MONITORING AND EVALUATION FRAMEWORK

FOR CONTINUING PROFESSIONAL DEVELOPMENT

2012

Monitoring and Evaluation Implementation Framework for Continuing Professional Development (CPD)

1. About this guide and its applicability

Monitoring and evaluation (M&E) can be effective tools to enhance the quality of project planning and management. Monitoring helps project managers to understand whether the projects are progressing in schedule and to ensure that project inputs, activities, outputs and external factors are proceeding as planned. Evaluation can be a tool to help project managers assess to what extent the projects have achieved the objectives set forth in the project documents.

This guide is a step-by-step process of using the proposed M&E Plan for CPD. It is expected that it will be used in different ways by different program interventions and at different stages of the strategy development and implementation process. However, it is very important to involve stakeholders and partners in each specific programme.

The guide puts emphasis on the use of the Results Framework approach, which is meant to be simple and straight forward in design and, therefore, it does not require specialized skills. It is a systemic approach to documenting the logic of a strategy and its subsequent management, monitoring and performance measurement to ensure that the intended results have been achieved.

This Guide has been written for all those people who have specific yet different M&E-related responsibilities and tasks within the scope of CPD in the education sector. This makes it possible for the users to focus on the material that is relevant for their needs at a particular point in time. The user might want to copy parts of the Guide on particular M&E functions and use it in specific projects in CPD.

2. What does the Guide do?

2.1 The objectives of this Guide are to provide the reader with:

- A basic understanding of the purposes, processes, norms, standards and guiding principles for planning, monitoring and evaluation with the CPD context.
- Knowledge of the essential elements of the planning and monitoring and processes in CPD, i.e developing a robust results framework for projects and programmes, with clear indicators, baselines and targets; and setting up an effective monitoring system.
- Knowledge of the essential elements of the evaluation process in CPD: developing an evaluation plan, managing, designing and conducting quality evaluations, and using evaluation to develop intervention programmes.

2.2 To enhance the results-based culture within CPD and improve the quality of planning, monitoring and evaluation of education projects and programmes.

3. The importance of M&E

Monitoring and Evaluation is important because:

- it provides the only consolidated source of information showcasing project progress;
- it allows educators to learn from each other's experiences, building on expertise and knowledge;
- it often generates (written) reports that contribute to transparency and accountability, and allows for lessons to be shared more easily;
- it reveals mistakes and offers paths for learning and improvements;
- it provides a basis for questioning and testing assumptions;
- it provides a means for educators seeking to learn from each other's experiences and to incorporate them into policy and practice;
- it provides a way to assess the crucial link between implementers and beneficiaries on the ground and decision-makers;
- it provides a more robust basis for raising funds and influencing policy.

To ensure effective implementation and follow –up, ongoing evaluation must be built into the implementation, based on predetermined critical success criteria for each learning initiative. Evaluation should take place at different times: (before) pre-CPD interventions (known as diagnostic evaluation), during a CPD intervention (known as formative evaluation), and at the post-conclusion of a learning programme (known as summative evaluation), or sometime after a learning programme (known as longitudinal evaluation). Frequent interim evaluations must be conducted in order to prevent stagnation and encourage ongoing CPD programmes. The evaluation process should also include opportunities for revisitng the learning programme strategy in order to effect amendments and improvements (Meyers, 2002).

4. Definitions

Monitoring is the routine checking of information on progress, so as to confirm that progress is occurring against the defined direction. It commonly involves monthly to quarterly reporting, on outputs, activities and use of resources (e.g. people, time, money, and materials). It should be used to ensure that what has been planned is going forward as intended and within the resources allocated.

Evaluation is used to ensure that the direction chosen is correct, and that the right mix of strategies and resources were used to get there. It can typically be formative (helping to develop learning and understanding within stakeholders) or summative (i.e indicating the degree of achievement). It typically focuses on outcomes and their relationship with outputs.

