This book examines project management tools and techniques in education. If project abandonment and failure in the education sector is to be avoided, it is important to manage them through project management tools and techniques. The author discussed various tools and techniques of managing education projects like network analysis, programme evaluation techniques, critical path method, planning, programming, budgeting system, management by objectives and project cycle management. Project management cycle technique sequential stages of identification, preparation, implementation, evaluation and sustainability were explained in detail. In stressing the importance of project management tools and techniques, the author attempted to draw a conclusion on utilizing them in the education sector.

Project management in Education

Kabiru Mohammed Badau

Project Management in Education: Tools and Techniques



Kabiru Mohammed Badau (PhD in Educational Management) is a senior lecturer in the department of Science Education, Modibbo Adama University of Technology, Yola, Nigeria. Education project planner/manager and university lecturer with many scholarly publications on project management in education in national and international journals.



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DEDICATION

To My late Ada, Mohammed Arabi Badau and Ama, Mairo Mohammed Badau who tried to see that I acquire a functional education.

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I wish to acknowledge with thanks the assistance of all those who have contributed in one way or the other towards the publication of this book. My profound gratitude goes to Professor Kaka Bukar of University of Maiduguri, Nigeria, who despite his crucial schedules went through the manuscript and offered useful suggestions.

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PREFACE

In Nigeria, in recent years, there have been signs, against the background of acute economic and social crises, of a widening gap between the educational objectives set by state and national authorities and the results obtained in terms of education projects management. Education projects are abandoned in the course of implementation and the quality of implementation even when completed is very poor. This results in poor infrastructural facilities in schools.

This book aims to highlight the importance of integrating education projects tools and techniques for identification, preparation, implementation, evaluation and sustainability with sectoral planning to achieve project objectives. These require relevant and effective planners that pay attention to the translation of political objectives into action programmes so that they ensure continuous monitoring or guidance of project execution and evaluate projects results. Unfortunately, all these have turned out to be difficult if not impossible in Nigeria, because of lack of training of the staff of Ministry of Education from Planning and Project management units on the art of education project management.

The problem of implementation of National Policy on Education through Education Project Management is not course related solely, or even mainly to the technical expertise of the officials at the various institutions involved. But the fact of not having fully mastered the tools and techniques of project identification, preparation, implementation, evaluation and sustainability quite obviously constitutes a serious handicap, when the country enter into negotiations with international external (bilateral and multilateral), funding agencies, whose importance continue to grow.

This book is an integral part of the effects to strengthen the ability of Federal and State Ministries of Education to manage education projects that are consistent with national and state priorities and viable in educational, social, administrative and financial terms. It is also limited to a simple presentation of the education project cycle management technique and their role in the planning process through the successive stages of the project cycle.

Mau

Kabiru Mohammed Badau (PhD)

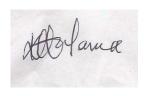
FORWARD

Effective educational projects management is vital for the development of any economy like Nigeria. This is because educational development itself is the result of a series of successfully managed projects. This makes education project management an extremely important problem area for a developing economy like Nigeria. Unfortunately, many education projects experience schedule slippages and cost overruns due to a variety of reasons. To remedy the situation, an education project has to be meticulously planned, effectively implemented and professionally managed to achieve the objectives of time saving, cost effectiveness and functional performance.

The author presents an education project management tools and techniques approach with a total systems view of education project management. He presents a thorough analysis of why projects fail and how they can succeed. The author presents a very candid and practical examples of some relevant examples of education project management tools and techniques, which each student and education project manager must know.

The book will prove to be very useful in managing any size and type of education project in Nigeria. Some of the distinctive features of this book include stages of education project cycle management techniques from identification, preparation, implementation, evaluation and sustainability of education projects.

I strongly recommend this book to readers in education project management and educational planning and management in generally.



Professor K.H Bulama Former Dean, School of Technology and Science education, Modibbo Adama University of Technology, Yola, Nigeria.

-		V	
Ded	ication		
Ack	nowledgements	vi	
Pref	ace	vii	
Forv	vard	ix	
Con	tents	xi	
Figu	are 1	44	
Figu	are 2	121	
CH	APTER ONE: Introduction		
1.1	Justification for Education Projects		1
1.2	Review Questions		3
CH	APTER TWO: Education Projects		
2.1	Concept of Education Projects		4
2.2	Types of Education Projects		5
2.3	Historical Development of Education Projects		5
2.4	Plans, Policies, Objectives and Education Projects		6
2.5	Advantages of Education Projects		8

Pages

Contents

2.6	Disadvantages of Education Projects	8
2.7	The Role of the Education Project Manager	9
2.8	Summary	9
2.9	Review Questions	9
CH	APTER THREE: Education Projects Management	
3.1	The Concept of Education Projects Management	11
3.2	Task in Management of Education Projects	12
3.3	Types of Education Projects Management	13
3.4	Application of Education Projects Management	14
3.5	Approach to education projects management	15
3,6	Strategies for Management of education projects	15
3.7	Process of education projects Management	16
3.8	Organisations Involved in the Management of Education Projects	17
3.9	Factors for the Success of Education Projects Management	18
3.10	The Role of the Educational Project Manager	19
3.11	Summary	19
3.12	2 Review Questions	19
CH	APTER FOUR: Education Project Management Tools	
4.1	Meaning of Education projects Management Tools	21

