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USAID FUNDED MALAWI TEACHER PROFESSIONAL DEVELOPMENT SUPPORT (MTPDS) PROGRAM

National Primary Curriculum Monitoring and Evaluation

Implementation Strategy

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National Primary Curriculum Monitoring and Evaluation:

Implementation Strategy

Produced and Prepared by USAID Funded MTDPS Program in collaboration with MoEST

Table of Contents

Acronyms

BE	Basic Education
CPD	Continuous Professional Development
CPEA	Coordinating Primary Education Advisor
CSO	Civil Society Organization
DEMs	District Education Managers
DFID	Department for International Development
DIAS	Department of Inspectorate and Advisory Services
DTED	Department of Teacher Education and Development
EDMs	Education Divisional Manager
EMIS	Education Management Information Systems
ESIP	Education Sector Implementation Plan
M&E	Monitoring &Evaluation
MIE	Malawi Institute of Education
MK	Malawi Kwacha
MOEST	Ministry of Education Science and Technology
MTPDS	USAID Funded Malawi Teacher Professional Development Program
NESP	National Education Sector Plan
NSTED	National Strategy for Teacher Education and Development
NPC	National Primary Curriculum
ODL	Open and Distance Learning
OBE	Outcomes-Based Education
PEAs	Primary Education Advisors
PCAR	Primary Curriculum and Assessment Reform
SEMA	Senior Education Management Advisor
TOT	Training of Trainers
TTC	Teacher Training College
USAID	US Agency for International Development

1. Introduction

The Monitoring and Evaluation Framework for the National Primary Curriculum (NPC) allows for systematic measurement of the essential inputs, outputs and outcomes of the National Primary Curriculum (NPC) that was introduced through the Primary Curriculum and Assessment Reform (PCAR) process, which was initiated by the Ministry of Education Science and Technology (MoEST) starting in 2007. The set of 11 Performance Indicators that are described in the NPC M&E Framework serve to evaluate the implementation, uptake and impact of the NPC, providing high quality and representative school-based information to support regular primary education performance reviews. This New Primary Curriculum M&E Implementation Strategy complements the NPC M&E Framework by providing a systematic description of the processes by which data will be collected and the instrumentation that will be used.

This strategy was developed by USAID Funded Malawi Teacher Professional Development Support (MTPDS) Program in consultation with MoEST officials from the Departments of Education Planning (DEP), Basic Education (DBE) Malawi Institute of Education (MIE), and especially the Department of Inspectorate and Advisory Services (DIAS). It provides detailed information on planning and budgeting for the annual data collection, analysis, and performance review processes described in the M&E Framework for the NPC. After a brief overview of the technical approach, a detailed schedule or "work plan" for all implementation activities is presented. Annex 1 contains Performance Monitoring Tables which define and summarize each indicator. The budget is in Annex 2. Data collection instruments are placed in Annex 3.

2. Technical Approach

The M&E Framework for the NPC outlines a set of 11 Performance Indicators that serve to monitor and evaluate primary school sub-sector performance according to the following inputs and outcomes fundamental to the NPC, including:

- Production, availability and use of the core teaching and learning materials of the NPC
- The success of rolling out orientation and training of educators related to the NPC
- The frequency, nature and value of ongoing school-based support to teachers on the NPC (The nature and value of support is obtained through qualitative inquiry supplementing the indicator which informs the frequency of support to teachers)
- The successful uptake of classroom practices fundamental to the NPC
- The impact of the NPC on learner performance in early grade reading and mathematics

Even though planning, budgeting and oversight of the annual data collection exercise will be led by the members of the Department of Inspectorate and Advisory Services (DIAS), the technical approach to implementation is built on the premise that: *monitoring and evaluation implemented by diverse stakeholders promotes a shared sense of responsibility and accountability for the outcomes*.

Thus, the responsibility for monitoring and evaluating the PCAR and NPC will be shared by all Directorates involved in primary education and primary teacher education and – within the context of

school performance reviews – by representatives from school governing bodies, parents and other community members. The NPC M&E, implemented under this approach, can go far in mobilizing widespread commitment to achieving the goals and objectives of the NPC and ultimately to the enhancement of early grade literacy and numeracy attainment. To this end, the implementation of the annual data collection, analysis, and performance review process will involve inter-departmental representatives from the MoEST, the Malawi Institute for Education (MIE) and Malawian teacher education and research institutions. School performance reviews which will follow the monitoring activity and make up the dissemination aspect of M&E. This will involve parents, members of school governing bodies, and other community members (e.g., traditional leaders, CSO representatives, private sector) as well as educators.

The cycle of implementation will take place over the course of approximately three months out of the year and include the following components: implementation planning and budgeting; preparation and printing of instruments; training of the field teams; data collection; analysis and reporting; and performance review. These components, including roles and responsibilities for each are introduced below.

3. Detailed Description of Implementation Components

A. IMPLEMENTATION PLANNING AND BUDGETING (Nov 1st – 14th Week November)

Three days each year- preceding the training and field work- are dedicated to reviewing the data collection process and finalizing the specific requirements of the field work. This will be an inter-departmental task organized and led by DIAS. The objectives of this planning meeting are to review roles and responsibilities, random sampling of schools, time-frames, instruments, training venues, logistics arrangements, and budget. The planning meeting is also an opportunity for stakeholders to discuss additional research questions that could be pursued during the field work and within the budget. For example, it is possible within this framework to add a limited number of questions to the teacher interview and/or to add one or two focus group discussions that could serve to answer research questions that may emerge new from year to year. In these instances, teacher interview forms may be modified to add additional questions or, for example, focus group discussion points may be developed if there is a need for such qualitative inquiry. Planning and budgeting should take place during the last week of September.

B. PREPARATION AND PRINTING OF MATERIALS (Nov 15th – 30th)

MIE will be responsible for preparing and printing the Core Instruments, including any additional surveys or guides that may be added during the pre-planning meeting (above). These will be prepared and printed prior to the data collection training. Data collection materials include: forms for recording data from the reviews of syllabi and learner texts to take place at the school; teacher observation instrument; teacher interview guides; discussion guides for debriefing the school and community; and any additional to-be-determined materials supplementing the core set. Materials preparation will take place during the first two weeks of October.

