CAMBRIDGE EDUCATION

Evaluation of the Child-centred Multi-level Approach to Teaching and Learning in Sri Lanka

Main Report - Volume I

7 May 2020

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List of Acronyms

ABL	Activity-based Learning
A	Activity
ACCCL	All Children to Complete every Competence Level
ADE	Assistant Director of Education
CE	Cambridge Education
CFA	Child Centred Approach
CPD	Continuous Professional Development
CSO	Civil Society Organisation
CU	Central and Uva
DLC	Desired Learning Competencies
DFAT	Department for Foreign Affairs and Trade
EI	Educational Initiatives
ELC	Essential Learning Competencies
ERA	Environment-Related Activities
GAFSO	Group Action for Social Order
GIZ	Germany's Development Agency for International Cooperation
GR	Grades
HRBA	Human Rights Based Approach
ILO	International Labour Organisation
IPDT	Institute of Professional Development Teacher
ISA	In-Service Advisor
KS	Key Stages
LL	Learning Ladder
MGML	Multi-Grade Multi-level
ML	Multi-Level
MLGPC	Ministry of Local Government and Provincial Councils
MLT	Multi-Level Teaching
MOE	Ministry of Education
NCOE	National Colleges of Education

NE	Northern and Eastern
NER	Net Enrolment Rate
NI	No Information
NGO	Non-governmental Organisation
NIE	National Institute of Education
OECD- DAC	Organisation for Economic Cooperation and Development - Development Assistance Committee
PDE	Provincial Director of Education
Q	Questions
RIVER	Rishi Valley Institute for Educational Resources
S	Student
SBTD	School- Based Teacher Development
SIDA	Swedish International Development Cooperation Agency
SL	Sri Lanka(n)
SPSS	Statistical Package for Social Sciences
T	Teacher
TIMs	Teacher Instruction Manuals
ToRs	Terms of Reference
TTC	Teacher Training Colleges
UNICEF	United Nations International Children's Emergency Fund
UNEG	United Nations Evaluation Group
ZDE	Zonal Directors of Education

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Executive summary

This report presents the formative evaluation of the Multi-level (ML) teaching and learning approach, supported by UNICEF, in Sri Lanka. This evaluation will be used to strengthen the existing implementation of the ML approach and to provide evidence for national stakeholders during their current reform of the national framework for education to consider the scale up of ML nationally, and/or its integration into mainstream approaches to pedagogy and teacher education. The ongoing national education reform process will also benefit from the experience and evidence gathered through this programme in reforming its teacher development modules for primary education.

Context

The ML programme has been implemented in a context where national policy directives stress the importance of child-friendly environments for learning and where there was a growing concern that children in the early grades of primary education were not achieving the Essential Learning Competencies as defined by the National Institute of Education (NIE). The Multi-Level teaching programme has benefitted from this policy context and contributed to it. Its development had two main reference points – first, the Sri Lankan National Curriculum objectives and second, pedagogic ideas drawn from the RIVER Multigrade Multilevel Learning (MGML) education programme in the Chittoor District of Andhra Pradesh in neighbouring India. From 2012 MOE, with the provinces, embarked on a small-scale programme of ML teaching with educators in just 14 schools. Since that time, the MOE has trained more than 1,000 resource persons to work on ML across Sri Lanka's nine provinces. The programme has reached a large number of schools across the country, though the exact number is unknown. This arises because the MOE and provinces have adopted a mainstreamed and targeted approach simultaneously. In some cases, training has been offered to all teachers in a geographical area irrespective of whether the teacher's school is an ML school, whilst in other cases, only teachers in ML schools have received training. In the latter case, some of these trained teachers from ML schools have subsequently transferred to non-ML schools but have continued to introduce some ML practices in their new school.

UNICEF involvement in the programme commenced in 2016 and focussed on 400+ schools in the four provinces where UNICEF had been working in primary education over a number of years – Central, East, North and Uva. UNICEF's involvement in ML followed on from its programme of support to schools implementing a Child Friendly Approach (CFA), an approach that is wholly consistent with the ML approach (Clarke, Wijesundara and Sethunga, 2016). Moreover, that support was targeted on those provinces that, historically, display poorer performance in academic achievement, and, in the case of the North and the East, require additional support in the wake of the civil war. UNICEF supports the ML programme in some schools, while the MOE, together with the provinces, support ML in other schools. UNICEF's support has been largely responsive in nature, responding to requests from the MOE and the provinces for the provision of training, learning materials, guidelines, monitoring and teacher exchanges. They have offered support in a flexible manner to each of the four provinces, responding to felt needs by province-led implementers. UNICEF field officers have supported teachers, school principals, ISAs, province education officers, as well as the officers of the MOE Primary Education Branch. The actual financial contribution from UNICEF to schools for ML has been relatively limited.

Evaluation Objectives

The overall objectives of this evaluation are:

1. To determine the relevance, efficiency, effectiveness and sustainability of the ML methodology as a key enabler in promoting child-centred teaching and learning across the education system in Sri Lanka;
2. To make recommendations on how to improve the government's relevant policies, plans, strategies and operations of the ML approach;
3. To explore the potential for scaling it up; and
4. To provide strategic guidance to UNICEF in sharpening its focus areas of support to the government for mainstreaming the ML approach.

Methodology

The evaluation took place from December 2019 to March 2020. The OECD-DAC evaluation criteria used in the evaluation address relevance, efficiency, effectiveness and sustainability. Impact was not be assessed due to the lack of baseline data and the fact that the evaluation is formative in nature. Equity, gender equality and the Human Rights based Approach (HRBA) were also included as additional essential criteria for the evaluation. The evaluation used a mixed method approach with both qualitative and quantitative data being collected and analysed. Several sources of evidence were employed including document reviews, semi-structured interviews, lesson observations, questionnaires and group tasks. Tools were developed, tested and translated and three types of triangulation were used – methods triangulation, respondent and document triangulation. The protocols used for classroom observation may be of particular value to the MOE, the NIE and the provinces as they develop their monitoring and evaluation systems. For ease of reference, the analytical questions and methods were combined through a Question by Methods Matrix.

A particular feature of the evaluation process has been its participatory nature, including a Stakeholder Roundtable workshop during inception, a Consultation in Kandy with teachers from four provinces and a Participatory Validation Workshop with central and provincial level staff. Overall, 16 schools were visited (half ML and half non-ML), where 29 teachers, 16 Principals and 16 groups of parents were interviewed as well as 52 officers (at provincial, central, zonal and divisional level), three representatives from CSOs and nine UNICEF staff members (from central and field level). A self-administered teacher questionnaire employed at the Teacher Consultation meeting was translated by province staff and the MOE into Sinhala and Tamil. Other interview formats were administered orally in English and others in Sinhala and Tamil, dependent on the language facility and preference of the respondent.

The Multi-Level Approach to Teaching and Learning

The Ministry of Education (MOE) defines the Multi-level approach to teaching and learning as one:

> that enables one to teach lessons to an entire group while meeting the individual needs of learners, to 'teach individually all at once'. (It is a method that accommodates) ...a range of learning, teaching and assessment methods in which students can engage according to their own developmental needs along the continuum of learning (MOE presentation at Stakeholder Roundtable January 21st, 2020).

ML addresses issues faced in common with teachers and learners worldwide as they strive to meet the learning targets set out in Sustainable Development Goal 4. ML recognises the diversity

of learning achievement levels found in every classroom in Sri Lanka and elsewhere. ML addresses the need for the formative assessment of every child during every lesson, followed immediately by differentiated remediation and enrichment activities. ML recognises that children learn at different speeds, focuses on the learning needs of, especially, slow learners, and recognises, implicitly, that prior learning is an extremely strong predictor of subsequent learning. ML focuses on the causal link between prior and subsequent learning and the difference that changed teacher and learner practices can make to a reduction of achievement gaps between learners. It is inclusive of all learners, in particular those who might otherwise become 'silently excluded' from learning. The distinctive feature of the ML methodological approach is its inclusion of all children, low and high achievers alike, and its stress on remediation activities for those at risk of falling behind. In this sense, it is well aligned with the UN Convention on the Rights of the Child (CRC) and the Convention on the Rights of Persons with Disabilities (CRPD).

Findings

Relevance

The ML concept and practice is relevant to and consistent with the dominant policy discourse of child-centred education that has pervaded the Sri Lankan education discourse since the 1970s and which was re-affirmed recently in President Gotabaya Rajapakse's *Vistas of Prosperity and Splendour*. The ML approach is aligned with the NIE curriculum content, learning competencies and expected learning outcomes, and therefore has enormous potential value in contributing to the pedagogy of current and revised national curricula and material design. The majority of stakeholders at National and Provincial level with experience of ML perceived the ML concept and method as both relevant and useful for the delivery of the Primary education curriculum, especially in the early grades where it is currently being practised.

The training of teachers in the ML method follows a cascade model of in-service, consisting of short term workshops of varying lengths. There does not appear to be a systematically organised training programme that ensures that teachers receive training at different levels of complexity in a timely and regular manner. At the same time, teachers who had received training reported that it had been relevant and useful, and a third mentioned additionally the relevance of training that included real-time demonstrations of the ML method.

The MOE's draft ML guidance manual provides very useful and relevant material for teachers and for those who are training teachers. It would benefit from some final revisions prior to distribution to increase its utility and depth. Teachers indicated that ML materials – the Activity cards, other materials produced by province/teachers and learning ladders – were relevant for the ML approach.

Effectiveness

The objectives of ML are stated variously by MOE. They are numerous and qualitatively different. The lack of a clear definition of a few objectives limits the evaluation team's ability to address related questions of effectiveness. However, stakeholders working at various levels of the education system make positive claims about the effectiveness of ML. To date, the implementation of ML appears to have been effective in creating a positive narrative around which educators enthuse.

Based on the observations and data collected during this evaluation, a number of important ingredients have been identified as important for achieving ML's objectives: a well-trained primary education teacher, a teacher well trained in ML, monitoring and supervision support from within the province, sufficient learning materials, sufficient space in the class for group work and

manageable class sizes. These ingredients re-emerge throughout this report as markers of effectiveness.

Although this evaluation was not designed to measure differences in effectiveness across provinces, some differences in ML implementation between provinces were found, in terms of how the recommended stages of the lesson are followed, the volume and type of learning materials available in the classroom, the use of personal or whole class 'learning ladders' and the provision of opportunities for more advanced students. Given the ingredients identified for meeting ML objectives, particularly sufficient learning materials, these provincial differences in implementation may well have an impact on the local effectiveness of the approach, not tested by this evaluation.

A wide range of 'good' teaching and learning practices were found in all classes, whether ML or not. However, in ML-related settings, student engagement in learning was higher, teachers were more likely to provide feedback on incorrect answers, and students were more likely to ask a question of a teacher in a whole class setting. These are all are consistent with the broad objectives of ML and indicate that ML has been integrated into daily classroom practices. Two Child-friendly dimensions were observed more frequently in ML-related settings: the teacher effectively manages the class, and learning/learners appear joyful. The latter is one of the goals of child-friendly schools as well as of ML and suggests that ML is correlated more highly with 'joyful learning' than non-ML.

The effective implementation of ML has faced a number of challenges, among which were initial resistance from teachers. This varied by province, but it was noted that resistance reduced over time as awareness was raised, skills were developed, and teachers gained confidence in the use of ML. For teachers, the main challenges reported were lack of materials, time spent in developing materials, the cost of materials and classroom space and facilities.

The governance of ML is implicit rather than explicit. To date, the MOE has not issued its ML Guidance Manual, though a draft is available. There are no government circulars that refer to ML and no budget lines at national, provincial or school level that pertain directly to ML, though clearly the MOE and the provinces choose to spend money on it. To date, ML is not referred to in the National Institute of Education's curriculum guidelines for teachers. As a result of these gaps in the governance structure, ML lacks a degree of legitimacy.

Quality assurance, in the form of monitoring and training, is one of the tools being used by national government, provinces and UNICEF to improve effectiveness. It is being carried out differently in different provinces and in some cases lacks clarity, which needs to be addressed. Overall, the majority of stakeholders considered the quality assurance process to be improving.

Efficiency

Issues of time and resources in relation to learning materials appear to be common to both ML and non-ML teachers. Just over half of all teachers interviewed felt that there were insufficient materials available and that they would have liked more school-based training. There are many challenges faced with sourcing funds for ML at a school level, including receiving funds from government in the first place, the amount of funding, which is insufficient for a whole school's needs, and the level of support from other sources, e.g. parents, which is highly variable. As a result, more than 50% of teachers in ML and non-ML schools spend over Rs 500 every month on teaching and learning materials. Although schools receive a modest annual budget from the province for the purchase of items to enhance the quality of education, these budgets are not always reaching provinces and schools in a timely manner, or at all. Moreover, some of the conditions attached to the use of the money restrict ease of access to some types of material.

Based on the evaluation team's observations and data collected on efficiency, the main area which has emerged as being the most important and achievable for efficiency gains is in material development and use; materials are often developed separately by multiple individual teachers in the same school and used once. Facilities and equipment (at a school level), training modalities (to be more school based) and the potential of mainstreaming ML into the national system were also identified as important.

Sustainability

Considerable technical capacity has been built from the central and provincial levels to the teachers in the schools, providing proof of concept that could be utilised for scale-up both across a province and across a country. However, systemic issues around the functionality and resourcing of provinces, zones and divisions to strengthen school improvement are still prevalent. While some see ML as a UNICEF initiative, this does not seem to be a whole-system belief or a barrier to government ownership. Most stakeholders believe that ML can be owned and run by government.

There is immense potential and political will to scale up the ML approach, contents and implementation modalities, once lessons learned have been addressed. Decisions on ML are currently not being taken at the national level, nor are all actors playing a role in undertaking actions which would foster its scale up and sustainability. To date, the NIE has not played a role in the implementation of ML and has not incorporated it as an approach into standard teacher training programmes, curriculum revisions or the Teacher Instruction Manuals (TIMS). They are a key player in the national primary education system yet have been outside of the ML discourse and decision-making structures.

Key stakeholders think that current financial resources available for ML would be insufficient for a nationwide scale up. However, ML has already been scaled up at a Provincial level by their own means, indicating it should be possible. Capacities which may be necessary for sustainable scale up, such as fundraising, networking and integrated monitoring, often appeared to be lacking at a local and school level.

Equity, Gender Equality and HRBA

ML's focus on promoting equitable learning for all children, especially the weakest, was well recognised by stakeholders and highlights its alignment with the principles of inclusion and human rights. There were also examples identified during field work of teachers who had used ML to help them to identify the needs of students with special educational needs.

ML documentation (e.g. MOE draft ML guideline, assessment materials, monitoring formats) was not found to contain explicit references to gender, disability, language differences or ethnicity. This may be a contributing factor for the lack of emphasis on these issues by teachers and other respondents during field work.

Many of the findings on gender equality and inclusion pertained to the overall primary education system and were not applicable to ML contexts only. However, teachers in ML-related settings were found to exhibit greater levels of certain behaviours related to gender attitudes and participation, including encouraging equal participation of girls and boys and more incidences of both girls and boys answering the teachers' questions.

Conclusions

School level

There is a good uptake of the ML model at school level, but this could be made more effective by increasing teachers' access to resources and by encouraging school-based professional

development, both of which can be done more efficiently. There is overall belief in and support for ML to be scaled up nationwide with government ownership. However, there are critical local issues which need to be addressed. Schools face a chronic lack of resources and materials which hampers ML implementation and therefore effectiveness. A sustainable solution for this must be sought. Material development and use could be made more cost effective and efficient relatively easily by supporting sustainable reusable material development and sharing within schools. Centralised training could be replaced or supplemented with a blended approach of more cost-effective school-based training and peer-support activities supported by materials available on mobile devices and online learning.

Province level

Flexibility in implementation and approach would be more effective if it was based on a set of consistently applied standards and if capacity building was needs-based. The evaluation findings point to variations across the provinces in terms of ML classroom practices, the content of training and of monitoring documents. In the North and the East, the pedagogic practices observed bear more similarity to the RIVER MGML model than do those in the Central and Uva provinces, which in turn bear more similarity to the preferred MOE model. This may have arisen through the actions of a range of ML champions re-constructing what they learned from the RIVER programme and grafting it onto the mainstream system in different ways. There is space in any pedagogy for both essential and flexible elements. There is little evidence that there has been an extensive discussion across the provinces of essential versus flexible practices though.

National level

The ML approach can be more effectively implemented and supported if there is clarity and consensus on its Theory of Change and if it is legitimated by NIE, together with other key stakeholders, and funded through a more efficient system that gets resources to schools when they are needed. There is currently a lack of clearly articulated objectives for ML or a conceptual framework for stakeholders to build their version of ML around. Future development of ML must start from a review and streamlining of the objectives of ML and the development of renewed plans of action, supported by a Theory of Change, with risks and assumptions identified and addressed. An initial starting point for this is presented in Section 6.1 of this report in the form of a causal framework.

Internal coherence at a national level on ML, between MOE and NIE, has been weak to date, as is common with any new intervention. Rectifying this and mainstreaming ML into the national system would legitimate ML and the work of teachers, ISAs and officers, some of whom worry that they are not meeting all the NIE expectations by following the ML approach. The most effective way for ML to be legitimated is for its best elements to be integrated within the National Curriculum. This means not only its integration as a teaching method within the TIMS, but also a consideration of how best to provide provinces and schools with the teaching and learning materials to support it. Such materials would be funded centrally.

Mainstreaming would also obviate the need for a parallel system of monitoring, quality assurance and training. Moreover, it would save considerably on costs since, currently, ML represents an additional, not substitutable cost. Additional costs per child will fall if ML goes to a national scale, materials are produced which are reusable, and duplication is eliminated. For meaningful mainstreaming to happen, NIE must become a central player in the future development of ML.

There is also the need to create minimum standards of quality and quantity of training courses, of materials and monitoring for each and every teacher. A first step would be the creation of standards, the second an audit of teachers and schools. Such an audit would help to identify capacity gaps at a school level, something which is crucial for the success of the intervention. If

a teacher is not coping in the first place, adding ML to the situation is not going to help unless the underlying capacity issue is dealt with.

Equity and ML

The success of ML in addressing diversity in learning levels provides an exciting opportunity to increase teachers' understanding and responses to a broader understanding of inclusion. ML is already well aligned with the government's ambitions around inclusive education, gender equality and human rights. However, these issues are not explicit in the ML methodology or materials yet, and there is a lot of potential for ML to reframe this narrative and raise awareness at a school and wider community level. This would likely have positive knock on effects on the learning outcomes and progress of all students in their ML classrooms.

ML has tackled one dimension of equity very directly – the learning outcome differences between children and the provision of targeted support for low achievers so they are not 'silently excluded' from learning. Equity embodies the notion of fairness and ML recognises that many low achieving students are low achievers for a range of reasons beyond their control – individual, school, household, community and system. Through its emphasis on remediation ML compensates low achievement with additional actions designed to help the low achiever continue along a pathway of learning. To date ML has not addressed a potential interaction between gender, language, poverty and ethnicity and the ML approach. This is an area for future research.

Going Forward

The ML programme has been implemented in a context where national policy directives stress the importance of child-friendly environments for learning: child friendly principals are embedded in the MOE approach (see Section 2). The Multi-Level teaching programme has benefitted from this policy context and contributed to it. In the current education policy context there is an opportunity for ML to expand to other schools in the provinces and, as suggested already, to the entire mainstream system. An intensive engagement between MOE and NIE on the mainstreaming of ML is particularly timely in the current education policy context. ML's emphasis on inclusive education aligns with the government's commitments in this area and could hasten the finalisation and publication of the draft Inclusive Education Policy. In addition, a recently formed Task Force on Education Reform has taken on board President Gotabaya's *Vistas of Prosperity and Splendour* and his commitment to a 'truly student-centred education system', the development of all primary schools as child-friendly schools, the recruitment of teaching assistants for all Grade 1-5 teachers and digitisation of teaching and learning materials. Assuming that these commitments move beyond rhetoric, ML educators have much to offer to the Task Force and much to gain from them.

Recommendations

Three main recommendations are set out below: (i) a call for the mainstreaming of ML through an intensive engagement between the MOE, NIE and the Provinces, (ii) an outline of the nature of such an engagement and (iii) a range of actions that need to be undertaken by support system actors and agencies in support of this mainstreaming. These are based on the evaluation's findings and also take into account a range of suggestions and recommendations made by stakeholder groups experienced in the practice of ML. The recommendations are made with cognisance of the broader work of the Task Force on Education about the future direction of the education system and of the new cycle of curriculum and learning materials revision embarked on in 2020 by the NIE.

1. Mainstream ML

It is recommended that expert groups from the MOE and the Provinces embark on an intensive engagement with the NIE to share lessons about the vision, concept and methods of ML, with a view to adapting and integrating the ML teaching and learning methods with the new curriculum goals and content, teacher education and quality assurance. This should accommodate the broader societal goals of equity and inclusion, together with the aspiration to move forward, expand and improve learning for all students. It will be important to recognise and enhance the technical capacity to deliver ML in the NIE, MOE and the Provinces.

2. The nature of an intensive engagement between NIE, the MOE and the Provinces

The engagement between the NIE, the MOE and the Provinces should include, but not be restricted to, the following:

1. MOE-NIE-Province Team observations and review of ML classes in each of the nine Provinces, each team to comprise an MOE Primary Education Branch officer, a member of the NIE Early Childhood and Primary Education Department and a Provincial ML resource person;
2. A clarification of the objectives of ML and its underlying pedagogic principles (e.g. differentiation, formative assessment, mastery learning, inclusion, peer learning, e-learning);
3. The joint development of a 'Theory of Change' from inputs to outputs/outcomes and anticipated impact;
4. A review of the underlying pedagogic principles of ML to highlight the essential and flexible elements of the ML approach in relation to the emerging primary education curriculum, with a view to ensuring a degree of standardisation across all Provinces and schools while empowering educators to make relevant adaptations to resonate with different school contexts;
5. The creation of minimum standards for the delivery of ML, including requirements for teacher training, materials for teachers and students, and support for systematic monitoring and supervision;
6. The review and revision of budgetary allocations to ensure these standards can be met going forward; and
7. The revision, finalisation, production and dissemination of the ML guidance Manual for teachers (the revision should address, inter alia, objectives, pedagogical principles, methods, formative assessment and learning ladders, and the use and purpose of different types of groups (teacher and student perspectives)).

3. Support actors and agencies

The revision and implementation of a revised curriculum and pedagogy needs to be supported and reinforced by a range of actors and be embedded within the core of the primary education system. The pedagogy transacted between teachers and students needs sensitive development and shared ownership within a professional development framework which seeks inputs from different groups of stakeholders. Eight steps are suggested to support the changes for this that MOE, the NIE and the Provinces need to make:

1. The inclusion of new ML content into pre-service and in-service teacher education and training undertaken by the schools, Provinces, NIE, National Colleges of Education (NCOEs), Teacher Training Colleges (TTCs) and the Universities.
2. The digitisation of all ML related curriculum and training materials which should be used in online and face-to-face teacher education and, additionally, be made available as open

access resources for teachers via the MOE's developing E-platform, known as E-thaksalawa.

3. The updating of the training, roles and responsibilities of the in-service advisors who work closely with teachers.
4. Simplification of the finance and administration 'circulars' that determine how school principals and teachers can access and spend money from the 'School Quality Inputs' budgets to assist them in the development of materials for teaching and learning with higher discretionary limits.
5. The integration of ML methods within the MOE and Province-level quality assurance and monitoring and supervision systems to ensure alignments between teacher education and quality assurance objectives and learning evaluation criteria.
6. Prioritisation as soon as feasible of the development of a training programme that includes ML methods for the soon to be recruited new cadre of teaching assistants.
7. An immediate change in Teacher deployment practices at the Zonal level to ensure that those who have been trained in ML are posted to ML schools (this recommendation assumes that mainstreaming may take some time to be implemented).
8. An urgent audit of ML teacher needs to ensure that training is directed towards those in most need and most likely to benefit including both existing teachers and new entrants.

Specific Guidance for UNICEF

It is recommended that UNICEF should increase its support for the development and dissemination of ML through strategic facilitation of an 'intensive engagement' between MOE, NIE and the provinces to help ignite a cycle of curriculum innovation across the system. This can happen alongside continuing existing support for some inputs at the Province level until a new national curriculum strategy is in place.

The engagement will build on UNICEF experience to date in its support to ML schools and teachers in four Provinces. Starting immediately, it could support all the steps outlined in 2 (i) - (v). UNICEF could contribute to the Task Force for Education and use its convening power to assist in drawing down from its accumulated experience with ML and it could facilitate stakeholder engagement to build constituencies of support to implement more effective and efficient methods of organising learning.

UNICEF could support the NIE, MOE and Provinces to develop the infrastructure to accelerate curriculum development especially in relation to current Task Force commitments to:

(i) develop more student-centred learning for all learners;

(ii) digitise learning materials and teacher guides;

(iii) prepare teaching assistants for their new roles in primary classes;

(iv) share the formats used by the evaluation team, especially the class observation tools, for their further development and use by MOE, NIE and the provinces.

Finally, UNICEF can champion inclusion and equity dimensions across these activities to ensure that the rights of the most disadvantaged are always forefront; use this evaluation to demonstrate knowledge leadership and evidence-based decision making in practice; and share practices from other countries to facilitate these recommendations.

1 Evaluation Purpose and Object

1.1 Introduction

This report presents the formative evaluation of the Multi-level (ML) teaching and learning approach in Sri Lanka, which began in 2012 and has been scaled up to more provinces and schools since then, with support from UNICEF since 2016. This evaluation will be used to improve the existing implementation of the ML approach in those provinces and to provide evidence for national stakeholders during their current revision of the national framework for education to consider the adoption of ML as an approach nationally.

The evaluation research was conducted in the period December 2019 – March 2020 by an independent team of national and international education and evaluation specialists put together by Cambridge Education and contracted by the UNICEF office in Sri Lanka. The evaluation team was led by Angela Little, as Team Leader, with Emma Mba overseeing as Project Principal from Cambridge Education. Eve Hadshar and Kate Martin, both Cambridge Education, undertook the fieldwork alongside national independent consultants Kamal Herath, Eroshan Alagaretnam and Asique Mohammed.

The scope of the evaluation was specified in the terms of reference (TOR), which is included in Appendix 1. The evaluation was coordinated by the UNICEF Sri Lanka Chief of Education and technically supported by the Evaluation Reference Group with support from the UNICEF Regional Education Advisor/Specialist. The UNICEF Regional Office evaluation section quality assured and approved the key deliverables. The Ministry of Education (MOE), National Institute of Education (NIE), Provincial Directors of Education (PDEs) and other key stakeholders provided additional support and guidance.

