the long-term in line with global developments in education. Quality assurance reaches deep into the education system as the standard of education in each school is open to evaluation through the protocols and processes of the quality assurance framework [MOE (2010)]. The ultimate goal of a quality assurance system is to assure every child of a high quality of education [Materu (2007)].

The development of a quality assurance framework is an important recent policy initiative in the Maldives. The MOE has introduced quality indicators for Child-Friendly *Baraabaru* Schools (CFBS)² [MOE (2010)]. CFBS is a new model that provides a comprehensive tool kit for the evaluation of school performance. The main objectives of CFBS are to facilitate the assessment of education processes by schools (self-assessment) and by provincial and national level authorities (external assessments). The CFBS model helps to identify the strengths, weaknesses and development needs of schools, and assists school-based development activities.

The CFBS indicators can be used for school self-assessments and for external assessments. The CFBS quality indicators are categorized into five dimensions of education quality. These

² *Baraabaru* means ‘good’ in Dhivehi.

are: (a) inclusivity; (b) child-centered teaching and learning; (c) health and safety; (d) family and community partnerships; and (e) leadership and management [Table 7]. For each dimension, there are standards of quality. And for each standard, there are indicators that serve as criteria for ratings within the standard. There are four levels of rating: emerging, procession, achieving, and achieved. The indicators are used for both self-evaluation and monitoring. The quality assurance evaluation processes can be implemented by schools, with the support of the provincial and national level authorities.

Table 7. Dimensions of Education Quality in CFBS

Inclusivity	Child-centered teaching and learning	Health and safety	Family and community partnership	Leadership and management
<ul style="list-style-type: none"> • Policy on inclusivity • Annual enrolment and projections • Inclusion plan • Children at risk • Leadership and mentorship 	<ul style="list-style-type: none"> • Curriculum and syllabi • Lesson planning • Teaching and learning strategies • Teaching and learning resources • Learning environment • Learner-centered assessment • Co-curricular and extra – curricular activities, and career guidance 	<ul style="list-style-type: none"> • Health personnel and facilities • School health policies • Health and nutrition services • Health education • Healthy physical environment • Fitness activities 	<ul style="list-style-type: none"> • Family participation • Communication • Parental role • Community involvement • Community resources 	<ul style="list-style-type: none"> • Planning • Professional development • Professional qualifications and skills • Human resources management • Infrastructure and finance • Leadership and management • Community collaboration • Student leadership

Source: MOE (2010).

Strategic Options for an Effective Quality Assurance Program

While a conceptual framework for quality assurance in the Maldives has been prepared, it now needs to be implemented effectively. In particular, the two dimensions of quality assessment, the internal reviews or self-assessments by schools, and the external reviews through mechanisms such as school inspections, need to be carefully developed and supported. Priority policy attention is required for the program to be successful.

Considerable capacity will need to be built to implement a sound quality assurance program in the atolls and islands. The capacity of schools has to be developed to undertake

internal reviews and self-assessments. A significant degree of variation exists between and within atolls in terms of the education levels and capabilities of parents and local communities. In consequence, the MOE needs to clarify the roles and responsibilities of stakeholders from the local communities in the quality assurance process. In addition, the capacity of atolls to implement the protocols and procedures for external quality assurance activities has to be developed. A geographic unit to function as the hub for the implementation of external reviews, such as the provincial or atoll, has to be defined by the MOE and the necessary capacity built within this geographical unit.

Decentralized delivery of the quality assurance program will help to improve the cost-effectiveness of implementation. Given the geography of the country with multiple and scattered islands, centrally driven quality assurance processes such as quality assurance inspections can be expensive. As such, the decentralized levels of the education system, especially atolls and islands, will need to implement nearly all the activities for the quality assurance program to be cost-effective. The program would also have to rely heavily on self-assessments by schools, with external reviews taking place according to a time cycle that is affordable. The MOE needs to develop on-line tools that can support the atolls, islands and schools to implement the quality assurance program efficiently.