C. TRAINING (December 5th – 29th)

Implementation training will take place in 2 phases. The first phase involves a National Training of Trainers (TOT) workshop for the Senior Education Management Advisors (SEMAs) and selected Teacher Training College (TTC) Field Supervisors. Phase 2 will take place in the Division Education Office and will involve the direct training of all field team members. Qualified DIAS officials and selected MIE staff that have been trained in education survey techniques, focus group discussion and school performance review process will lead the Phase 1 National TOT workshop and provide oversight of the SEMA trainers during the Phase 2 training of field teams. Training will take place from mid-October to the end of October.

- Phase 1

TOT training, led by DIAS Officials or MIE staff, is provided to SEMAs and selected Lead TTC Field Supervisors during a 3-day workshop based in Lilongwe. Participants receive training on the entire implementation process in order to prepare them for the trainer and team leader roles. This training and all other training will involve a day of field work in schools from which inter-rater reliability measures will be taken and reviewed.

- Phase 2

SEMAs in each division will be responsible for training the field teams for the schools selected for the division. A DIAS official or MIE staff member will assist, provide oversight and supervise the division training. The Phase 2 workshop will last 3 days and include a field pilot in a nearby school. During the field activity, observer pairs will observe real classrooms. Among others, the following topics will be covered:

1. Introduction. SEMAs will provide an introduction to the goals and objectives of the M&E Framework for the NPC and Implementation. The SEMA will also introduce participants to the training objectives and what the team will do and learn during the 3 day workshop.
2. Detailed school activities and schedule. All team members will learn the procedures for the day, their particular role and will learn how to introduce themselves to teachers, students, and where indicated community groups (e.g., exit briefing).
3. Administration of surveys, classroom observations, and learner assessments. Team members will learn and practice the administration of all instruments and will be have an opportunity to establish acceptable inter-rater reliability through a field visit to a school in-session.
4. Recording and scoring. Team members will learn how to record responses on response forms and score the classroom observation and learner assessments.
5. Compiling results. Team members will learn to compile data from the teacher observations and learner assessments they conducted.
6. Team review. Team members will learn their role in the internal team briefing which will take place during lunch, prior to the community briefing following. In this meeting team members will complete their scoring and report results to the Team Leader. Team members will also discuss any key findings that they feel would be important to share during the school-community briefing. The Team Leader will consolidate the scores and comments and review the small set of bullet points for the school-community briefing.
7. Teacher-parent briefing. Team members will learn the objectives of the school-community briefing and learn basic skills and ethics to ensure that teachers and community members are left feeling that they have an important role to play in advancing quality teaching and learning. The objectives of the teacher-parent briefing include: sharing key information learned from the school assessment; facilitate discussion of these key points; mobilize teacher and parent interest and commitment to supporting early grade learning.

8. Logistics planning. Team members will understand exactly where and when to report for the data collection activity, learn about provision for transportation, meals, and accommodation, depending on the travel requirements for participating team members. For example, the neighboring and local PEAs will be budgeted for fuel for their motorcycle and will be provided a lunch allowance, but will not be provided allowance for other transportation or accommodation.
9. Evaluation of training. Team members will have an opportunity to provide feedback to the training team to ensure that the training remains dynamic and that each year informs and serves to improve the training courses to follow.

D. DATA COLLECTION (January 14th – 31st)

The majority of data will be collected in a representative sample of schools across Malawi. Data collection for M&E Indicator 1 and Indicator 2; however, are based on reviews of the production of syllabi and teacher's guides. A Senior DIAS Official from the DIAS Headquarters, working with the appropriate MIE Official such as the PCAR Coordinator, will be responsible for reviewing annually the production of teacher syllabi and teacher guides. The identified DIAS Official will be responsible for consolidating the data on production and calculate the measurement for:

- Indicator 1: Syllabi to teacher ratio
- Indicator 2: Teacher's Guide to teacher ratio.

A total of 120 schools randomly sampled each year from all the primary government schools in Malawi, stratified by division and district, provide a representative national sample according to the distribution of students in the primary school population. This sample will result in a range of 16 to 38 schools per Division, depending on the relative primary school population in the Division. For example, Central East Division has less than half the primary school learners than Central West Division and therefore the random sample is expected to result in approximately 16-17 schools in Central East and 38-39 schools in Central West Division. This will result in a representative national sample of school performance information on materials, instructional practices and a snapshot of student learning in early grade reading and mathematics. In total, the data collection activity will result in 120 school materials reviews; 480 teachers observed and interviewed (960 lessons: one math lesson and one reading lesson for each teacher); 2400 student learning snapshots (i.e., 1200 Std.2 and 1200 Std.4 students); and 120 teacher-parent briefings.

The six-person field team will be made up of:

- 1 SEMA
- 1 Coordinating PEA
- 1 Neighboring PEA
- 1 Local PEA
- 1 TTC Field Supervisor
- 1 National Supervisor (i.e. DIAS Official or MIE staff person)

Oversight and supervision will be provided by either a senior DIAS officer joining the field work from DIAS Headquarters or will be provided by a senior researcher from MIE. The National Supervisor on each team will be responsible for providing oversight and will fill in when there is a team member gap. He/she will also lead the teacher-parent briefing following the data collection activity. Team members who are primarily responsible for classroom observation and student assessment will include: the SEMA; Coordinating PEA; Neighboring PEA; and TTC Field Supervisor. Given the potential conflict of interest,

the Local PEA will not participate in direct teacher observations or student testing. The Local PEA will be responsible for collecting data on the availability of syllabi and textbooks. He/she will collect this information during the week prior to the school visit. The National Supervisor will check the materials review and data collected from the PEA during the school visit. The accuracy of the materials data will also be checked during the classroom observation activity when teachers and students are asked to show their materials.

Each team will visit four schools per week. A day in the field each week will be allocated to data consolidation, data entry and team discussions about results and recording the notes from team discussions. The days selected will be based on an evaluation of the "best days," and will allow for some scheduling flexibility given community nuances. For example, there could be a market day where absenteeism is particularly high or travel between schools may dictate the weekly school visit schedule.

