BUILDING ON TECHNOLOGICAL RESOURCES FOR EFFECTIVE MONITORING AND EVALUATION OUTCOMES OF ACCELERATED LEARNING PROJECTS IN KENYA

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Abstract: *Monitoring and evaluation (M&E) is essential for knowing whether an education sector plan is being implemented or not, as well as for learning lessons for future policy and planning. M&E helps in identifying obstacles as well as highlighting possible changes to the way programmes are implemented. The indicators that track progress need to be relevant, and adapted to monitoring levels of safety, resilience, and social cohesion within the education system. Resources are necessary to achieve effective monitoring and evaluation. Technological resources enhance data collection and communication. The study presented in this paper adopted a descriptive research design, and data were collected through closed-ended questionnaires from a sample of 90 respondents consisting of head teachers, teachers, and project staff from two counties in Kenya. From the findings, there is a strong correlation between technological resources and effectiveness of M&E. It is hence recommended that project initiators and managers may need to pay more attention to the technological resources used in M&E systems to achieve set objectives and improve overall project outcomes. This paper is based on accelerated learning projects in Kenya and may not reflect the scenario in other sectors. More studies can be carried out on other sector specific projects to ascertain further the influence of technological resources on M&E effectiveness.*

Keywords: *accelerated learning program, resources; technology, monitoring and evaluation*

1.0 Introduction and Background

Monitoring is the methodical process of gathering, analyzing, and applying data to track how well a program is doing at achieving its goals and to help managers make decisions. According to Gage and Dunn (2009), evaluation is the methodical examination of the effectiveness of a project, program, strategy, policy, issue, theme, sector, operational area, or institution. It involves comparing the present situation with the past to know how much has been achieved from the laid down objectives.

M&E is crucial in assisting individuals working on projects determine whether progress is being made in accordance with expectations. Globally, Monitoring and evaluation has been in existence since ancient times, Kusek (2004). The majority of project managers recognize the value of task monitoring and evaluation in achieving project success and objectives. By providing corrective action for deviations from the expected standard, project monitoring and evaluation exercises improve the overall effectiveness of project planning, management, and implementation (Kahilu, 2010).

The Canadian government has more than 30 years formalized and centralized monitoring and evaluation. The Canadian M&E framework is described by; internal evaluation units in most federal departments, with central leadership. Prominence is given on both monitoring and evaluation as tools of performance measurement and a well-defined foundation setting the rules and expectations for performance measurement and evaluation—policy, standards, and guidelines. The M&E framework is utilized to guide decision and to convey responsibility to parliament (Lahey, 2011).

In the region, Rwanda has been cited as one of the best performing countries in East Africa by the World Bank in its internalization of M&E in the projects' success in every sector of the economy. While studying the role of M&E in the completion of Non-Government funded projects in the health and education sector in Kigali, Dansoh and Amoah (2010) discovered that there was an influence of the level of expertise of the personnel handling the construction projects, the availability of the personnel, the attitudes and perception of the projects handlers on M&E, the financial resources and geographical locations.

In Uganda M&E has shown how it can be developed for contribution to national capacity building rather than being a data collection exercise that is fruitless. Indications of excessive monitoring and evaluation, have been managed by assigning the mandate of coordination to an M&E working group comprising of representatives of the Office of the Prime Minister and ministries of finance and planning, public service, and local government. There is potential on improving the alignment of M&E capacity with strengthening cost-effectiveness and achievement of value for money. The working group is harmonizing application of M&E actions.

Monitoring and evaluation (M&E) is essential for knowing whether an education sector plan is being implemented or not, as well as for learning lessons for future policy and planning. M&E helps identifying obstacles as well as highlighting possible changes to the way programmes are implemented. The indicators that track progress need to be relevant, and adapted to monitoring levels of safety, resilience, and social cohesion within the education system. (Bethke et al., 2015).