Potential Innovations to Utilize the Quality Assurance Program

The information from the quality assurance reviews can and should feed into policy initiatives at the national level. An important national level policy measure could be the classification and grouping of schools according to their performance, on quality assurance reviews, such as in Singapore [Box 2]. Appropriate policy attention, including the allocation of more resources, can then be directed at these groups of schools. Another policy use would be to observe recurrent deficiencies or challenges across schools, which may require changes either in academic programs (e.g. teacher education and training) or in the management of the education system.

The information from the quality assurance reviews need to feed into school improvement activities at the local level. This would require schools to actively pursue measures to strengthen areas in which they are diagnosed as weak through the quality assurance reviews. The weaknesses identified can differ from school to school, and over time within the same school. Hence, the quality assurance reviews have the advantage of being sensitive to the needs of individual schools. However, there is considerable responsibility on schools to take the initiative and design and implement performance improving actions. If schools fail to take initiative, the potential of the quality assurance program will be under-utilized. Sri Lanka has developed and implemented a system of quality assurance over the last decade or so [Box 3]. The feedback from Sri Lankan schools which have utilized the quality assurance processes to improve school performance is that the quality assurance system provides a very useful organizational framework for school improvement activities.

Box 2. Quality Assurance in Singapore Schools

Quality assurance in education is of great concern in Singapore. The Ministry of Education in Singapore has implemented a School Excellence Model (SEM), which provides a systematic framework that enable schools to evaluate their practices by themselves, since 2000. Secondary schools have been ranked based on performance criteria. The SEM was modified in 2004 so that instead of ranking schools based on academic performance, schools with similar levels of academic performance are classed together.

The SEM is a self-assessment model for schools adapted from various quality models. The SEM aims to provide a means to objectively identify and measure the schools' strengths and areas for improvement, to allow benchmarking against similar schools, and to stimulate school improvement activities. The SEM comprises nine quality criteria against which a school can be assessed: (a) leadership of school leaders; (b) strategic planning; (c) staff management; (d) resources; (e) student-focused processes; (f) efficiency and effectiveness on administrative and operational results; (g) staff results; (h) partnership and society results; and (i) key performance results. Once in five years, schools conduct an external validation exercise in which an external team of the Ministry of Education visits the school for three days to validate the results of a self-assessment using the same criteria. The assessment process is explicit in requiring evidence to justify a certain score. The SEM is closely linked to a system of awards to schools based on broad criteria such as the extent of value-added, good organizational practices, and performance in the arts and sports.

Source: Tan and Ng (2005).

Box 3. Quality Assurance in Sri Lanka

Sri Lanka has introduced a quality assurance system. The Ministry of Education has trained school principals and teachers, and in-service advisors located in education zones and divisions, in quality assurance activities. The conceptual model of the quality assurance systems contains eight themes. These are: (a) general management; (b) physical and human resources management; (c) curriculum management and classroom observation; (d) co-curricular activities; (e) student achievement; (f) student welfare; (g) school and community; and (h) student development for a knowledge based society.

The anticipated benefits of the Quality Assurance system are to:

- improve accountability and capacity at the school level for performance improvement activities;
- strengthen professional development through the improvement of competencies among school stakeholders;
- utilize physical resources more efficiently;
- identify the strengths and weakness of schools and introduce appropriate remedies ; and
- improve the quality of schools.

The conceptual model of quality assurance has been organized and integrated within the overall program of the government for the general education sector, the Education Sector Development Framework and Program (ESDFP). This has given the quality assurance activities a prominent position in the education policy framework of the country. The quality assurance system contains both internal reviews by schools and external reviews by education administrators. Schools can use the findings of the quality assurance reviews for the development of school plans and to monitor the implementation of the school plans.

Source: MOE Sri Lanka (2010).

