

Methodological issues of education monitoring and evaluation

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Abstract

Monitoring and evaluation (M&E) has a prominent and crucial role in attaining targeted goals, especially in the education sector. M&E mechanisms can be put in place to check how lecturers or teachers in higher educational institutions deliver quality work. At primary and secondary levels of education, time to time inspections are conducted to supervise the teaching and learning processes going on in schools. The reason for the participation of the stakeholders in this study is that the research methodology was simple and time-saving, also the participation of low-level stakeholders, e.g., HODs, lecturers, teachers and other experienced staff was limited and they often do not have the opportunity to participate in policy-making activities at the higher level. This article focuses on how the M&E systems are persuaded and the importance of M&E of teaching processes in the institutions, providing methodological framework for M&E, and concluding that internal M&E teams should be established, sufficient funding and financial allocations measures should be taken to support the developmental process of M&E systems. Furthermore, quality training sessions and appropriate education should be provided to local stakeholders and other staff for the development of educational institutions to execute effectiveness, efficiency, impact and sustainability.

Keywords: Monitoring and evaluation, educational institutions, stakeholders, teaching and learning, policy-making.

1. Introduction

This article provides a discussion of the methodological issues of monitoring and evaluation (M&E) in the education sector. Over the years, the role of M&E in theory and development has become much more practical and prominent. Almost in every sector, development managers or practitioners are giving M&E an extra edge as a practice platform for accountability and learning (Karani, Bichanga & Kumau, 2014). The need of good governance for society immensely increased the importance of M&E. M&E development should be assessed on four substantial elements, i.e., effectiveness, efficiency, impact and sustainability (Kabonga, 2016; Kessler & Tanburn 2014; Metzger & Guenther, 2015; World Bank, 2010). This article focuses on the use of M&E as a tool to gain these four substantial elements.

Higher education is a major contributor to gain economic stability and is looked at as a driver of economic competency in an increasingly growing global economy. Improvement in employment skills demands an accountable and quality teaching environment within educational institutions (OECD, 2017). In past few years, credible accountability for schools and teachers has left prominent effects on the education sector. An increasing role of M&E has been adopted as a standard of persuading the enhancement of quality education. M&E systems help build and run educational projects, policies or programmes, and assess and improve its achievements and effectiveness (Disha, 2017). An effective M&E is strategic to determining how well a training programme can meet its objectives and serve the target audience. M&E is a way of measuring activities and results in a systematic manner (Hobson, Mayne & Hamilton, 2013). In particular, the success of every educational reform, project or activity is calculated by the level of M&E involved in the industry, as M&E directly impact the quality of services delivered.

The self-evaluation systems within the institutions drive themselves towards constant and internal improvement and focus on the quality of teaching and learning. School-based management members such as head teachers, heads of department and experienced teachers can validate the constant check and balance, whereas in higher education systems this task should be carried out by the governing board, principal, vice principal and heads of departments. In order to monitor how teaching and learning is going on, the management or section heads visit the classrooms. This should take place frequently in the education sector to support teaching and learning processes (Chukwu, 2015). The external evaluation in basic and higher educational institutes should be conducted by the Ministry of Education. By sending their officials to the institutions for regular inspection and monitoring teaching and learning management, they can practice a frequent check and balance on how the current educational policies are going on and what steps should be taken to improve the implication of the policies. This mechanism emphasises on the development and implementation of a focused, evidence-based and efficient M&E system for the education sector to set and achieve certain goals.

The United States is, in terms of its trends, number of authors, academic and professional influence, considered as the motherland of this field by focusing on developments of modules and approaches, evaluation of the institutions, legislation and capacity building initiatives, impact factors of publications and academic programmes (Byamugisha & Basheka, 2015).

M&E are two distinguished and designed processes to monitor the impact of a policy or progress against the overall goals, objectives and targets. Monitoring is an ongoing process, which is a systematic and routine collection of information from policies, projects and programmes. Evaluation, on the other hand, involves the assessment of a systematic and objective manner of how the implemented policies, projects or programmes are working. However, the scope of M&E in education is not stationary and it needs to reconcile the moral force of concepts and needs of the industry which also could vary with time to come. The evolving process of M&E systems cannot be taken as a single-dimensional process, rather should be taken as an ever-changing process with a number of variations in responses to different contexts, societies, cultures, origins or countries around the globe. Strides in the evolution of M&E in the education sector depend on a country's educational development speed,

procedures and practices. There are four different development stages of M&E system in the education sector.