The evolution of M&E in Kenya was the introduction of the Kenya Vision 2030 in 2008 as the country's development design. Vision 2030 replaced the Economic Recovery Strategy (ERS) which run between 2003 and 2007. Vision 2030 became the principal driver of development in Kenya and therefore the basis for National Integrated Monitoring and Evaluation System (NIMES) GoK (2007) which was established in 2004. NIMES was established to track the implementation of policies, programmes and projects during the Economic Recovery Strategy period, which ended in 2007. One of the problems that NIMES was to address was the inadequate supply of data for planning and policy making, particularly at lower levels (villages, locations, divisions and districts). The data collected at these levels was usually forwarded upwards to respective headquarters and hardly shared vertically with other line ministries and stakeholders or fed back to lower levels.

Effective M&E enable projects, programmes or organisations to define, select, collect, analyze and use information for a variety of purposes. For effective M&E to take place, it needs adequate resources. In Economics, resources are defined as a service or asset used to produce goods and services that meet human needs and wants (McConnell, Brue and Flynn, 2011). Resources have to be carefully planned, allocated, shared, costed/valued, and managed to ensure their long term sustainability. Limited resources may hinder the effectiveness of monitoring and evaluation. Resources have three main characteristics: utility, limited availability, and potential for depletion on consumption (Uzoma, 2018).

1.1. Accelerated Learning Program and Problem

The Accelerated Learning Project (ALP) was initiated in 2018 with the primary goal of addressing educational inequalities by identifying and assisting students who have fallen behind in their learning journey. This project adopts the Teaching at the Right Level (TaRL) approach, aligning with the ideals of the Sustainable Development Goals, which emphasize the importance of prioritizing education for the most marginalized students as a means to rectify disparities and ensure equal access to quality education for all children. This arises from the disparities found in education attainments of different children as highlighted by UNESCO, (2017) that many children are in school but they are not learning.

The ALP is founded upon the core principle that every child deserves a strong educational foundation. This evidence-based instructional framework aims to equip students who are lagging in reading and mathematics skills with essential competencies. The project's overarching objective is for children to read with understanding and reason with numbers. Aligned with the Sustainable Development Goal's directive to prioritize the furthest-behind students, the ALP was launched in Tana River, and Bungoma Counties. These counties which were ranked among the lowest-performing, were intentionally selected for the project's implementation. In these regions, the learning achievements of students were notably below the national average (Karogo et al., 2020). To achieve the objective of the ALP, the methodology of the Teaching at the Right Level (TaRL) approach is used. This approach has the following elements as;

i. Level-Based Grouping

ii. Multi-Sensory and Engaging Methods

iii. Ongoing Progress Monitoring

iv. Parental Involvement

These approaches when taken progressively, bring focus and a tailored learning to address areas of weakness and build confidence in the learners and stakeholders. The overall objective of ALP is to improve learning outcomes for identified categories of learners at different levels. For the projects to have the desired outcome, there is need to conduct effective monitoring and evaluation to not only give feedback but also create an avenue for follow up and knowledge building.

From this perspective this paper uncovers some aspects that affect effective monitoring and evaluation. The use of technological resources makes it easier to follow on the project and students undergoing the ALP program and create key knowledge for future learning and makes it easy for follow up and reporting.

Education has become a right recognized by different legal regulatory frameworks in the world. Since the Millennium Development Goals (MDGs) were signed by 189 countries and subsequent introduction of the Sustainable development goals (SDGs) there has been massive progress in the education sector. According to the UNDP, enrollment in primary education has reached 91 percent in developing countries. However, half of this population have not achieved the minimum proficiency levels of reading and mathematics. The traditional education interventions focused on children accessing school, but now researchers and decision makers are focusing their attention on efforts to improve learning outcomes (Pritchett 2013, Robinson 2011).