NATIONAL ASSESSMENTS OF LEARNING OUTCOMES

The Maldives has conducted national assessments of learning outcomes in the past. These national assessments have been useful to measure and understand the levels of cognitive achievement in the country as a whole, as well as in the various atolls. However, institutional capacity has not been developed in the Maldives to undertake regular national assessments of learning outcomes that are technically rigorous and useful for policy purposes.

The Maldives should develop institutional capacity to conduct national assessments of learning outcomes on a regular cycle. National assessments have become the main tool for policy analysis and policy development in the education systems of developed countries [see Greaney and Kellaghan (2008)]. Many middle-income countries, and other countries in South Asia such as Sri Lanka, Bangladesh, Nepal, Pakistan and India, are developing institutional capacity to undertake national assessments according to a regular cycle and in line with the requirements of policy makers.

National assessments are useful for a variety of purposes. These include the following:

- measuring the level of learning by students;
- monitoring the level of student learning over time;
- obtaining evidence on the strengths and weaknesses of students' knowledge and skills;
- examining disparities in learning between different sub-groups of students. e.g. regional disparities, gender disparities, or disparities among children from different economic groups;
- analyzing the factors associated with student learning, such as school resources, teacher competence and preparation, and the home learning environments of students; and
- developing policies and programs based on scientific information on learning levels and the covariates of learning outcomes.

Examples of the uses of national assessments in several other countries are given in Table 8 below.

Table 8. Selected Countries That Used National Assessment Results in Reviewing the Education System

Country	Examples of Some Claimed Uses
Argentina	Instituted a program of school inspection
Bolivia	Linked assessment data to a program for child nutrition
Burkina Faso	Provided input for country analysis
Cuba	Strengthened preschool and early childhood care programs
Kenya	Led to benchmarks for providing facilities
Kuwait	Provided support for the policy of introducing classroom libraries
Malawi	Provided input for reform program
Mauritius	Used data to support national sector study
Namibia	Used by national commission
Nepal	Supported major government reform program
Niger	Provided input for country analysis

Sri Lanka	Provided input for national sector strategy for education
Uganda	Used to prepare educational reform program
Uruguay	Used to support a policy of expanding an equity program for full-time schools
Vietnam	Used to establish benchmarks for providing facilities (desks per pupil, books per pupil)
Zanzibar (Tanzania)	Used in review of educational policies, standards, and benchmarks
Zimbabwe	Used in commission review

Sources: Kellaghan, Greaney and Murray (2009).

The national assessments can be designed to take into account the policy interests of Maldivian policy makers. For instance, policy makers could benefit from a national assessment which examined the factors associated with student learning, as such an information base does not exist in the country. The findings of such an assessment can be used to develop policies in areas such as teacher education and training, the implementation of the new curriculum, and education resources.

It is important to keep in mind that National Assessments of Learning Outcomes and Public Examinations are different. These key differences are highlighted in Table 9 below.

Table 9. Differences between National Assessments and Public Examinations

	National assessments	Public examinations
Purpose	To provide feedback to policy makers	To certify and select students
Frequency	For individual subjects offered on a regular basis (such as every four years)	Annually and more often where the system allows for repeats
Duration	One or two days	Can extend over a few weeks
Who is tested?	Usually a sample of students at a particular grade or age level	All students who wish to take this examination at the examination grade level
Format	Usually multiple choice and short answer	Usually multiple choices
Stakes: importance for students, teachers, and others	Low importance	Great importance
Coverage of curriculum	Generally confined to one or two subjects	Covers main subject areas
Effect on teaching	Very little direct effect	Major effect: teacher tendency to teach what is expected on the examination
Additional tuition sought for students	Very unlikely	Frequently
Do students get results?	Seldom	Yes

Is additional information collected from students?	Frequently, in student questionnaires	Seldom
Scoring	Usually involves statistically sophisticated techniques	Usually a simple process that is based on a predetermined marking scheme
Effect on level of student attainment	Unlikely to have an effect	Poor results or the prospect of failure, which can lead to early dropout
Usefulness for monitoring trends in achievements levels over time	Appropriate if tests are designed with monitoring in mind	Not appropriate because examination questions and candidate populations change from year to year

Source: Greaney and Kellaghan (2008).