Key school-based data collection activities

1. Official notification to school

Prior to the school visit DIAS will officially correspond with the Head Teacher to inform them of the M&E data collection activity. A schedule of the data collection activities will be provided in the notification. Head Teachers will be requested to send the Teacher Registers for each Standard, Standard 1 to Standard 4 and the Student Registers for Standard 2 and Standard 4. It is important to have this information prior to the training scheduled for mid-October. Therefore, schools should be notified immediately following the Implementation Planning and Budgeting activity (when the schools are selected) which takes place in the last week of September. The Coordinating PEA and Local PEA will be responsible to ensure that these registers are provided to the National DIAS Officials in a timely fashion. Head teachers will also be requested to organize a one-hour briefing with standard 1 – 4 teachers and parents of standard 1 – 4 learners to take place after school hours between 1:00 and 2:00 PM.

2. Materials Review

- Local PEA Responsibilities to Materials Review

The Local PEA will visit the schools one or two days prior to the team visit and will review the availability of syllabi, teacher's guides, textbooks in order to measure performance on Indicator 3, Indicator 4, and Indicator 5. The Local PEA will count and record the number of primary school syllabi and number of teacher's guides available at the school by visiting classes to see the teacher syllabi and reviewing the school stocks and visiting classes to observe the availability of syllabi and teacher guides. The Local PEA will record the number of syllabi and teacher guides and the number of teachers in the school. He/she will record the number of textbooks in each subject and each Standard and will record the number of registered learners for each Standard. The Local PEA will support the M&E Team at the school during the school visit. At that time he/she will provide the completed forms for the Materials Review, Indicators 3-5.

- Classroom Observer Responsibilities to Materials Review

As mentioned above the Local PEA will complete the information needed for calculating the measures on Indicator 3-5 during the materials review process in the days preceding the team visit. The team members conducting the classroom observations will also ask to view the teachers' syllabi and the teachers' guides and will record whether or not these were available and in use in the classroom. The classroom observers will also record the number of learners in the classroom and ask the learners to show the team member their Chichewa and Mathematics books by raising them in succession in the air.

This data will be recorded on the teacher observation forms and transferred to the materials review form in order to consolidate information on materials.

3. Classroom Observations

The classroom observation instrument was developed by a team of MoEST officials from Development and Planning, Basic Education, DIAS and MIE. The classroom observation instrument was designed to measure instructional practices that are considered "essential" to classroom instruction under the NPC. Student observation items were designed to measure student behaviors in the classroom that are considered "essential" for learning. Acceptable teaching practices should promote the desirable learning behaviors under the NPC. The classroom observation instrument is made up of 19 observations items, 6 student observations and 13 teacher observations. Each observation is rated on a 4-point scale according to specific scoring definitions given for each behavior to be observed on the classroom observation instrument. Though scoring definitions will be specific to the behavior being observed, in general the scores range from a score of "1" representing very poor understanding and application of the target behavior being observed to a score of "4" representing excellent knowledge and application of the target behavior being observed. A score of "3" represents satisfactory understanding and application of the behavior.

As mentioned above, each observation item is tied to measurement criteria that are grounded in a practical definition. For example, in measuring teachers' ability to "Support learners of all ability levels," the ratings are defined as:

1- Fails to adjust lessons to diverse learner levels
2- Attempts to adjust lessons for learners with diverse abilities
3- Successfully adjusts lessons for diverse abilities, both slow and advanced learners
4- Successfully adjusts lessons for learners with diverse abilities, including special needs

Two team members will be selected to conduct the classroom observation. Classroom observers will include any of the following team members: SEMA, DIAS Official, Coordinating PEA, and/or TTC Field Coordinator. The Neighboring PEA and Local PEA will not be assigned to the classroom observation activity.

One teacher will be observed in each of the Standards 1 through 4, with a total of four teachers observed in every school. Each teacher will be observed presenting a Chichewa lesson and a Mathematics lesson. Each of the two selected classroom observers will observe 2 teachers, one from the infant classes (Standard 1 and Standard 2) and one from the junior classes (Standard 3, Standard 4).

The assigned score for each lesson observed will be the average of all items observed for that lesson. Teacher observations that yield an average rating of 3.00 will meet the criteria for being included in the percentage calculation for Indicator 8, "Percent of teachers demonstrating essential OBE practices for teaching early grade literacy" and Indicator 9, "Percent of teachers demonstrating essential OBE practices for teaching early grade mathematics."

4. Teacher Training and Support

Individuals assigned to classroom observations will also be responsible for conducting teacher interviews to learn about the nature, usefulness and extent of the teachers' orientation and training on

the NPC and the nature and extent of follow-on teacher support provided to assist teachers in implementing the NPC. Teacher surveys and interview guides will be attached to the classroom observation instrument. After the classroom observation and during a scheduled break between lessons, teachers will be interviewed to obtain information on training and support. Observers will record information needed to inform the three indicators related to training and support:

- Percent of teachers receiving initial orientation
- Percent of teachers receiving additional training beyond the initial orientation
- Frequency of school-based support received in the current term.

To enrich the data on training and support the interviewer will also probe into the nature of the follow-on training activity and to the nature and value of school-based support.

5. Snapshot of learner performance

- Introduction

Learner performance in Chichewa and Mathematics will be measured through small sample of Standard 2 and Standard 3 literacy and numeracy ability, referred to here as a "snapshot of literacy and numeracy." The "snapshot" approach allows the team to capture some meaningful aspect of learners' literacy and numeracy skill development in relation to grade expectations, but does not provide comprehensive nor diagnostic information on the learners reading and mathematics achievement. The reduced sample of learner skills in early grade reading and mathematics do serve to measure performance on the four outcome indicators of the NPC with strong reliability and validity.[1] The outcome indicators include:

- Average oral reading fluency for standard 2 learners
- Average oral reading fluency for standard 4 learners
- Average standard 2 learner performance in basic numeracy skills
- Average standard 4 learner performance in basic numeracy skills

- Reading

Oral reading fluency, a measure of the number of words read correctly in one minute, was selected as a meaningful and effective "snapshot" of literacy skill development for the NPC M&E. In the National Baseline Assessment of Early Grade Reading conducted in November, 2010, 72.78 percent of standard 2 learners and 41.86 percent of standard 4 learners obtained zero scores in oral reading fluency. The professional literature shows that there is a close relationship between oral reading fluency and reading comprehension. As the child becomes more automatic or "fluent" in his reading of passages the more attention the child can give to the meaning of what he/she is reading and thus the better he/she is able to comprehend what he is reading. The reading passages used for assessing oral reading fluency were taken from those developed for the Malawi National Early Grade Reading Assessment (EGRA). Measurement of the standard 2 and standard 4 learner performance indicators for literacy is the national average reading fluency for standard 2 and standard 4 learners, respectively.