4.2	Network Analysis Technique (NAT)	21
4.3	Programme Evaluation and Review Technique (PERT)	23
4.4	Critical Path Method (CPM)	25
4.5	Planning-Programming-Budgeting System (PPBS)	26
4.6	Management by Objective (MBO)	29
4.7	Work Breakdown Analysis (WBS)	31
4.8	Cost – Benefit Analysis (CBA)	32
4.9	Scientific Project Management Technique (SPMT)	33
4.10	System approach Technique (SAPT)	34
4.11	Phases Management Technique (PMT)	34
4.12	Project Cycle Management Technique (PCMT)	36
4.13	The Role of the Education Projects Manager	45
4.14	Summary	45
4.15	Review Questions	46
CHA	APTER FIVE: – Education Projects Cycle Management	
5.1	The Concept of Education Projects Cycle Management	48
5.2	Procedural Stages in the Education Projects Cycle	49
5.3	Successive Stages of the Project Cycle Management	49
5.4	Other Stages of Education Projects Management Cycle	50
5.5	United Nations Development Programme (UNDP) Stages of Education Programme	ojec
Cycl	le Management	52

5.6	world Bank Stages of the Educational Projects Cycle Management	
	Technique	52
5.7	United Nations Educational, Scientific and CulturalOrganisation	
Stag	ges of Education Projects Cycle Management	53
5.8	General Features of the Stages of Education Project Cycle Management	
	Technique	54
5.9	The Role of the Education Project Manager	56
5.10	9 Summary	56
5.1	1 Review Questions	56
СН	APTER SIX: Beneficiary Participation in Education Projects Cycle	
Ma	nagement Technique	
6.1	Concept of Beneficiary Participation	57
6.2	Forms of Beneficiary Participation	58
6.3	Forms of Beneficiary Participation in Different Stages of Education	
Pro	ject Cycle Management	59
6.4	The Role of the Education Project Manager	60
6.5	Summary	60
6.6	Review Questions	60
CH	APTER SEVEN: Education Projects Identification	
7.1	The Concept of Education Projects Identification	62
7.2	The purpose of Projects Identification	62
7.3	Justification for Projects Identification	62
7.4	Education System Diagnosis	64
7.5	Critical Analysis of the Education Sector	64
7.6	Needs and Problems of the Society	65
7.7	Societal Needs Assessment	65
7 8	Education Sector Analysis	66

7.9 The Problems of the Education System itself	68
7.10 Education Sector Study	69
7.11 Environmental Policy	70
7.12 Steps in Education Projects Identification	70
7.13 Planning for Projects Identification	71
7.14 Objectives of Projects Identification	73
7.15 Data and Information for Projects Identification	74
7.16 The Role of the Educational Project Manager	75
7.17 Summary	75
7.18 Review Questions	76
CHAPTER EIGHT: Education Projects Preparation	
8.1 The Concept of Education Projects Preparation	77
8.2 Purpose of Education Projects Preparation	78
8.3 Formulating Education Projects Preparation	78
8.4 Preparation of Education Projects Proposal	80
8.5 Preparation of Education Projects Document	80
8.6 Phases in Education Projects Preparation	81
8.7 Design in Education projects Preparation	83
8.8 Education Projects preparation Report	85
8.9 Feasibility Studies in Education Projects preparation	86
8.10 Appraisal in education Projects preparation	88
8.11 Negotiation for Education Projects Preparation	92
8.12 The Role of the Educational Project Manager	94
8.13 Summary	94
8.14 Review Questions	94
CHAPTER NINE : Education Projects Implementation	
9.1 The Concept of Education Projects Implementation	96

9.2	Supervision of Education Projects Implementation	97
9.3 1	Phases in Education Projects Implementation	97
9.4	Work Plan for Education Projects Implementation	97
9.5	Costing Education Projects Implementation	98
9.6	Sources of Funding Education Projects Implementation	99
9.7 1	Financial Management of Education Projects Implementation	103
9.8	The Role of the Education Project Manager	108
9.9	Summary	108
9.10	Review Questions	109
CHA	APTER TEN: Education Projects Monitoring and Evaluation	
10.1	The Concept of Monitoring and evaluation of Education Projects	110
10.2	The Purpose of Monitoring and Evaluation of Education Projects	110
10.3	Functions of Education Projects Monitoring	112
10.4	Functions of Education Projects Evaluation	118
10.5	Types of Education Projects Evaluation	118
10.6	Types of Final Projects Evaluation	110
10.7	The Role of the Educational Project Manager	120
10.8	Summary	126
10.9	Review Questions	126
CHA	APTER ELEVEN: Education Projects Sustainability	
11.1	The concept of Education Projects Sustainability	127
11.2	The content of Education Projects Sustainability	127
11.3	Factors Responsible for Education Projects Sustainability	128
11.4	Functions of Education Projects Sustainability	128
11.5	Procedures of Education Projects Sustainability	129
11.6	Strategies for Education Projects Sustainability	130
11.7	The Role of the Education Project Manager	130