The report has seven sections. The first section sets out the purpose and object of the evaluation including an overview of what the ML approach is. The second section describes the background context of the primary education sector in Sri Lanka and the evolution of the ML approach. The third section describes the evaluation objectives and scope, while the fourth section sets out the evaluation methodology which includes the evaluation criteria, design, methods and data sources. The fifth section presents the findings of the evaluation against the criteria defined in section four and based on the data collected and analysed during the evaluation. Section six presents conclusions, lessons learned and a set of recommendations which have been developed with involvement from the key stakeholders. Section seven includes the references used in the evaluation. The Appendices contain additional detailed information about the evaluation such as sampling guidance, fieldwork guidance, key elements of the national child friendly strategy and all research tools used during fieldwork. They also contain additional data related to the findings.

1.2 The purpose of the evaluation

First and foremost, the findings and recommendations of the evaluation are intended to inform the implementation of child-centred teaching and learning, associated policies and strategies, and options for scalability, for the Sri Lankan government. The intended users of the evaluation are therefore national government (MOE and NIE), provincial authorities, school teachers and principals and UNICEF Sri Lanka.

There is high level agreement in Sri Lanka that the ML methodology can improve children's engagement in learning and ultimately improve their learning outcomes. As a result, national level guidelines on ML have been developed by the MOE. The practical application of the ML approach

is still in its infancy in Sri Lanka and one of the reasons UNICEF commissioned this evaluation was so that they could understand how well the current programme is being implemented. Therefore, this evaluation is formative in nature and intended to generate reliable process data on the operations of the ML approach – e.g. what are the processes and implementation strategies that are working well, and what are the processes and implementation strategies that are not working well and require improvements. This evaluation is not intended to measure the impact of the ML approach.

In addition to this, UNICEF and the MOE are seeking evidence-based recommendations for how the ML approach can be put effectively into practice across the country. This includes taking into consideration alignment of the ML approach with the national curriculum, which is undergoing a full comprehensive review in 2020, as well as with what is being taught to student teachers in pre-service education and with the national vision for inclusion and commitment to human rights. In order to scale up and mainstream ML across the country, the government would need to review the funding, support and quality assurance mechanisms that are needed for successful implementation, based on the findings of this evaluation and the lessons learned from the provinces in which UNICEF has been supporting ML.

1.3 The object of the evaluation

1.3.1 What is the ML approach to teaching and learning?

The simplest definition of ML is offered by the MOE. It is a pedagogical approach:

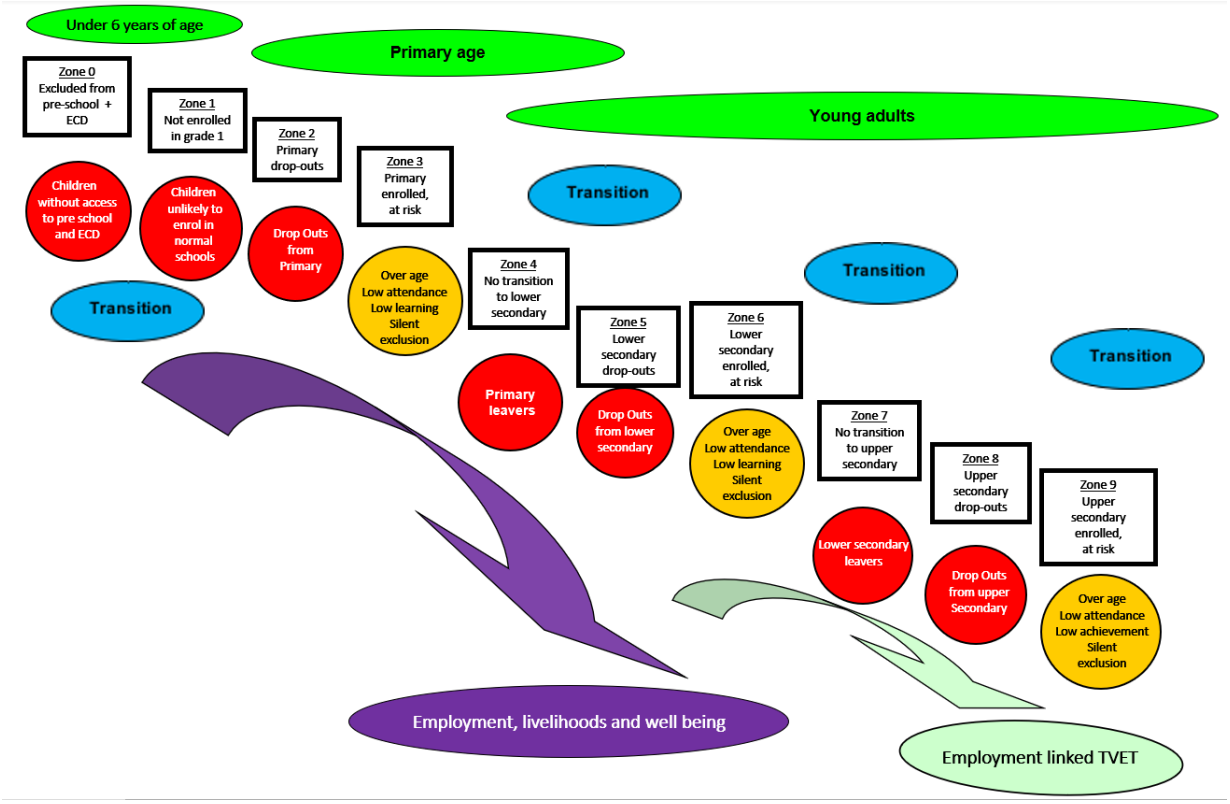
> that enables one to teach lessons to an entire group while meeting the individual needs of learners, to 'teach individually all at once'. (It is a method that accommodates) …a range of learning, teaching and assessment methods in which students can engage according to their own developmental needs along the continuum of learning (MOE presentation at Stakeholder Roundtable, Jan 21st, 2020).

This definition already highlights the equitable and HRBA nature of ML as each and every student is recognised as a rights' holder. ML addresses issues faced in common with teachers and learners worldwide as they strive to meet the learning targets set out in the Sustainable Development Goals (United Nations, 2015). ML recognises the diversity of learning achievement levels found in every classroom in Sri Lanka (NEREC 2009, 2014, 2016) and elsewhere (e.g. PISA 2018). ML addresses the need for the formative assessment (e.g. Assessment Reform Group, 1999) of every child during every lesson, followed immediately by differentiated remediation and enrichment activities (Tomlinson, 2017). ML recognises that children learn at different speeds and focuses especially on the learning needs of slow learners. Again, this represents an inclusive and intrinsically HRBA outlook which considers all children to be equal rights' holders in the learning space. ML also recognises, implicitly, that prior learning is an extremely strong predictor of subsequent learning (Boyden, Dawes, Dornan and Tredoux, 2019). ML focuses on the causal link between prior and subsequent learning and the difference that changed teacher and learner practices make to a reduction of achievement gaps between learners. As described by the MOE at the Stakeholder Roundtable, held on Jan 21st, 2020, ML is based on the following principles:

> When cognitive skills are strong, learning is fast and easy; when weak, learning becomes a struggle. Irrespective of age, cognition can be improved with the right training. Multi-level teaching provides success for every student within rigorous standards and acknowledges diverse learner characteristics. Students who are absent do not lose out. They are able to start the learning ladder where they left off…Multi-level instruction is a critical skill for teachers.

Crucially, inclusion comes out as a clear theme in this discourse and can be viewed conceptually through the lens of the Zones of Exclusion set out in the CREATE model of educational access, transitions and equity (Lewin, 2015, Lewin and Little, 2011, www.create-rpc.org). The CREATE model charts the progress of a cohort of students through an education from pre-school to the end of secondary educations. The model identifies seven Zones where exclusions from primary and secondary school occur, and where actions are required in order *to transform exclusion into inclusion* (Figure 1).

Figure 1: Zones of Inclusion and Exclusion from Education



Source: Lewin, 2015

The model is dynamic. It can be used to chart the progress of individual students over time or to track the progress, or lack of progress, of a cohort of children. The Zones of exclusion describe different types of exclusion over time.

In Sri Lanka, where the primary school enrolment ratio is very high and dropout from primary school is very low, the Zone of exclusion of greatest relevance to ML is a subset of Zone 3. Zone 3 describes, *inter alia*, those who are at risk of dropping out of learning through 'silent exclusion'. These are:

> those who are at risk of remaining in school but dropping out of learning because of a failure to achieve sufficient learning at one level in order to learn effectively at the next. (Little, Indika and Rolleston, 2009)

ML focuses squarely on the teaching and learning challenges faced by children in Zone 3. Children are at risk of *dropping out of learning*, rather than school, because they fail to achieve sufficient learning at one level in order to learn effectively at the next. The ML teaching and learning method is designed to transform the risk of exclusion from learning into opportunities for

continued inclusion in learning. Currently, ML does not address other forms of exclusion which could lead to some children being left out of the ML experience altogether, for example, those with extreme physical and mental disabilities excluded from all types of schooling and from the mainstream classes. The potential for ML to play a transformative role in countering exclusion is explored later in this report.

1.3.2 ML compared to the mainstream Sri Lankan approach

ML is essentially a teaching method, designed to deliver the national curriculum in ways that enhance learning outcomes. The ML objectives are aligned very closely to those of the mainstream approach. By contrast with that of the mainstream though, which also promotes activity–based teaching and learning, the ML methodological approach also:

Simplifies the competency levels expected to be achieved by all children in ML

Emphasises the importance of Learning Activities at all stages of the lesson

Re-stages lessons in terms of Introduction, Practice, Assessment, Remediation and Enrichment. (This contrasts with the mainstream stages of Introduction, Lesson Development, Assessment and Closure.)

Advocates the use of one or more Assessment Activities at an earlier stage in the lesson than in the mainstream approach, with a greater emphasis on Remediation activities for those children likely to fall behind, and a parallel set of Enrichment Activities for those who are succeeding in attaining the required learning levels.

Employs 'learning ladders' to guide the lesson planning of the teacher and to chart personal and inter-personal progress

Uses a wider range of student grouping practices than the mainstream

In Section 5.1, a range of felt needs, priorities and sources of inspiration that influenced the adoption and adaptation of ML are described. Most of these were internal to the system but one is a model of Multigrade and Multilevel Learning (MGML) observed by a group of officers from the MOE, NIE and the provinces developed some years ago in Chittoor, Andhra Pradesh. These influences give us further insight into the unique aspects of the ML approach and the way in which it is meeting a felt need in the Sri Lankan education context.

2 Background Context

2.1 Overview of Primary Education in Sri Lanka

In Sri Lanka there are four stages of general education, which are shown in Table 1.

Table 2: Four stages of general education in Sri Lanka

Stage	Grades	Age range
Primary education	Grades 1 - 5	5+ - 9+
Junior secondary	Grades 6 - 9	10+ - 13+
Senior secondary	Grades 10 – 11	14+ - 15+
Collegiate	Grades 12 – 13	16+ - 17+

By law general education is compulsory and fee-free up to the end of Grade 11. Recently, non-selective entry to Grades 12 and 13 has been introduced. Sri Lanka has a good record on the promotion of participation in primary and secondary education. The net enrolment rate (NER) for primary education is 99 percent and for junior secondary education 84 percent (School census data, 2017). There is also high gender parity, in primary education the net enrolment is 99 percent for girls and 98 percent for boys.

Public examinations are held at the end of Grades 5, 11 and 13. Excellent performance in the primary Grade 5 'scholarship' examination enables students to apply for access to the high-status National schools, and in some cases for financial support. Although not compulsory, the Grade 5 scholarship examination is sat by almost all students. Many educators and teachers have expressed concern over the negative 'backwash effects' of the Grade 5 examination on the curriculum and pedagogy of primary education (Kotalawala, 1993, Wijesundara and Perera, 2000).

2.1.1 The primary school curriculum

The student-centred primary education curriculum has its origins in the 1972-77 and 1997 Education Reforms. Both reforms promoted a learner-centred pedagogy based on activity-based learning in line with a competency-based curriculum (Peiris, 1983, Peiris 2000, Peiris and Nanayakkara, 2000). The General Education Reforms of 1997, which continue to guide the National Institute of Education in its design of the curriculum asserted:

> Education will be child-centred, not teacher-centred. The emphasis will be in developing the child's mind, skills, attitudes and abilities….During (primary education) the child must build the well-recognised, five pillars of learning - being knowledgeable and well informed, being practically skilled, being disciplined, being refined, being able to speak well. Primary education will consist of three key stages. Key stage 1 Grades I and II; Key stage 2 Grades III and IV; Key stage 3 Grade V… at the point of entry, the teacher will engage children in a series of specially designed play items and activities, with a view to identifying each child's capabilities at entry, as early as possible. This will help the teacher to plan the learning-teaching process according to the needs of each child. Throughout the teaching-learning process children will be assessed continuously, placed emphasis on informal methods of assessment. Towards the end of each key stage, children will be assessed to determine their levels of mastery of Essential Competencies, lists of which will be available to teachers. This will enable teachers to assess the degree of success

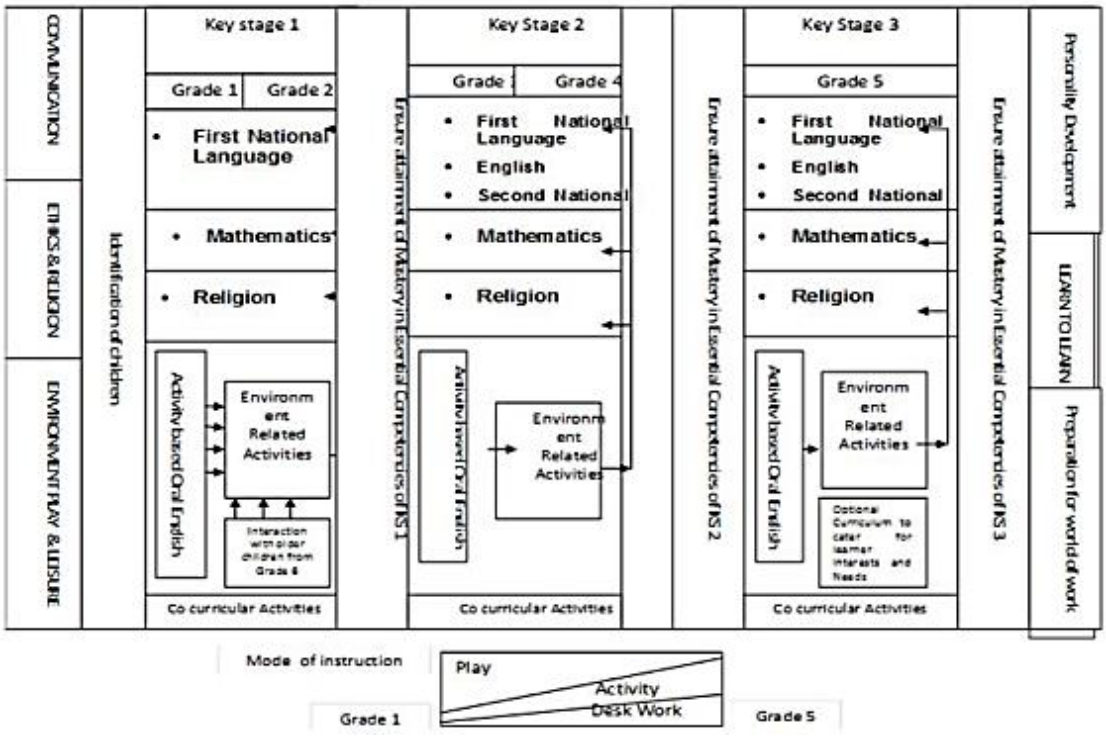
achieved and to take corrective measures where necessary' (General Education Reforms, 1997).

The curriculum for general education is determined by the National Institute of Education. The Ministry prescribes the school calendar and the number of hours to be allocated to different subjects. Schools determine the day to day timetable. The competencies that underpin the curriculum relate to:

- Literacy, numeracy, graphics, information technology
- Social, biological and physical environments
- Ethics and religion
- Leisure, enjoyment and recreation
- Learning to learn
- Personality development
- Preparation for the world of work.

The learning pedagogy is intended to be learner-centred and activity-based, described as guided play, learning activities and desk-based learning. Teachers are expected to shift the emphasis away from guided play and towards desk work from Grade 1 to Grade 5. The curriculum is based around four subjects – language, religion (Buddhism, Saivaneri, Islam, Catholicism or Christianity), mathematics and environment-related activities, with elements of integration across the subjects. The majority of children learn through the medium of the mother tongue, either Sinhala (the majority language) or Tamil (the minority language). The second national language (either Tamil or Sinhala) and English are introduced through oral activities from Grade 1 and more formally from Grade 3. A set of Essential Learning Competencies provide a framework for the continuous assessment of the learning achievement of competencies. Figure 2 presents a schematic overview of the primary curriculum framework (Peiris and Nanayakkara, 2000).

Figure 2: Primary Curriculum Framework



The materials provided for all schools by the National Institute of Education include Teacher Instructional Manuals (TIMS) and student workbooks and activity books. The Education Publications Department of the Ministry of Education writes and prints the textbooks in line with the Learning Objectives provided in the TIMS. New textbooks, workbooks and activity books are provided free to every child at the beginning of the school year. Students purchase exercise books, pens, pencils, rulers and rubbers.

2.1.2 Equity measures in primary education

In addition to free textbooks and other learning materials, students are provided with materials for one school uniform, in some cases free shoes, and subsidized public transport, making the Sri Lankan system one of the most highly subsidized systems in the world.

Schools are graded according to a 5-point difficulty index, developed in 2005 and amended in 2006, ranging from very convenient to very difficult. It is a type of equity index, designed to support teachers working in the most difficult settings. The criteria used in each province to assign the school difficulty index include distance from centres, population, facilities (basic and learning facilities), access, transport and location. As described in Section 4.4, the two extremes of the difficulty index have been used in the selection of schools for the fieldwork sample and the selection of teachers for the Teacher Consultation. Teachers deployed in schools classified as very difficult are allocated a salary supplement of 15%, and in difficult schools 10%. While most school expenditures (e.g. salary, infrastructure) are handled by the province and the zone, schools are allocated funds for ‘quality inputs’, at the discretion of the school principal and teachers. ‘Very difficult’ and ‘difficult’ schools receive a supplement to the ‘quality inputs’ fund, though very small schools in both of these categories do not (MOE Interview). The use of the funds to purchase materials is regulated by government finance circulars and a school’s ability to deploy these funds for quality development depends on the annual flow of funds from the province. In one of the provinces it was claimed that ‘last year we did not receive funds for quality inputs.’

2.1.3 Inequalities in learning outcomes in the primary stage of education

Since 2003 the National Education Research and Evaluation Centre has undertaken national assessments of achievement at different grades across the system. At the primary stage samples of learning assessments have been taken at Grade 4 (NEREC, 2009, NEREC 2014, NEREC 2016). In general, differences of achievement are marked by

- Gender (boys perform worse than girls)
- Medium of instruction (Tamil-medium students perform worse than Sinhala-medium students)
- School type (students in Type 2 schools perform worst)
- School location (students in rural schools perform worse than students in urban schools)
- Province (students in the Northern, Eastern, Central and Uva provinces are among the lowest four provinces out of nine)

These findings are based on students who attend mainstream schools. They do not include students who have special educational needs, defined by the MOE as those who are totally deaf, partially deaf, totally blind, partially blind, those with speech difficulties, dyslexia, intellectual impairment, physical disability, epilepsy, behaviour difficulties and multiple disabilities. The Ministry estimates that around 1.2%-1.3% of the student population experiences one or more disability, an estimate that is quite low by international standards (Gibson 2014). The Department

of Census and Statistics in Sri Lanka identified in the 2012 Census approximately 8.7 % of the adult population as being disabled, which suggests that approximately 7% of the school population is not being identified as disabled. SEN students are provided with education in three main ways – through (i) special education schools located away from mainstream schools (ii) special education units located on the site of a mainstream school, with inclusion in some mainstream activities and (iii) mainstream school classes. Inequities related to gender, language and disability will be returned to in the findings of this Evaluation.

2.2 The Evolution of the Multi-level Approach in Sri Lanka

Over the past four decades, external partners, including UNICEF, the United Kingdom's Department for International Development (DFID), the Swedish International Development Cooperation Agency (SIDA), Australia's Department for Foreign Affairs and Trade (DFAT), the World Bank and Germany's development agency for international cooperation (GIZ), have supported Central and Provincial Ministry programmes to improve access to and the quality of primary education, especially child-centred education (for examples, see Ranaweera, 2000, Little, 2003, McGillvray, Carpenter and Norup, 2012, Little, Shojo, Sonnadara and Aturupane 2019, Clarke, Wijesundara and Sethunga, 2016).

In 2010, with a view to improving the child-centred learning approach, the then Director of Primary Education led a team of Sri Lankan resource persons from the MOE, NIE and Provincial Education Departments (PDE) in a visit to the Rishi Valley Institute for Educational Resources (RIVER) in India in order to learn about the Multi-Grade Multi-Level (MGML) approach used there. The approach, as conceived by RIVER, starts from a proposition that in any class of learners there is a natural heterogeneity of all children. Similarly, the ML approach in Sri Lanka is based on the idea that all teachers have, within their classes, students learning at different levels, and that a degree of differentiation of methods, content and assessments is necessary to meet learning needs at different levels. This is consistent with the principles of inclusive education and human rights, which Sri Lanka is committed to, and the concept is gaining ground among education officials and teachers.

Drawing on inspiration from the MGML programme, the MOE Primary Education Branch embarked, in 2012, along with province-based officers, on a small-scale ML innovation in just 14 schools across each of the country's nine provinces. It has continued to be promoted by MOE in the provinces over the past 8 years, with periodic training and monitoring. By the end of 2019 the MOE had been directly involved in the training of more than 1,000 ML resource persons across the country (see Appendix 11). The number of schools practising the ML approach across the country is unknown, but is estimated to be between 1,000 – 2,000 schools. From 2012 onwards the MOE's Primary Education Branch included its ML-related activities within the MOE's Education Sector Development Plan (2012-2016).

UNICEF's involvement with ML began rather later, in 2016, with its support focussed on approximately 450 schools in the four provinces included in this evaluation (Central, East, North, Uva). These were the four provinces where UNICEF had been working over long period of time, most recently with the Child-friendly Approach (CFA) programme, and where its field officers had built up a considerable knowledge of education and effective collaboration within the provincial education systems The evaluation of that programme was largely positive. The Child Friendly approach was judged to be very relevant for primary education in Sri Lanka, especially the idea that schooling should be a happy place where learning was 'joyful' (Clarke, Wijesundara and Sethunga, 2016). As per UNICEF Sri Lanka's ongoing country programme (2018-2022), the ML pedagogy fits under their Middle Childhood outcome which focuses on child-centred learning and development for 5–9 year olds.

According to UNICEF, the ML programme helps to address some of the main issues in primary education identified through their situational analysis in 2017: the disparities of learning outcomes across the country as well as in the classroom, lack of integration of child-centeredness principle and learning for all in education policies and sector plans (e.g. curriculum and learning materials), limited formative assessment and a lack of teachers with basic training in child-centred pedagogy. Therefore, with its emphasis on supporting teachers to provide a differentiated approach towards the students, activity-based learning, integrated formative assessment and enrichment and remedial activities incorporated, ML should promote an equal start for all children and a smooth transition into secondary education. UNICEF's approach of modelling innovative approaches at the school level and bringing the resulting evidence to the policy table to influence national and budget decisions fits in well with the overall working modality as well. UNICEF's modest financial support for ML has been used mainly for the production of learning materials (activity cards), opportunities for ML teachers to observe ML practices in other schools and meetings and workshops. In the North and East, UNICEF resources have also been used for the contracting of two CSOs to facilitate training, monitoring and the production of materials.

2.2.1 ML Pedagogy fidelity and adaptation

In curriculum theory the terms fidelity and adaptation are used to describe curricula and pedagogy that remain faithful to the model that inspired them and those that diverge and are adapted to new circumstances. The Sri Lankan ML pedagogical approach, as developed by the MOE, diverges in several ways from the RIVER model that inspired it. The approach of the RIVER model is activity and task-oriented and 'joyful'. The pace and sequencing of learning is managed by the children themselves, a concept encapsulated by the expression 'the child is in the driving seat'. The method is best described as individualised learning guided by 'ladders of learning' that sequence learning tasks and respective evaluations. Children proceed through the learning sequences at their own pace and learn in various types of grouping – teacher-based; partly-teacher based; peer group-based; and individual (Műller, Lichtinger and Girg, 2015).

The following differences are based on observation of the Rishi Valley by the Team Leader and of the Sri Lanka model by team members:

- The SL ML model focuses on maths and language, while the RIVER model includes Environmental studies. In Sri Lanka environmental studies is included in the North and East but not the Central and Uva provinces.
- The RIVER model is used in multi-grade as well as mono-graded classrooms. The SL ML model is used only in mono-graded classrooms.
- The SL ML model is based around the lesson format of the school timetable – one-hour periods for Grades 1 and 2; 40 minutes for Grade 3. In the RIVER model, time use is more flexible.
- In the RIVER model some students may be engaged in Introduction activities with support from the teacher, while others may be engaged in Enrichment activities, working alone, at the same time. During observations of the ML approach in Sri Lanka, all students were engaged in Introduction activities at the same time at the beginning of a lesson, with direction from the teacher (though this may have been an artefact of the observation visits).
- In the RIVER model children engage in activities without teacher direction or supervision for much of the time. In the SL model, students are working with direction or supervision for much of the time.
- In the RIVER model, the teacher's voice does not dominate most of the time. In the SL model the teacher's voice is dominant, even when students engage in group activities.
- In the RIVER model, students self-mark their Assessment activity prior to the teacher marking of their work. In the SL model, most marking is undertaken by the teacher.

- In the RIVER model students learn to select, collect and return their activity cards to designated areas. In the SL model, there appear to be two models. In the Eastern province students are adept at selecting and returning Activity cards to shared trays and racks, in line with the Rishi Valley model. In the other provinces, teachers select, distribute and return activity cards and other learning materials to designated areas.

The MOE SL model of Multi-level teaching represents a curriculum adaptation of the RIVER model, rather than a faithful copy of it. It is the MOE ML model that is mainly referred to in the rest of this report. At the same time the four provinces have made further adaptations to the MOE ML model which are described later in this report (see Section 5.2).

2.2.2 Actors involved in ML

There are a number of key institutions and actors involved in the primary education system and the implementation of ML in Sri Lanka, and it is important to understand their roles and responsibilities when considering how well ML implementation is working, and key messages for scaling up the approach nationwide. These actors and their roles are presented in Table 2.