- Mathematics

Selected subtests from the Early Grade Reading Assessment (EGRA) which was administered as part of the National Baseline Assessment of Early Grade Mathematics conducted in November 2010 make up the "snapshot" of early grade numeracy skill.[2] These include Oral Counting, Number Identification,

[1] To be determined

[2] The final decision about the mathematics items are still to be determined with consultation from the DIAS team and from the mathematics advisor leading the EGMA test administration.

Addition Problems, Subtraction Problems. In the Oral Counting subtest, learners count by rote as far as they can in one minute. In the Number Identification subtest, learners identify numbers presented on a grid. In the Addition Problems and Subtraction Problems subtests, learners perform simple arithmetic operations, including single and double digit numbers. A percentage correct score is calculated for each learner. Measurement of the standard 2 and standard 4 learner performance indicators for mathematics is the average percent correct score for the mathematics assessment for standard 2 and standard 4 learners, respectively.

6. Teacher and Parent Briefing

The purpose of the teacher – parent briefing is to mobilize school and community commitment to supporting learners in attaining basic literacy and numeracy. Briefing these stakeholders on the activity and where possible, some of the results in learner testing, will help to foster a shared sense of responsibility for the success of the NPC. During the course of the day, data collectors will have time to consolidate results and prepare some key talking points for the teacher – parent briefing. It is essential that the teachers and parents participating in this briefing are left with a positive sense of empowerment that they have a role to play in supporting the school and helping to promote improvement in the outcomes from year to year.

Data collection will take place from the 1st to the 21st of November. Each team will visit 8 schools each over the course of two weeks (4 schools per week and one off-day for data scoring, entry and discussion). The period of 3 weeks provides for some flex time to ensure that all 120 schools are visited.

General schedule for the school-based data collection

7:00 Arrive at school. Meet Head Teacher for introductions and discussion of the data collection. Final selection of learners for testing and classrooms for observation will be selected. Head teacher informs team about her plan for learner testing.
7:30 Team divides up and organizes for the teacher observations, interviews and student testing. Classroom schedules are reviewed to plan schedule of observations and interviews. Teachers are informed.
8:00 Classroom Observation and Learner Testing;
12:00 Data collectors consolidate data, prepare for debriefing
1:00 Briefing of standard 1-4 teachers and standard 1-4 parents
2:00 Collect materials, pay respects to head teacher and leave
3:00 Travel to Teacher Development Center for a team briefing, consolidate results and plan for following day, depart

E. DATA ENTRY, ANALYSIS, AND REPORTING (November 23 – December 15)

Data entry, analysis and reporting will be shared among the Field Teams and the National DIAS. Field teams will be responsible for entering data into Excel spreadsheets during the field work. Two extra days have been scheduled in the field to ensure that each Field Team completes the scoring and data entry for their assigned schools. These data, in electronic form, will be transported to the national DIAS office by the National Official assigned as supervisor on each team. The Senior DIAS Advisors based in the National Office, working with MIE staff from the Research and Evaluation Unit, will be responsible for consolidating, analyzing and reporting results. Both National and Division findings will be reported in the Annual NPC M&E Report.

F. PERFORMANCE REVIEWS (Feb 1st -14th)

The use of information gathered from National NPC Monitoring will be facilitated through a schedule of Primary Education Performance Reviews at the National and Division Levels, to be scheduled following the distribution of the Annual M&E Report.

ANNEX 1. Performance Monitoring Tables for the Malawi NPC M&E Indicators

Indicator	Definition	Plan for Data Acquisition				Analysis and Use of Data	
		Source	Method	Responsible Party	Frequency	Analysis	Use of Information
1. Syllabi to teacher ratio (produced)	This is a measure of the production of syllabi in all subjects (Combined for Primary	MIE	Visit MIE and review production reports	DIAS Official	Annually	Primary syllabi produced/ teachers	To inform the relationship between production and availability of syllabi in schools
2. Teacher's guide to teacher ratio (produced)	This is a measure of the production of teacher's guides for all subjects	MIE	Visit MIE and review production reports	DIAS Official	Annually	Teacher guides Produced/ teachers by subj.	To inform the relationship between production and availability of Teacher's guides in schools
3. Percent of teachers with syllabi	This measures the actual number of teachers that have a copy of the syllabus that is readily available in the school	Teachers observed in classroom	Visit school to count the number of syllabus's that are being used	Local PEA with oversight from School M&E Team	Annually	Primary syllabi in classrooms/ teachers in schools observed	This will inform the success in getting materials in the hands of the user
4. Percent of teachers with teacher's guides	This measures the actual number of teachers that have a copy of the teachers guide that is readily available in the school	Teachers observed in classroom	Visit school to count the number of teacher's guides that are being used	Local PEA with oversight from School M&E Team	Annually	Teachers guides in classrooms/ teachers in schools observed	This will inform the success in getting materials in the hands of the user
5. Percent of learners with a curriculum based text. (Information supplemented with information on the use of texts in the classroom)	The number of learners in selected classrooms at sample schools in possession of a curriculum-based textbook for subjects being observed (literacy and numeracy) divided by the total number of learners in those selected classes expressed as a percentage	School stores and learner observations in class	Visit to school and count numbers of texts for all subjects and grades and number of learners registered	Local PEA with oversight from School M&E Team	Annually	Texts for a given subject and grade/number of students for the grade	This will inform the success in getting texts in the hands of learners. The text/pupil ratio will be supplemented with quality data on the use of texts in the classroom
6 Percent of teachers receiving initial orientation on the NPC disaggregated by teacher qualification	Initial orientation refers to the introductory in-service training on the NPC	Teacher	Teacher interview following classroom observation during school M&E visit	Field M&E Team	Annually	Calculation of % based on number of teachers interviewed	These data inform the MoEST of the success in reaching all teachers for NPC orientation and provide information on gaps