Many organizations running projects are placing much importance on monitoring and evaluation. Furthermore, it has become one of the requirements of donor funded projects. This emphasizes the need for those who are part of developmental projects to learn from past experience, to improve results of the project and to be

accountable. Interest in M&E has increased in the developmental world as there is much emphasis on the results and sustainability of interventions. Developmental partners are interested in assessing the reliability of their partners and the viability of the project. The processes of monitoring and evaluation allow the stakeholders to evaluate the impact and how success is being achieved to ensure sustainability. A number of organisations and bodies adopted the M&E process in the early 2000s after the understanding of the correlation between project success and M&E. In China for example, every project has an interweaved process and program of M&E (World Bank, 2013). In African countries like Libya, Ghana and Angola, M&E has been introduced in the education sector to accelerate the performance of the projects while other countries like Kenya and her East African counter parts have embraced the idea (Mwangi & Kimenyi, 2011).

Where there lacks monitoring and evaluation, it will be difficult to determine whether intended objectives and goals are being accomplished as planned, what actions are required to ensure success and whether initiatives are making positive contributions towards human development World Bank (2011). Since accelerated learning project has specific goals and expected outcomes, M&E becomes critical in its success. Being a donor funded program, fast tacking the effectiveness of M&E activities provides critical information for policy and future projects in the education sector in Kenya. Due to the improved technological access and its contribution to task efficiency project managers are embracing technological resources to improve the outcomes of various projects.

Despite the anticipated influence of ALP in improving learning outcomes, more need to be done to generate the required feedback as to whether the resources that are being utilized are adequate to bring out the desired outcome. Technological resources are critical in influencing project outcomes at different levels. This paper brings out findings on how technology resources have led to the attainment of accelerated learning among the target group.

1.2. Objectives and Guiding Questions

The main objective of this paper is to establish how technological resources have enhanced the effectiveness of monitoring and evaluation of accelerated learning programs (ALP) in Kenya. Specifically, the paper seeks to;

- To determine how use of technology hardware influences M&E effectiveness in ALP in Kenya.

- To find out the influence of technology software on the effectiveness of M&E in ALP in Kenya.

- To ascertain the influence of frequency in change of technology on the effectiveness of M&E in ALP in Kenya.

To make the inquiry more enlightening the following questions were posed:

- How does use of technology hardware influences M&E effectiveness in ALP in Kenya?

- How does use of technology software influence the effectiveness of M&E in ALP in Kenya?

- How does the frequency of change in technology influence the effectiveness of M&E in ALP in Kenya?

The paper sought to address the objectives and questions raised for purposes of understanding how these technological resources contribute to the effectiveness of the M&E function. An effective M&E system contributes to useful feedback and quality decisions for project success and future learning.

2.0. Literature and Theoretical Review

2.1. Literature Review on Technological Resources and Usage

Studies in technology adoption and usage have been growing tremendously and the application of technological resources has gained momentum in business and non-business organizations.

The use of ICT in education fields can be applied in a number of fields within the school setting. For instance, ICTs can be useful in performing management duties and also in classroom in the content delivery process. Computers in educational institutions are used frequently in performing administrative duties for example storage of data of students. A study by Olson et al (2011) highlights that there is a clear distinction on the frequency of technology use by the older and younger generation. Older adults are selective in the technologies they use and are likely to be slower to adopt. This was evidenced by their continued frequent use of long-standing technologies and less frequent use of more recent technologies.

The adoption of technology can bring down the costs of monitoring and evaluation considerably. For example, World Bank found that mobile data collection reduced costs for each survey by an average of 71%. According to USAID, mobile data collection also lowers the time taken to run a survey by 70%. Collecting data electronically reduces data-entry costs and makes the information easily accessible faster

Xiong (2018) states that the majority of M&E systems in low-income countries are still using paper based data collection and reporting systems that are prone to data quality problems related to accuracy, completeness, and timeliness. The surge of mobile phone penetration in low-income countries has allowed a unique opportunity to introduce an electronic data capture and reporting M&E system.

According to the Government of Kenya ICT policy (2015), inadequate ICT infrastructure has hampered provision of efficient and affordable ICT services in the country. Most people are not able to access digital information due to lack of the necessary infrastructure.

A study by Kienyere (2018), underscores availability of computers as highly influencing project sustainability. Findings from this study concluded that availability of computers and a working constant supply of internet would ensure project sustainability. Benjamin (2018) in her study, factors influencing ICT in Kenya states underscores the lack of adequate technological infrastructure hinders the provision of efficient and affordable services which in turn influences project implementation to a great extent.