1.1. Premature stage

In this stage, the establishment of favourable and contributing parameters are practiced to set up a functional M&E system.

1.2. Fragmentary stage

This stage represents more sensible or organised institutions that already have M&E systems and are becoming fully functional to implement the practices.

1.3. Independent stage

Different M&E systems are constituted and are functional as a separate entity to serve within their scope.

1.4. Synergetic stage

M&E systems are operating at full collaboration and in a coordinated manner to provide effective, efficient, relevant and quality information for policymaking.

2. Literature review

Decentralisation of education systems demands evidence on the performance of the systems and due to the consequent changing policies, the M&E systems are tended to be modified and developed on the regional, district and school levels. In order to strengthen the educational reforms, many governments have decentralised their monitoring systems. In this regard, focus has been shifted towards performance or result-based monitoring. These shifts have developed various components of the context in which teaching–learning takes place and also are responsible for changing the concepts of collecting detailed information about each student. In Latin America, one of the most complete and complex M&E systems is in Brazil, which provide demands practising at three levels: federal, state and municipal. Their M&E system ensures that all components are fully interconnected and functional at higher level of efficiency in a coordinated way. Also in Chile, the Adjusted Voucher Law (Ley SEP) was created and practised to increase the accountability of schools on the basis of their performance, and parents could make effective decisions about the choice of the school by using the information system (Alves et al., 2015, p. 18).

The effectiveness of an M&E system can be judged by the quality and reliability of evidence gathered and the degree of evidence used for planning and implementation. A good M&E system is not a statistical process. In order to make it sustainable and measure the effectiveness and efficiency, an M&E system must be planned, presented properly, effectively, and also must be provided along with sufficient resources. Governments are doing things to plan effective policies in education, and desired results are being achieved. Strong M&E systems provide the means to collecting and using all the necessary information into the policy cycle as part of a strong M&E system. It provides the basis for a sound governance and accountability in the education sector. The value of evidence-based policy-making in education has been well documented and argued widely. Despite of the fact, systematic M&E about the executions of the policies and measurement of their impact can be vulnerable sometimes. A good M&E system can help policymakers to accommodate better plans through driven information or evidences.

There are three main findings gathered from reviews, which are as follows:

- M&E systems continue gathering copious data but the utilisation of gathered data or evidence for policymaking and planning is very low.
- Lack of participation of local stakeholders in the planning of the education sector: there is a low level of participation in monitoring.
- Local communities are not familiar to use evidence from evaluations.

The availability of comprehensive information on the following areas could help policymakers to make vital decisions, such as dropouts, achievements and accessibility in remote areas and the quality of teaching, as these are not included in policy-making processes. Utilisation of evidence is dependent on the way in which the information is disseminated. The produced amount of information may not be useful for specific user demands or for a specific area. In this case, schools and teachers are not collaborated or informed about the data reports, and the whole analysis could not be used to execute improvement in the curriculum, education policy or planning.

National governments provide most of the basic education facilities in the developing countries. However, decentralisation of education systems also focuses on the transfer of responsibilities to the sub-national or even to the ground levels. The civil society plays a great role in providing education to the poor in many countries and they are often considered as the only source of education or providers of other fundamental services, including education. In other cases, the private sector is also involved in the education sector, such as Azim Premji Foundation in India, and Agha Khan Foundation working in several countries of Africa and Asia. However, the participation, quantum and quality involvement of stakeholders, such as NGOs, FBOs and the other communities, in M&E of education appear to be very low with respect to other social development sectors, such as agriculture, health and community development. Although many countries are focusing on having apex coordinating bodies and providing them a platform for monitoring and evaluating in the education sector, through a wider and more systematic involvement of these bodies in monitoring activities the whole process could get a boost.

Increasing levels of participation of local community stakeholders in the education sector have generated greater demand of evidence to ensure greater accountability and transparency.

The ability to effectively utilise such evidence for monitoring is halted by several reasons.