Indicator	Definition	Plan for Data Acquisition				Analysis and Use of Data	
		Source	Method	Responsible Party	Frequency	Analysis	Use of Information
7. Percent of teachers receiving additional training beyond the initial orientation	Additional training refers to continuous professional development focused on supporting key areas of specialized training such as early grade reading	Teacher	Teacher interview following classroom observation during school M&E visit	Field M&E Team	Annually	Calculation of % based on number of teachers interviewed	These data inform the MoEST on the success and reach of continuous professional development programs
8. Average frequency of support visits teachers received in the current term (Data to be supplemented by quality information on nature and value of the support)	"Support" refers to coaching, mentoring, in class supervision and demonstration provided by peers, PEAs, head teachers, or coaches/mentors	Teacher	Teacher interview following classroom observation during school M&E visit	Field M&E Team	Annually	Average calculations based on total number of teachers interviewed	The frequency data will help to inform and advise the MoEST on the effectiveness of teacher support systems
9. Percent of teachers demonstrating essential OBE practices for teaching early grade reading and mathematics - disaggregated by standard and subject	"Essential OBE practices" refer to essential teacher instructional practices which are key to implementing OBE according to the NPC – according consensus from MoEST inter-departmental stakeholders.	Classroom observations	NPC M&E Classroom Observation Instrument: Observing Std 2 and Std 4 Chichewa Lesson	Field M&E Team	Annually	Item scores on the teacher observation instrument are averaged for each lesson. Teachers with average scores of 3.0 or above are counted in the %age	This indicator provides both composite information on teacher instructional practices as well as diagnostic information on the relative strengths and weaknesses across essential practices
10. Average oral reading fluency – disaggregated by standard	Oral reading fluency (ORF) is measured by the number of words a learner can read from a passage in one minute	Learner	The passage and procedures for assessing ORF are drawn from the EGRA instruments applied in the National Baseline	Field M&E Team	Annually	A mean will be calculated from all learners and reported by grade	Composite information on learner performance is used to track the impact of the NPC on student learning
11. Average learner performance in basic numeracy skills – disaggregated by standard	This measures the actual number of texts in all primary subjects in relation to the number of learners registered in a sample of schools for all	Learner	Rote counting, number identification, and addition and subtraction subtests from the EGMA instrument for the National baseline	Field M&E Team	Annually	A mean will be calculated from all learners and reported by grade	Composite information on learner performance is used to track the impact of the NPC on student learning

ANNEX 2. DETAILED BUDGET FOR ANNUAL PCAR MONITORING AND EVALUATION

Unit	Description of units	Number of Units	Days (if applies)	Unit Cost	Total Cost	Additional Explanation
School	School	120				
Days	Days in Field for each team member (8 School Visits + 1 Day/Wk Team Review + 1 weekend)	12				
Teams	2 Teams for CEED, NEED, SHED, SEED; 4 for CWED; 3 for SWED	15				
Team Make-up	1 Coordinating PEA	15				
	1 SEMA	15				
	1 Neighboring PEA	15				
	1 TTC Field Supervisor	15				
	1 Local PEA	15				
	National MoEST Supervisor (DIAS, MIE)	15				
DATA COLLECTION						
Survey Materials	Materials Review Form - Production	5		20	100	20MK per page for copying: 1 page only + extra
	Materials Review Form - Delivery/Use	132		75	9,900	10% extra in case of loss, etc. (e.g., for 120 schools we will print 132 instead of just 120
	Teacher Observation and Interview Guides: Guides provide observers/interviews with detailed notes about the observation exercise and interview	30		200	6,000	2 guides for each classroom observer on each team; 2 team members testing per team for 15 teams = 30 observation guides altogether (10 pg guide)
	Set of Teacher Materials for Observer/Interviewers: Each set includes: 2 classroom observation forms (i.e., 2 subjects/tch * 3 pgs), 1 teacher interview form (1 p.); 1 form for recording results (1p). This total 8 sheets per teacher	528		160	84,480	One set (8 sheets each) for each of 4 teachers observed/interviewed for each of 120 schools: 4 sets * 120 schools = 480 (+10% or48 to cover losses, etc.)

ANNEX 2. DETAILED BUDGET FOR ANNUAL PCAR MONITORING AND EVALUATION (Continued)

DATA COLLECTION (Continued)						
	Set of Student Assessment Guides: Guides provide detailed script and guidelines for conducting student assessments	30		300	9,000	2 sets for each test administrator on team; 2 test administrators/team * 15 teams = 30 guides * approx 300MK each
	Student Assessment Scoring Form	2640		300	9,000	20 students/school * 120 schools = 2400 + 240 (10% cover loss, etc)
Fuel	Estimated fuel for Local PEA motorbike/day (reimbursed by receipt)	15	10	1400	210,000	Assuming local and neighboring PEAs will not be receiving per diem or accommodation as they will be living in vicinity
	Estimated fuel for Neighboring PEA motorbike/day (reimbursed by receipt)	15	10	2000	300,000	
	Fuel for Travel from Division to School (SEMA, Coordinating PEA, National Official travel together)	15	12	5000	900,000	Assuming that the SEMAs, Coordinating PEA, and National Official will be traveling in same vehicle (truck) throughout data collection. This includes travel from Division and District Centers
	Transportation for TTC Field Supervisor to School from Division	15	12	5000	900,000	This is for mileage for the TTC Field Supervisor to travel in personal or TTC vehicle to participate in M&E
Accommodation	Accommodation for National Official/per day in field according to MoEST guidelines	15	12	4500	810,000	Estimated at $30/day * 150MK/$ for 12 days each (2 work weeks and 1 weekend).
	Accommodation for SEMA/per day in field according to MoEST guidelines	15	12	4500	810,000	Estimated at $30/day * 150MK/$ for 12 days each (2 work weeks and 1 weekend). pt
	Accommodation for Coordinating PEA/per day per day in field according to MoEST guidelines	15	12	4500	810,000	Estimated at $30/day * 150MK/$ for 12 days each (2 work weeks and 1 weekend). pt
	Accommodation for TTC Field Supervisor/day in field according to MoEST guidelines	15	12	4500	810,000	Estimated at $30/day * 150MK/$ for 12 days each (2 work weeks and 1 weekend).