Using analytics, visualization, dashboards, and mapping can enhance your ability to make sense of all the data collected for M&E (UNDP, 2013). ICT Works (2018) has listed 6 technologies for monitoring and evaluating programs. They include mobile phones, FM radios, digital data entry, remote sensing and location tracking. These are critical resources for attaining the objectives of accelerated learning programmes in Kenya. According to UNESCO (2010), 30 percent of the Kenyans are able to access computers with only 04 percent coming from the rural and remote area that are greatly and adversely affected by no electricity supply. Despite the challenges of power connection, there has been a revolution in computing and communications, and all indications are that technological progress and use of information technology will continue at a rapid pace (Lee, K.R. and Chavannes, 2001). Embracing new technology will enable efficiency and effectiveness in M&E while inspiring an inventive culture in learning among other human activities.

2.2. Theoretical Review

The theories discussed below build the understanding of the findings presented in this paper.

1. Resource Based Theory

Resource based theory has been widely used to understand the principles and strategies of resource allocation and usage in different sectors. It has provided a mechanism to comprehend how strategic resources and proficiencies allow firms to appreciate excellent performance. The theory demonstrates a comprehensive framework for analyzing organizations and offers ideas that are evidence based from studies done on numerous organizations.

Barney (1991) contends that firms that have ownership of strategic resources, have an advanced competitive advantage over its rivals. This consequently makes the firm enjoy good profits over a period of time. He states that common resources like cash and vehicles should not be considered as strategic resources as competitors can easily acquire them. The supporters of this view argue that organizations should perform an internal analysis to come up with the sources of competitive advantage rather than externally searching for it.

Grant (1991) proposes an action plan for managers to identify their resources and capabilities. Afterwards they are to assess their competitive advantage and use a strategy that will utilize these resources. When the resource improves the effectiveness and efficiency of a firm, it is to be termed as valuable and rare (Habbershon & Williams, 1999).

The Resource based theory has been applied in project management. The firm has been defined as a set of resources therefore projects are a subset of resources. A project schedule has thus been looked at as resource levelling as the project estimate is the sum of the required resource quantities multiplied by the corresponding unit costs (PMI 2010).

2. Diffusion on innovation theory

Diffusion on innovation as a theory was developed by E.M Rogers in 1962 and it is one of the oldest social science theories. It is a hypothesis of how technological and other advancements spread throughout societies and cultures, from introduction to wider-adoption.

Diffusion on Innovation theory sees innovations as being communicated through certain channels over time and within a particular social system (Sarker & Sahay, 2004). Individuals are seen as possessing different degrees of willingness to adopt innovations, and thus it is generally observed that the portion of the population adopting an innovation is approximately normally distributed over time. Breaking this normal distribution into segments leads to the segregation of individuals into the following five categories of individual innovativeness (from earliest to latest adopters): innovators, early adopters, early majority, late majority, laggards. Those firms that are late adopters of technology tend to have trouble securing the support and participation of the stakeholders (Wallace, Keil & Rai, 2004).
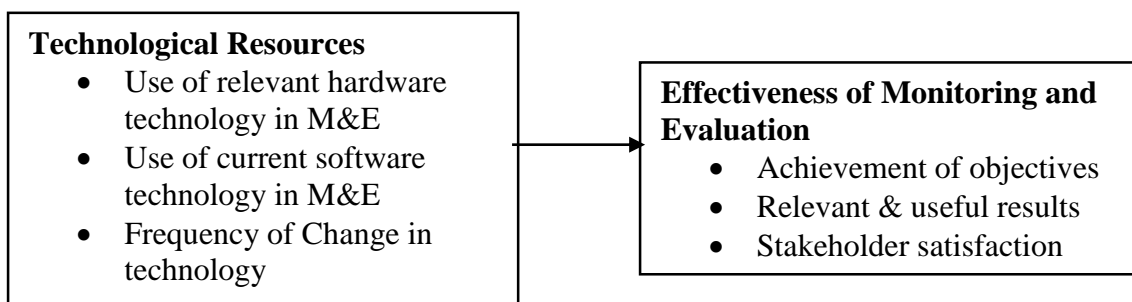
Factors that affect the rate of innovation diffusion include the mix of rural to urban population within a society, the society's level of education, and the extent of industrialization and development. Different societies are likely to have different adoption rates—the rate at which members of a society accept a new innovation. Adoption rates for different types of innovation vary. For example, a society may have adopted the internet faster than it adopted the automobile due to cost, accessibility, and familiarity with technological change.