5. Types of Evaluations

Evaluation timing	Focus of evaluation	Questions to ask
Diagnostic evaluation Before delivery of the CPD programme	• The design of the programme • Existing skills levels of learners as part of the CPD needs analysis	• Are the training and learning facilitation methods appropriate to achieve the outcomes? • Do the training methods coincide with the learners' preference and learning styles? • Has the learning programme been designed in the most efficient manner?
Formative evaluation During the CPD intervention	• The quality of the delivery process • The adequacy of the learning material • The appropriateness of the delivery methods	• Are the learners enjoying the delivery of the programme? • Are the methods being used in the delivery of the programme effective in achieving the programme objective and learning outcomes? • What is the quality of the delivery of the learning programme? • Are all the administrative arrangements running smoothly?
Summative evaluation Directly after the CPD intervention	• Satisfaction of the learners with the learning programme • The achievement of the outcomes by the learners • The overall effectiveness of the learning programme	• Have the learners achieved the learning outcomes? What are the learners assessment results? • Was the learning programme effectively delivered? • Did the learning programme achieve its overall objectives? • What could we have done differently? • What needs to be changed? • How would we improve the learning programme?
Longitudinal evaluation On the job 3-12 months after completion of the CPD intervention	• Transfer and application of learning in the workplace • Support for new knowledge, skills and attitudes in the workplace • Impact on individual performance in the workplace • Impact on the performance of the education system	

6. Key M&E concepts:

Outcomes versus output, input, activities and impact

Inputs: the human, financial and other resources expended in undertaking the activities.

Activities: the things that need to be done to achieve outputs.

Outputs: the major results needed to achieve the outcomes.

Outcomes: the long term benefits, intended or unintended. These can be relatively short-term (e.g during a project life, commonly referred to them as project purpose or objective) or long term, commonly referred to as goal or long-term objectives.

Impacts: the result of achieving specific outcomes, such as improving learner performance.

7. CPD Results Framework

The Continuing Professional Development Results Framework (CPDRF) is applied to monitor projects/programmes during implementation (with a view to taking corrective action) or to assess the results, or even the design of the completed projects. CPDFR addresses several long standing criticism of capacity development work, including the lack of clear definitions, coherent conceptual frameworks, and effective monitoring of results. It also promotes a common, systematic approach to capacity development by clarifying objectives, assess prevailing capacity factors, identify appropriate agents of change and change processes, and guide the design of effective learning activities. The framework addresses a gap often found between broad overall objectives and specific learning activities. The framework requires a defined set of variables to any developmental goal in a given context, and to model explicitly the change process that is expected to be facilitated by learning. Individuals and groups of teachers, teachers

A CPDRF has two critical features, namely:

Big picture perspective: a Results Framework incorporates the contribution of stakeholders necessary to achieve relevant goals and objectives.

Cause and Effect Logic: a Results Framework outlines the development hypothesis implicit in the strategy and the cause-and-effect linkages between the goal, strategic objectives and specific programme outcomes.

6.1 What a CPD Results Framework is used for

The result framework is used for planning, management/monitoring/review and communication.

Planning-a CPDRF is used to identify appropriate objectives by ensuring that important questions are asked at an early stage. It also provides a framework within which to work collaboratively with stakeholders in order to build shared ownership of objectives and approaches.

Management/Monitoring/Review- a CPDRF can fill the role of a performance framework for a programme strategy. It provides a programme-level framework to monitor progress towards achieving results and where necessary, to adjust programmes accordingly. In addition, the framework allows for annual reviews which are straightforward and rigorous in structure through which a strategy's performance can be tested.

Communication-a CPD Results Framework can provide a strategy in one page, that gives the reader an immediate idea of what a programme is aiming to achieve.

6.2 Characteristics of a CPD Results Framework

Research and information–a CPD Results Framework should be based on concrete information and analysis which is well grounded in reality.

An understanding of 'cause and effect' logic- cause and effect relationships are based on a hypothesis, and not on hard evidence. The performance data-and good strategy will provide flexibility to learn lessons and build in modifications as the strategy proceeds, as a result the strength of the hypothesis will be borne out.

An understanding of attribution-the degree of attribution progresses from Strategic objective through Intermediate objective to programme outcome. At programme outcome, the attribution emphasizes the desired programme outcomes. Below is an example of the adaptation of the M&E Framework in the Namibia Novice Teachers Induction Programme.