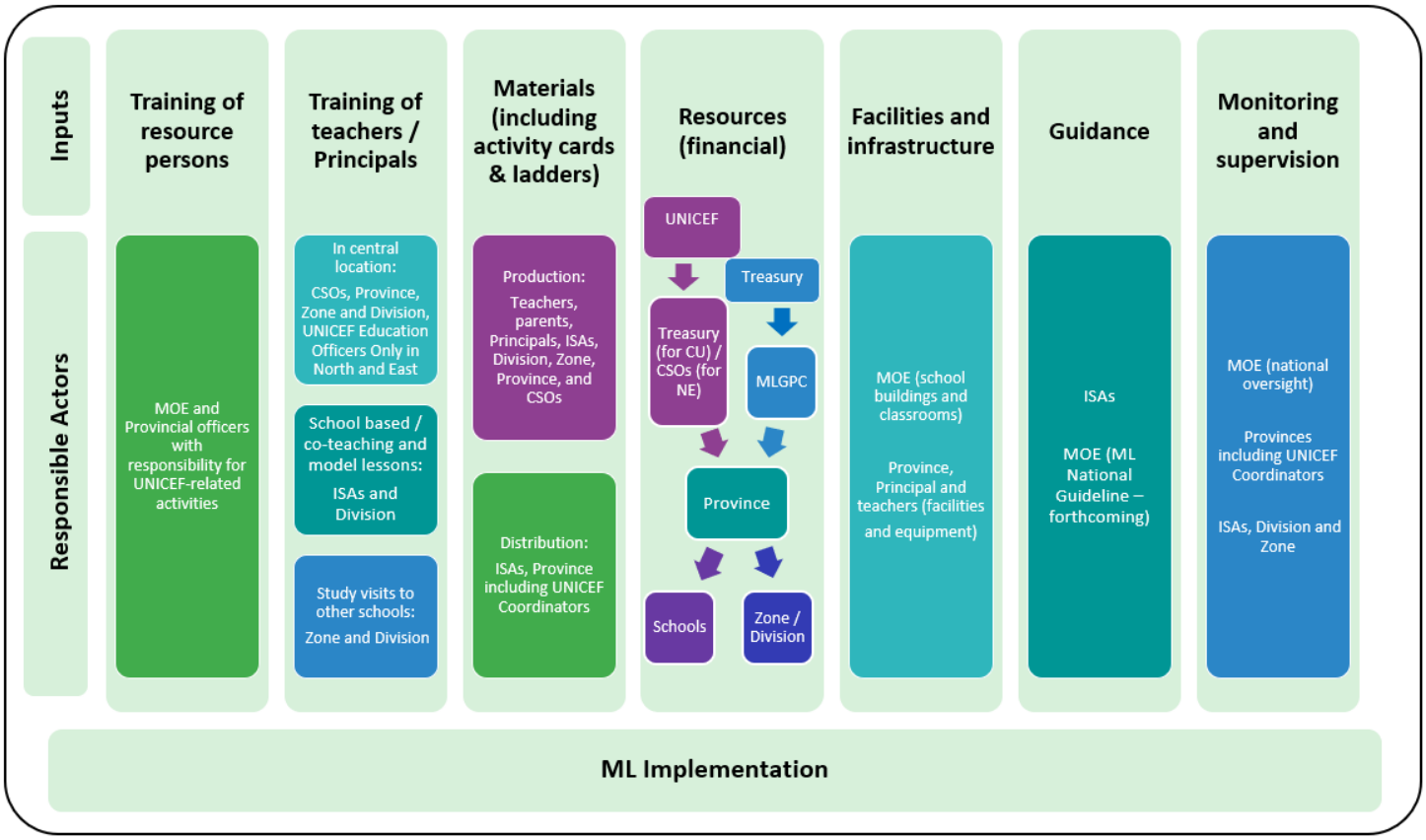
Table 2: Roles and Responsibilities

Actor	Responsibilities as pertaining to primary education / ML
MOE	• Responsible for monitoring the quality of primary education (Primary Education Branch) • Prescribes school calendar and number of hours dedicated to each subject • Writes textbooks (Education Publications Department) in line with learning objectives in TIMs (as set by the NIE) • Development of national ML guidelines (Primary Education Branch) • Trains province-based resource persons (mostly province education officers) in ML (Primary Education Branch), who then train others in the province
NIE	• Develops and revises (every five years) national curriculum content for primary education (Department of Early Childhood and Primary Education) • Runs annual 5-day training courses for teachers on the revised curriculum (grade by grade, on annual rolling basis) (Department of Early Childhood and Primary Education) • Defines essential and desirable learning competencies to be achieved by the end of key stage (Department of Early Childhood and Primary Education) • Produces education materials for teachers (e.g. TIMs) and students (e.g. workbooks) (Department of Early Childhood and Primary Education) • Defines the teacher education curriculum (Department of Institutional Development)
UNICEF Central (Colombo)	• Models innovative approaches, such as ML, at a school level and bring the resulting findings to the policy table to influence decision making and planning • Provides financial resources for ML to provinces (North, East, Central, Uva) • Responds to requests from MOE for ML training, monitoring, guidance and materials • Contracts CSOs (in the North and East) to facilitate training and materials production
UNICEF Field Officers	• Respond to requests from provinces for ML training, monitoring, guidance and materials • Provide focussed support to specific schools in the four provinces • Provide support to provincial, zonal and divisional educational officers involved in ML, including ISAs

Actor	Responsibilities as pertaining to primary education / ML
CSOs (GAFSO and IPDT)	• Provide support directly to schools (in North and East) in the form of ML training and materials
Provincial Education Officials	***Varies by province but includes:*** • Technical support including monitoring of ML process and mentoring/coaching of ISAs • Providing ML-specific training/awareness raising to teachers, ISAs, Principals, and Zonal and Divisional officers • Coordinating with UNICEF on ML support • Designing, developing and providing materials e.g. activity cards, learning ladders, and equipment • Providing funds to schools and Zonal and Divisional offices • Managing ISAs and Zonal and Divisional offices
Provincial Education Coordinators of UNICEF projects	• Organise/deliver training of trainers • Support production and distribution of materials (e.g. activity cards and learning ladders) • Support monitoring activities • Coordinate with Zonal and Divisional officers • Coordinate with UNICEF
Zonal Education Officials	• Provide monitoring support to teachers in schools, giving immediate feedback and support • Provide training/capacity building for Principals and teachers on ML, including on the development and use of materials • Manage teacher transfers • Organise study visits for teachers to other schools in the Zone • Provide learning materials • Coordinate between Province and UNICEF
Divisional Education Officials	• Organise training and monitoring visits to schools • Provide materials • Provide co-teaching and capacity building programmes for schools • Organise study visit for teachers to other schools in the Division
ISAs	• Monitor and supervise ML schools and teachers • Visit schools regularly (monthly) • Co-teach and provide model demonstration lessons • Mentor teachers e.g. on material development and lesson plans • Support SBTD and quality circles in schools • Organise workshops/seminars for teachers, sometimes led by MOE resource persons • Support activity card development and distribution • Coordinate with provincial and national government
School Principals	• Release teachers for training • Monitor or coordinate the monitoring of lessons • Support with material production in some cases • Lead SBTD and quality circles

It is clear from Table 2 that there is some overlap between the roles and responsibilities of different institutions and that there is a lot of support for ML coming through different channels. Any impact of this on the ground is explored in Section 5. An institutional mapping which displays how the actors contribute to ML implementation can be found in Figure 3.

Figure 3: Institutional Mapping of ML Implementation



Key: CU = Central and Uva provinces; NE = Northern and Eastern provinces

Source: Cambridge Education, 2020

3 Evaluation Objectives and Scope

The evaluation objectives were clearly set out in the original Terms of Reference (Appendix 1) and have not changed. The scope was refined during the inception period, following discussions with UNICEF, the government and relevant partners. As a result, the evaluation focus shifted slightly away from UNICEF's involvement in ML and more towards the role of government, as the primary audience of this evaluation. The overall objectives, however, remained the same.

The overall objectives of this evaluation are:

i. To determine the relevance, efficiency, effectiveness and sustainability of the ML methodology as a key enabler in promoting child-centred teaching and learning across the education system in Sri Lanka;
ii. To make recommendations on how to improve the government's relevant policies, plans, strategies and operations of the ML approach;
iii. To explore the potential for scaling it up; and
iv. To provide strategic guidance to UNICEF in sharpening its focus areas of support to the government for mainstreaming the ML approach.

In addition, the evaluation aims to assess the extent to which the ML approach is guided by UNICEF and system-wide objectives on gender equality and human rights, including child rights and equity. UNICEF programming should be gender responsive[1] or gender transformative[2] and a gender lens should be integrated across all aspects of an evaluation. This is therefore a recurring theme throughout this report. Concepts of "rights' holders" and "duty bearers", central to HRBA, will also be reflected on.

The objectives will achieve the purpose of the evaluation as they will provide evidenced-based findings and recommendations to the Sri Lankan government and other key stakeholders, including UNICEF, on how well ML is currently being implemented. The lessons learned from this will help to inform the government as they review the national framework for education and consider if and how the ML approach can be scaled up.

The objectives have not changed from those listed in the TORs, but the research questions were refined during the inception period and the decision was made to include non-ML schools in the fieldwork sample which had a major impact on the sampling and methodological approach. This is discussed in more detail in Section 4.

3.1 The Evaluation Scope

In terms of scope, a formative approach was taken to this work, focussing on four of the main OECD-DAC Evaluation criteria – relevance, efficiency, effectiveness and sustainability – as well as equity, gender inclusion and HRBA. Impact has not been assessed due to the unavailability of baseline or other robust data for comparison. Similarly, learning outcomes in ML and non-ML schools have not been measured. Throughout the research, aspects of ML implementation which

[1] Identifies and addresses the different needs of girls, boys, women and men to promote equal outcomes (UNICEF Guidance on Gender Integration in Evaluation, 2019)

[2] Explicitly seeks to redress gender inequalities and empower the disadvantaged population (UNICEF Guidance on Gender Integration in Evaluation, 2019)

are working well and those which are not working well and need to be improved have been explored.

The evaluation covers two zones in each of the four provinces (Central, Uva, Northern and Eastern) where UNICEF have been supporting the ML approach. Field visits were made to and data was collected from both non-ML and UNICEF-supported ML schools (see Section 4.4). The focus of the ML approach is on the lower primary grades. However, at the time of the evaluation, the school year had only just started so Grade 1 was not observed, and in the East and North Provinces Grade 3 had just been added to the intervention so was excluded in those areas. Therefore, in Uva and Central provinces the evaluation included Grades 2 and 3, while in the East and North, the focus was only on Grade 2.

The timeline of the evaluation was from December 2019 to March 2020 to ensure the evidence was available to feed into on-going national level reforms. As a result, data was collected from the field in a three-week period in February 2020 only. All relevant aspects of the ML approach accessible to us within the timeframe and parameters of the methodology (see Section 4) were reviewed, including: curriculum and syllabus; national ML guidelines; materials and delivery mechanism of the approach; level and modality of implementation in schools and classrooms; planning and monitoring mechanisms; classroom infrastructure; and awareness and capacity building of stakeholders. These are all addressed in the next two Sections on Methodology and Findings, through the lens of the DAC criteria and specific research questions of the evaluation.

4 Evaluation Methodology

4.1 Evaluation criteria

As mentioned earlier, the TOR specified the evaluation criteria to be used will be the DAC criteria of relevance, effectiveness, efficiency and sustainability. Impact will not be assessed due to the lack of baseline data and the formative nature of the evaluation. The evaluation is designed to align with UNICEF's revised Evaluation Policy and the United Nations Evaluation Group (UNEG) Norms and Standards (2016). As a result, equity, gender equality and Human Rights based Approach (HRBA) criteria are also included in the evaluation as non-DAC criteria.

4.2 Analytical framework

The specific objectives of this evaluation are:

1. To assess the **relevance** of the ML approach in terms of the justification for such an intervention and design relevancy.
2. To assess the **effectiveness** of the implementation process of the programme, including the extent to which the ML approach has achieved its objectives with regard to child-centred learning, as well as identifying areas that need further strengthening in the way that the approach is understood and implemented.
3. To assess the **efficiency** of the implementation process and to assess the cost related with the ML teaching and learning approach (schools which apply ML approach) in comparison to the approach followed by non-ML schools (schools which do not apply ML approach).
4. To assess the **sustainability** of the intervention – is it sustainable, does it work with the local curriculum, is the Government ready to adopt it, and how feasible would it be to roll out the ML approach to other schools?
5. To assess the extent to which the ML intervention addressed issues of **equity, gender equality and HRBA** both in the planning of the intervention, the design and in advancing equitable access and learning among different groups.

The research questions listed in the TOR and in Appendix 3 represent the analytical framework under which this evaluation was conducted, based on the objectives listed above, and including:

- The main OECD-DAC Criteria applied;
- The questions from the terms of reference that the evaluation will seek to address;
- Primary and secondary data collection sources.

The evaluation was formative in nature and used a mixed-methods approach to the collection and analysis of both qualitative and quantitative evidence. The evidence collected related to the 30+ specific evaluation questions set out in the TOR, with some minor revisions subsequently in response to external factors and to ensure that there is a clear link between each question and the sources of evidence through the evaluation tools. These revisions to the research questions are presented alongside the final list of questions in Appendix 3.

The full Evaluation Matrix including evaluation questions, data sources, data collection methods and type of analysis is also available in Appendix 6.

4.3 Methods used to collect evidence

Several sources of evidence were employed by the evaluation team. A document review included reviews of evaluations of similar programmes, reviews of relevant evaluation tools, and policy,

curriculum, training and monitoring documents, many of which were translated from Sinhala or Tamil to English. Semi-structured interviews were conducted with individuals and groups, and detailed observations were made of teaching and learning. In addition, questionnaires and group tasks were also used to elicit individual and group responses.

A particular feature of the evaluation process has been its participatory nature. During the inception phase a Stakeholder Roundtable workshop was held (21st January 2020) in Colombo with 31 staff from central agencies and the provinces. During field work, a Consultation Meeting was held (15th February 2020) in Kandy with 54 teachers from four provinces. Towards the end of the data analysis stage, the Stakeholder Roundtable groups reconvened at a Participatory Validation Workshop (2nd March 2020) held in Colombo. Further consultations between UNICEF and the evaluation team were held following the submission of the first draft of the report.

While the majority of interviews were held between an individual member of the evaluation team (sometimes with a translator) and an individual respondent, a number were held between one or more team members and groups (e.g. with parent groups, groups of staff at MOE and NIE). Several informants were met on more than one occasion and with some there were follow-up telephone conversations and email correspondence, generating more evidence and documentary material (see Appendix 5 for more detailed information about the evaluation methods used).

Fieldwork took place over a three-week period in February 2020 (see Fieldwork Schedule in Appendix 5). During the first week, three team members conducted central level interviews and ran the Stakeholder Roundtable workshop. Meanwhile, the translators continued with their translations of key documents. In the second week the team leader, one national consultant and one education specialist developed, trialled and revised evaluation tools/formats in one ML and one non-ML school. They were then joined by five other team members for a 2.5-day training workshop led by the Team Leader on the usage of the tools, including trialling them together in schools and revising accordingly. Further information on tool trial is provided in relevant sections on individual tools in Appendix 5. The training workshop was attended by all evaluation team members, including translators, and covered the following:

- Overall evaluation design
- Tool development
- Provincial data
- Definitions of key education terms
- School and zonal office visit – tool trial
- Fieldwork protocol (see Guidance note in Appendix 5)
- Ethical approach to fieldwork (see Section 4.6)
- Teacher consultation approach and participant selection
- Logistics.

The set of tools used in the fieldwork in the provinces were finalised at the end of this training period. They are presented in Appendix 15.

4.3.1 Summary of Respondents

Table 3 summarises the number of research participants who took part in the fieldwork from each stakeholder group.

Table 3: Summary of Research Participants including Gender Composition

Stakeholder group	Number	Male	Female	Comparison

Stakeholder roundtable participants	31	18	13	M>F
MOE	7	1	6	F>M
NIE	12	2	10	F>M
UNICEF Colombo	6	2	4	F>M
UNICEF field officers	3	2	1	M>F
Provincial officers	9	6	3	M>F
Zonal officers	11	7	4	M>F
Divisional officers	5	2	3	F>M
ISAs	8	Information not available		
CSOs	3	2	1	M>F
Principals	16	12	4	M>F
Teachers (observed/interviewed – ML and non-ML)	29	3	26	F>M
ML teachers from consultation	54	Information not available		
Parents	152	11	141	F>M
Participatory validation workshop	27	16	11	M>F
Cambridge evaluation team	*15*	*6*	*9*	*M>F*

The majority of the participants from Central government (MOE and NIE) were female, whilst the majority of their counterparts met in Provinces and Zones were male. The majority of Principals were also male, whilst teachers and parents met tended to be female. The significance (or not) of these figures is discussed in Section 5.5. The consideration of gender and equity dimensions to the methodology and research tools was in any case of high importance.

4.3.2 Equity and gender inclusion

The evaluation team incorporated issues of gender and inclusion into the data collection tools in the following ways:

- Child friendly teaching practices demonstrated during lesson observations in relation to gender, including whether boys and girls were sitting together; whether teachers encouraged equal participation of girls and boys; and whether girls and boys both responded to teacher questions.
- Teacher interviews – teachers were asked about how they manage any students with special educational needs in their classrooms, as well as how they support the strongest and weakest students, including any who are unable to reach the desired learning competencies by the end of the lesson.
- Parent interviews – parents were asked how teachers support their children with any learning difficulties faced.
- School data – schools were asked how many children with ‘special education needs’ there were in each of the school grades.
- Support system actors were also asked during interviews about how learners facing difficulties are supported.

In addition, the impact of the team's visit on the school, teachers, parents and pupils was considered and taken into account when scheduling the school visit and timetable. The ethical approach to conducting fieldwork was covered in the whole team training session led by the Team Leader prior to fieldwork commencing and this included considering any potential equity and gender concerns of the evaluation team and data collection process itself. The team was aware that all national researchers were male and that this represented a limitation to be conscious of in classrooms and with female respondents. Where possible, interviews were conducted by multiple researchers in locations of the interviewee's choice where they were most comfortable. Further detail on the fieldwork protocol is provided in Section 4.6 below.

4.3.3 Triangulation

The evaluation design employs three types of triangulation – method triangulation, respondent triangulation and document triangulation (Cohen, Manion and Morrison, 2007). A Triangulation by Evaluation question matrix is presented in Appendix 7. This shows, for each evaluation question, the sources of evidence employed to generate evidence to address this question. First, it indicates which methods were used to generate evidence (e.g. semi- structured interview plus observations plus questionnaire). Second, where semi-structured interviews or group tasks have been used, it is indicated whether two or more stakeholder groups answered the same interview question or engaged in the same group task. This is respondent triangulation (RT). Finally, where documentary analysis has been used, document triangulation (DT) is indicated to show where two or more documents have been analysed.

4.4 Sampling Strategy

As the evaluation is not a large-scale survey, simple or stratified random sampling is not useful and purposive sampling has been employed. The sampling approach is also constrained by time and resources, and the need to work across four provinces, in non-ML as well as ML schools and with non-ML as well as ML teachers. This section presents the approach developed for the selection of schools for the field survey and teachers for the Teacher Consultation meeting.

4.4.1 Schools

16 schools were sampled, i.e. four per province. Two teams undertook the work in schools, the first working in Central and Uva (CU), the second in the North and East (NE). With such a small number of schools, a maximum of three selection criteria were used for selection. The first was Province and the second 'ML or non-ML school'. Following an extensive discussion with stakeholders on 21st January, where a number of alternative criteria were discussed (e.g. school type, length of ML implementation, language medium, Grade 5 achievement), it was decided to use the School Difficulty Index. This differentiates schools in terms of the difficulties faced by teachers in their work (e.g. remote location, difficult terrain, disadvantaged communities) into five levels and results in a salary supplement for teachers in difficult and very difficult schools. A guideline was developed accordingly to be used by the provinces, in consultation with the UNICEF education field officers, in the selection of schools. Table 4 below sets out the overview of the sampled schools.

Table 4: School Sample (8 ML and 8 non-ML schools)

North (4)		East (4)		Central (4)		Uva (4)	
ML (2)	Non-ML (2)	ML (2)	Non-ML (2)	ML (2)	Non-ML (2)	ML (2)	Non-ML (2)

V dif (1)	V con (1)	V dif (1)	V con (1)	V dif (1)	V con (1)	V dif (1)	V con (1)	V dif (1)	V con (1)	V dif (1)	V con (1)	V dif (1)	V con (1)	V dif (1)	V con (1)

Key: V dif = very difficult; V con = very congenial

ML has been introduced to grades and by subjects in a non-identical way across the four provinces. Table 5 sets out the numbers of classes observed, by grade and subject. In principle, the plan was to observe Grade 1 classes, but the students in Grade 1 had been enrolled in school for only two weeks and 'the official curriculum had not yet started'. They were therefore excluded from the sample. Most schools only had one teacher for each grade, but in the few schools that had more than one teacher the school made the decision on which teacher should be observed.

Table 5: Lessons Observed

North (10)		East (7)			Central (13)						Uva (16)					
G2		G2			G2			G3			G2			G3		
M	T	M	T	S	M	S	T	M	S	T	M	S	T	M	S	T
6	4	3	2	2	4	3	1	3	1	1	4	3	1	4	3	1

Key: M = maths; T = Tamil; S = Sinhala

4.4.2 Teacher consultation

The teacher consultation meeting involved teachers from the four provinces, from Zones not included for the school visit sample, and including Very Difficult and Very Congenial schools. The sampling guideline and agenda for the consultation is presented in Appendix 4.

4.5 Data Analysis

The evidence and analyses for this evaluation have employed both qualitative and quantitative techniques and as a result, the evaluation tools generated a range of qualitative data and quantifiable data. The interview formats posed a series of standard questions to respondents in similar groups (e.g. teachers, principals, ISAs). In the interests of 'respondent triangulation', one common question was posed as well as a specific set of questions across several stakeholder groups. In all cases the questions generated open-ended responses. The raw data is qualitative. A five-step procedure for their analysis was followed, that is qualitative in its initial stage and quantitative in its final stage.

Step 1 transfer open-ended responses to an excel file, recording the response verbatim.

Step 2 read all responses and identify common themes/responses.

Step 3 categorise these in terms of the categories/themes.

Step 4 where possible, count the numbers of respondents in each category (simple frequencies and percentages).

Step 5 Analyse by teacher and school characteristics where numbers permit.

The observation formats generated closed-ended responses suitable for quantitative analysis. These responses have been coded using SPSS software and total scores, mean values and standard deviations calculated. This quantitative data has then been analysed by teacher and school characteristics.

4.6 Fieldwork Protocol and Ethical Considerations

The fieldwork protocol employed aligns with the evaluation's focus on HRBA in its consideration of all respondents met, including children, as intrinsic rights' holders. As such, permission was sought from all respondents before commencing with any data collection and all schools were informed in advance of the evaluation visit and its purpose. Upon arriving at each school, the evaluation team discussed and confirmed with the Principal the nature and schedule of the visit, and the data required by the time of departure. Permission for lesson observations, interviews and photos was sought during this initial briefing. Similar information was given to each class teacher observed, including making it clear that they were not being judged as a teacher and seeking their permission for the observation in addition to that of the Principal. Evaluation teams observed the whole lesson and did not distract the class or interact with individual children. The observations were of activities of children in general rather than of specific children and no child was interviewed either individually or in a group.

The methodological design has been and continues to be guided by Cambridge Education's rigorous internal ethical standards, as well as by the UNEG Code of Conduct (UNEG, 2008) and Ethical Guidelines for Evaluations (UNEG, 2008). As such, it was ensured that sensitive information collected during the fieldwork cannot be traced to its source so that the relevant individuals are protected from reprisals and the team applied UNICEF ethical norms and procedures throughout. A small number of photographs/video clips were taken of classroom layout, equipment and general student activities (e.g. a whole class engaged in small group work). Permission for these photographs was sought from the school principal and teacher in advance. Photographs and videos have been be used as an aid for analysis and for illustrative dissemination purposes. Before conducting any interviews or focus group discussions, participants were made aware of the extent to which the information they provide is confidential and were given the opportunity to withdraw at any point. No names of any participants are reported and, where an individual could be identified by their professional position, generic titles (e.g. provincial stakeholder) are used to limit the potential of identification.

In terms of the evaluation teams, Cambridge Education (CE) require all its staff, suppliers and implementing partners to comply with the highest standards of ethical behaviour in all respects and at all times, as reflected in CE's mandatory ethics policy and training. All team members have satisfied CE's due diligence process and signed CE's Ethics Policy Statement; Health, Safety and Security Policy Statement; and Safeguarding policy prior to commencing any fieldwork. CE has zero tolerance around issues of fraud, bribery, corruption, child safeguarding and harassment; and where necessary will cooperate with the appropriate authorities to investigate any alleged transgressions. In addition, any potential conflicts of interest are taken into account when engaging staff, suppliers and implementing partners on any assignment and issues of payment and compensation are clearly laid out in all contracts and managed by CE's Commercial experts.

This final evaluation report conforms with UNEG Quality Checklist for Evaluation Reports (UNEG, 2010) and the UNICEF-Adapted UNEG Evaluation Reports Standards (UNICEF, 2017).

4.7 Limitations

4.7.1 Methodological Limitations

Nature of the evaluation

Due to the lack of baseline data, and the formative nature of the evaluation, impact, including on learning outcomes, was not assessed. This was how the evaluation was originally set out in the TORs, but still represents a limitation in the methodology and resulting conclusions, as no measure of the impact of the ML programme on students' learning could be provided. Further,

this lack of data on learning outcomes precluded any potential analysis of (disaggregated) impacts on gender specifically. For example, it was not possible to analyse whether ML had improved learning outcomes more for girls or boys i.e. to measure whether it was achieving a redress of the known underperformance of boys.

Mitigation measure: Not applicable.

Timeframe

The timeframe for the evaluation was determined by the MOE and UNICEF country office, taking into account the timing of the dissemination and use of the findings for feeding into government decisions around mainstreaming the approach. Overall, the timing was very tight and although all the tasks were completed on time, this meant the team had a very heavy workload with extensive multi-tasking, for example, on data collation, analysis, writing up of findings, recommendations etc rather than addressing these sequentially. This limited the time available for reflection by the team as they prepared the first draft of the final report.

Mitigation measure: The team's work was tightly coordinated and communication both within the team and between the team and UNICEF was regular and effective, with quick response times from UNICEF contributing to deadlines being met.

Sample size

The TOR requested that the evaluation cover schools that were not practicing ML as well as those that were. This constrained the number of ML schools which could be included, resulting in coverage of eight ML schools and eight non-ML. The small size of the school sample was mentioned at several points during the inception phase, though was inevitable given the short length of time (two weeks) allocated for work in schools.

Mitigation measure: In order to mitigate the impact of this limitation, a one-day teacher consultation was organised to which 60 teachers were invited from the four provinces (54 attended). This provided an opportunity to extend the sample size of teachers met to 83. Planning for this was undertaken on the public holiday jointly by the team, the respective provinces and the UNICEF Education Field Officers, and its execution had to be on a Saturday (the final day of the allocated time for fieldwork).

Observation bias

Observation bias during classroom observations is another intrinsic challenge of this kind of evaluation. Different researchers with their own conscious and unconscious biases observed lessons in different provinces. Within each province, the two lead researchers also frequently had to split up to observe lessons individually in order to fit in all the observations (language and maths, for G2 and 3 in Central and Uva) within one school day.