As technological diffusion takes the different channels, actors benefit differently and with time it becomes an integral part for performance of different tasks including learning. In the end technology becomes an enabler and facilitator of task performance generating key benefits and competitive advantage.

3. Technology Adoption Model Theory (TAM)

The acceptance and the use of information technologies can bring immediate and long-term benefits at organisational and individual levels, such as improved performance, financial and time efficiency and convenience (Foley Curley, 1984; Sharda, Barr & McDonnell, 1988). In this paper accepting technology in implementing accelerated learning programs is critical since it speeds the tasks and creates quick response to feedback on M&E. The attitude of project managers to adopting technology will determine the extent to which the project will achieve its objectives and reach a wider network of beneficiaries.

Fig 2.1: Conceptual framework

Technological Resources
- Use of relevant hardware technology in M&E
- Use of current software technology in M&E
- Frequency of Change in technology

→

Effectiveness of Monitoring and Evaluation
- Achievement of objectives
- Relevant & useful results
- Stakeholder satisfaction

Technological resources are mostly useful in accomplishing tasks that would be complicated on manual applications. They also create data bases that can easily be retrieved and aid in decision making processes. In education programmes, technology hardware, technology software and technological changes or upgrades play a great role in enhancing the learning and data management processes. The anticipated outcomes are; achievement of objectives; generation of relevant results and stakeholder satisfaction.

3.0. Methodology and Design

This paper is based on findings collected using a descriptive survey design approach. This design enables a researcher to describe phenomena in its natural setting. Technological resources are part of the resources used in project management. Using this design makes it easier to segregate pertinent information for analysis.

Orodho (2009) notes that a descriptive research survey design is an appropriate way of evaluating educational programs as educational activities operate in a social context. It also attempts to describe such things as possible behavior, attitudes and characteristics (Mugenda, 2003). This design involves collecting original data using a questionnaire for the purposes of describing a population which is too large to observe directly.

The target population of the was 100 respondents comprising of; 40 head teachers, 40 teachers and 20 project staff. The head teachers and teachers are responsible in the day to day running of the project. They have direct contact with the children who are part of the Accelerated Learning Project. While the project staff provide thought leadership to the project. A census was carried out since the numbers were manageable and also because they were spread out in two counties.

Table 3.1 Target Population

Category	Population
Head teachers	40
Teachers	40
Project staff	20
Total	**100**

The data was collected using a structured questionnaire which was piloted using similar populations who were not included in the final data collection. A reliability test yielded an average score of 0. 89 using Cronbach's Alpha coefficient. Validity was ascertained using expert review of the instrument and a factor analysis. All the constructs were valid and hence used to generate the findings in this paper.

4.0. Findings, Discussions, Summary Recommendations and Conclusions.

The findings in his paper were generated from field data analyzed using SPSS version 26 and description and inferential statistics tools. The findings are based on the key constructs and are presented in the table 4.1.

Statements on the influence of technology resource adequacy on the effectiveness of M&E were identified and the respondents were asked to indicate their position using the scale of 5=Strongly agree (SA) 4 = Agree (A) 3 = Not sure (N) 2 = Disagree (D) 1 = Strongly disagree (SD). From the responses, descriptive measures mean and standard deviation (STD) were used to enhance interpretation and generalization. The results are shown on Table 4.1.