Accessing such information could be difficult in many countries due to the right of the public to obtain any information from the public domain or any information that is not classified. There are also special authorities or officers in some countries to ensure the safety of such information. The process of obtaining such specialised information is usually purposeless. This may discourage the information seekers to pursue further enquiry. In addition, many countries try to restrict access to such data due to socio-political or other administrative reasons.

2.1. Significance of the study

This study could be useful for the involvement of low-level stakeholders to collaborate with the management, policymakers and research practitioners. The M&E area has emerged with all its significance and provides a platform to practice result-based management and other development processes and helps establishing effective, efficient, impactful and sustainable policies in the education sector. Hence, this will add to the small existing body of literature on the subject. It is important for the development researchers or practitioners to understand the morale force of M&E systems. This study could provide guidelines for operations and procedures that should be adopted to practice M&E systems and how to make improvements in them in order to meet the expectations of different stakeholders. This study also provides valuable information for future research and interventions.

It will inform policymakers on how to set up effective M&E systems, and will also participate in measuring how M&E help organisations and stakeholders to achieve greater accountability and transparency within the educational institutions and policy-making centres. The study could be helpful for organisations, low- and high-level stakeholders, NGOs, management students, teachers and project managers to create a framework for the designing and implementation of result-based M&E systems. This study will critique M&E systems and try to adopt the solution.

2.2. Ethical considerations of the study

In order to make it ethical and balanced, researchers first obtained authorisation from concerned authorities to pursue the research. A copy of the permission letter from the authorities was attached with the questionnaire and other materials. The description of the study was disclosed to every participant and to the authorities also. The description of the study includes its purpose, rights of all participants, confidentiality and the right to withdraw from the study, if it seems necessary. The researchers also assured the participants' confidentiality by asking them not to include their names or any form of identification on the questionnaires. The whole study was firstly explained verbally by the researchers. The researchers then organised visits to the project offices and other concerned offices so that the challenges in data collection process could be addressed and implicated.

3. Statement of the problem

Experts considered M&E as an evident form of development in the education sector and also requested for expression of interest for M&E consultants. In underdeveloped countries, NGOs and other stakeholders are facing several challenges. Moreover, there is inability to resourcefully respond to changing needs. M&E of different projects in the education sector is vulnerable due to poor leadership, lack of institutional systems and information is not easy to access for public and stakeholders. In addition, there is lack of skilled and experienced work force or professionals to accommodate the needs of the system. Hence, they end up with substandard M&E systems that do not meet the developmental needs (Chesos, 2010). The study by Koffi-Tessio (2002) also shows that M&E systems seem to be controlled in a bureaucratic style. M&E is also considered as a donor and not a management tool or requirement.

4. Research questions

1. Do you think there is a lack of well experienced, professional and resourceful persons or researchers in public and private sectors?
2. Do you consider it impossible to retrieve, collect, prepare or interpret information or data with limited financial and staff resources?
3. Have there been sufficient practices evolving M&E?

4.1. Research methodology

A descriptive design was adopted for study purposes. A descriptive survey design allows an in-depth analysis and understanding of a particular development as it exists in the present condition (Cooper & Schindler, 2008). It also allows data collection relevant to the predetermined objectives and also provides sufficient information to the study's problem (Kothari, 2004). It is the combination of both quantitative and qualitative data collection procedures; the design allows a researcher to gather exhaustive information in a way that reduces the cost of the data collection. A study of the M&E framework was conducted through a questionnaire, group discussion and interview guide. The main aim was to study situations, people, scenarios and all possible solutions for deducing an innovative idea which could be used for the development of the M&E framework in the education sector.

The researchers used the following to collect information:

- Validity (Strongly Agree, Agree, Disagree)
- Frequency and percentage

4.2. Data collection

The researchers used questionnaire, interview guides and focus group discussions for collecting data. A total of 50 respondents were given the questionnaire to think and fill at ease. An interview guide was also used to evoke information from the senior management from various projects online as well as focus group discussion through different social media platforms. Document analysis is a method used by researchers to gather information that is not captured in the responses of the questionnaires. It has advantages over other data collection methods because the documents are expected to be complete, detailed, consistent and well structured.

4.3. Data analysis procedures

Researchers collected the data using a questionnaire, interview guides, focus group discussions and document analysis. Collected data were examined and cross-checked for integrity and clarity. Valued data were analysed using descriptive statistics, while on the other hand, content analysis was used to determine the quality of qualitative data. Afterwards, qualitative data were merged into quantitative data and examined further in accordance with the main objectives of the study. The data were then presented using frequency tables.