ANNEX 2. DETAILED BUDGET FOR ANNUAL PCAR MONITORING AND EVALUATION (Continued)

DATA COLLECTION (Continued)						
Per Diem	Per Diem for National Official/per day in field	15	12	1500	270,000	
	Per Diem for SEMA/per day per day in field	15	12	1500	270,000	
	Per Diem for Coordinating PEA/per day per day in field	15	12	1500	270,000	
	Per Diem for TTC Field Supervisor/day in field	15	12	1500	270,000	
Lunch Allowance	Lunch allowance	15	8	600	72,000	Lunch allowance for all team members during visits to school (8/team)
				TOTAL FOR DATA COLLECTION	**6,811,480**	
NATIONAL TOT TRAINING						
Description of Units						
National TOT Participants	Total of 30 participants from outside of Lilongwe					15 SEMAS, 4 MIE Staff, 5 DIAS, 1 DTED, 1 BE, 1 Planning, 1 BE, 1 CERT, 1 Domasi College
Participants needed accom, travel, per diem	13 SEMAs from outside Lilongwe					15 SEMAs or 1 per each team, excluding 2 SEMAs from Lilongwe
	4 MIE Staff					
	1 CERT Representative					
	1 Domasi College Representative					
Trainer Guides	Guides for 5 Trainers (Trainers will be selected from DIAS, MIE, CERT, Domasi)	5		1500	7,500	Approximately $10.00 each guide
Participant Materials	25 participants	19		1500	28,500	Approximately $10.00 per set of training materials
Transportation to Lilongwe	19 participants	19		4500	85,500	Allocated $30 per return trip to Lilongwe
Accomodation participants outside of Lilongwe	19 participants	19		7500	142,500	Allocated $50/night
Per diem	19 participants	19		3000	57,000	Allocated $20/day
				TOTAL FOR NATIONAL TOT TRAINING	**321,000**	

ANNEX 2. DETAILED BUDGET FOR ANNUAL PCAR MONITORING AND EVALUATION (Continued)

DIVISION TRAINING						
Participants	15 TTC Supervisors Traveling to Division					Division Training will be led by the SEMAs with 1 supervisor for each Division assigned to assist
	15 Local PEAS					
	15 Coordinating PEAS					
	6 Division Training Supervisors (DIAS and/or MIE Trainers who led the National Training)					
Trainer Guides	Guides for 15 SEMA Trainers and 6 Training Supervisors	21		1500	31,500	SEMAS lead training (all 15 SEMAs lead training); 1 supervisor per Division; Approximately $10.00 each guide
Participant Materials	45 participants	45		1500	67,500	Approximately $10.00 set of training materials
Transportation to Division	45 participants	45		3000	135,000	Allocated $20 per trip to division per person
Accommodation	45 participants	45	2	3000	270,000	Allocated $20 per night accom. in Division
Per diem (excluding lunch)	45 participants	45	3	2250	303,750	Allocated $15 per day per diem (lunch excluded)
Lunch at training venue	61 participants and trainers	61	3	750	137,250	Allocated $5 per lunch at training venue
				TOTAL FOR DIVISION TRAINING	**945,000**	
				GRAND TOTAL	**8,077,480**	**US$53,849.87 at 150MK/$**

ANNEX 3: DATA COLLECTION INSTRUMENTS

Demographics 1: Teacher Data*						**School Code**
	Stream One Total	Stream One Females	Stream One ODL Student Teachers	Stream Two Total	Stream Two Females	Stream Two ODL Student Teachers
Std 1						
Std 2						
Std 3						
Std 4						
Std 5						
Std 6						
Std 7						
Std 8						

* Streams refer to double shifting. Thus Stream One means teachers in Shift 1, etc.

Demographics 2: Learner Data*							**School Code**	
	Class 1 Total	Class 1 Females	Class 2 Total	Class 2 Females	Class 3 Total	Class 3 Females	Total Learners	Total Females
Std 1								
Std 2								
Std 3								
Std 4								
Std 5								
Std 6								
Std 7								
Std 8								

* Classes refer to multiple classes for a given Standard in one school where there are not double shifts

Materials 1: PEA School Materials Review*				**School Code**	
Question Code	Type of Materials 1-Syllabus 2-Teachers' Guides 3-Learners' Books 4-Supplementary Materials	Subject 1-English 2- Chichewa 3- Mathematics 4-Expressive Arts 5-Religious Knowledge 6-Bible Knowledge 7-Life Skills 8- Social & Environmental Studies (std 4) 9-Agriculture Science and Technology (std 4)	Standard for Materials	Number of Materials	Comments on Materials
*PEAs will review materials in the school prior to the data collection site visit.					

Materials 2: Classroom Materials Review*						**School Code**
Question Code	Types of Materials 1-Syllabus 2-Teachers' Guides 3-Learners' Books 4-Supplementary Materials	Subject Observed 1-Chichewa 2-English 3-Mathematics	Standard Observed	Count	Learners Attending	Comments on Materials

*Teachers and learners in the classrooms that are observed will be asked to show these materials

Classroom Observation 1: Essential Student Behaviors

Teacher ID _____

SCORE

CO1.1 Learner use of questions

1- No questions
2- Simple questions only
3- Questions only when teacher probes
4- Self-initiated creative questions

CO1.2 Learner Behavior in Groups

1- Sit in groups, no interaction
2- Few learner interact
3- Groups discuss problems, limited interaction
4- Groups discuss and interact well

CO1.3 Learner attention [e.g., Attention span]

1- Learners not looking at teacher or doing other things
2- Look briefly at teacher and then lose interest quickly
3- Learners looking at teacher and responding to teacher directives
4- Learners actively involved in classroom activities

CO1.4 Performing learner tasks or "practice"

1- Few learners engaged in learner activities
2- Learners perform tasks, but only when prompted by teacher
3- Learners perform learner tasks, even without prompting
4- Learners actively involved in guided and independent learner tasks

CO1.5 Guided and independent practice in literacy

1- No supported or independent practice in literacy development observed (e.g., naming or writing letters, sound games, reading or writing.
2- When called on children read aloud in front of class
3- Learners practice literacy skills independently or in groups – mostly when given teacher support and assistance
4- Learners actively involved in guided and independent learner tasks

Classroom Observation 1: Essential Student Behaviors (Continued)