Table 4.1: Descriptive Statistics on Technological Resource Adequacy

Technological Resources	SD	D	N	A	SA	Mean	STD
The project team is able to use the hardware and software technology	3.4	8.0	1.1	64.8%	22.7	3.955	.9335
The project uses a monitoring and evaluation system	4.5	8.0	4.5	61.4%	21.6	3.875	.9921
There is use of software technology like SPSS and R to analyze data	3.4	11.4	6.8	54.5%	23.9	3.841	1.0271
The project has invested in both hardware and software technology	3.4	9.1	8.0	56.8%	21.6	3.851	.9827
Current technology is used to conduct M&E	4.5	11.4	4.5	54.5%	23.9	3.828	1.0697
Relevant technology is used to conduct M&E	3.4	10.2	4.5	60.2%	19.3	3.837	.9805
The technology used can generate reports that is consumable	2.3	10.2	2.3	56.8%	26.1	3.965	.9634
Technology influences effectiveness of M&E	4.5	6.8	3.4	52.3%	31.8	4.011	1.0286

As observed from the table above, 88% of the respondents either agree or strongly agree that the project team is able to use the hardware and software technology. 83% either agree or strongly agree that the project uses a monitoring and evaluation system. 78% either agree or strongly agree that there is use of software technology like SPSS and R to analyze data. 78% either agree or strongly agree that the project has invested in both hardware and software technology. 78% either agree or strongly agree that the current technology is used to conduct M&E. 80% either agree or strongly agree that the relevant technology is used to conduct M&E. 83%

either agree or strongly agree that the technology used can generate reports that is consumable. 84% either agree or strongly agree that the technology influences effectiveness of M&E. This is in agreement with Kienyere (2018) where he stated that technology is a huge influence towards project success.

How technology resources impact monitoring and assessment efficacy was a question posed to the respondents. The main finding from the data was that with enough technology resources, data collection techniques and data administration might be more accurate and effective, resulting in more efficient monitoring and evaluation. Also technology can help in making work easier by automating reporting and remote monitoring.

This reveals that technology plays a significant role in Monitoring and Evaluation in projects. Technology acts as an enabler tool to enhance various aspects of M&E, by facilitating efficient and accurate data collection. This improves data accuracy and reduces errors, leading to more reliable M&E results. Technological adequacy allows for real-time monitoring of project activities and progress. This helps project managers and evaluators to quickly identify any issues or deviations from the planned course, enabling timely adjustments and interventions. It also enhances project accountability and responsiveness.

4.2 Inferential Statistics

To evaluate the relationships between the dependent and independent variables, correlation and multiple regression analysis was done and the findings presented in the following subsections.

4.2.1 Correlation Analysis

Correlation analysis seeks to determine the degree of interdependence of the independent variables and also show the degree of their association with the dependent variable separately. The Pearson's Correlation Coefficient (r) is the ratio of the covariance of two variables representing a set of numerical data, and standardized to the square root of the variances (Hall, 2015). The values of the correlation coefficient (R) are supposed to be between -1 and +1. A value of 0 implies no relationship, +1 correlation coefficient indicates that the two variables are perfectly correlated in a positive linear sense, that is, both variables increase together while a values of -1 correlation coefficient indicates that two variables are perfectly correlated in a negative linear sense, that is, one variable increases as the other decreases (Collis & Roger, 2013; Neuman, 2006; Sekeran, 2008; Kothari, 2012). Pearson's correlation was performed at 95% confidence interval. The results are presented in Table 4.2.

Table 4.2: Correlation Analysis   **Correlations**

		Tech	M&E effectiveness
Technology	Pearson Correlation	1	
	Sig. (2-tailed) .000		
M&E effectiveness	Pearson Correlation	.0816**	1
	Sig. (2-tailed)	.000	

**Correlation is significant at the 0.01 level (2-tailed).

The results show a strong positive correlation between technology and effectiveness of monitoring and evaluation of 0.816. This implies that if projects use technology, the level of effectiveness of M&E will improve greatly. This also shows that 81.6% of M&E effectiveness is as a result of technology use in the M&E system in the accelerated learning projects in Kenya. The findings illustrate the results obtained from the correlation analysis for population for the period of study at a 0.05 significance level.