A CPDRF is depicted as follows:

Objectives	Performance Indicators	Means of Verification	Critical Assumptions
1. Provide the necessary support to the novice teachers	1. Orientation: 1.1 number of meetings held, number of internal school tours; 1.2 Number of meetings held, number of internal community tours held. 2. Mentoring: 2.1 Types of novice needs identified 2.2 Goals identified 2.3 Mentoring Year Planner developed 2.4 Types of administrative support identified 2.5 Portfolio available 2.5.1 No. of co-Planning sessions	Survey, document analysis, classroom observation/interviews with unique teachers	100% of target group attained appropriate competencies & skills

	2.5.2 Types of feedback from Observation 2.5.3 No. of face-to-face meetings 2.5.4 No. of work sessions on content-specific issues 2.5.5 No. of classroom observation 2.5.6 Types and number of Professional Development attended.		
2. Increase the retention of promising novice teachers	No. of novice teachers in service. No. of novice teachers exited teaching at intervals (2 or 5 years later)	Document analysis, EMIS	100% novice teachers retained

8. Types of indicators, targets and means of verification

Indicators are designed to measure changes over time by pointing the direction of change in either the positive, negative, or whether the situation is improving or worsening. Indicators are usually numeric. They may contain qualitative data which is usually quantified.

When numeric data are based on qualitative values, these should be applied to generate meaningful information. It is therefore important to have qualitative indicators which can boost stakeholders' participation, given that their opinion would be required in order to produce the indicators.

Indicators can have different uses depending on the type of information that needs to be collected. It is therefore important to distinguish between the different types of indicators according to their function and the type of information they refer to:

Direct (e.g for programmes development-an indicator could be the number of programmes created and sustained for at least 1 year as a direct result of a programme intervention), i.e. a close match to an objective of programme creation; or

Indirect, sometimes referred to as a proxy indicator, i.e where an indicator has to be used to represent the objective. For example for skills developed, a proxy indicator could be the number of internships agreed, which is not a complete indicator for skills developed (there may be other sources), but could represent at least part of the objectives;

The **target** provides the actual number and the timescale;

The **baseline** provides the reference point in terms of quantity, quality and time, against which the target can be measured.

Input indicators: measure the means by which the project is implemented.

Process indicators: measure delivery activities of the resources devoted to a program or project; monitor achievement during implementation in order to track progress towards the intended results.

Output indicators: measure the extent to which the project delivers the intended outputs and identify intermediate results.

Impact indicators: measure the extent to which the project has the intended effects and related directly to the long-term results of the project.

9. Methods of evaluation

This section focuses on some of the many methods of evaluation to determine how it works, when it should be used, how to use it, and how methods can be matched to the model of evaluation used. The techniques commonly used by the valuators are:

- Open –ended comments or reactions
- Objective questions or surveys
- Task performance measures such as simulation and role plays
- Multiple choice or similar tests
- Participant self-assessment

It must be stressed that no method is value free or theory free. Instead, the use of method will be determined by the model that the valuator uses. At all times, the valuator must question applications and whether the method is most useful for valuating training as an activity or if it shows synergy with the CPD Results Framework.

10. Who should conduct the evaluation?

Members of the CPD consortium are mandated to conduct CPD evaluations. These are selected members of the Faculty of Education, UNAM and members from the Directorates of Ministry of Education: NIED and PQA. In addition, members of the Regional Continuing Professional Development Coordinating Committee may also conduct evaluations at regional and national levels. However, the information sought during the evaluations should be forwarded to the CPD Unit for record purposes.

11. Guidelines for deciding on evaluation methods

When does evaluation occur?	Goal of evaluation	Methods to use
During the training event	Judgement about the quality of the learner's experience during learning	Sessional reactionnaries Event reactionnaires Group discussion Individual comment
	Judgement of learning	Written tests Behavioural observation Repertory grid

		Practical tests Video-audio recording Computer-based assessment
	Measures of change during training	Pre or post tests Behaviour observation Practical tests Repertory grid
	Assessment of terminal competence	Test Behaviour observation