Mitigation measure: The training provided to researchers before commencing fieldwork, including in classrooms themselves, helped to mitigate any negative impact of this, as well as the ongoing communication and clarification between observers throughout the fieldwork, under the guidance of the Team Leader. The two teams set up a WhatsApp group to facilitate communication and had regular (usually daily) calls to discuss issues encountered and agree on a joint approach to deal with them.

4.7.2 Data Limitations

Availability of interview respondents

Inevitably, some of the respondents sought for interview were unavailable due to unforeseen and unavoidable circumstances. For example, one Principal was travelling for a month in India, and

some Provincial Directors were occupied with official business for the entirety of the team's visit in the respective Province.

Mitigation measure: Alternates were interviewed where possible, for example the Acting Principal or Assistant Director.

Financial data

Due to political sensitivities, data gaps, the limited timeframe for data collection and the sheer amount of information required to address all the research questions in the ToRs, some data could not be obtained, particularly in relation to finances. This happened at the level of the school, Provincial government and UNICEF. It was not always clear if the data didn't exist or if the respondent didn't want or wasn't able to share it.

Mitigation measure: Several different communication methods were used to try to access all the information sought, including phone, email and in person. Different individuals with different authority levels within a given institution were also contacted. UNICEF Education Officers provided invaluable support in accessing Provincial level financial data.

Gender and inclusion

ML was always designed to be inclusive of both low and high achievers, but not specifically to address issues of gender exclusion. This meant that the extent to which data could be collected, and ultimately the extent to which the research questions could be responded to in this area, was limited.

Mitigation measure: Dimensions of gender and inclusion were included in the research tools but otherwise the ability to generate evidence on gender and inclusion from the respondents was limited.

5 Findings

This section sets out the findings of the evaluation and is structured according to the research criteria set out in the TOR.

5.1 Relevance

The OECD-DAC (2019) criterion of Relevance refers to the extent to which the intervention objectives and design respond to beneficiaries', global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. In this section first the needs, policies and priorities that gave rise to ML are addressed, then more specific questions included in the TOR to address (i) the relevance of the teaching approach for delivering the primary curricula (ii) the relevance of the training of teachers in preparing them to adopt this approach in the classroom, and (iii) the relevance of the teaching-learning materials used.

The imperatives for and influences on ML

From the MOE perspective, the need for the ML approach arose from several influences, all focussed on learning outcomes. From the late 2000s, research studies conducted by Sri Lanka's National Education and Research Centre (NEREC) were showing lower than expected performance on Grade 4 learning assessments and wide differences across provinces, school type, medium of instruction, school location and student gender (NEREC, 2009, 2014, 2016). Through its monitoring role the MOE was becoming concerned about shortfalls on the performance of students in relation to the National Institute of Education's (NIE) Essential and Desirable Learning Competencies (ELCs and DLCs) at the end of Key stage 1 (i.e. grade 1), Key stage 2 (i.e. grade 2 and 3) and Key stage 3 (i.e. grade 4 and 5). There was also growing concern that the rhetoric of student-centred and child-centred approaches, which was playing an increasing role in the national discourse about teaching and learning, paid insufficient attention to the processes, practices and outcomes of learning.

Another influence was the 'child-friendly schools' framework and associated interventions in schools on which the MOE, together with support from UNICEF, had been working in Sri Lanka over a number of years. The 'child-friendly' framework derives from the 1989 Convention on the Rights of the Child (United Nations, 1989). It promotes rights-based, child friendly education systems and schools characterised as 'inclusive, healthy and protective for all children, effective for learning and involving children, families and communities' (UNICEF, 2012). Of the six child-friendly school dimensions embedded in the framework, it was the one focused on the teaching and learning process and the promotion of 'quality learning outcomes' that, in the Sri Lankan context, was proving to be the most challenging. Evaluations of the child friendly approach conducted by DFAT and UNICEF identified this dimension as requiring sharper conceptualisation and greater consensus over agreed meanings, observations and measurements (Little, Perera, Sivagnanam, and Jennings, J. 2012, Clarke, Wijesundara and Sethunga, 2016).

The MOE draft ML guidelines explain how ML is seen as a way of enhancing child-friendly learning environments:

> Many particulars have been presented about creating an active and enjoyable learning environment which encourages the development of a child's potential to its maximum and ensures a quality primary education by introducing a Child Friendly Approach (CFA) with 6 dimensions to provide quality education for all the children by inclusion of all the children and giving them opportunity to express their views. The Multi-Level Teaching Learning

> Methodology can be considered as a way of creating such a learning environment. (MOE ML guidance manual draft, 2020, English translation, p 5).

The ML approach therefore is considered a relevant response to the identified need.

5.1.1 Relevance of the ML teaching approach for delivering primary curricula

Relevance of ML for Sri Lankan context

Among various stakeholder groups there was an overwhelming perception that the majority considered the ML teaching approach to be relevant for the delivery of primary education. Its relevance has been ensured, in part, because it has been aligned with the learning objectives, content and competencies guidance as set out by the NIE. It does not threaten the overall goals of primary education or suggest radical revisions of what is taught; it is not an alternative curriculum. It is, rather, a different way of delivering it. As a group of officers from the NIE and the MOE said at the Stakeholder Roundtable:

> It is relevant. The ML approach follows the national curriculum, including its learning outcomes, activities, assessment methods, and use of textbooks and workbooks.

This view was corroborated by Provincial Directors, Zonal and divisional officers and UNICEF staff (see Appendix 11). ML aligns with national learning objectives and learning outcomes are clearly specified. ML was considered to have the potential to help all students achieve the Essential Learning Competencies set out by the NIE and reduce the learning gaps between students. This is a significant finding in relation to inclusion and HRBA, further demonstrating ML's alignment to these principles and the concept of students as rights' holders. In addition, because the learning outcomes set out in the TIMS for teachers are simplified, teachers are able to design many different yet still relevant activities for their achievement. Further excerpts from these stakeholders can be found in Appendix 11.

ISAs and school principals are much closer to the practice of ML in the classroom. All ISAs interviewed and almost all principals of schools where ML was practiced considered ML to be relevant, as exemplified by these comments:

> It is a comprehensive approach for teaching and learning of students in multi-levels in the same classroom. It mostly benefits slow learners. It increases children's creativity and self-confidence.

> There was a very lethargic situation reflected from children and some teachers in (the mainstream) primary but with this ML approach, there is a clear enthusiasm and passion to teaching and learning.

Teachers, at the front line of ML delivery, considered it to be relevant because it caters for different levels of learning, while promoting support for the weakest students. It helps teachers to identify the learning levels of students, to build lessons from simple activities to more complex activities and to manage lessons. They also referenced how ML promotes student enjoyment, prevents students being left behind and increases attendance. Further views from teachers can be found in Appendix 11.

The child-centred policy discourse

As noted already in Section 2 of this report, the current student-centred curriculum has its origins in the 1972-77 and 1997 Education Reform. A continuing commitment to 'Child-centred' education was affirmed in the 2010 national development plan *Mahinda Chintana*: *vision for the future* and in the Ministry of Education's National Strategic Plan for Education 2012-2017. The most recent

articulation appears in President Gotabaya Rajapaksa's *Vistas of Prosperity and Splendour* (pp 20-21, 2019):

> It is our objective to establish a truly student-centered education system. We will take suitable action to eliminate physical and mental punishments and ensure that there would be no abuse of children in the education system.

The Director of NIE and members of the NIE Department of Early Childhood and Primary Education confirmed that it is the details of the Action plans linked with the 1997 Policy that have guided the development of the primary education curriculum and its revisions over the past twenty years (Interviews at NIE).

The MOE Primary Education Branch has promoted the Child-Friendly Approach in its monitoring of school quality and, through close collaboration with the MOE Quality Assurance Branch, has succeeded in having most of the child friendly dimensions incorporated into the Quality Assurance system for primary education. For its part, the NIE has institutionalised aspects of the Child Friendly Approach into the work of its departments. Appendix 8 summarises the CFA approach, its dimensions, criteria and key activities as performed by the NIE in support of them.

The TIMS provided by the NIE provide the main source of guidance for teachers in terms of what and how they should teach. They underline the importance of the student-centred approach to teaching. For example, in the foreword to the Grade 3 TIM, the Director of the NIE writes:

> Through these teacher guides, teachers get the freedom to choose by themselves the quality inputs and activities to develop the competencies of the students……The basic objective of this new rational syllabus, new teacher guides and new text books is being able to free the students from the teacher centred education and to improve the number of students who can provide the human resources having competencies and skills required for the global employment markets through an education system that could implement a student centred education enriched by activities. (NIE 2018: iii-iv, translated by Muthu Sivagnanam)

Teachers are guided and trained to make attractive child friendly learning resources (Activities) for children to use individually and in pairs or groups. Appendix 9 provides more detail on the nature of student-centred guidance given to teachers via the TIMs.

With its focus on the diversity of learning levels found among students and the commitment to the learning progress of all students, the ML approach is consistent with the over-riding Sri Lankan discourse on the value of child-centred teaching. ML arose out of, the discourse on child-friendly schools, promoted in part by UNICEF, and based on child rights and child-centred education (United Nations, 1989).

Acceptance of ML

ML's 'consistency with' and 'relevance for' the delivery of the primary curricula does not ensure its introduction into the mainstream system country-wide. The concept of ML has not yet been institutionalised in practice in the same way as child-friendly education. ML is not included in teacher education curricula, it is not included in the NIE TIMS, and it is not incorporated into the MOE or province-level monitoring systems. This does not mean that ML is irrelevant to the primary school curriculum. While it is seen as highly relevant by those who practice it on the ground, it has not yet been incorporated into the guidance to teachers provided by the NIE. This may be emblematic of a lack of acceptance or awareness of ML at the level of the NIE which needs to be addressed.

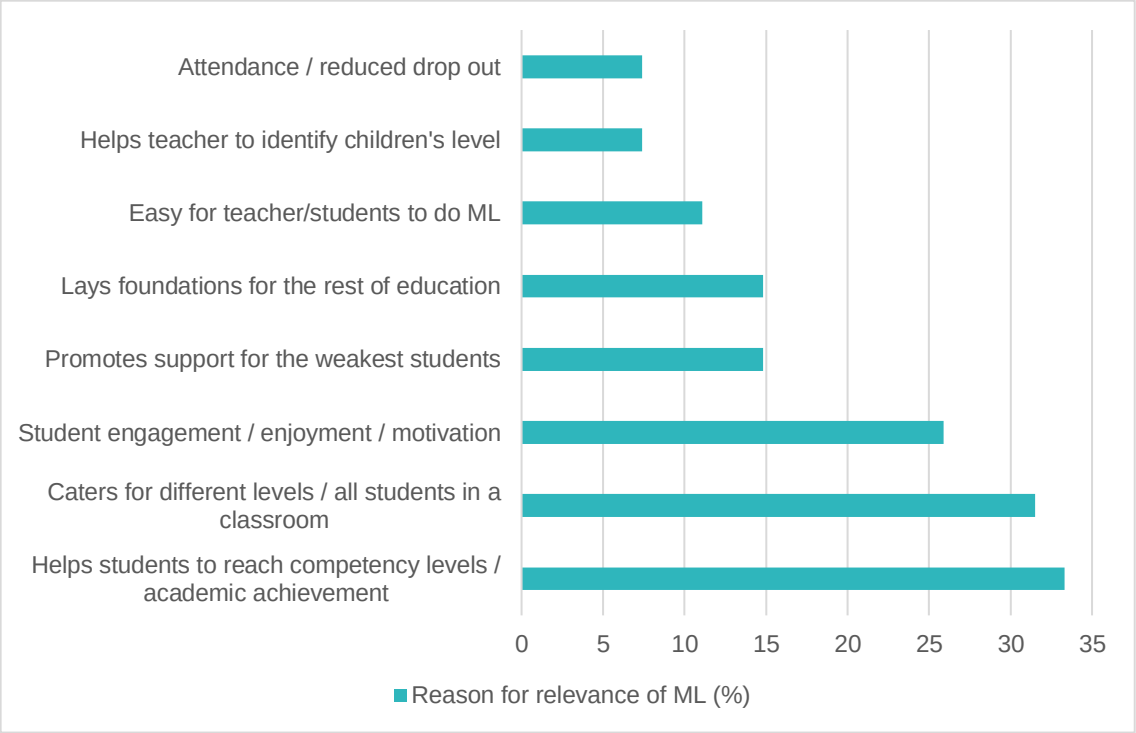
The acceptance and general understanding of the ML approach by the officers who make up the 'ML support system' in the Provinces (i.e. from Provinces, Zones, Divisions and ISAs) is much stronger, as is, perhaps unsurprisingly, that of teachers and UNICEF field officers. All their responses to the question 'What does the ML approach mean to you?' can be found in Appendix 11, and express a clearer and deeper understanding of ML the closer to the classroom or the approach the stakeholder gets. For example, UNICEF field officers are not necessarily close to the classroom, but they do understand ML well and have had high exposure to the approach.

The early grades

ML is currently practised in Grades 1-2 in the North and East and in Grades 1-3 in the Uva and Central provinces. School principals and education officers were asked whether they considered ML to be relevant for the early grades of primary education. The overwhelming answer was 'yes', from 7/8 of the principals in the ML schools, and 17/19 of the officers in the support system. One or two went further and suggested that it be applied across all five grades of primary school, and on into the lower secondary stage, Grades 6, 7 and 8.

Teachers explained how ML helps students to reach the required competency levels, caters to all students in the classroom, promotes student engagement and motivation, and lays the foundation for the rest of education. Among the 54 teachers who completed the ML questionnaire during the teacher consultation, the relevance of ML for Grades 1-3 was judged to lie in the reasons given in Figure 4.

Figure 4: Teacher perceptions of the relevance of ML for Grades 1-3 (N = 54)



5.1.2 Relevance of the training of teachers in preparing them to adopt the ML approach in the classroom

Relevance of training

In the ML schools visited, 12 of the 15 teachers interviewed had received some form of training; three had received none. Among the 54 ML teachers who attended the Teacher Consultation, 13

had received no training. Conversely a surprising number of teachers in the non-ML schools had received some ML training (7/14). Several reasons for this apparent anomaly were identified. The first is that teachers are transferred from school to school quite frequently. A teacher who was posted previously to what was deemed to be an ML school may have subsequently transferred to a non-ML school. Second, Zones and Provinces may have decided to invite all teachers, irrespective of school history, for training in ML techniques, on the grounds of its relevance for all teachers. This was the case in the Central Province. Third, new, untrained recruits may have received no training in any of the techniques of primary education, including ML, and have been allocated to an ML school to teach Grades 1, 2 or 3. Fourth, a teacher in an ML school, now teaching Grades 1-3, may previously have taught Grade 4 and 5 and not been called for the ML training for teachers in Grades 1, 2 or 3. Conversely a teacher in an ML school who has received training may have been allocated to teach Grade 4 or 5, where ML is not officially practised. The relevance/usefulness of specific teacher training will be dependent on the teacher being in an environment where she/he can use those skills.

Nine of the teachers who had received ML training in the ML schools visited commented on its relevance/usefulness. Eight of the nine reported finding it relevant/useful:

> It was useful as we can learn from other teachers (e.g. song, poems). Good for planning lessons as it was participatory and practical. Also included demonstrations.
>
> I learned a lot of techniques, tricks and methods to keep children engaged in the classroom from the ML trainings.

Training modalities

Sri Lanka has a complex system of pre- and in-service training (Sethunga, Wijesundara, Kalamy and Karunanayake, 2014). In-service training for ML is undertaken within the provinces. The training of teachers in the ML approach follows a cascade model of in-service, very short-term training workshops conducted by resources persons in the provinces. It is not certificated. Over the years since 2011, MOE officers have trained more than 1,000 ML resource persons (see Appendix 11). These resource persons then run the training courses within the Provinces. In Central and Uva provinces the training for UNICEF-supported schools is organised by province staff who contract a province-based resource person to deliver the training, many of whom are education officers and ISAs and some expert ML teachers trained already by the MOE. In the case of the UNICEF-assisted schools in the North and the East, training is organised by the CSOs, IPDT and GASFO, respectively. The CSOs manage the training but contract the actual trainers, who are again usually education officers and ISAs from within the province.

The length of ML training received by teachers interviewed varied. The majority had attended one 3- or 5-day training in a central location organised by the Zone or the Province. One had received 11 days across 2017-19 and one 8 days across 2018-2019. Among the 54 teachers met at the Teacher Consultation, six had received 1-2 days of training, 17 between 3-6 days and six between 9-14 days.

Cascade models have many advantages, not least involving support system staff in training and the development of their own capacity to support ML teachers. One disadvantage is that training "messages" can become watered down in a multi-levelled cascade. There is a case to be made for supplementing the current cascade model with more direct means of communicating with teachers through digitised materials and with more school-based training options. Practical demonstrations and practice are easier in school settings and recognised by many as an important aspect of teacher training in general and ML specifically. Three of the nine ML teachers interviewed who had received ML training mentioned practical demonstrations or real practice and several principles and support system actors also.

To date, ML training has not been provided within the primary education teacher education curricula of the nationally managed Colleges of Education, Teacher Training Colleges, NIE or Universities. However, a unit on ML teaching has been included in the crash-course 300-hour training of graduate recruits for primary education who have received no training in primary

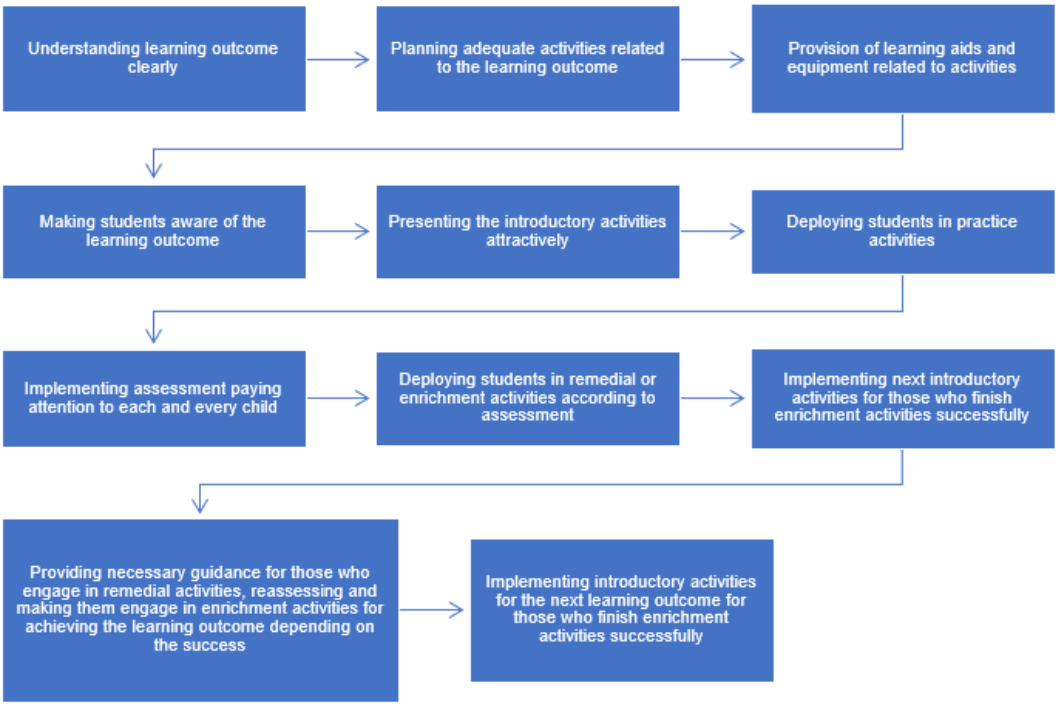
education prior to their appointments. Historically, this arose because of a growing concern that government was appointing large numbers of, especially, arts graduates to teach in schools with no prior training in the methods of primary education. The course was designed some years ago through a close collaboration between the (now retired) Director of the MOE Primary Education Branch and the Director of the NIE Department of Early and Primary Education.

ML training in practice

During this evaluation, there was no opportunity to observe ML training in practice but some observations on the training curriculum are offered below. Two main sources of training material are available – the draft ML guidance manual developed by the MOE (not distributed yet) and provincial level training manuals. The MOE manual is available in draft form in Sinhala and was translated to English for the purpose of this evaluation. The contents of the guidance manual *Multi-Level Teaching-Learning Methodology* (2020) can be found in Appendix 11.

The manual is clearly written and well structured. It presents the rationale for Multi-level teaching, the importance of aligning it with the National Curriculum and the importance of studying the competencies and learning outcomes embedded in the curriculum. It describes the different stages of an ideal lesson structure as well as lesson planning and implementation. It makes a number of claims about the beneficial outcomes of the methodology. And, at a very practical level, it offers a number of lesson plans in Sinhala and Maths. Figure 5 shows the stages of planning and implementing a lesson set out in the guidance manual.

Figure 5: Planning and implementation of a lesson according to ML teaching methodology[3]



[3] Source: Multi-level (Teaching) Learning Methodology Guidance Manual (*draft*), Ministry of Education, Primary Education branch, 2020. Translated from Sinhala to English by Subhashinie Wijesundera, 12.1.2020.

An example of a suggested lesson plan for Grade 1 Maths from this guidance manual is presented also in Appendix 10 of this report. Overall, the content of the manual has enormous potential value, but it requires further revision before finalisation and mass distribution. A number of suggestions for revision are offered in Appendix 11. These include, inter alia, a clearer statement of the objectives, principles and methods of ML, a clearer description of 'dynamic grouping', a discussion of the value of different types of groups, from a teacher and student perspective, recommended practice on the use of 'learning ladders', minimum training and resource standards for ML.

The provinces too have developed training manuals. The Eastern Province has produced a manual in Tamil for its Province-led training programmes under what it has renamed the "All Children to Complete every Competence Level" (ACCCL) programme. It is complementary to the MOE manual but introduces additional content. For example, the trainers are expected to introduce a discussion of personal and group ladders, the ladders in relation to milestones, how to sensitise parents to the method and how to introduce students to the card system, in particular the symbols used to distinguish cards by subject and by type of learning activity (Introductory, Practice etc.). The Eastern province manual reflects its own curriculum adaptation of the ML method. With its emphasis on the use of cards for every stage of the lesson and the involvement of students in the selection, use and return of these cards to trays and racks, it reflects an adaptation of the ML model that is closer to the original RIVER model than that adopted, adapted and advocated by the MOE in Sri Lanka. The Northern province has developed a similar training manual to that of the East, with some additional useful content e.g. the duties of the School Principal in relation to ACCCL (ML). This is an example of principals being framed as duty bearers in the context of ML, whilst the agency of students encouraged to select their own activity cards speaks to the rights holder terminology of HRBA.

Without the opportunity to observe training sessions it is difficult to judge the relevance of the methods adopted. However, the manuals from the Eastern and Northern provinces indicate that some of the methods to be used in training reflect the ML methodology itself – a large number of practical activities with many of them to be undertaken in groups and using a range of learning materials. This is laudable. Teacher trainee 'students', whether they be raw recruits or experienced teachers, learn new methods for teaching students best when learning about those methods in the same way that they are to be applied.

Teacher reflections on ML training

Teachers in the ML schools and those met at the Teacher Consultation offered many comments on the usefulness of the training received. Positives of the training from teachers' perspectives were with the skills it helped them to develop – using activity cards, implementing the different stages of an ML lesson, teaching for different levels in the same classroom and preparing teaching aids. Some excerpts from their responses are as follows:

> Good for planning lessons as it was participatory and practical. Also included demonstrations.
>
> Before 2017 I got ideas from my colleagues…after the training it is easier for me to handle this approach.
>
> After the training the implementation of an ML lesson became quite similar to that of a normal lesson.

Among the teachers met at the Teacher Consultation, just two were dissatisfied with their training on the grounds that 'it was insufficient'. This may be partly due to the length of time their training lasted – 1-2 days, which can do little more than create awareness. The development of implementable skills and the preparation of learning activities (with support) requires longer and

more sustained training episodes. Short one-off trainings could thus be considered a negative of the ML training, when they are delivered as such.

The comment above about the demonstration lesson deserves to be highlighted. It is reminiscent of another teacher met during fieldwork whose plea was for an opportunity to see a model ML lesson, so that she would gain a more thorough understanding. Demonstrations of lessons by practised teachers provide invaluable and effective training. To an extent this has been recognised already through two means. The first has been a series of visits by teachers in one province to schools in another province. These have been much appreciated. A second means is the use of film/DVD. We understand that a film has been made in the past in the Eastern Province, with support from UNICEF. We have not seen the film and are not in a position to judge its quality. However, in general, filmed transactions in classrooms material can be used for general awareness programmes, and, if used judiciously, for focussed training of specific skills. It is also clear that support system actors would benefit from demonstrations of parts of, if not whole, lessons, in order to appreciate the commonalities and differences across the ML classes in the provinces. At the Participatory Validation Workshop, it became clear that among 33 persons present (including Evaluation team members), only five had observed at least one ML class in each of the four provinces.

5.1.3 Relevance of the teaching learning materials used

Range of materials used

Many types of material are used by teachers and students in the implementation of the ML approach. Teachers met in the schools and through the Teacher Consultation identified a wide range of materials used in the classroom. The majority of ML teachers reported using activity cards (some laminated, some not), worksheets and learning ladders. Other materials included numeric and alphabet cards, addition/subtraction tables, measures, dolls, dominoes, number map, songs, poems and real objects (including from the environment). One mentioned a computer. The proportion of hand-made and disposable materials made by the teachers and those designed by teachers but produced in large numbers for use by all teachers varied from class to class and school to school.

Among the teachers who attended the Teacher Consultation meeting (N = 54), the vast majority indicated that they used the activity cards (98%), ladders (89%), worksheets (91%) and other additional materials (80%) in their teaching. There are no notable differences between provinces on material use or relevance, although ladders are used differently in Central and Uva compared to in the North and East, as discussed in Section 5.2. ML teachers in Central and Uva still use activity cards though they don't receive mass-produced cards as in the North and East. Rather, these may be made by the teachers or schools or provided with support from the Province (e.g. in Uva). See Appendix 12 for further information on the differences in ML implementation between provinces.

Relevance of ML materials

A majority (over 75%) of the teachers interviewed who had received activity cards, ladders or worksheets, found them relevant for ML (Appendix 11). In addition, 11 of the 15 ML teachers mentioned making their own resources. Only six of the 11 responded to the question about how relevant these materials were, of whom 100% found them relevant. One teacher described homemade materials as 'essential'.

Teachers from the teacher consultation gave further information as to why activity cards and learning ladders are relevant. They mentioned that the activity cards helped children reach the competency levels, catered for different levels of student, were easy to use, reduced the workload

of the teacher and were a good practical activity. On the learning ladders, teachers said that it helped them to identify the level of their students, encouraged/motivated the students, helped them to achieve competency levels and increased student's ownership/understanding of their own learning. These findings are presented in Table 6.