5. Results and discussion

The majority of the respondents were 30–45 years old. Most of the participants were married (53%), females (80%), graduated with bachelor or master degree (90%), worked or working as teachers in educational institutions (75%) and in managerial posts (25%).

Table 1. Lack of experienced professionals and resourceful personnel

	Frequency	Percent
Validity		
Strongly agree	24	48.0
Agree	23	46.0
Disagree	3	6.0

Table 1 indicates that the majority of respondents were unsatisfied with the current situation regarding M&E applications, and also the level of practices executed by policymakers is not as per standard. The lack of professionalism and experience is a major factor for applying M&E modules or conducting development practices in the education sector.

Table 2. Limited financial and staff resources for collection, retrieval, preparations and interpretation of data

	Frequency	Percent
Validity		
Strongly agree	30	60.0
Agree	18	36.0
Disagree	2	4.0

Limited financial and staff resources is another hurdle in conducting a smooth and effective M&E system, especially in underdeveloped countries. Data collection and its uses could be vulnerable in applying and obtaining the desired results.

Table 3. Sufficient practices evolving M&E

	Frequency	Percent
Validity		
Strongly agree	12	24.0
Agree	11	22.0
Disagree	27	54.0

From the findings, more than half of the respondents confirmed that the widely used M&E framework approaches are facing insufficient practices, while other respondents indicate the use of current approaches.

6. Conclusion

This article examined the M&E of the education sector. It reviewed different definitions of M&E by authors and also takes a glance at the importance of M&E in today's educational system. The study was conducted to examine the accountability process, track programme implementation, improve programmes and show whether the programme is meeting the objectives, among others. The key components of the M&E system were also discussed; they included inputs, processes, outputs, outcomes and impact. The article provides an overview of the benefits and also indicates some errors in practicing M&E in educational development. The suggestions of the article show that internal M&E teams have to play a part in collaborating with public and private sectors, NGOs, and other stakeholders so that effective, efficient, impactful and sustainable M&E systems could be established and development of educational system may take a new boost. Based on the research findings of this study, we conclude that only a small number of M&E tools and methods was examined and, therefore, low involvement of stakeholders during all stages of the M&E process was linked to minimal knowledge of the use of these tools.

Finally, conclusive evidence showed that appropriate and proactive participation of stakeholders in the M&E process could guide us to a better management system for educational institutions. The involvement of crucial stakeholders, only to limited or lower-level activities with less involvement in key areas, may determine the project's success or failure. This could have serious implications and a breach to the well-covered theory could possibly go away. Theory that guides this study, the evaluation-based theory, which assesses project effectiveness, makes it efficient and sustainable and creates a great impact on upcoming generations in achieving their goals. It determines the relevance and sustainability of an ongoing project by comparing the project impact with what was set to be achieved in the master plan of the project. The selective involvement of stakeholders is also against the World Bank's (2011) principles, which state that the role played by stakeholders in developmental projects dictates the effectiveness of M&E systems. Management and employees should therefore work in collaboration with all stakeholders to ensure that they provide the required input and also execute the M&E systems which are effective and operate to the maximum.

7. Recommendations

Based on the evidence of the study, the following recommendations were made:

Local stakeholders and teams should be given appropriate training and education to set up M&E practicalities in institutions, to uplift their calibres and morals and also to monitor effectiveness of policies already in progress.

The management should be proactive in designing M&E systems. Deans of faculties, heads of departments, professors, and unit coordinators should hold lecturers, seminars, workshops and other academic activities to exercise the proper application of M&E principles and guidelines.

Team members should be trained in such a way that they could identify the indicators that will guide the exercise for the implementation of M&E systems to the maximum.

8. Suggestions for further research

The observations of the study indicate some relevant issues. This research could not cover the vast area of M&E development and procedures in context with keeping all the elements and necessary measures intact, but the findings and material of this study could be used in order to conduct further research. The researchers challenge development practitioners, project managers and other concerned researchers to examine the study and conduct further research using other determinants of evaluation of M&E systems for different projects or policy-making processes by using other tools and methods in teaching and training, management influence and stakeholder involvement, so that the findings of other researches can generalise the results.

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