Teacher ID _____

SCORE

CO1.6 Guided and independent practice in numeracy

✓ Check if observed

Learners practice counting aloud in groups and as a class	
Learners practice using counters and other manipulatives	
Learners practice mathematics operations on paper, independently or in groups	
Learners practice writing numbers	

Scoring Notes

1- One or none observed
2- Two of the above observed
3- Three of the above observed
4- All four are observed

Classroom Observation 2: Essential Teacher Practices Teacher ID _____

SCORE

CO2.1 Teacher preparation

✓ Check if observed

Schemes of work	
Lesson plans	
Teaching and learning aids	

Scoring notes

1- No evidence of teacher preparation (none of the above observed)
2- Limited evidence of preparation (one of the above available)
3- Satisfactory evidence of preparation (two of the above available)
4- Strong evidence of preparation (three of the above available)

CO2.2 Introduction of lesson

✓ Check all that are observed

Links lesson with the previous topic, learners experience, bridges known-unknown, current context	
Provides advance organizer (tells students what they can expect to learn and do during the lesson)	
Motivates and arouses interest	
Takes not more than 5 minutes	

Scoring Notes

1- One or none observed
2- 2 of the above are observed
3- 3 of the above are observed
4- All four are observed

CO2.3 Interaction

1- Little or no interaction'
2- Mainly teacher – learner interaction
3- Teacher – learner and learner – teacher
4- Teacher-pupil, learner-teacher, pupil-pupil, and/or learner-environment

Classroom Observation 2: Essential Teacher Practices (Continued)

Teacher ID _____

SCORE

CO2.4 Teacher questioning

1- Mostly close ended
2- Simple recall and close-ended
3- Open-ended questions
4- Open-ended and probing

CO2.5 Assessment of learner activities

✓ Check all those that are observed

Marks exercises, solicits and provides feedback	
Makes use of feedback obtained from learners during class	
Feedback includes use of gestures and generous positive reinforcement	
Learners encouraged to show parents their homework	
Monitors and marks homework, and checks for parent involvement	

Scoring Notes

1- None of the above is observed
2- One of the above is observed
3- Three of the above are observed
4- Four or more of the above are observed

CO2.6 Supervision of learning activities

1- No supervision observed during lesson
2- Walks around room, observing activities – but does NOT interact with learners
3- Monitors individual and group activities, asking and answering questions
4- Monitors individual and group activities, explains and expands on knowledge, modifying task according to needs of learners

CO2.7 Appropriate and variable methods

1- Methods are not appropriate (must be appropriate language of instruction)
2- One appropriate method applied
3- At least 2 appropriate methods applied
4- More than 2 appropriate methods applied

CO2.8 Support learners of all ability levels

1- Fails to adjust lessons to diverse learner levels
2- Attempts to adjust lessons for learners with diverse abilities
3- Successfully adjusts lessons for diverse abilities, both slow and advanced learners
4- Successfully adjusts lessons for learners with diverse abilities, including special needs.

Classroom Observation 2: Essential Teacher Practices (Continued)
Teacher ID _____

SCORE

CO2.9 Promotes engagement of all learners

1- Learners are rarely encouraged to participate
2- Few and only selected learners encouraged to participate
3- Many and diverse learners encouraged to participate
4- All learners equally encouraged to participate

CO2.9 Promotes critical thinking and creativity

1- Teacher lectures, learners listen
2- Learners involved but teacher directed activities
3- Learners involved in sharing ideas
4- Learners involved in problem solving, creative activities

CO2.10 Organization of learners for lesson

1- Does not organize class for learner
2- Groups learners but provides whole class or individual instructions
3- Organizes class to maximize learning, such as pair work, individual, and/or groups
4- Organizes class to maximize learning, such as pair work, individual, and/or groups and allows learners to share work with class

C02.11 Time management skills

1- Timetable is not adhered nor do lessons begin and end on time
2- Either the timetable is adhered to or lessons fail to begin and end on time (both criteria met)
3- Timetable adhered to and lesson begins and ends on time
4- Timetable adhered to, lesson begins and ends on time, and learners given sufficient time for practice

CO2.12Application of standard lesson sequence

✓ Check if observed

Introduction	
Development	
Conclusion	
Logical sequence and flow of lesson	

Scoring Notes

1- None of the above is observed
2- 1 of the above is observed
3- 2 of the above are observed
4- 3 or more of the above are observed

Teacher Interview 1: Training and Support **Teacher ID**						**School Code**	
Question Code	Question	Standard	Response		Freq	Qualitative Inquiry	
		Std 1 Std 2 Std 3 Std 4	YES	NO		Nature of Training/Support	Acceptability of Training/Support
	Received Orientation Training-Tch1						
	Additional NPC Training						
	Teacher Support						

Teacher Interview 2: Qualitative Inquiry **Teacher ID _____**			**School Code**
Code	Qualitative Inquiry Guideline	Standard	Discussion
	NPC Training: Nature and Effectiveness		
	Preparation of Teachers to Early Grade Learning Context		
	Confidence in applying classroom reforms related to the NPC, in particular the teaching of reading and mathematics in standard 1-4		
	Teachers' ease and success in applying continuous assessment.; if challenged, what would assist teachers in monitoring learner performance regularly		
	How can communities be mobilized to support the rollout of the NPC?		

Learner Assessment 1: Oral Reading Fluency

Section 6a. Oral Reading Fluency (Scoring)

Show the child the story in the student stimuli booklet. Say,

Here is a short story. I want you to read it aloud, quickly but carefully. When you have finished. Do you understand what you are to do? When I say "begin," read the story as best as you can. I will keep quiet & listen to you, unless you need help. Ready? Begin.