When does evaluation occur?	Goal of evaluation	Methods to use
In the workplace	Did training meet needs or goals?	Questionnaires Performance appraisal reviews Evaluation interviews
	Application of learning in the workplace	Action planning Behavioural observation Critical incident analysis Evaluation interviews Questionnaires Performance appraisal reviews Participant observation Pre or post sampling of work
Organisational effectiveness	Changes in organizational performance	Analyses of performance indices-operational measures such as output quality or quantity, sales volume, wastage, expressed customer satisfaction, financial measures such as cost, return on investment
	Cost effectiveness of training	Costing Cost/benefit analysis Cost effectiveness analysis
	Congruence of training and organizational vision	Interview Content analysis of formal and operative policies
Social or cultural	Contribution of training to national goals and objectives	cost-benefit analysis values analysis Surveys

Adapted from Meyer, 2002: 334

12. Data Quality Assessment Framework

The guide document borrows the Data Quality Assessment Framework to inform data collection quality; data processing; and the quality of analysis and interpretation; and, dissemination process for education statistics at the national and regional level. In addition, qualitative approaches may be adopted to ensure data quality. The DQAF examines these categories through six dimensions and twenty one sub-dimensions (see Table below)

Data Quality Assessment Framework						
	Dimensions	**Sub-dimensions**				
0	Pre-requisites	Legal and institutional environment	Resources	Quality awareness		
1	Integrity	Professionalism	Transparency	Ethical norms		Revision studies
2	Methodological soundness	Concepts and definitions	Scope	Classification	Basis for recording	
3	Accuracy and Reliability	Source data available	Regular assessment and validation of source data	Sound statistical techniques	Regular assessment and validation of intermediate results and statistical outputs	
4	Serviceability	Relevance	Consistent statistics	Timely and regular dissemination	Revision policy and practice	
5	Accessibility	Accessible data	Accessible and pertinent metadata	Assistance to users		

Adopted from Data Quality Assessment Framework (Unesco, 2010)

The list of questions below highlights the decision-making process for each dimension shown in the table above:

1. Integrity
    - Are data collection, analysis and dissemination processes guided by professional principles?
    - Are statistical policies and practices transparent?
    - Are ethical standards used to guide policy development and staff?
2. Methodological soundness
    - Do education concepts and definitions comply with standard statistical frameworks?
    - Are the data produced comprehensive and follow international norms?
    - Are the data categorized and classified in a manner consistent with international standards and best practices?
    - Are the data recorded according to internationally accepted standards, guidelines, or good practices?
3. Accuracy and reliability
    - How comprehensive are the data sources used to compile statistics?

- Are education data and statistics validated against different data sources?
- Are the sound, well-documented, statistical techniques in place?
- Are data sources regularly assessed and validated?

4. Serviceability
    - Are the statistics relevant and timely?
    - Is there a predictable revision policy?
    - Are the data consistent within a dataset and over time?
5. Are the data easily available?
    - Are the data disseminated in an adequate and impartial manner?
    - Are there adequate metadata to describe the data completely?
    - Is there a focus on assisting the user?

13. What should the M&E Plan include?

The M&E Plan should include an introduction and an indicator matrix table. The introduction should briefly describe the aims and objectives of the programme, methodologies used to obtain the data, the planned interventions to be implemented, the critical assumptions underlying the intervention and the anticipated critical hindrances that might have an effect on the project.

The indicator matrix table provides an overview of the project and creates a better understanding of the linkages of the different activities of the project. The indicator matrix should be developed in line with the set objectives of the project. In order to operationalize the project, each objective will have a number of activities formulated. The CPD Framework borrows a matrix table format from the MCA-N:

Indicator Matrix Table

Activities *List all activities listed in the project proposal*	**Results** *The expected status after activity implementation*	**Indicator** *How will you measure the achievement of results*	**Definition** *Define the indicator in detail*	**Target** *What the indicator is expected to achieve by end of implementation. Target can be dissagregated by gender or geographic location*	**Reporting** *Monthly, quarterly, or annually)*	**Data source** *Project reports, or other sources.*
Objective 1:						
Activity 1						
Activity 2						

Adapted from the MCC M&E Policy 2009.

14. Suggested outline for an evaluation report

This section presents a suggested outline for evaluation report

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