4.2.2. Regression Analysis

According to Mooi and Starstedt (2014), regression analysis is a mechanism applied in the analysis of relationships between an independent variable and a dependent variable by fitting a line-of-best-fit through a series of observations. This facilitates the provision of clarity on: whether the independent variables have a statistically significant relationship with a dependent variable; test the relative strength of different independent variables' effect on a dependent variable; and make predictions. A regression analysis was conducted to test the relationship between the variable (independent) on the effectiveness of monitoring and evaluation.

4.2.3. Model Summary

Model summary' table, provides information about the regression line's ability to account for the total variation in the dependent variable

Table 4.3: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.835[a]	.697	.683	.47926

a Predictors: (constant) Technology

The independent variable explains only 69.7% of the effects of the independent variables on effectiveness of monitoring and evaluation as represented by the R^2 which means that other factors not studied in this research contribute 30.3% of the effects of the independent variables on effectiveness of monitoring and evaluation. Technological resources contribute to almost 70% of the M&E effectiveness in the accelerated Learning projects Kenya. There is need to employ more resources to the project and control other factors so that the projects can be effectively monitored.

Table 4.4: Coefficient Analysis

Coefficient[a]						
	Unstandardized Coefficients		Std.	Standardized Coefficients		
Model	B		Error	Beta	t	Sig.
1 (Constant)						
Technological Resources	.554		.114	.557	4.863	.000

[a.] Dependent Variable: M&E Effectiveness

The results show that there is a positive and statistically significant relationship between technological resources usage and the effectiveness of M&E in the accelerated learning projects in Kenya.

The regression model for this relationship is as;

$$Y = \beta 0 + \beta_1 X_1 + \varepsilon$$

$$= 0.592 + \varepsilon$$

This implies only 59.2 % of the M&E effectiveness is explained by technological adoption. The rest of changes is accounted for by errors and other factors not captured in the model.

4.3 Summary Conclusions and Recommendations

This paper has presented findings on the influence of technology resources on M&E of accelerated learning projects in Kenya.

The survey's results show that the majority of respondents agree that monitoring and evaluation (M&E) frequently uses both hardware and software technologies. For example, SPSS and R are used for data analysis. It was also emphasized that a monitoring and evaluation system was in place, emphasizing the importance of employing a structured M&E strategy. This is in line with Anantatmula and Kanungo (2005) who concluded that technology systems must be developed to meet specific business and project needs. Furthermore, it was found that current and relevant technology is being utilized in M&E, resulting in the production of consumable reports.

This suggests that technology is helping to streamline M&E processes and make data more accessible to stakeholders. Overall, the use of technology in M&E was perceived to have a positive impact on effectiveness. This highlights the importance of keeping up with technological advancements and incorporating them into M&E practices. By doing so, projects can improve their monitoring and evaluation efforts and make more informed decisions based on data.

The goal of this paper was to ascertain how well-equipped technology resources impacted monitoring and assessment performance. According to the study's findings, M & E effectiveness and enough technology resources are positively correlated. Utilizing technology reduces errors, saves time and costs, and boosts the accuracy and dependability of data acquired. Since high-quality data is gathered, evaluated, and used to guide decisions that can affect the outcomes and success of the project, technology helps with effective monitoring and evaluation.

In conclusion this paper argues that use of technology cannot be overemphasized. Hardware, software and frequent review of the applicable technology is critical in achieving M&E objectives and satisfying stakeholders.

Based on the findings presented here, the paper recommends that technology resources should be enhanced and provided easily for use in project M&E. Specifically, hardware, software and new improved technologies should be a priority to accelerated learning projects in Kenya. It helps in data management and sharing in current projects and future ones. Technology facilitates knowledge archiving and timely retrieval for quick decisions and response.

Future researchers should compare use of technology and manual processes in leaning programs to identify quantitative evidence for technology use and traditional methods. Further research could also be conducted

comparing rural and urban outcomes for accelerated learning projects to gauge availability of technological resources among these setups.

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