Table 6: Relevance of learning materials according to teacher consultation attendees

No of teachers who cite the following as relevance of activity cards	Count	% (N = 46[4])	No of teachers who cite the following as relevance of learning ladders	Count	% (N = 47[5])
Children like them - engaging / interesting	13	28.3	Helps to identify level of students / evaluate their progress	15	31.9
Helps students learn / reach competency levels	13	28.3	Encourages / motivates students	15	31.9
Caters for different levels of students	4	8.7	Helps students learn / reach competency levels	11	23.4
Easy to use / reduces workload for teachers	3	6.5	Increases student's ownership / understanding of their own learning	8	17
Good as a practical activity	3	6.5	Useful for dynamic grouping	3	6.4

Relevance: Main findings

1. The ML concept and practice is relevant to and consistent with the dominant policy discourse of child-centred education that has pervaded the education discourse since the 1970s and re-affirmed recently in President Gotabaya Rakapakse's *Vistas of Prosperity and Splendour*.

2. The ML approach is aligned with the NIE curriculum content, learning competencies and expected learning outcomes, and therefore has enormous potential value in contributing to the pedagogy of current and revised national curricula.

3. The majority of stakeholders at National and Provincial level with experience of ML perceived the ML concept and method as both relevant and useful for the delivery of the Primary education curriculum, especially in the early grades where it is currently being practised.

4. The training of teachers in the ML method follows a cascade model of in-service, short term workshops of varying lengths. There does not appear to be a systematically organised training programme that ensures that teachers receive training at different levels of complexity in a timely and regular manner. At the same time, teachers who had received training reported that it had been relevant and useful, especially when the training included demonstrations of the ML method.

5. The MOE's draft ML guidance manual provides very useful and relevant material for teachers and for those who are training teachers. It would benefit from some final revisions prior to distribution to increase its utility and depth.

[4] 8 participants didn't respond to this question.

[5] 7 participants didn't respond to this question.

6. Teachers indicated that both the Activity cards and learning ladders were relevant for the ML approach.

5.2 Effectiveness

The OECD-DAC (2019) criterion of Effectiveness addresses the question, 'is the intervention achieving its objectives?' Here, the question 'To what extent has the ML approach achieved its objectives'? is addressed.

To what extent and how has the ML approach achieved its objectives?

The DAC criteria explains that that the evaluation of effectiveness 'should analyse progress towards objectives along the results chain / causal pathway'. This stands in contrast to impact, which looks at higher-order effects and broader changes to which an intervention may be contributing. Effectiveness is concerned with more closely attributable results.

The challenge in applying this to ML is in understanding what the expected results of this intervention are. As noted already neither the MOE nor UNICEF has developed a theory of change or results chain/causal pathway, setting out clear objectives. ML is not a 'project' in the conventional sense, with clearly articulated goals and verifiable indicators. It was never conceived in this way by the MOE. Nor did UNICEF conceive their support in this way in 2016 when they joined MOE in the programme. However, there are two sources of data which provide evidence on the objectives and benefits of ML: (i) the draft MOE ML Guidance manual, and (ii) the TOR for this evaluation. These are compared below in Table 7.

Table 7: ML objectives, inferred from the MOE ML Guidance Manual and the TOR for this evaluation

	MOE ML Guidance Manual (draft)	TOR for this Evaluation
Objectives which appear in both documents	• Students become proficient in Essential Learning Competencies • Participation of all students in the learning process • Promoting enjoyable learning opportunities	• All children achieve the Essential Learning Competencies • Children are continuously engaged in meaningful learning-oriented activities • Learning is joyful/fun
Objectives which appear in one or other of the documents	• Majority of students become proficient in Desired Learning Competencies • Gaining frequent active learning opportunities • Originating students with intrinsic motivation and overcoming challenges • Development of student personality and social skills • Minimizing of student dropouts • Improving students' school attendance • Providing opportunity for intra subject and inter subject integration due to motivation of the teacher to study the themes and lessons in the syllabus • Facilitate all the stages in the teaching learning process including planning, assessing and reflection	• Opportunities to learn through different modes (i.e. outdoor activities, role plays, songs, stories etc) • Provision for self-paced and individualised learning • Variety of teaching-learning materials use in and out of the classroom • Physical environment in the classroom is conducive for engaged, joyful learning • Continuous assessment is integrated with the learning process • Children develop soft skills i.e. communication, collaboration, leadership • Scope for higher order thinking and critical questioning • Attention to holistic, all round development

	• Development of teacher skills in preparing teaching aids and activities related to learning outcomes • Easy to assess essential learning competencies and Desired learning competencies accurately • Easy classroom management • Encourages positive responses to learner differences by the teacher • Minimizes homework which causes stress on students • Providing opportunity for experimental teaching • Improving parental trust	• Contextualisation to children's everyday world and community

Table 7 indicates that the presentation of the ML objectives vary markedly. It is also clear that the 'objectives' are of qualitatively different types and are not prioritised. Some objectives refer to cognitive learning outcomes, such as the achievement of the NIE's Essential and Desirable Learning Competencies, whilst some refer to non-cognitive outcomes such as student personality and social skills, holistic all-round development, communication, collaboration and leadership. Some refer to student participation indicators such as minimising dropouts and improving school attendance. Still others refer to the process of teaching and learning e.g. promoting enjoyable learning opportunities or inputs and development of teacher skills.

The objectives of ML, as presented in the TOR, were provided by the MOE and developed jointly between the MOE and UNICEF. They are at variance with the information contained in the Draft ML Guidance Manual. This suggests the need for their review, prioritisation and rationalisation.

As already discussed, the perceived relevance of ML to the evaluation respondents in their work as educators was evident with positive claims made about the effectiveness of ML in relation to the Essential and Desirable learning outcomes, attendance[6], reduction of dropout, student personality and social skills. At the Stakeholder Roundtable and during fieldwork respondents were invited to provide evidence for some of these claims at class, school, division, zone or Province levels. And, while evidence might well exist, none was presented to the evaluation teams. Nevertheless, the implementation of ML to date has been very effective in creating a positive narrative around which educators enthuse. This narrative is one which provides support for the assertion that ML objectives are, to an extent at least, being met.

Factors affecting the achievement of ML objectives

The TOR invited us to address the question 'What were the major factors influencing the achievement or non-achievement of the ML objectives?'. In the absence of a clear set of measurable objectives, it is difficult to analyse in a systematic way the factors that might have influenced the achievement or non-achievement of objectives. However, on the basis of the fieldwork undertaken in classrooms, it is the evaluation team's judgement that the following are important:

[6] Average school attendance data for the academic year 2019 from 8 ML and 8 non-ML schools was collected. The mean average attendance in 6 ML schools was 91.1% and 5 non-ML schools was 84.2%. These findings are suggestive of an ML gain but the sample size of 11 is too small to make more than tentative claims.

1. Whether or not a teacher has received good basic teacher training. The presence or absence of a well-trained experienced teacher made a big difference to successful ML implementation. In one school visited, a Gr 2 and Gr 3 teacher both teaching ML lessons through a wall from each other were delivering very different quality lessons despite being in the same school environment. The engaged and well-trained teacher was able to implement ML effectively; the other wasn't.
2. Whether or not a teacher had received ML training. Many teachers and support system actors cited this as important (see Appendix 13) and it would likely correlate with teachers' conceptual understanding of ML and therefore its effective delivery.
3. Monitoring and supervision support from provincial actors and/or the Principal or other teachers, again referenced by many respondents.
4. Sufficient classroom materials, and resources/facilities to develop and produce enough copies of them, was important for successful implementation of ML according to teachers. Similarly, sufficient time to develop materials and plan well for an ML lesson.
5. Sufficient space in the classroom to implement ML, including dynamic grouping, and, related to this, not too many students. Very large classes limited the successful implementation of ML, according to teachers. (Though, the evaluation teams did see at least one good example of a successful ML lesson with a large class).
6. Lack of mainstreaming or alignment with the national system/curriculum was also raised as an important factor by support system actors (see Appendix 13).

Observing ML and mainstream teaching and learning in practice

Teaching and learning were observed in 24 ML and 22 non-ML lessons, in order to compare and contrast classes that according to the provinces were following ML methods, and those following mainstream methods. To this end the team developed formats to observe a range of (i) teaching and learning behaviours, (ii) child-friendly practices and (iii) the availability of resources and physical environment (see Appendix 15 for the final versions of these formats). The formats were designed to observe the practices expected in both ML and non-ML classes, and some that one could expect to observe in ML classes only. These findings provide us with evidence of how well the ML approach has been integrated and applied in daily teaching and learning practices.

As referred to in Section 5.1, in some classes in schools designated as ML, teachers had received no training in ML methods, whilst in some designated as non-ML, there were teachers who had received some ML training. Hence, the analyses below of teaching and learning behaviours and child-friendly practices involve two comparison groups: (i) ML vs non-ML schools and (ii) ML vs non-ML trained teachers.

Teaching and learning behaviours

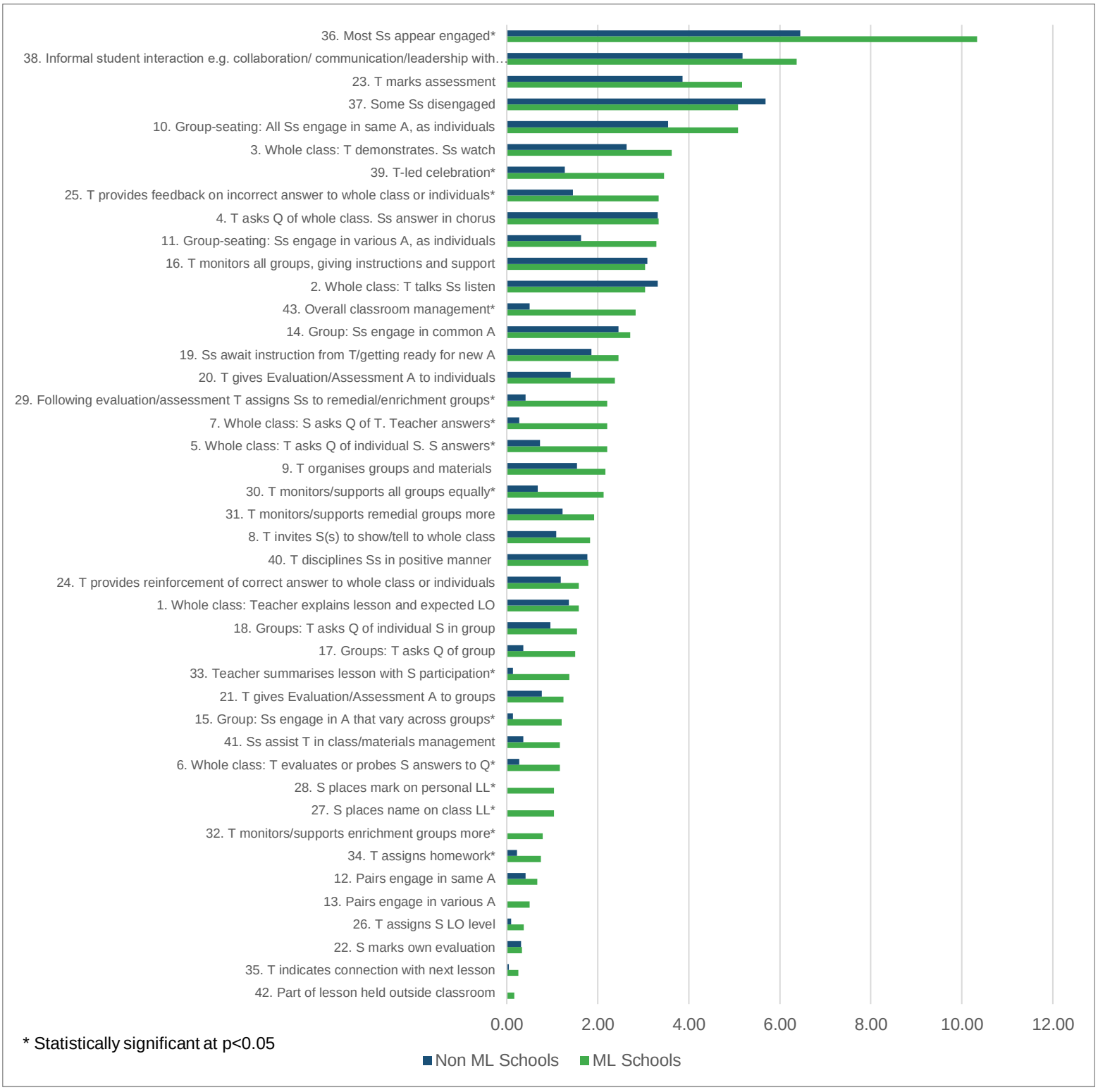
Teaching and learning behaviours were observed in a total of 46 lessons. In order to control for the length of lessons observed, the analysis was restricted to 45 minutes for all classes and the number of times any of the behaviours were observed in three-minute intervals within this. Figures 6 and 7 show the teaching and learning behaviours observed in (i) lessons in ML and non-ML schools and in (ii) lessons where teachers had received some ML training, irrespective of whether they are teaching in an ML or non-ML designated school, and those where teachers had no ML training.

Figure 6, comparing lessons in ML and non-ML schools, indicates that no major differences were observed on 33 of the 43 behaviours. These behaviours are observable to similar degrees, on average, in all classes, and all represent good pedagogic practice. There were statistically significant differences between means on 10 behaviours. In all cases the mean was higher in the ML schools.

Figure 7 compares lessons conducted by teachers who had received some training in ML, compared with those who had not. No major differences were observed on 38 of the 43 behaviours, whilst there were statistically significant differences on five. In all cases the mean was higher for teachers with some ML training. For the full means and t-test results see Appendix 13.

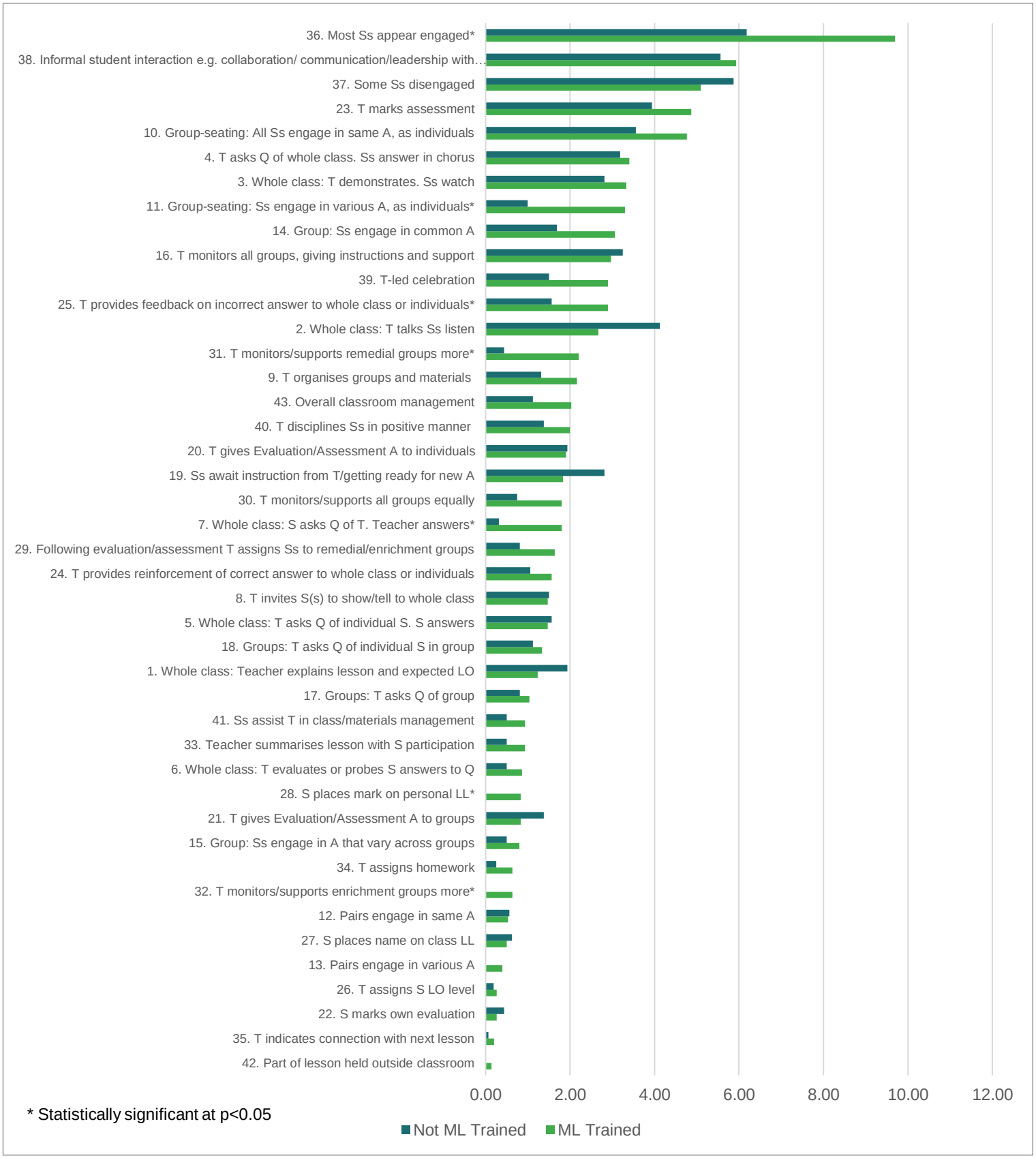
Table 8 compares these analyses for the behaviours where differences were found.

Figure 6: Means of total time behaviour observed (comparison of ML vs non-ML schools)



* Statistically significant at p<0.05

Figure 7: Means of total time behaviour observed (ML trained vs non-ML trained)



* Statistically significant at p<0.05

Table 8: Comparing findings from two analyses of teaching and learning behaviours

	ML schools vs non-ML schools	ML trained teachers vs non-ML trained
Behaviours which were significant in both comparisons	Whole class: student asks question of teacher: teacher responds Most students appear engaged Teacher provides feedback on incorrect answer to whole class or individuals	Whole class: student asks question of teacher: teacher responds Most students appear engaged Teacher provides feedback on incorrect answer to whole class or individuals
Behaviours which were significant in one comparison only	Whole class: Teacher asks question of individual Student, student answers Whole class: Teacher evaluates of probes student answers to questions Group: students engage in Activities that vary across groups Following evaluation/assessment Teacher assigns students to remedial/enrichment groups Teacher monitors/support all groups equally Student places mark on class ladder Overall classroom management	Teacher organises groups and materials Group-seating: Students engage in various activities, as individuals

These findings are broadly consistent with the ML objectives. Both analyses show higher levels of student engagement in learning in ML schools/amongst ML trained teachers, both of which are mentioned as objectives in Table 7 above. While neither analysis showed differences in the propensity of teachers to provide feedback on correct answers, both show that teachers in ML schools or ML trained teachers were more likely to provide feedback on *incorrect* answers. This practice is not mentioned as specific guidance in the MOE draft ML Guidelines but it is a characteristic of good formative assessment practice where, if all are to learn, 'learning errors' require more attention from the teacher than correct answers.

Encouragingly, both analyses show that ML students were more likely to ask a question of a teacher in a whole class setting, than were students in non-ML classes or students taught by teachers without ML training. This is suggestive of student engagement and participation in learning, and the development of the confidence to query the teacher, all resonant with the rights bearer HRBA discourse.

Other significant differences found in only one of the two analyses are also consistent with some of the ML objectives. Differentiation of activities across groups is seen more often in ML classes than non-ML classes, whereas differentiation of activities within groups is seen more often when teachers are trained in ML as compared with those who are not. Following assessment, students are assigned to differentiated activities, designed to remediate or enrich, more in ML classes as compared with non-ML classes.

Child-friendly practices

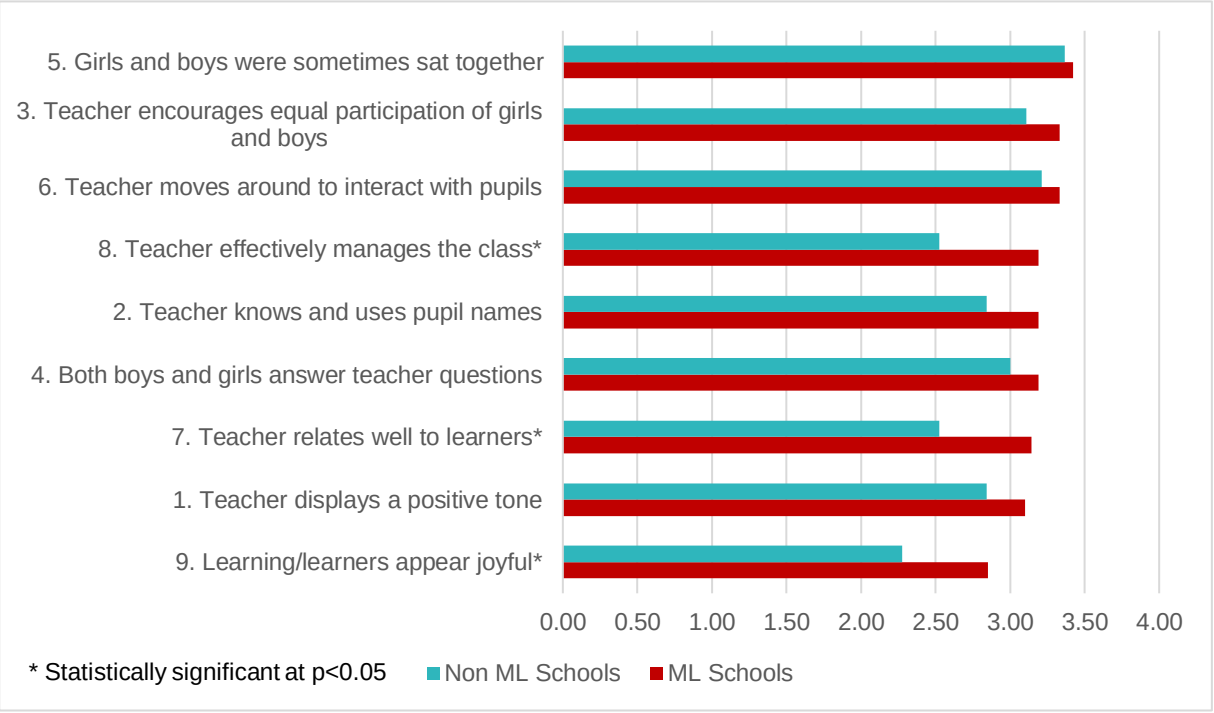
Figure 8 displays the comparison in child-friendly practices observed between ML and non-ML schools (for full findings see Appendix 13). The nine child-friendly dimensions on which judgements were made at the end of each lesson are shown in Figure 8 below. The findings show

that when lessons in ML and non-ML schools are compared, there are differences on three child-friendly dimensions:

- ✓ Teacher relates well to students
- ✓ Teacher effectively manages class
- ✓ Learning/learners appear joyful

There were no differences found on each of the three gender equality dimensions (see Figure 8 – items 3, 4 and 5).

Figure 8: Consistency of child-friendly practices observed by school type (ML or non-ML)



When teachers who had received some training in ML were compared with those who had not, differences were also found on three dimensions:

- ✓ Teacher displays a positive tone
- ✓ Teacher effectively manages the class
- ✓ Learning/learners appear joyful.

The common findings in these two comparisons are 'learning/learners appear joyful' and 'the teacher effectively manages the class'. The former is one of the goals of child-friendly schools (Table 7 above), which has been a common goal for schools nationwide in Sri Lanka for a number of years. This finding, emerging from comparisons of ML and non-ML schools, and ML and non-ML trained teachers, suggests that ML is correlated more highly with 'joyful learning' than is non-ML.

Curriculum adaptations across provinces

The observations of lessons revealed different interpretations of the ML approach in practice across provinces. Whilst differences in approach across provinces has been brought to the attention of the team prior to commencing fieldwork, few, if any, persons interviewed was able to

articulate clearly and consistently what these were. Presentations at the stakeholder roundtable indicated some of the differences, but these were difficult to grasp until actually seeing an ML lesson in action. On the basis of the lesson observations and interviews conducted, the main characteristics of the approach across provinces and specific recommendations for each province are presented in Appendix 12. This is based on an initial description by the team which was discussed at the Participatory Validation Workshop and revised subsequently.

1. The biggest difference between provinces was on the availability of materials. In the East, mass produced activity cards had been produced and distributed (recently) to all schools, irrespective of whether teachers had been trained in ML methods or not. In the North some mass-produced activity cards had been distributed to some but not all ML schools. In Central and Uva provinces, by contrast, the majority of materials are developed by the teachers.
2. Another big difference between provinces was in their use of the 'learning ladders'. In Central and Uva provinces whole class ladders, where students affixed their names or numbers to a ladder to indicate learning achievement, were in evidence. In the North the teacher keeps paper records, while in the East there was evidence of personal learning ladders and sometime whole class ladders. These different uses of learning ladders have potential implications for student motivation and, in the view of the evaluation team, deserve careful reflection by MOE, NIE and the provinces, jointly, and a recommended way forward.
3. Support for the provision of learning opportunities for the most advanced students also seemed to vary across the provinces. In the North and East, teachers sometime provide further activity cards, but 'often students seem bored because the cards are not challenging/interesting enough'. In Central and Uva, there was some evidence of more challenging activities being available; otherwise students were asked to read.

Further detail on these differences and more can be found in Appendix 12 and in the ML report by Uthayakumar, 2019.

Implementation barriers and ways forward

The implementation of curriculum reform or revision is never smooth. Barriers and challenges to implementation occur at every stage of the education system, from parents, teachers, principals, education officers, politicians etc. Many challenges were noted by the evaluation's stakeholder groups (see Appendix 13). The most frequently cited challenge to the implementation of ML from Provincial support system staff was 'resistance from teachers', though this varied widely across the provinces, from 75% in the North to 37.5% in Central. Support system actors also reported that teacher resistance had reduced over time, usually because of heightened awareness of ML/more training or because teachers had started to see the approach 'work'. ISA and Principal support for teachers was also mentioned in this regard.

Teachers and school principals also spoke about the challenges they faced in implementing ML. For them the challenges revolved mainly around the time spent on preparing materials and the cost of developing them. Materials, time, budget and space/facilities were mentioned by around 40% of teachers (see Appendix 13). Other barriers mentioned were insufficient number of ISAs, ISA workload and shortage of transport facilities for ISAs. Only 5 persons (14%) cited lack of support from the school principal.

Teachers and support system actors were invited to suggest 'ways in which ML could become more effective'. These responses may be seen as ways of overcoming barriers. These results are presented in Appendix 13. ML teachers (including those who attended the Teacher Consultation) cited a range of ways in which ML could be improved. The most cited were training, teaching materials, resources and monitoring. Others referred to the classroom environment, space, facilities and equipment.

There were broad similarities across the four provinces, but also a few differences. ML teachers in the North were less likely to mention monitoring/supervision as an area for improvement. Teachers in Uva were more likely to mention funding, while teachers in the East and Central were more likely to mention classroom space and facilities than those in the North and Uva. A similar pattern emerges from the staff in the provincial support system. Training, materials and monitoring were top the list, though, again, respondents in the North were less likely to mention monitoring than those in the other three provinces. Almost 30% across the four provinces suggested scaling up the programme and integrating it within the National Curriculum, though there was variation in the frequency of this suggestion across the provinces (North, 50%; East 20%; Uva 33% and Central 12.5%).