*Start the timer when the child reads the first word. Follow along with your pencil and clearly mark any incorrect words with a slash (**/**). Count self-corrections as correct.* ***Stay quiet,*** *unless the child hesitates for 3 seconds, in which case provide the word, point to the next word and say "**Please go on**." Mark the word you provide to the child as incorrect.*
At 60 seconds, say "Stop." Mark the final word read with a bracket ( ]).
Early stop rule: *If the child reads no words correctly on the first line, say "**Thank you!**", discontinue this exercise, check the box at the bottom of the page, and go on to the next exercise.*

(Replace following with adapted Chichewa passage)		No Response
My name is Pat. I live on a farm with my mother, father, and brother Sam.	16	
Every year, the land gets very dry before the rains come. We watch the sky and wait.	33	
One afternoon as I sat outside, I saw dark clouds and then something hit my head, lightly at first and then harder.	55	
I jumped up and ran towards the house. The rains had come at last.	69	

Time remaining on stopwatch at completion (number of SECONDS): ☐

Check this box if exercise stopped due to no correct answers in the first line. ☐

Illustrative Stimulus Card for Measuring Oral Reading Fluency
(Replace Chichewa Passage that has been Adapted, Piloted)

My name is Pat. I live on a farm with my mother, father, and brother Sam. Every year, the land gets very dry before the rains come. We watch the sky and wait. One afternoon as I sat outside, I saw dark clouds and then something hit my head, lightly at first and then harder. I jumped up and ran towards the house. The rains had come at last.

Learner Assessment 2: Early Grade Mathematics

Task 1: Oral Counting	🕮 ×	🕐 60 sec limit
🗣 Ndikufuna undiwerengere. Ndikuwuza nthawi yoyambira ndi yomalizira kuwerenga. Ndiwerengere kuyambira 1 mpakana pamene ungalekezerepo, yamba: 1 … 🗣 Umvetsere m'mene ndikufunira kuti uwerengere. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Monga m'mene ndawerengera, werenga kuyambira 1 mpakana pamene ungalekezerepo, yamba: 1 …		✋ • If child makes an error • If time reaches 60 sec.
✍ Last number counted correctly:		

Task 2: Rational Counting	🕮 Sheet 1 (double)	🕐 60 sec limit
🗣 Ukuwonawa ndi maseko. Ndikufuna kuti uziloza ndi kuwerenga masekowa. Uyambire seko iyi: 1 … 🗣 Wawerenga maseko angati?		✋ • If child makes an error • If time reaches 60 sec.
✍ Last circle counted correctly:		
✍ Number of circles that the child says they counted:		

Task 3: Number recognition	🕮 Sheet 2 (2 pages)	🕐 60 sec limit
🗣 Ukuwonawa ndi manambala. Ndikufuna kuti uziloza ndi kuyitchula nambalayo. Yambira nambala iyi.		✋ • If child makes 3 consecutive errors • If time reaches 60 sec. ➲ • If child does not attempt an item in 5 seconds
✍ (✓) 1 = numbers correctly identified. (×) 2 = numbers not identified or incorrectly identified.		
✍ Total number correct:		

2	1	2	97	1	2
9	1	2	104	1	2
13	1	2	234	1	2
18	1	2	468	1	2
65	1	2	6,430	1	2

Learner Assessment 2: Mathematics (Continued)

Task 7.1: Addition questions (Level 1)	Sheet 5(1)	×
Tsopano tiwona masamu owonkhetsa.		• If child makes 3 consecutive errors • If child does not attempt an item in **5** seconds
For each question (✓) 1 = correctly answered. (×) 2 = not or incorrectly answered.		
3 + 4 yankho lake n'chiyani?	✓× Correct answer: 7	1 2
2 + 7 yankho lake n'chiyani?	✓× Correct answer: 9	1 2
3 + 2 yankho lake n'chiyani?	✓× Correct answer: 5	1 2
4 + 5 yankho lake n'chiyani?	✓× Correct answer: 9	1 2
7 + 3 yankho lake n'chiyani?	✓× Correct answer: 10	1 2
Did child use: fingers Y N?		
Total number correct:		

Task 7.2: Addition questions (Level 2)	Sheet 5(2)	×
❖ paper, pencils and/or counters allowed if child wants to use them		
Mafunso ena ndi awa. Ukhoza kugwiritsa ntchito mawerengero awa kapena pepala ndi pensulo ngati ukufuna.		• If child uses counters for first two items • If child makes 3 consecutive errors • If child does not attempt an item in **20** seconds
For each question (✓) 1 = correctly answered. (×) 2 = not or incorrectly answered.		
18 + 2 yankho lake n'chiyani?	✓× Correct answer: 20	1 2
13 + 12 yankho lake n'chiyani?	✓× Correct answer: 25	1 2
50 + 37 yankho lake n'chiyani?	✓× Correct answer: 87	1 2
67 + 25 yankho lake n'chiyani?	✓× Correct answer: 92	1 2
165 + 37 yankho lake n'chiyani?	✓× Correct answer: 202	1 2
Did child use: fingers Y N, counters Y N, paper & pencil Y N?		
Total number correct:		

Learner Assessment 2: Mathematics (Continued)

Task 8.1: Subtraction questions (Level 1)	Sheet 6(1)	⏱ ×
Tsopano tiwona masamu ochotsera.		• If child makes 3 consecutive errors • If child does not attempt an item in **5** seconds
For each question (✓) 1 = correctly answered. (×) 2 = not or incorrectly answered.		
5 – 4 yankho lake n'chiyani?	✓× Correct answer: 1	1 2
9 – 5 yankho lake n'chiyani?	✓× Correct answer: 4	1 2
8 – 6 yankho lake n'chiyani?	✓× Correct answer: 2	1 2
7 – 3 yankho lake n'chiyani?	✓× Correct answer: 4	1 2
10 – 4 yankho lake n'chiyani?	✓× Correct answer: 6	1 2
Did child use: fingers Y N?		
Total number correct:		

Task 8.2: Subtraction questions (Level 2)	Sheet 6(2)	⏱ ×
paper, pencils and/or counters allowed if child wants to use them		
Masamu ena ochotsera ndi awa. Ukhoza kugwiritsa ntchito mawerengero awa kapena pepala ndi pensulo ngati ukufuna.		• If child uses counters for first two items • If child makes 3 consecutive errors • If child does not attempt an item in **20** seconds
For each question (✓) 1 = correctly answered. (×) 2 = not or incorrectly answered.		
18 – 2 yankho lake n'chiyani?	✓× Correct answer: 16	1 2
23 – 7 yankho lake n'chiyani?	✓× Correct answer: 16	1 2
25 - 13 yankho lake n'chiyani?	✓× Correct answer: 12	1 2
43 – 19 yankho lake n'chiyani?	✓× Correct answer: 24	1 2
153 - 71 yankho lake n'chiyani?	✓× Correct answer: 82	1 2
Did child use: fingers Y N, counters Y N, paper & pencil Y N?		
Total number correct:		