The GOM needs to decide the institutional home for the national assessments of learning outcomes, if the development of such institutional capacity is considered desirable. Some countries use an external agency: for instance, Ireland has an Education Research Center in Dublin; and Sri Lanka is building capacity for rigorous national assessments in the National Education Research and Evaluation Center of the Faculty of Education in the University of Colombo. Other countries use either their Department of Public Examinations, or staff in their Ministries of Education. The various models have their advantages and disadvantages which are summarized in Table 10.

The Maldives in the past trained a small pool of officials in the MOE and conducted national assessments from within the government. However, these officials were either promoted or transferred elsewhere in a few years, and the capacity in the MOE weakened. A model that policy makers could consider for the future is to develop the technical capacity for national assessments in the Faculty of Education of the Maldives National University (MNU). This model would have the advantage that the academic staff of the Faculty of Education will be available over the long-term, as academics are not in a transferable service. The technical rigor of the analysis is also likely to be strong when university researchers are involved. In addition, the model would strengthen the capacity of the university for research. The role of the MOE in this model would be to utilize the results of the national assessments for policy formulation and program development.

The Maldives could also consider participating in international assessments of learning outcomes from time to time. The benefits would include assessing the performance of the education system in relation to other middle-income and developing countries. This comparative assessment could produce policy ideas for the further development of the system. The cost, of course, is that participation in such studies can be very expensive. National policy makers would need to measure the benefits and costs of such participation and choose.

Table 10. Options for Implementing a National Assessment

Designated agency	Advantages	Disadvantages
Drawn from staff of ministry of education	<ul style="list-style-type: none"> - Likely to be trusted by ministry. - Enjoys ready access to key personnel, materials, and data (for example, school population data). - Funds that may not have to be secured for staff time. 	<ul style="list-style-type: none"> - Findings might be subject to political manipulation including suppression. - May be viewed sceptically by other stakeholders. - Staff may be required to undertake many other tasks. - Technical capacity may be lacking.
Drawn from staff of public examination unit	<ul style="list-style-type: none"> - Usually is credible. - Has experience in running secure assessments. - Funds that may not have to be secured for staff time. - Some skills (for example, test development) that can be transferred to enhance the examination unit. - More likely to be sustainable than some other models. 	<ul style="list-style-type: none"> - Staff who may be required to undertake many other tasks. - Technical capacity that may be weak. - May lack ready access to data. - Public examination experience that may result in test items that are too difficult.
Drawn from research/ university sector	<ul style="list-style-type: none"> - Findings that may be more credible with stakeholders. - Greater likelihood of some technical competence. - May use data for further studies of the education system. 	<ul style="list-style-type: none"> - Have to raise funds to cover staff costs. - May be less sustainable than some other models. - May come into conflict with education ministry.
Recruited as foreign technical assistance (TA)	<ul style="list-style-type: none"> - More likely to be technically competent. - Nature of funding that can help ensure timely completion. 	<ul style="list-style-type: none"> - Likely to be expensive. - May not be sensitive to educational context. - Difficult to ensure assessment sustainability. - Possibly little national capacity enhancement.
Made up of a national team supported with some international TA	<ul style="list-style-type: none"> - Can improve technical capacity of nationals. - May ensure timely completion. - May add credibility to the results. 	<ul style="list-style-type: none"> - Possibly difficult to coordinate work of national team members and TA. - Might be difficult to ensure skill transfer to nationals.
Ministry team supported with national TA	<ul style="list-style-type: none"> - Can ensure ministry support while obtaining national TA. - Less expensive than international TA. 	<ul style="list-style-type: none"> - National TA that may lack the necessary technical capacity. - Other potential disadvantages that are listed under ministry of education and that may apply.

Source: Greaney and Kellaghan (2008).

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