Parent perceptions of ML

Based on the evaluation team's observations, the group that has perhaps benefitted most from ML, outside of the school, has been parents, especially mothers. During school visits, the team met groups of parents of Grade 2 students (mostly mothers), invited in advance by the school principal. These groups varied in size from 4 to 20 persons.

Parent groups were asked whether their children were following the ML method in any subjects. Five out of the 8 groups met in the ML schools were aware of the ML method being used in some subjects. With the exception of one comment made in relation to a lessening interest in the Tamil language, the comments were overwhelmingly positive. Here are some excerpts:

> There is a clear difference. Children are more interested to learn Maths.
>
> Even when at home doing gardening work, children use rocks, leaves, seeds to do mathematics.
>
> We are very happy with the teacher but yes, we notice a difference between the ML subjects and non-ML subjects - the children are more enthusiastic and have more activities with ML subjects.

Asked if their children enjoy school, all parent groups who answered this question from ML and non-ML schools (n = 15), said yes. One ML parent said they had, '100% confidence in the school and the teaching approach', while another said, 'Yes they enjoy…the children compete to learn as they want to get further with the (activity) cards'.

Increased engagement of parents in their children's learning would likely have a myriad of benefits, not tested by this evaluation. It is also worth noting that the parents who chose to voluntarily attend these discussions with the evaluation teams would likely have been the most engaged parents. Impressions from others may have been less favourable. Of the parents the evaluation teams did meet, most of them reported to attend regular parent-teacher/school meetings. However, the difference in their engagement linked to ML seemed to be most related to interactions with their children. They mentioned how proactive their children are in getting ready for school and how they are ahead of siblings not following ML.

Governance and quality assurance

To date governance structures pertaining to ML have not been outlined. There is no government circular, no recognition of ML within curriculum guidelines from NIE and no guidance manual issued by either MOE or the provinces.

Provinces have been implementing this approach with support from the MOE Primary Education Branch, under two of its functions: (i) monitoring and (ii) innovation. In terms of the roles and

responsibilities of government bodies in relation to curriculum and teaching methods, it is the NIE that has the main authority, not the MOE (see Table 2 in Section 2.2). Thus, while the provinces are able to promote initiatives such as ML, especially when supported by the MOE, the official authority of the curriculum (including pedagogy) lies with the NIE. This has implications for budgeting since the money for the running of provincial schools flows from the Treasury to the Provincial Ministries and Provincial Departments of Education via the Ministry of Local Government and Provincial Councils (MLGPC). If the MLGPC does not direct Provincial Ministries to ring fence funds for ML in all its facets (training, materials, monitoring), then the ML work lacks a degree of legitimacy and officers must make the case for expenditures. It also has implications for teachers, some of whom worry that they are implementing a programme that is not the mainstream programme and does not cover all the primary grades up to the all important Grade 5 scholarship exam. As one of the UNICEF Field Education Officers said, 'still we do not have a national level/MOE approved guideline or book'. Key elements of good governance involve legitimacy and funding. The ML programme has reached a stage where it needs to be legitimated.

Quality assurance occurs through training and monitoring. To date, there has been a considerable amount of training work undertaken by the MOE and in the provinces (see Uthayakumar, 2019 for details). While some of this will have been introductory, some teachers have benefitted from follow-on training and involvement in materials development, both of which will have contributed in some ways to quality assurance. The main quality assurance mechanism though is monitoring, using, for the most part, tailor-made ML monitoring formats. The monitoring approach for ML is non-standard across the provinces (Uthayakumar, 2019). In Central and Uva a single format is prepared by the Provincial department, for use by all officers, the school principal and the ISA. In Uva the format is being digitised, facilitating the sharing of results from the school with the provincial department (interview with Provincial officers). In the East, separate formats have been developed for the use of (i) the principal, (ii) the ISAs and (iii) the zonal officers. In the North, the principal monitors using general non-ML specific supervision guidelines provided by the MOE. Some support system actors interviewed by the evaluation teams were asked how effective the QA system is for ML in their province. This response by one provincial actor sums up the overall perceptions from them quite well: 'relatively effective but it could be better'. Time for monitoring and also distances to some schools were mentioned as challenges as well as having to monitor ML and non-ML teaching in one visit using different formats in certain provinces. Others felt monitoring had improved a lot recently and was now working effectively. ISAs have a responsibility for between 15 and 20 schools each and a wide range of activities across all the grades and activities of primary. The amount of time ISAs can spend with any one ML teacher per month is limited.

Key elements of quality assurance include the development of high-quality monitoring formats which can be used by ISAs and officers at all levels of the system, and clarity over the purpose of these formats, whether formative or summative. Clarity over formats for monitoring ML, and sometimes the formats themselves, are currently lacking in some provinces. The main purpose of monitoring should be to assess teaching strengths and weaknesses, and to provide teachers with the opportunity to discuss problems and challenges without fear. The process of monitoring should also provide an opportunity for the monitor to offer constructive help and suggestions. Based on the observations of the evaluation team, there was little evidence that these aspects of monitoring are not working well for ML. Monitors themselves, whether the principal, ISA or another officer, should also be well versed in the approach and be prepared to co-teach with the teacher.

Effectiveness: Main findings

1. The objectives of ML are stated variously by MOE. They are numerous and qualitatively different. The lack of a clear definition of a few objectives limits the evaluation team's ability to address related questions of effectiveness.

2. Stakeholders working at various levels of the education system make positive claims about the effectiveness of ML. To date, the implementation of ML appears to have been effective in creating a positive narrative around which educators enthuse.
3. Important ingredients of a package of inputs for good quality ML implementation include a well-trained primary education teacher, a teacher well trained in ML, monitoring and supervision support from within the province, sufficient learning materials, sufficient space in the class for group work and manageable class sizes.
4. A wide range of 'good' teaching and learning practices were found in all classes, whether ML or not. However, in ML-related settings, student engagement in learning was higher, teachers were more likely to provide feedback on incorrect answers, and students were more likely to ask a question of a teacher in a whole class setting. These are all consistent with the broad objectives of ML and indicate that ML has been integrated into daily classroom practices.
5. Two Child-friendly dimensions were observed more frequently in ML-related settings: the teacher effectively manages the class, and learning/learners appear joyful. The latter is one of the goals of child-friendly schools as well as of ML and suggests that ML is correlated more highly with 'joyful learning' than non-ML.
6. The main differences in ML implementation between provinces lie in the degree to which all recommended stages of the lesson are followed, the volume and type of learning materials available in classrooms, the use of the personal and whole class 'learning ladders' and the provision of opportunities for the more advanced students. These differences may impact the extent to which ML is effective in each province.
7. The implementation of ML has faced a number of challenges, among which were initial resistance from teachers. This varied by province, but it was noted that resistance reduced over time as awareness was raised, skills were developed, and teachers gained confidence in its use. For teachers, the main challenges reported were lack of materials, time spent in developing materials, the cost of materials and classroom space and facilities.
8. Whilst the target beneficiaries of ML are children, parents also appeared to be benefitting in terms of their engagement with and enthusiasm for their children's learning. This in turn is likely to generate more support for their children's education.
9. The governance of ML is implicit rather than explicit. To date, the MOE has not issued its ML Guidance Manual, though a draft is available. There are no government circulars that refer to ML and no budget lines at national, provincial or school level that pertain directly to ML, though clearly the MOE and the provinces choose to spend money on it. To date, ML is not referred to in the National Institute of Education's curriculum guidelines for teachers. As a result of these gaps in the governance structure, ML lacks a degree of legitimacy. Quality assurance is one tool which the government is using to improve the effectiveness of ML. It being carried out differently in different provinces and in some cases lacks clarity, though overall is thought to be improving.

5.3 Efficiency

Efficiency refers to the extent to which an intervention delivers, or is likely to deliver, results in the most cost-effective and timely way, as compared with feasible alternatives. Put simply, efficiency is the ratio of outputs to inputs, measured in economic terms. Efficiency may examine the entire results chain or part of it (outputs, outcomes and impact) (OECD, 2019).

In addressing the question of efficiency in relation to ML two conceptual challenges were faced, and one methodological. First, as no results chain involving measurable outputs, outcomes and impact has been developed in the past, it is difficult to know against what to compare costs (or time and resources). Second, ML is not an alternative form of provision to primary education; it is

supplementary to the mainstream provision. Third, difficulties were faced in being able to collect enough financial data to address all related research questions. However, based on observations and interviews, some analysis of the costs of time and resources is presented below, and some judgements on efficiency/inefficiency.

Overall, the evaluation team finds that some quite basic inefficiencies exist within the ML system as things stand. ML teachers are spending large amounts of time and money creating often new and different materials for every student for every ML lesson. Sixty per cent of teachers in ML schools are spending Rs 500 or more per month, from salaries that average Rs 40,000 (c $200). Materials and learnings are often not shared within or between schools and training is not always reaching those who need it or is not regular enough to give teachers what they need.

Whilst a comparison of inputs and outputs as a judgement of efficiency is not possible within the scope of this evaluation, it appears that ML involves resources, in the form of money or time or both, additional to those of the mainstream education system. Students in ML schools receive the same textbooks and other learning materials as students in non-ML schools, but any additional materials required for ML activities involve extra costs, some of which are borne by the province, the zone, the school, the teacher or the parents. In principle, neither teachers nor parents should be spending their own money on teaching and learning materials, though frequently they are. This phenomenon is common in non-ML schools too, in which 58.1% of teachers are spending Rs 500 or more per month on teaching materials. Thus, this is not an ML-specific problem but a more general one which may be felt more acutely in ML schools (see below).

The ML approach is supported financially and technically by UNICEF in selected schools (ML schools) in each of the four provinces. Aside from this, schools currently receive no financial support for ML specifically from national government allocations or other sources[7], other than small proportions of the quality input fund from MOE[8], and anything they raise independently from their own pockets or those of parents or other members of the community. It was evident from the fieldwork that teachers themselves are covering a lot of the outstanding costs of ML at a classroom level, particularly in terms of teaching materials, and that levels of parental support in this regard are highly variable. In some area, parents simply cannot help. Basic factors such as trained teachers, learning materials and classroom space were inadequate in many schools visited.

In terms of fund utilisation and flow from government and UNICEF to schools there is some anecdotal evidence of how this is working from interviews with provincial and UNICEF officers. UNICEF funds are channelled through the province (or zone) in Central and Uva, and through CSOs in North and East (though decreasingly so), and this in itself doesn't seem to be causing issues in terms of efficiency. The flow of funds from that part of government (MLGPC) which funds the provinces directly can be more problematic though and school level quality input funds are not always reaching schools and teachers and appear to be insufficient when they do.

Specific research questions on efficiency will now be addressed, drawing on interview data and cost data from provincial level expenditure by UNICEF and school level expenditure by teachers to make recommendations. There are some fairly basic efficiency gains identified for ML which could be made easily and at little cost.

[7] In the past, schools in some provinces received funding from the national level or external funding (i.e. from CSOs) for ML according to some informants, but this is no longer the case.

[8] Rs 3000-4000 per year for one class (Uthayakumar, 2019), though this has to cover many areas of school expenditure, so much of it is already earmarked and not available for ML.

Cost elements in implementing ML

The main cost categories associated with ML implementation are materials, training and monitoring. Within these, some costs are recurrent, e.g. transport and human resource costs for monitoring, which occurs on an ongoing basis, whilst others are capital, such as the learning ladders and activity cards which only need to be produced once for each class and can be reused. Materials also involve recurrent costs as some materials need to be developed and produced by schools and teachers on a regular ongoing basis, and printing or photocopying is a constant need. Training costs can be recurrent or capital, depending on whether the training delivered is a one-off session, or recurring on a monthly or annual basis. In addition to these three main cost categories, costs may be incurred for classroom repair and arrangement for ML. When these arise, they constitute capital costs.

Different costs are more pertinent to actors at different levels of ML implementation. The cost of teaching materials was a big concern for teachers, as well as costs of photocopying/printing and equipment or facilities required to produce materials and teach lessons. The cost of training did not arise often as a concern for teachers or schools. However, there were several requests for training which is local (including school-based) and more regular and that includes more within and between school learning.

The costs of ML implementation to UNICEF in Central and Uva provinces[9] are shown in Tables 9 and 10.

Table 9: Central Province funding (140 schools supported)

	2018	2019
Training	Rs 1,315,200	Rs 3,222,460
Materials		Rs 1,350,000
Monitoring	Rs 494,400	Rs 124,000
Other	Rs 10,000	Rs 51,256
Total	Rs 1,819,600	Rs 4,747,716

Table 10: Uva Province funding (110 school supported)

	2018	2019
Training	Rs 767,455	Rs 247,112
Materials	Rs 397,500	Rs 650,763
Monitoring	Rs 86,965	Rs 211,645
Other (Learning Ladders)	Rs 800,000	Rs 1,020,000
Total	Rs 2,051,920	Rs 2,129,520

In Central province there was a big increase in ML expenditure by UNICEF from 2018 to 2019, largely associated with training due to a decision to train all G3 and 4 teachers on ML theory, and all G1-4 teachers on ML material development and utilisation, which hadn't been done previously. Training was the biggest expense in Central province, whilst in Uva the biggest expense was

[9] This data for Northern and Eastern provinces was not accessible to the evaluation team.

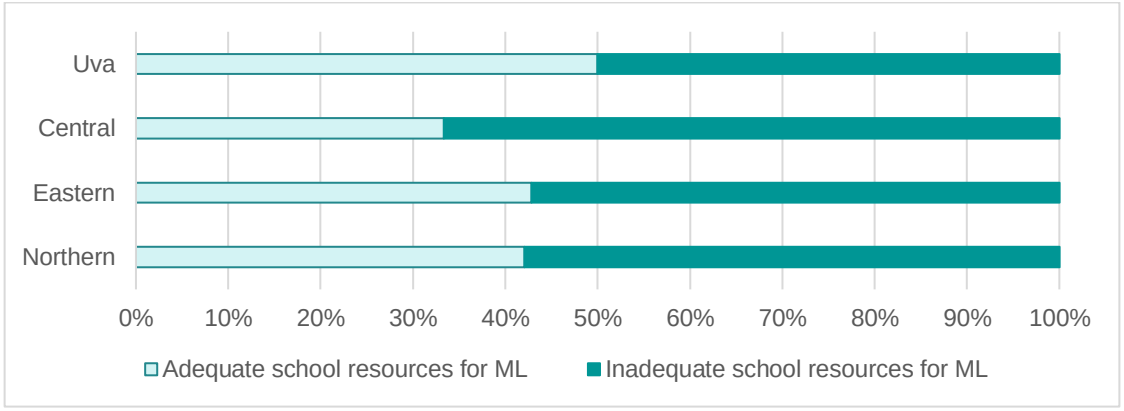
learning ladders. In both provinces, UNICEF spent less on monitoring than the other main cost elements of ML implementation.

At a school level, according to a report by Uthayakumar (2019), UNICEF-supported schools in Uva and Central provinces directly receive between Rs 7,000 and Rs 12,000 per school for ML activities from PDE. Some in Uva also received some funds for classroom repair. Northern and Eastern province ML schools received funds from PDE to arrange their classroom for ML (Rs 5,000 in North; Rs 25,000 in East) as well as for materials (activity cards) and training. The funds were only for classes following ML though, not for all classes in the school, which potentially has equity implications (Uthayakumar, 2019).

The cost of ML implementation to schools is not very clear. According to the Principals of the eight ML schools visited, direct costs of ML to schools appear to be largely in the form of materials rather than training and monitoring (Appendix 14). In 2019, none of the eight ML schools reported spending any funds on ML training and only one on monitoring, whilst six spent between Rs 6,000 and Rs 75,000 on materials over the course of the school year. The proportion of school funds allocated to ML from School Quality Inputs and elsewhere (UNICEF, parents or other sources) varies from 15% to 100%.

In terms of adequacy of resources for ML within schools, of teachers from both the school visits and teacher consultation (N = 69), 39% reported that these were sufficient and 54% that they weren't. Figure 9 displays this data for each province respectively. The only province with a notable difference is Central, within which two thirds of teachers cite a lack of resources for ML.

Figure 9: Adequacy of resources by province



Efficiency of ML compared to alternatives

ML costs cannot be directly compared to those of alternative programmes as no other comparable programme in Sri Lanka was studied as part of this evaluation. The mainstream non-ML system is not an alternative since ML schools and teachers receive the same inputs in terms of budgets, salaries, equipment etc. as the non-ML schools; any ML expenditure is additional to this. However, when asked about their average monthly expenditure on materials, teachers were found to spend similar amounts regardless of whether they taught in an ML or a non-ML school, as shown in Table 11.

Table 11: ML vs non-ML expenditure (monthly average)

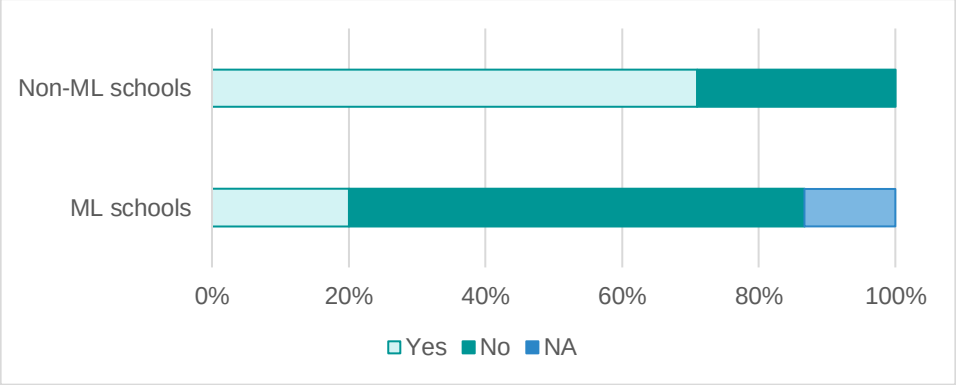
	None	< Rs 500	Rs 500-1000	Rs 1000-2000	> Rs 2000

Amount ML teachers spend on materials (N = 15)	1	5	4	3	2
%	6.7	33.3	26.7	20.0	13.3
Amount non-ML teachers spend on materials (N = 14)	1	5	4	3	1
%	7.1	35.7	28.6	21.4	7.1

The majority, over 60% of all teachers, spend more than Rs 500/month, of whom more than half are spending more than Rs 1,000/month, regardless of whether they teach in an ML school or not. This indicates that materials for teaching in general are more of an issue than ML materials specifically (or, that ML teachers are choosing not to spend more on them then they usually spend anyway). Only 7% of teachers interviewed spend none of their own funds on classroom materials (6.7% ML and 7.1% non-ML). This point was discussed at some length at the Participatory Validation Workshop where the Provincial Directors confirmed that the average salary of a primary school teacher per month is around Rs 40,000. To put this into perspective, the minimum cost of photocopying for a class of 30 is Rs 6,528 per month (Uthayakumar, 2019). There is clearly a problem in terms of the financial burden placed on teachers. One teacher in Uva province said that without spending money on her own materials, "it would be difficult to do this job" and an ISA from Central province said, “for everything (for ML) they (teachers/schools/someone) have to spend money."

Of the sample of ML and non-ML teachers who were interviewed during fieldwork (N = 29), there was a large difference in terms of reported adequacy of resources. 67% of teachers in ML schools stated that the resources available for teaching in their school were inadequate, compared to 29% of teachers in non-ML schools (see Figure 10). This suggests that the similar amounts of money spent by ML and non-ML teachers on materials may be adequate in non-ML settings, but not in ML schools.

Figure 10: Adequacy of resources by school type



Challenges in sourcing ML funds

Both the quantity and timeliness of funds being transferred through the system present issues for ML. Timeliness is of concern as it affects the implementation of the curriculum across the school year, whilst insufficient funds restricts ISAs from visiting schools regularly and constrain the amount of materials that can be produced in the school for pupils, thus reducing the effectiveness of the approach. Poorer communities are unable to provide funding support to schools, which widens inequity and inequality.

Central level funding from government is insufficient according to many respondents, and sometimes not reaching schools (e.g. in Uva province). Funding for schools in the provinces is channelled from the Treasury to schools via the Ministry of Local Government and Provincial Councils (MLGPC) to the Provincial Ministries of Education to the PDEs. Two provincial actors noted that flow of funds for education from national government is a challenge. Also, according to some informants, even in schools which receive financial support from UNICEF, the funding is not sufficient for implementing ML. Over a third (36%) of provincial actors (N = 33) cited budgets or funds as a challenge or source of resistance to ML implementation. This seems to be felt particularly acutely by ISAs, 75% of whom (N=8) said that funding and resources were a challenge for ML. There was also discussion about whether MOE funds are being used in the most efficient / effective way. One respondent recommended that MOE funds should be more focussed on actual teaching and learning, such as ML. The spending of the School Quality Inputs budget is guided by a circular written by the MOE, in line with government financial regulations. These can be quite cumbersome. For example, even when small items (e.g. paper, pens, boards) need to be purchased, estimates have to be sought by the Principal from three suppliers. The rules attached to these funds thus represent another challenge.

One of the main challenges of ML funding at a school level is the printing or copying of materials for ML lessons. According to one ML principal, one of his teachers complained, "it's not worth doing this, it's only wasting paper". Forty three percent of all teachers (N = 61) cited materials as being a way in which ML implementation could be improved (see Appendix 13) and 80% of teachers interviewed (N = 10) mentioned time and materials as negative aspects of ML. The time taken to develop materials seemed to be more of a concern for many teachers than the financial cost. One teacher noted that the school has a photocopier, but that if they want to photocopy any worksheets, they need to supply their own paper. Another teacher with a small class of G2 students described how they hand write eight copies of each worksheet for each of the students. This is not an efficient use of time. In reference to the need to have enough copies of everything for the whole class, one teacher said: "The job cannot be done by being stingy - every child needs the same input." The report on ML by Uthayakumar (2019) similarly suggests that teachers need more funds for photocopying and learning materials. Some schools manage to source funds from parents and the local community, but this is highly variable. Some cannot as parents are simply too poor. This was witnessed especially in plantation schools in Central and Uva provinces.

At a provincial level, comprehensive information on ML costs was not available, but interviewees from the provinces reported supporting schools with ML training, ML monitoring, materials (activity cards, ladders), and capacity building for teachers, ISAs and Principals. Zonal and divisional representatives reported providing similar support. Meanwhile, ISAs and schools often felt that they needed more support. 27% of support system actors (N = 33) cited the limited capacity of ISAs – due to insufficient numbers, high workload, lack of transport etc. – as a challenge or source of resistance to ML implementation. In terms of coordination, there was no evidence of a lack of coordination between different actors in the ML system per se, though there are areas where responsibilities appear to overlap (see Table 2 in Section 2), such as on monitoring. This could cause duplication of effort and other inefficiencies.

Recommendations for cost efficiency

The TOR invites us to make some specific recommendations on how ML cost elements could be more efficient and sustainable, in addition to the main evaluation recommendations presented in Section 6. These are shown in Box 1.

Box 1: Recommendations for cost savings

- Making more sustainable cost-effective materials which are used by multiple teachers across multiple lessons and subjects over many years. There are big efficiency gains to be made here at the local level. If materials were made in this way this would immediately make ML much more sustainable and efficient.
- Necessary equipment (e.g. photocopiers and printers) and suitable classroom space – these are capital costs which need to be dealt with once and then mean a minimum requirement level for ML implementation can be met.
- A School-based Teacher Development (SBTD) model of teacher training for ML, rather than large scale sessions in central locations. This should include making more use of in-house training resources, i.e. teachers who are already trained in ML and can support others. More within school and between school sharing of learning from these ML "experts", observation of model lessons etc. would be cheaper than large scale training. There is also a gap in terms of guidance materials provided to teachers during or after training (most reported having received no such guidance materials) which could be another efficient way of reducing ongoing training needs, and an opportunity in terms of monitoring to support ongoing inhouse training.
- Incorporating ML more into the national system could also provide efficiency gains for teachers. Right now, some of them struggle to work out how to deliver the syllabus whilst using ML – the two do not seem to align, and there is not time to deliver the whole syllabus within the term in any case.
- Putting in place an efficient teacher transfer policy. Currently, when ML teachers are transferred into non-ML schools, and vice versa, this represents a significant efficiency loss. If mainstreamed, this becomes less of an issue from an ML perspective, though a clear policy around teacher allocation and transfer, which takes into account the needs of individual schools, and shortages and surplus of suitably qualified teachers across the provinces and the country, would still be recommended.
- Conducting a more thorough and targeted cost analysis of ML could be considered.

Interestingly, few participants raised financial resources as being a way of directly improving the delivery of ML. 21% of support system actors (N = 35) cited funds and financial flows as a way in which ML could be improved and only 8% of ML teachers (N = 61) mentioned financial resources in this regard (see Appendix 13). Thus, though several respondents cited finances as a challenge, this is not how they see ML implementation being improved in the first instance. Rather, training, materials and monitoring are mentioned most often, indicating that more efficient systems of knowledge and material sharing and learning within and between schools, together with supervision and school-based training, could bring about greater efficiency gains.

Efficiency: Main findings

1. Issues of time and resources in relation to learning materials appear to be common to both ML and non-ML teachers. Just over half of all teachers interviewed felt that there were insufficient materials available and that they would have liked more school-based training.
2. There are many challenges faced with sourcing funds for ML at a school level, including receiving funds from government in the first place, the amount of funding, which is insufficient for a whole school's needs, and the level of support from other sources, e.g. parents, which is highly variable. As a result, more than 50% of teachers in ML and non-ML schools spend over Rs 500 every month on teaching and learning materials. Furthermore, government School Quality Inputs are not always reaching provinces and schools in a timely manner, or at all.

3. Based on the observations and data collected on efficiency, the main area which has emerged as being the most important and achievable for efficiency gains is in material development and use. Facilities and equipment (at a school level), training modalities (to be more school-based) and the potential of mainstreaming ML into the national system were also identified as important.

5.4 Sustainability

Sustainability is the extent to which the net benefits of an intervention continue, or are likely to continue (DAC 2019). Sustainability is key to any intervention – can it operate by itself, without external input or support, across time and space?

To what extent are the approach and interventions sustainable?

According to one provincial officer, ML will only be sustainable if it is situated within a loose framework which means it can be implemented in a locally specific way. And in the words of another, 'there is no one ML'. Whilst there is much truth in these two statements, it is also possible that deviations from the approach advocated by MOE could be detrimental. A lack of understanding of the key elements of the approach by a number of actors, an absence to date of a set of clear guidelines (in Sinhala and Tamil) developed jointly between the MOE and the Provinces and the absence of a shared and demonstrated vision of an ideal ML class (through direct observation and film) could all hinder effective scale up. As noted earlier there are different understandings, as well as an absence of understanding, on the use of the ladder in classrooms, although generally teachers are positive about the use of learning ladders in all provinces. In Uva the ladder is a 'whole class' ladder on which students mark their performance on the assessment activity. In the East, more use is made of personal learning ladders. This is in line with MOE understanding. It is also in line with the preferred approach of the Director of the RIVER initiative which inspired ML in Sri Lanka: "We will not recommend to make visible the place of a child on a ladder for all the students as it leads to more comparison, demotivation etc." (personal communication, 09 03 20). Learnings such as this can bolster sustainability and inform scale up and will be explored in more detail in this section.

The ML Programme has been delivered through the MOE rather than through NIE and therefore has had little influence on the existing systems, curricula or training programmes for pre-service and in-service teacher development. The NIE is an essential and major player in the delivery of primary education (on curriculum, teacher training etc. – see Table 2 in Section 2.2) and thus must be actively engaged for ML scale up and long-term sustainability to be achieved. There is already one example of MOE/NIE collaboration on ML, in the form of a pre-service teacher training programme run by the provinces (a "crash course", formerly 300 hours, now 180 hours) that includes a unit on ML, but this in itself is not a high status or mandatory course. Considerable technical capacity has been built from the provincial level down to the school level on the ML approach in the target provinces, zones, divisions and schools, and provinces run ML training themselves, thereby providing proof of concept that can be utilised in the NIE annual training programmes, and there is strong political will to scale up the ML approach, contents and implementation modalities. The approach is similar to those used in India, with varying levels of success. An evaluation conducted by UNICEF in India provides many lessons from these programmes which will help Sri Lanka implement a more successful scale up (see Appendix 2 for a summary of findings). Most stakeholders believe that ML can be owned and run by government as part of the school system if there is:

- ✓ national level leadership,
- ✓ the necessary budgets are allocated, and
- ✓ capacity issues are addressed.

There is a recognition that non-government funds, either from school level fundraising or external funding (e.g. from NGOs) may be needed for ML mainstreaming. However, some provinces have chosen to scale up/roll out ML more widely beyond schools receiving UNICEF support already, showing that where there is a will, resources can be allocated to ML expansion and mainstreaming in some cases. Whilst there are important differences in ML implementation and stage of scale up between the four provinces studied (see Appendix 12), decisions need to be taken at the national level to ensure sustainability of the approach. Key considerations for ownership to occur revolve around having a common approach to ML that is consistently understood and ensuring that learning feeds into institutionalisation and implementation.

Government ownership has already been supported by UNICEF in the four provinces to an extent. A joint workshop to take stock of ML, engaging MOE/NIE and the PDEs, has been held and inter-provincial study visits and training sessions have been used to build capacity at a provincial and local level. UNICEF's approach to supporting ML overall has been one of enabling and capacity building rather than imposing an approach from outside. Whilst some still see ML as a UNICEF initiative, this does not seem to be a whole-system belief or a barrier to government ownership. 2020 also provides ideal opportunity for mainstreaming as national comprehensive curriculum reforms are ongoing, as well as an NIE review of the Primary 1 curriculum and its associated training.

ML and existing capacity on child-centred learning

As previously discussed in this report, the child-centred discourse has been active in Sri Lanka for decades and is prevalent in education materials, training courses and programmes. Thus, the nature of the ML programme as fundamentally child-centred inevitably links to and builds on this existing system. ML training and capacity building sessions at a national, provincial, zonal or local (i.e. divisional) levels, inevitably support capacity to deliver child-centred education. However, without a baseline or a focus on the evaluation of any specific capacity building programme, the ability to say whether ML in itself has increased overall capacity in this area is limited.

Overall, it seems that ML training initiatives have reached the relevant support system actors in the ML system necessary to build existing capacity in child-centred education. Of the 31 provincial, zonal and divisional level support system actors interviewed, including ISAs, 24 (77%) had received at least one session of ML training. Most had received more than one and had received training in the past 3 years, predominantly delivered by the province or by UNICEF. Of the 23% who hadn't received any training, 71% of them were zonal officers, indicating this might be an area to direct capacity building support. Twenty nine percent of all support system actors (N = 35) cited capacity building for the whole system (not just teachers) and support to ISAs as a recommendation for improving ML implementation. In addition, 60% of support system actors (N = 35) provide support/training as resource persons to lower government or school level. It appears that considerable technical capacity has been built from the provincial level down to the school level on the ML approach in the target provinces, zones, divisions and schools.

However, the reality of implementation is inevitably patchy and where particular individuals in key roles are disengaged or inexperienced and unsupported, the benefits of this continuity and reinforcement of child-centred education may not be felt. Some principals reported that the level of support from province/zone can depend a lot on the particular individual in the role and thus is not guaranteed or systematic. One divisional officer said:

> "I am not happy about the provincial level resource pool. We need more practical people. People can talk about theories, but we need more practical people who can closely work with teachers and students."

At a national level, according to the MOE, ML is closely aligned with the expectations of the National Curriculum and its child-centred approach. The MOE has invested a considerable amount of time and resources in leading ML training courses within the provinces (see Appendix 11). However, ML is not yet integrated into the annual training programmes that NIE runs in the provinces. This gap and NIE's lack of engagement with ML in general to date represents a failing to build on existing capacity in child-centred education. NIE has control over the content of teacher education programmes in the Colleges of Education and teacher training colleges (but not the universities) and in principle, if NIE were to adopt ML as a methodological approach within its Teacher Instructional Manuals (TIMs), it could do the same within the teacher education curricula for the primary stage of education.

Potential and political will for scale up and mainstreaming

The ML approach and implementation modality has high potential for scaling up. It resembles the Activity-based Learning (ABL) approach to teaching and learning in India in many ways (see below), which has already been scaled up successfully in that context, and it has already been scaled up in some provinces (e.g. Central and Eastern). It doesn't entail major upfront capital costs (see Efficiency section above) and is already aligned with the child-friendly nature of the national approach. Several actors mentioned that scaling up ML would be a way of making ML more effective; 29% of support system actors (N = 35) and 25% of ML Principals (N = 8) cite scale up, mainstreaming into the national system and curriculum alignment as recommendations for improving ML implementation. Overall, it seems support system actors felt it has the potential to be mainstreamed. One respondent said:

> "It (ML) should be mainstreamed with agreement of MOE and NIE, and implemented nationally. It should be the only approach and not contradictory to others."

At a local level though, some things would need to change to create a more conducive enabling environment for mainstreaming. Challenges faced at school level (see Appendix 13) are myriad and need to be considered carefully in the context of scaling up.

In terms of political will, there is considerable interest in continuing the ML initiative from the MOE's primary education branch. Their view is that ML should be mainstreamed by NIE. However, to date, there is relatively little awareness of the approach at the senior most levels of the MOE, as well as in NIE. This does not mean that there is a lack of will. More, that it is a will that needs to be mobilised. Indeed, senior NIE members participated actively in the Stakeholder Roundtable and the Participatory Evaluation Workshop and a group at the latter comprising of the Director-General NIE, Director Primary Education NIE, Former Director Primary Education, MOE, Assistant Director Primary Education MOE and one of the Provincial Directors recommended strongly that ML should be mainstreamed.

ML ownership

The evaluation team observed more ownership by government in some provinces compared to others. Central province, for example, reported to have adopted ML in all primary schools of their own volition and considered themselves to be driving and managing it (Provincial level interviews, Central). Ownership and leadership were referred to by some support system actors during the interviews with them (see Appendix 13). One ISA said:

> "I believe ML will directly support and provide practical technical knowledge to implementing the existing primary education system. Therefore, this approach should be promoted with higher involvement of MOE and NIE."

This indicates a belief that the national government is currently not as engaged as they could be and that for it to be successful, national involvement and drive is essential. Another ISA mentioned that the government should develop their own strategy for ML implementation[10].

ML came across as being perceived to be UNICEF-owned by some stakeholders:

> "People look at ML as a UNICEF programme, rather than a government initiative. There isn't a clear strategy as to how UNICEF will hand over to government."

However, others were less aware of UNICEF's role and seemed to view ML simply as a modified way of teaching early grades. The majority of respondents didn't see UNICEF as playing a key role in sustaining the ML approach and associated costs in the future (see below). At the Stakeholder Roundtable and Participatory Validation Workshops, and during interviews, the Primary Education Branch of the MOE demonstrated a strong sense of ownership of the programme. By contrast, staff of the NIE's Department of Early Childhood and Primary Education demonstrate less ownership and less awareness of the programme in practice, currently. It is essential to the sustainability of the ML programme that the NIE is centrally involved and engaged, along with the MOE.

Input required for full government ownership

There were conflicting messages about how much external input is actually required for ML. Some respondents thought that all schools implementing ML required materials, training and monitoring to be provided to them, whilst some believed much more could be generated by the schools themselves without external support. The latter came through as being the more sustainable option; 40% of support system actors (N = 35) cited school-based fundraising as a way of sustaining ML costs. Ongoing training and material costs would also be greatly reduced if, for example, ML was incorporated into national initial teacher education. Mainstreaming in itself could therefore reduce required inputs for government ownership.

Implications for transitioning to a government-run approach are financial, in terms of overall budgets and ensuring funds are adequately reaching schools but also in earmarking funds for ML, and at a policy level – several support system actors recommended a nationwide policy on ML as a prerequisite or first step for mainstreaming and scale up. In addition, a human resource capacity analysis would need to be conducted throughout the system, from MOE to ISAs, and any gaps filled, to ensure that monitoring and training for ML can be sustained nationwide.

Comparison of ML to other child-centred initiatives

The ML approach is comparable to the non-ML approach in Sri Lanka in terms of the child-centred focus. Both involve students working together in groups, for example, as well as a degree of formative assessment and the principal of supporting the most disadvantaged students. Further information on the ML approach compared to the Sri Lankan mainstream approach can be found in Section 1.3. This mainstream approach is currently being implemented nationwide, indicating ML has similar potential for scale up.

Outside of Sri Lanka, the ML approach, as practised to date in Sri Lanka, is most similar to the approaches that have been employed in India. The first experimental Multigrade and Multilevel (MGML) programme began in Rishi Valley in the 1980s and was adopted in the state of Tamil Nadu in India from the early 2000s, where it was renamed Activity Based Learning (ABL). In later

[10] Which they are already starting to do in the form of the National ML Guidelines under development.

years this ABL programme was adapted by a number of other states. The main similarities / differences to ML are presented in Section 2.2 as well as in the relevance and effectiveness findings of this report.

Lessons learned from scale up from India

A main lesson from the adoption of the approach by Tamil Nadu was high level political will. This involved a close collaboration between the Minister of Education of the day and a high-level government servant. Key to this collaboration was the visits organised by the latter for the Minister to schools employing the approach. The value of the approach was demonstrable. Another aspect of the scale up in Tamil Nadu relevant for ML scale up was the recruitment of graduates (with teaching experience) to work in teacher resource centres to support teachers. In principle, ISAs in Sri Lanka could play the same role.

The experience of ABL in the states of India has not been an unmitigated success however and there are lessons to be learned from these challenges also. Though most states drew on the Rishi Valley/RIVER model, the models adopted by different states evolved over time, and "in the process, some deviated from the underlying principles of the original model" (Education Initiatives, 2015). Classes that adhered more closely to the original model (adapted from the RIVER model) showed greater gains in student learning. Linked to this, many teachers were found to have a procedural understanding of the approach but to lack a conceptual understanding which would enable them to implement the approach flexibly whilst staying true to the key principles. Implementation issues were attributed to frequent changes in the ABL design, a lack of continuity in implementation, high pupil teacher ratios, inadequate quality of training, lack of teaching experience of support personnel and late delivery of materials. And while teacher involvement in the design and implementation of ABL was very high in the initial pilot programmes the degree of involvement waned as the ABL programmes were implemented at scale (Education Initiatives, 2015). These challenges represent opportunities for ML and Sri Lanka to anticipate and mitigate against from the outset. The key messages for scale up of ML in Sri Lanka are set out in Box 2.

Box 2: Messages for scale up of ML in Sri Lanka

1. Ensure high level political will and collaboration;
2. Strengthen the role of the ISAs;
3. Demonstrate good practice to actors at all levels of the system;
4. Review the MOE 'model' and linked Province models, consolidate understandings of the concepts behind the method and strengthen the method;
5. Act with persistence over a period of time to support teachers in understanding and implementation;
6. Maintain small class sizes; and
7. Ensure materials are delivered in a timely fashion.

New capacities or services in the system

Whilst education services capacities were not a strong focus of this evaluation design for field data collection, some evidence was found of new or enhanced capacities created or established which could specifically link to the sustainability of the ML approach. At a school level, such capacities were not very evident though they were referred to and aspired to in some cases. For example, teachers and Principals mentioned the potential of a school-based peer support system for ML, though acknowledged it wasn't happening currently due largely to time pressures. Others expressed interest in connecting with and learning from other schools on ML (support system actors cited this also as a recommendation), though again weren't doing this currently, and also

plans to incorporate ML into school development plans. These are very important initiatives for ML sustainability and should be supported and promoted by government in the context of scaling up.

At a community level, support from 'old boys/girls' (i.e. alumni) was referred to. Some schools are trying to engage them for financial or other support (e.g. material development, advocacy, outreach), though this didn't appear to be very structured at present. In addition, levels of parental engagement varied but support for ML was generally high (see Section 5.2) and could likely be harnessed further to support the sustainability of the programme.

At a local government level, efforts were being made to integrate ML into standard monitoring systems to streamline and reduce the burden of this process but also to support mainstreaming of ML. More could be done in terms of integration of ML into existing training initiatives. At a national government level, high-level Presidential proposals currently being considered around recruiting teaching assistants and digitalising education materials could lend themselves well to the sustainability of ML. Such initiatives need to be capitalised on if ML is to be mainstreamed. Overall, there is potential for some capacities or services to be strengthened or established in contributing to the sustainability of ML.

Stakeholder actions for sustainability

These services or courses of action were already being practiced in some zones and schools more than others. Some stakeholders were clearly doing their utmost to instil practices which would promote sustainability, such as managing scale up themselves rather than relying on UNICEF support, at a Provincial level, or building capacity to deliver ML across a whole school (e.g. by ISAs), at a school level. However, other stakeholders had different priorities and agendas with regards to ML and sustainability was not necessarily at the forefront of the discourse. This was sometimes due to the belief that this is a UNICEF programme and responsibility, not part of national requirements, or due to severe challenges in terms of capacity and resources at a local level which limited the potential for long-term forward planning more than meeting the needs of today. Some parents for example, could not and will not be able to support ML in their child's school. Contingency support should be in place for such instances.

At a national level, the MOE's Primary Education Branch is committed to the ML approach and has taken actions to promote its sustainability, e.g. producing national ML guidelines (yet to be published). For its part, the NIE, to date, has not been fully involved in the development of the ML approach, nor its implementation in the provinces, and therefore has not had the opportunity to take actions or decision to promote its sustainability.

Government resources and capacity

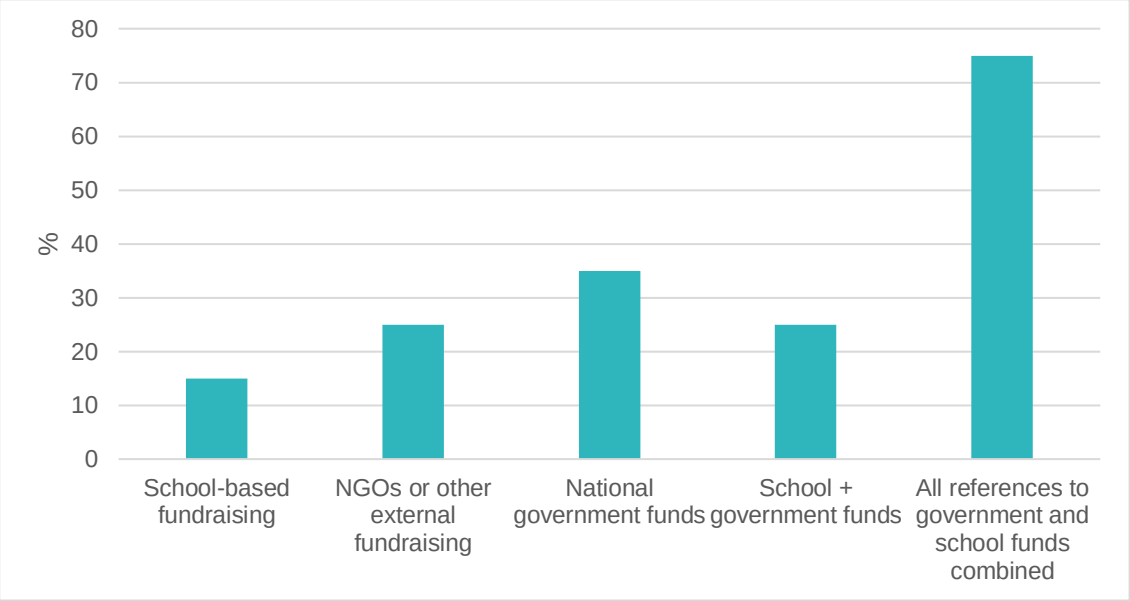
Based on interactions with MOE and NIE stakeholders at the Roundtable meeting and the Participatory Validation Workshop, it appears there is sufficient human resource at a national government level to champion, lead and own the mainstreaming of ML. Combined with strong personnel at a provincial, zonal and divisional level who are able to provide the necessary support directly to schools, this could be a winning combination to ensure positive benefits of ML emerging from the pilot provinces are sustained over a nationwide scale up. However, this assumption would be dependent on the existence of such individuals and engagement from the provinces in the short term to get things started on the right foot. In the longer term, once appropriate systems are in place and understanding and capacity built, individuals in key positions should be less important, and indeed must be for this to be sustainable.

Overall, whether or not the government can sustain ML benefits from a human resources/capacity perspective and from a financial perspective would need more in-depth investigation within

government financial systems, information which is not easy to access and wasn't sought as part of the current evaluation. When asked about challenges of ML however, 40% of support system actors (N = 35) cited budgets or funds as an issue and 20% a lack of resources (see Appendix 13). Capacity at a government level didn't emerge as a challenge, but it also wasn't asked about specifically, and hasn't been tested yet for ML, with the exception of the provincial level scale ups in Central and Eastern. It's too early to assess whether or not these can be deemed as "successes".

In addition, support system actors were asked how ML implementation costs could be sustained (see Figure 11). In response, 75% referenced government funds, school level fundraising or a combination of both, whilst 35% cited government funds alone as being how ML could be financially sustained. Clearly there is a recognition that government plays a role in financing ML but also an indication that they might not have the financial capacity to carry this alone. 25% of these support system actors cited NGO or other external funding as being necessary for ML costs to be sustained. However, it is also worth noting that UNICEF's financial contribution to ML schools has not been huge, and therefore that large amounts of funding shouldn't be necessary.

Figure 11: Ways in which ML costs can be sustained according to support system actors (N = 20)



UNICEF's approach

A few examples of how UNICEF has promoted (or not) ownership of the ML approach were observed during the fieldwork. Firstly, UNICEF have arranged and supported some cross-province visits for ML teachers, Principals and support system actors to learn how ML is being done elsewhere. This helps to promote local government/school ownership by putting more knowledge into the hands of the implementers to do so independently. Other trainings delivered or backed by UNICEF may also have promoted ML ownership. In addition, as previously mentioned, some provinces have chosen to scale up ML more widely themselves beyond the schools receiving UNICEF support. The motivation for this appeared to be related to the perceived effectiveness of the approach itself, but it is a clear demonstration of Provincial government taking ownership.

UNICEF's approach overall was one of being responsive to provincial needs rather than imposing on them. UNICEF support is not of the conventional type in which a project is designed with the

MOE with specific objectives and procedures in line with UNICEF standards. Rather, UNICEF support to the ML programme has been 'responsive, fluid and organic' (according to one UNICEF respondent during an interview). UNICEF has responded to requests from the MOE and the provinces for support in training, learning materials, guidelines, monitoring and teacher exchanges. They have adopted a flexible approach in relation to each of the four provinces, responding to felt needs by province-led implementers. UNICEF field officers have supported teachers, school principals, ISAs, province education officers, as well as the officers of the MOE Primary Education Branch. And UNICEF is not the only supporting ML agency. The project started four years before UNICEF's involvement and has been introduced to teachers and in schools gradually by the MOE, provinces and zones. In some zones there are ML schools supported by UNICEF and other ML schools supported by the respective Zone, Province and MOE, but not UNICEF.

On the other hand, some resources supplied by UNICEF to schools appear to not have promoted ownership or sustainability, particularly in terms of activity cards in the Northern and Eastern provinces. Whilst some teachers reported to find these useful and relevant, they also seemed to be insufficient in quantity and reach and therefore cause problems for teachers who rely on them for delivering ML but do not have enough. There was evidence of some overreliance in the form of teachers using activity cards for all remedial and enrichment activities without any adaptation or supplementing. Sustainable forms of material and material development were often referred to as being more suitable for ML (e.g. by around 50% of support system actors (N = 35)), though currently lacking.

There is limited evidence as to whether other stakeholders, such as CSOs, have ensured government or school ownership through their approach, though both CSOs interviewed worked closely with the provinces, which would likely facilitate their ownership, and one mentioned conducting model classrooms at a school level, which could promote ownership there. It seems such an approach has not been systematic though.

Sustainability: Main findings

1. Considerable technical capacity has been built from the provincial level down to the school level on the ML approach in the target provinces, zones, divisions and schools, thereby providing proof of concept that could be utilised for scale up. However, systemic issues around the functionality and resourcing of provinces, zones and divisions to strengthen school improvement are still prevalent.
2. While some see ML as a UNICEF initiative, this does not seem to be a whole-system belief or a barrier to government ownership. Most stakeholders believe that ML can be owned and run by government.
3. There is immense potential and political will to scale up the ML approach, contents and implementation modalities, once lessons learned have been addressed. Decisions on ML are currently not being taken at the national level, nor are all actors playing a role in undertaking actions which would foster its sustainability.
4. To date, the NIE has not played a role in the implementation of ML and has not incorporate it as an approach into standard teacher training programmes, curriculum revisions or the Teacher Instruction Manuals (TIMS). They are a key player in the national primary education system yet have been outside of the ML discourse and decision-making structures.
5. There is a belief that current financial resources available for ML would be insufficient for a nationwide scale up. However, ML has already been scaled up at a Provincial level by their own means, indicating it should be possible. Capacities which may be necessary for sustainable scale up, such as fundraising, networking and integrated monitoring, often appeared to be lacking at a local and school level

5.5 Equity, gender inclusion and HRBA

UNICEF's work on gender equality and the empowerment of girls and women is grounded in the Convention on the Rights of the Child, the Convention on the Elimination of All Forms of Discrimination against Women, and the Convention on the Rights of Persons with Disabilities; and is anchored in the landmark Beijing Declaration and Platform for Action (UNICEF, 2019). This section analyses the evaluation's findings on equity, gender inclusion and HRBA against this backdrop.

The ML programme is targeted, through its design, at addressing differences in learning levels and does not explicitly in either the planning documents or resource materials seek to address other issues of equity, HRBA or gender equality. At this stage there is no significant evidence that the ML approach has been effective in advancing equitable access to education (i.e. in terms of attendance or reduced drop out) or learning among different groups, though also no significant evidence to the contrary: learning outcomes or attendance have not yet been measured. However, in the course of data collection and analysis, mention of ML advancing learning or access was rare: 23% of ML teachers interviewed (N = 15) cited academic achievement as a positive aspect of ML; whilst 15.4% mentioned that ML prevents any students being excluded. HRBA language also wasn't observed explicitly in classrooms or in the practice of implementing ML – teachers still came across as being the "leader" and students as the "recipient" of education. However, as already discussed in this report, the focus in ML on *all* learners in a classroom, especially the weakest, speaks to HRBA principles of all children being rights' holders.

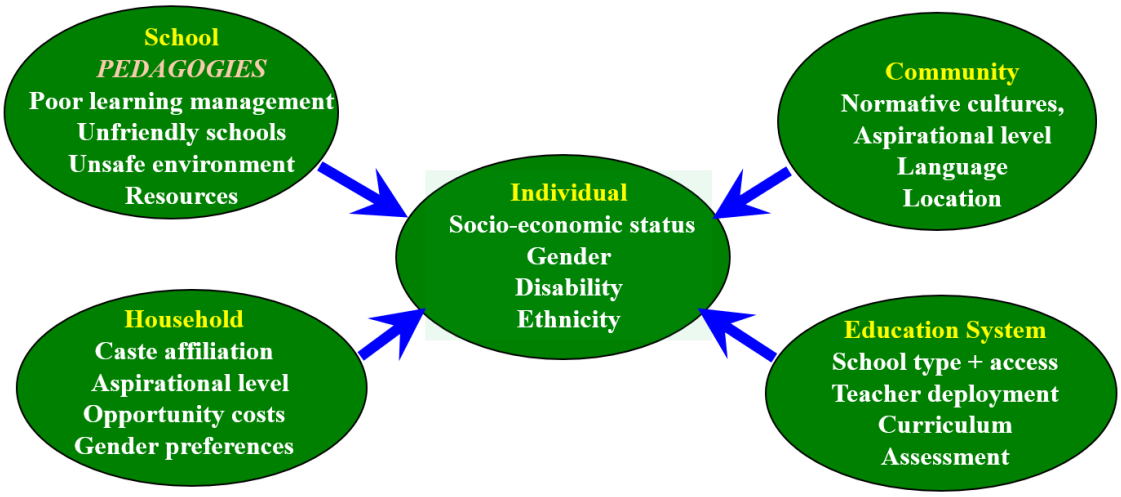
ML operates within the wider context of the national education system and is guided by the priorities of the Ministry of Education in terms of targets for training. As it is not a dedicated gender programme, focused training is not provided on this issue. To date the MOE has not issued an Inclusive Education policy (though one is under development) and rollout of their Inclusion toolkit published in 2012, and associated training, is as yet untracked. Therefore, ML's opportunity to influence the pedagogy of teachers in respect to such issues is hampered, and this was reflected in the discourse of ML teachers and other interview respondents who don't necessarily see ML through a gender and inclusion lens. Teachers trained in the ML approach were slightly more likely to show gender-sensitive behaviour in the classroom than those who were not trained in the ML approach. Some individual case studies show that ML can be successfully used by teachers to identify and address equitable learning, but this is not mainstreamed in the training or materials. The deep level of understanding by stakeholders of the effectiveness of the ML approach to address children's different learning levels demonstrates how awareness can be built across stakeholders on issues that otherwise may not be visible.

As referred to in Section 1.3, the CREATE Zone of Exclusion of most relevance to ML is 'silent exclusion', i.e. students dropping out of learning rather than school. Figure 12 develops the idea of silent exclusion further. There are many factors likely to increase this risk of dropping out of learning – individual factors, school factors, household factors, community factors and system factors. Among the school factors are the type of pedagogy in use, the management of learning and the friendliness of the school and learning environment. In principle, at the school level ML mitigates this risk, promoting an environment in which all children learn, a characteristic mentioned by many of the stakeholders in this evaluation.

Another school-level factor that should be examined closely is the language of instruction in school. In Sri Lanka children have the right to be educated in their mother tongue and schools are classified as either Sinhala or Tamil medium. In most of the lessons observed, children were being taught through their mother tongue by mother tongue teachers. However, in one of the Sinhala-medium schools visited during the fieldwork in Uva, all of the students in the Grade 2 class observed were Tamil children. This is very unusual, since all primary stage students in Sri

Lanka are entitled to receive their education through the language medium of their mother tongue at a school located within a two-mile radius. The Grade 2 teacher commented that these students had graduated to Grade 2 without having achieved the minimum levels of the Essential Learning Competencies: 'Some students were fully isolated/excluded during the first two terms of Grade 1 because they could not understand any Sinhala,' (the teacher taught in Sinhala). This provides a compelling example of how language can cause silent exclusion in an ML or non-ML school setting.

Figure 12: Zone 3 Silently Excluded – At risk of dropping out of learning



Source: Little and Lewin, 2020

Equity, HRBA and gender equality in ML documentation

In terms of ML programme documents, the national ML guideline and some ML resources being used in schools (e.g. activity cards), as well as monitoring tools, teacher guides and assessment materials were accessible. In these documents, relatively little reference to gender, inclusion and equity was found, if any. Remedial measures for students at different levels were mentioned in some of the monitoring materials and identifying the individual differences of all children and their learning problems was referred to in one of the teacher guides. This is largely related to catering for all levels of children in the classroom, something which stakeholders well understood, but that doesn't go any further in tackling exclusionary behaviours or promoting the learning of children from marginalised groups. This demonstrates a lack of explicit mainstreaming of equity, gender inclusion and HRBA issues in the ML materials and training, which may be a contributing factor to the lack of emphasis on these issues by teachers in the ML classroom or school.

Human rights do not feature explicitly in ML documentation either. However, the programme is aligned with HRBA in terms of its inclusive focus on all learners, including the weakest. The HRBA language of duty bearers (i.e. public agencies) and rights' holders (men, women and children) is not evident, but the status of some key stakeholders as being responsible (e.g. MOE) could be seen to represent duty bearers and school children deemed as having agency and choice over their education is in line with them being rights' holders.

The MOE ML guideline (in draft) refers at several points to ML as a method that contributes to the inclusion of both low and high achievers in learning, the need to offer low achievers remediation measures to ensure that they keep up with their lessons, and the value of ML as a tool that

enables those who have missed lessons through absenteeism to catch up. These messages support the reduction of some of the risk areas associated with silent exclusion discussed above (see Figure 12). However, they do not refer to other aspects of inclusion such as children with special education needs or with a mother tongue that differs from the medium of the school.

Gender equality findings

Gender norms which were prevalent in primary schools visited during fieldwork (both ML and non-ML) and evident in staffing and parenting roles were as follows:

- A very high proportion of teachers observed were women – only 8% were male
- Principals were almost always men – only 25% of Principals at the 16 schools visited were female, and such representation was even lower if taken regionally, with no female Principals in the east region schools visited, and only 1 in the north region
- Of parents involved in group discussions (a total of 152 across the 16 schools), only 7% were fathers (three of whom were not actually fathers but male role models)
- At MOE, the officers with responsibility for primary education are entirely women

Indeed, these findings align with previous research in Sri Lanka which found the vast majority of primary teachers to be female whilst many of the senior-most roles in the educational architecture at national, Provincial and Zonal level, are held by men, e.g. Provincial Directors are usually men and Additional Directors for primary education often women. The very highest level of officer in the MOE is usually male, with those responsible for primary education female (Little, 2013). This points to an issue of gender disparity in the different layers of government hierarchy, as well as an issue around the lack of male role models among teachers which may impact student's conscious and unconscious beliefs and biases about gender in both ML and non-ML classrooms.

Another study found that Sri Lankan secondary school materials often depict men and women in traditional gender roles (Kovinthan, 2016). The authors posit that the problem is worsened by the emphasis on tradition in the same materials: "The depiction of women and men in traditional gender roles alongside the emphasis on the need to follow tradition to uphold society leaves very little space for teachers or students to challenge the status quo". Indeed, they concluded the curriculum is fundamentally "grooming" girls to become obedient housewives. This is an area which merits more exploration in terms of ML materials.

Boys' under achievement throughout the education system has also been attributed to societal and cultural influences, curriculum and learning styles, peer group pressures and attitudes to education (Aturupane, Shojo and Ebenezer, 2018). There have been calls for an institutional review of aspects of the traditional school structure, curriculum, and assessment methodology, all of which may have an adverse impact on boys' performance (Aturupane, Higashi, Attygalle and Ebenezer (2019). And, findings on girls' favourable education performance arise in a society where labour market outcomes for women have been less than satisfactory when compared with those of men.

How ML has advanced equitable access and learning

At this stage, there is little evidence to demonstrate whether ML has advanced equitable access and increases in learning across different groups, though the evaluation findings suggest it may foster an enabling environment for such advancements.

Observations during school visits: Disability

Across all the teachers interviewed (N = 29), 24% provided definitive confirmation of at least one child in their class with special needs. More teachers reported having 'slow learners' but once the meaning of special needs and disability was expanded and probed, the majority then answered that there were no such children present in their class. The numbers of children reported by school principals as having special education needs was very small – four students across all 16 schools. These low numbers may be explained by the numbers of children with disabilities who are not attending mainstreaming education (23.5% of children aged 5-14 with disabilities are excluded from mainstream education, DCS, Statistical Data 2012 quoted by UNICEF, 2016) or there may be more children with special educational needs in schools who are undetected/undiagnosed.

Of the 54 teachers who attended the teacher consultation, 12 (22.2%) said they had at least one student in their classroom with special educational needs: 4 in Uva (28.6% of Uva teachers), 4 in Eastern (30.8% of Eastern teachers) 4 in Northern (26.7% of Northern teachers) and none in Central. In response to how they manage these students within their ML classrooms, some teachers said they give them more attention or simpler activities, whilst others said they let them engage in the same way as the other students in the class. Two teachers mentioned separating students with special educational needs from the rest of the class and one said the activity cards are particularly helpful for these students. This implies ML may be supporting inclusive learning in some particular cases.

During one of the school visits in the Eastern region, a child with Down's Syndrome, who was of primary school age, was observed at the perimeter of the Primary School, just beyond its entry gates. The evaluation team engaged with the Grade 2 teacher on why the child was absent from the school and she indicated that, "the children are afraid of the child," and that she did not feel she was adequately equipped to bring the boy into her class. She confirmed also that she had not received any training on special educational needs. In another school in the Eastern region, an older child was observed with severe mental disability, and when asked the teachers and Principal confirmed that there was a 'special Unit' at that school that was catering for 2 pupils, but that there were no children in the mainstream classes with any disabilities.

Conversely, one teacher in Uva cited how ML had helped her to identify the special educational needs of one her students. While giving this child more attention during remedial activities she realised that she had a problem with her vision. The teacher began to create special resources for her with bigger writing and observed improvements in the student's abilities.

Observations during school visits: Gender

During the 46 classroom observations undertaken by the evaluation team, Format 2C (see Appendix 15) provided data relevant to gender and inclusion. Teachers were assessed during the class on their behaviour, and in particular, out of 9 behaviour categories, the following 3 provide an indication of gender factors:

- Teacher encourages equal participation of girls and boys
- Both boys and girls answer the teacher's questions
- Girls and boys were sometimes sat together during the lesson.

Findings from analyses of these child-friendly behaviours no significant difference in gender attitudes and participation between ML and non-ML schools or between teachers trained in ML versus those not trained in ML. That being said, the means show that ML schools and ML trained teachers do exhibit greater levels of all the relevant behaviours, even if not to a statistically significant extent (see Appendix 13). Therefore, the participation of boys and girls, rate at which boys and girls sat together, and engagement of the teacher in encouraging girls and boys to be

involved, were not significantly different across the comparison types, but small positive increments are evident in ML cases. This gives a signal that ML pedagogy could be playing a role in advancing equitable learning in ML classrooms.

In terms of learning outcomes, there is no available data to track them and thus to identify whether ML has impacted children's achievement, regardless of their gender or able-ness. However, the qualitative findings from the field work present a picture of ML that would indicate a positive environment for such outcomes to emerge. For example, 11 out of 15 ML school teachers specifically highlighted engagement of weaker/slower students, activity-based learning, and the ability to support learners at all levels in their responses about how they experience ML. 7 out of 8 ML School Principals also emphasised the usefulness of ML for catering for children at their different pace of learning. Therefore, though these is no data yet available to support the conclusion that ML improves inclusion according to exclusion factors, a majority of respondents clearly indicate the enabling environment ML creates for such an outcome to emerge. However, it is important to note that inequities in learning are the result of many factors operating at the individual, school, household, community and system level (Figure 12). Pedagogy is just one of many.

Wider awareness of equity, HRBA and gender equality

Across 33 interviews of Government representatives at regional, zonal and divisional levels, none of the respondents mentioned gender, disabilities or specific issues for girls/boys' rights of their own accord. Asked about learners facing difficulties, and how such difficulties might be addressed, as well as for recommendations for improving education and ML in their geographies, none of the responses given alluded to specific issues of gender or marginalisation, aside from noting that ML is a useful tool for addressing different levels or abilities of students at once.

In the parent focus group discussions, across both ML and non-ML settings where a total of 141 mothers and 11 fathers were involved, there were no responses that indicated an awareness of or concern about gender, inclusion or marginalisation factors. Asked about any of their children facing difficulties, any positive response to this only alluded to the issue of 'slow learning' and need for additional support from the school or private tutors. These findings suggest there is a knowledge gap around gender equality and inclusion which ML could help to fill.

Equity: Main findings

1. ML's focus on promoting equitable learning for all children, especially the weakest, was well recognised by stakeholders and highlights its alignment with the principles of inclusion and human rights. There were also examples identified during field work of teachers who had used ML to help them to identify the needs of students with special educational needs.
2. ML documentation (e.g. MOE draft ML guideline, assessment materials, monitoring formats) wasn't found to contain explicit references to gender, disability, language differences or ethnicity. This may be a contributing factor for the lack of emphasis on these issues by teachers and other respondents during field work.
3. A lot of the findings on gender equality and inclusion pertained to the overall primary education system and were not applicable to ML contexts only. However, teachers in ML-related settings were found to exhibit greater levels of certain behaviours related to gender attitudes and participation.

6 Conclusions and recommendations

6.1 Conclusions

School level

There is a good uptake of the ML model at school level, but this could be made more effective by increasing teachers' access to resources and by encouraging school-based professional development, both of which can be done more efficiently. There is overall belief in and support for ML to be scaled up nationwide with government ownership. However, there are critical local issues which need to be addressed. Schools face a chronic lack of resources and materials which hampers ML implementation and therefore effectiveness. A sustainable solution for this must be sought. Material development and use could be made more cost effective and efficient relatively easily by supporting sustainable reusable material development and sharing within schools. Centralised training could be replaced or supplemented with a blended approach of more cost-effective school-based training and peer-support activities supported by materials available on mobile devices and online learning.

Province level

Flexibility in implementation and approach would be more effective if it was based on a set of consistently applied standards and if capacity building was needs-based. The evaluation findings point to variations across the provinces in terms of ML classroom practices, the content of training and of monitoring documents. In the North and the East, the pedagogic practices observed bear more similarity to the RIVER MGML model than do those in the Central and Uva provinces, which in turn bear more similarity to the preferred MOE model. This may have arisen through the actions of a range of ML champions re-constructing what they learned from the RIVER programme and grafting it onto the mainstream system in different ways. There is space in any pedagogy for both essential and flexible elements. There is little evidence that there has been an extensive discussion across the provinces of essential versus flexible practices though.

National level

The ML approach can be more effectively implemented and supported if there is clarity and consensus on its Theory of Change and if it is legitimated by NIE, together with other key stakeholders, and funded through a more efficient system that gets resources to schools when they are needed. As discussed earlier in this report, the current description of ML is not accompanied by a 'Theory of Change' or 'Results Chain'. There is currently a lack of clearly articulated objectives for ML or a conceptual framework for stakeholders to build their version of ML around. Future development of ML must start from a review and streamlining of the objectives of ML and the development of renewed plans of action, supported by a Theory of Change, with risks and assumptions identified and addressed.

To this end, the evaluation team has identified an implicit causal framework which may act as an initial starting point for such a development (Figure 13). The team created this retrospectively during its work. Figure 13 presents the inputs, processes, outputs, outcomes and impact of ML, as it appears to be intended by MOE and UNICEF. The overall impact – "a quality education for all children, which provides an active and enjoyable learning environment, encourages the development of a child's potential to its maximum and gives them the opportunity to express their views freely" – is adapted from the MOE vision for ML outlined in the draft ML guideline and discussed in some depth in Section 5.1.1. The outputs and outcomes are adapted from the

"objectives", or "positive features", of ML described in the same document (see Section 5.1.1). The processes are articulated well in extracts from a presentation of the ML approach by the Director of the MOE Primary Education Branch, 2016, and the inputs are those observed by the researchers as being necessary for successful ML implementation. Such a framework should be reviewed and improved by the MOE, NIE and the provinces as they move to the future. The concept is similar to what some term a 'Theory of Change' or a 'Results Chain', further guidance on which can be found in Brinkmann (2020, *draft*).

Internal coherence at a national level on ML, between MOE and NIE, has been weak to date, as is common with any new intervention. Rectifying this and mainstreaming ML into the national system would legitimate ML and the work of teachers, ISAs and officers, some of whom worry that they are not meeting all the NIE expectations by following the ML approach. The most effective way for ML to be legitimated is for its best elements to be integrated within the National Curriculum. This means not only its integration as a teaching method within the TIMS, but also a consideration of how best to provide provinces and schools with the teaching and learning materials to support it. Such materials would be funded centrally.

Mainstreaming would also obviate the need for a parallel system of monitoring, quality assurance and training. Moreover, it would save considerably on costs since, currently, ML represents an additional, not substitutable cost. Additional costs per child will fall if ML goes to a national scale, materials are produced which are reusable, and duplication is eliminated. For meaningful mainstreaming to happen, NIE must become a central player in the future development of ML.

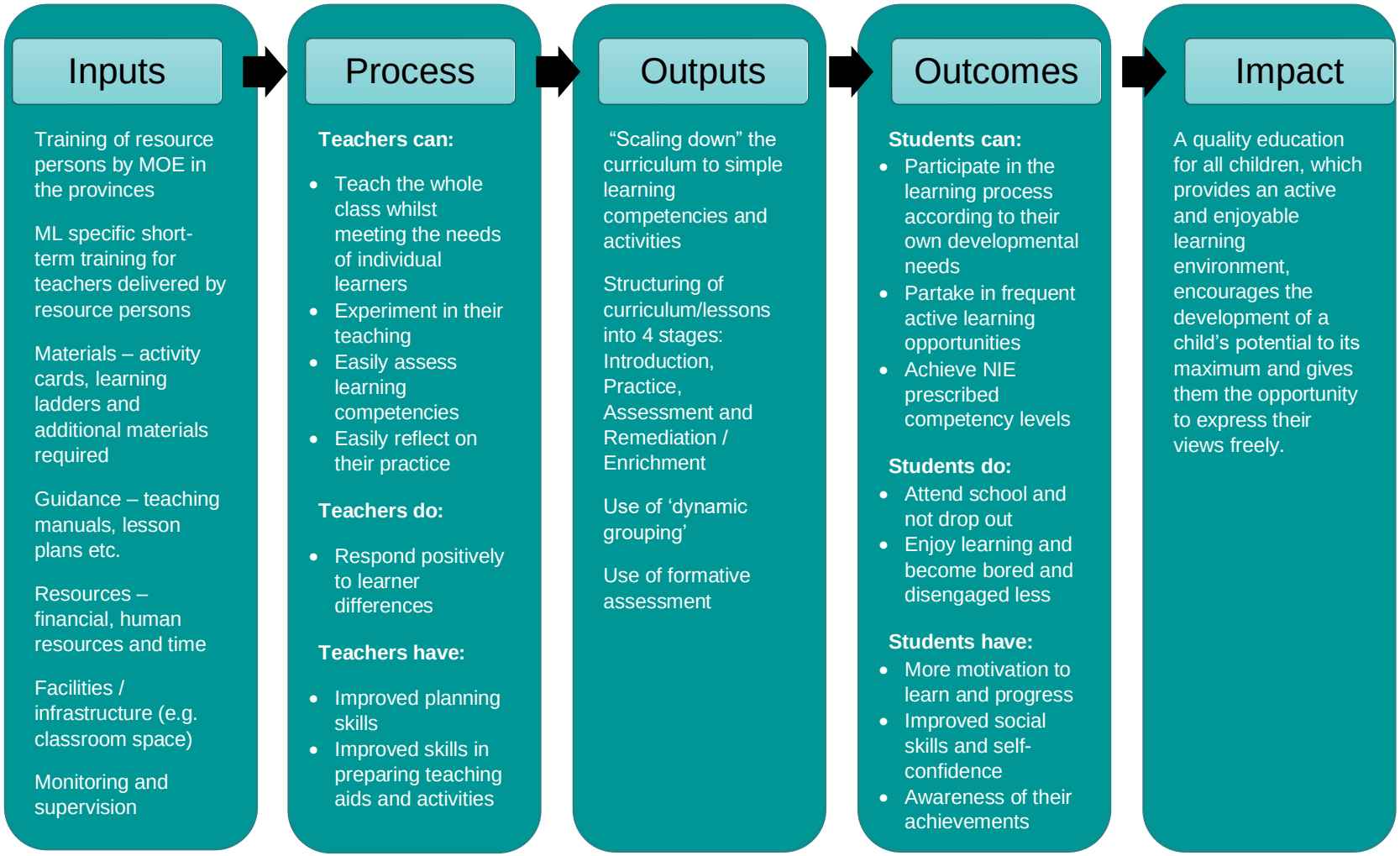
There is also need to create minimum standards of quality and quantity of training courses, of materials and monitoring for each and every teacher. A first step would be the creation of standards, the second an audit of teachers and schools. Such an audit would help to identify capacity gaps at a school level, something which is crucial for the success of the intervention. If a teacher is not coping in the first place, adding ML to the situation is not going to help unless the underlying capacity issue is dealt with.

Equity and ML

The success of ML in addressing diversity in learning levels provides an exciting opportunity to increase teachers' understanding and responses to a broader understanding of inclusion. ML is already well aligned with the government's ambitions around inclusive education, gender equality and human rights. However, these issues are not explicit in the ML methodology or materials yet, and there is a lot of potential for ML to reframe this narrative and raise awareness at a school and wider community level. This would likely have positive knock on effects on the learning outcomes and progress of all students in their ML classrooms.

ML has tackled one dimension of equity very directly – the learning outcome differences between children and the provision of targeted support for low achievers so they are not 'silently excluded' from learning. Equity embodies the notion of fairness and ML recognises that many low achieving students are low achievers for a range of reasons beyond their control – individual, school, household, community and system. Through its emphasis on remediation ML compensates low achievement with additional actions designed to help the low achiever continue along a pathway of learning. To date ML has not addressed a potential interaction between gender, language, poverty and ethnicity and the ML approach. This is an area for future research.

Figure 13: Causal framework



Source: Cambridge Education, 2020

Going Forward

The ML programme has been implemented in a context where national policy directives stress the importance of child-friendly environments for learning: child friendly principals are embedded in the MOE approach (see Section 2). The Multi-Level teaching programme has benefitted from this policy context and contributed to it. In the current education policy context there is an opportunity for ML to expand to other schools in the provinces and, as suggested already, to the entire mainstream system. An intensive engagement between MOE and NIE on the mainstreaming of ML is particularly timely in the current education policy context. ML's emphasis on inclusive education aligns with the government's commitments in this area and could hasten the finalisation and publication of the draft Inclusive Education Policy. In addition, a recently formed Task Force on Education Reform has taken on board President Gotabaya's *Vistas of Prosperity and Splendour* and his commitment to a 'truly student-centred education system', the development of all primary schools as child-friendly schools, the recruitment of teaching assistants for all Grade 1-5 teachers and digitisation of teaching and learning materials. Assuming that these commitments move beyond rhetoric, ML educators have much to offer to the Task Force and much to gain from them.

6.2 Lessons learned

Any intervention requires clearly articulated objectives and a Theory of Change, or results chain, which makes explicit for users and relevant stakeholders, what the conceptual framework, aims and expected pathway of the approach is. Without this, an intervention cannot be easily understood or measured, which again is likely to hamper its effective implementation. Shared ownership and consensus on purpose and methods is also likely to make a programme more resilient in the face of changing circumstances.

A successful teaching approach should be adaptable, as ML is, to the specific context of the school and classroom. However, it is also important to distinguish between an adaptation that is conceptual and one that is procedural, i.e. does a procedural adaptation align with an understanding of key concepts of ML or undermine one or more of them (e.g. the purpose and use of learning ladders). Having minimum standards for an intervention, which provide guidance on essential versus flexible elements, could help to reduce the risk of maladaptation.

The underlying capacity of the teacher is a crucial element in the success of a teaching and learning approach such as ML. Whether or not a teacher has received good basic training makes a big difference to successful ML implementation. Adding a teaching methodology to an already stressed teaching setting is unlikely to be effective. This is one reason why doing a school and teacher capacity audit can be a useful exercise.

Training, materials development and monitoring must go hand in hand for an approach such as ML, and each needs to be conceived of and implemented in a phased manner. There is no point in providing teachers with no ML training materials; and no point in monitoring 'ML lessons' in classes where the teacher has participated in no ML training. It is a package of inputs and support that is required, not one 'silver bullet'.

Internal coherence at a national level is necessary for an intervention to be legitimised and mainstreamed into an existing system. However, testing interventions at a small scale and generating evidence for their success, or otherwise, can be a useful step in bringing about wider system and policy change. For this to occur, a clear understanding of all stakeholders is necessary and awareness raising required.

6.3 Recommendations

Three main recommendations are set out below: (i) a call for the mainstreaming of ML through an intensive engagement between the MOE, NIE and the Provinces, (ii) an outline of the nature of such an engagement and (iii) a range of actions that need to be undertaken by support system actors and agencies in support of this mainstreaming. These are based on the evaluation's findings and also take into account a range of suggestions and recommendations made by stakeholder groups experienced in the practice of ML. The recommendations are made with cognisance of the broader work of the Task Force on Education about the future direction of the education system and of the new cycle of curriculum and learning materials revision embarked on in 2020 by the NIE.

1. Mainstream ML

It is recommended that expert groups from the MOE and the Provinces embark on an intensive engagement with the NIE to share lessons about the vision, concept and methods of ML, with a view to adapting and integrating the ML teaching and learning methods with the new curriculum goals and content, teacher education and quality assurance. This should accommodate the broader societal goals of equity and inclusion, together with the aspiration to move forward, expand and improve learning for all students. It will be important to recognise and enhance the technical capacity to deliver ML in the NIE, MOE and the Provinces.

2. The nature of an intensive engagement between NIE, the MOE and the Provinces

The engagement between the NIE, the MOE and the Provinces should include, but not be restricted to, the following:

1. MOE-NIE-Province Team observations and review of ML classes in each of the nine Provinces, each team to comprise an MOE Primary Education Branch officer, a member of the NIE Early Childhood and Primary Education Department and a Provincial ML resource person;
2. A clarification of the objectives of ML and its underlying pedagogic principles (e.g. differentiation, formative assessment, mastery learning, inclusion, peer learning, e-learning);
3. The joint development of a 'Theory of Change' from inputs to outputs/outcomes and anticipated impact;
4. A review of the underlying pedagogic principles of ML to highlight the essential and flexible elements of the ML approach in relation to the emerging primary education curriculum, with a view to ensuring a degree of standardisation across all Provinces and schools while empowering educators to make relevant adaptations to resonate with different school contexts;
5. The creation of minimum standards for the delivery of ML, including requirements for teacher training, materials for teachers and students, and support for systematic monitoring and supervision;
6. The review and revision of budgetary allocations to ensure these standards can be met going forward; and
7. The revision, finalisation, production and dissemination of the ML guidance Manual for teachers (the revision should address, inter alia, objectives, pedagogical principles, methods, formative assessment and learning ladders, and the use and purpose of different types of groups (teacher and student perspectives)).

3. Support actors and agencies

The revision and implementation of a revised curriculum and pedagogy needs to be supported and reinforced by a range of actors and be embedded within the core of the primary education system. The pedagogy transacted between teachers and students needs sensitive development and shared ownership within a professional development framework which seeks inputs from different groups of stakeholders. Eight steps are suggested to support the changes for this that MOE, the NIE and the Provinces need to make:

1. The inclusion of new ML content into pre-service and in-service teacher education and training undertaken by the schools, Provinces, NIE, National Colleges of Education (NCOEs), Teacher Training Colleges (TTCs) and the Universities.
2. The digitisation of all ML related curriculum and training materials which should be used in online and face-to-face teacher education and, additionally, be made available as open access resources for teachers via the MOE's developing E-platform, known as E-thaksalawa.
3. The updating of the training, roles and responsibilities of the in-service advisors who work closely with teachers.
4. Simplification of the finance and administration 'circulars' that determine how school principals and teachers can access and spend money from the 'School Quality Inputs' budgets to assist them in the development of materials for teaching and learning with higher discretionary limits.
5. The integration of ML methods within the MOE and Province-level quality assurance and monitoring and supervision systems to ensure alignments between teacher education and quality assurance objectives and learning evaluation criteria.
6. Prioritisation as soon as feasible of the development of a training programme that includes ML methods for the soon to be recruited new cadre of teaching assistants.
7. An immediate change in Teacher deployment practices at the Zonal level to ensure that those who have been trained in ML are posted to ML schools (this recommendation assumes that mainstreaming may take some time to be implemented).
8. An urgent audit of ML teacher needs to ensure that training is directed towards those in most need and most likely to benefit including both existing teachers and new entrants.

Specific Guidance for UNICEF

It is recommended that UNICEF should increase its support for the development and dissemination of ML through strategic facilitation of an 'intensive engagement' between MOE, NIE and the provinces to help ignite a cycle of curriculum innovation across the system. This can happen alongside continuing existing support for some inputs at the Province level until a new national curriculum strategy is in place.

The engagement will build on UNICEF experience to date in its support to ML schools and teachers in four Provinces. Starting immediately, it could support all the steps outlined in 2 (i) - (v). UNICEF could contribute to the Task Force for Education and use its convening power to assist in drawing down from its accumulated experience with ML and it could facilitate stakeholder engagement to build constituencies of support to implement more effective and efficient methods of organising learning.

UNICEF could support the NIE, MOE and Provinces to develop the infrastructure to accelerate curriculum development especially in relation to current Task Force commitments to:

(i) develop more student-centred learning for all learners;

(ii) digitise learning materials and teacher guides;

(iii) prepare teaching assistants for their new roles in primary classes;

(iv) share the formats used by the evaluation team, especially the class observation tools, for their further development and use by MOE, NIE and the provinces.

Finally, UNICEF can champion inclusion and equity dimensions across these activities to ensure that the rights of the most disadvantaged are always forefront; use this evaluation to demonstrate knowledge leadership and evidence-based decision making in practice; and share practices from other countries to facilitate these recommendations.

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A. Appendix List

All appendices are presented in supplementary volumes (II and III) to this main report.

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