11.8 Summary	131
11.9 Review Questions	131
CHAPTER TWELVE: General Conclusion	
12.1 General Conclusion on Education Projects Management Tools and	
Techniques	132
12.2 The General functions of the Education Manager	133
12.3 Summary	133
12.4 Review Questions	133
References	134
Index	142

CHAPTER ONE

INTRODUCTION

1.1 Justification for Education Projects

The experience of the last forty years has revealed the limitations of education project management by education project managers, at least as traditionally conceived. It has, infact, been rare for education projects to achieve their objectives. The lack of realism in the setting of these objectives, in the evaluation of administrative capacities, and in the estimation of available resources is the most obvious causes of these failures. Educational facilities are characterized by dilapidation and poor maintenance, inadequate and poor condition of furniture and equipment, inadequate and under utilising laboratories and workshops, low pupil – teacher ratio and shortage of qualified teachers.

In the face of these disappointing results, both decision-makers and administrators of education are now interested in a more pragmatic and less doctrine approach to education projects management than in the past. While project management is based on policies, more attention is now being paid to the education projects originating from policies. Attempts are being made to identify, prepare, implement, evaluate and sustain them more methodically.

The financial crises presently experienced by developing countries like Nigeria indicate this trend because of the need to manage public expenditure in education through project management is more rigorous. This increasing constraint is making those responsible for financial affairs in education project management, whether local, national or foreign, morestrict than in the past to increase their contribution to education, because of the significant budget share allocated to this sector.

The implementation of education policies through project management is progressively becoming a major centre of attention in educational planning. Yet in many situations, this phase remains the weak link of the overall process. Education projects are one of the best ways for decision-makers to gain control of it because their objectives, budgets and management periods are clearly defined. For this reason, Ministries of Education as well as sources of external assistance are resorting to projects more and more frequently. This book deals precisely with education project management, within the framework of the planning process. The point of view adopted is that of national and state authorities responsible for the development of education. Emphasis is put on the experience of Nigeria, pertaining to projects framed by national and state authorities and with the support of external sources. Most of the lessons learned from this experience are just as valid for projects that are financed entirely by national and state sources.

Chapter 1 introduced the justification of education projects management. After explaining the concept of education projects, Chapter 2 described the different types of education projects, the historical development of education projects and how they are derived from policies and plans.

Chapter 3, first of all examine the concept of education project management and its types, application and approaches by individuals and organisations involved. The functions of education project management and factors for its success were explained. Chapter 4 discussed the various techniques of education projects management and how they are utilized in managing education projects.

In Chapter 5, the concept of education project cycle management and its stages from individuals, national authorities and international donors were examined and goes to list and explain the characteristic of the stages of the project cycle. Then, chapter 6 explained the concept of beneficiary participation in education projects management and its various forms in managing education project.

Chapter 7, examines the criteria of identification of education projects as the first stage in the in the education projects cycle management and goes on to analyse their goals, the various tasks and working methods they required and the conditions under which are carried out.

Then, chapter 8, also examines the concept and purpose of education projects preparation through formulation, proposal, document design, pre-feasibility report, feasibility study, appraisal and conditions for negotiation.

In Chapter 9, the modalities for education project implementation through phases, supervision, work plan and cost of the projects were explained. Finally, the chapter examined sources of financing education projects and how the finances are managed.

After explaining the concept of monitoring and evaluation, chapter 10, explains their purpose and functions in education project management. The role of information and reporting in monitoring projects were explained. The types of evaluation carried out on education projects were specified.

Chapter 11, examines the concept of sustainability and methods for planning strategies and factors for successful sustainability of education projects.

Finally in chapter 12, general conclusion was drawn on managing education projects and the general functions of the education manager through project cycle management technique.

1.3 Review Questions

1. Discuss the justification for education projects.

CHAPTER TWO EDUCATION PROJECTS

2.1 Concept of Education Project

Education project is an important and carefully planned piece of work and activities that are intended to bring a new innovation or deal with a problem in the education system. The concept of education project was defined by United Nations Development Programme (UNDP, 1997b) as the smallest operational unit prepared and implemented as a separate entity within education programme. Education project objectives contribute to the achievement of the over-role educational programme objectives. Education projects approach emphasizes on means to an end, feasibility of projects, donor-led and single sector orientation.

Education project is an educational transformation which provides the basic requirements for educational development. It is the provision of basic needs to achieve educational objectives. The indicators of education development in developing countries like Nigeria are the percentage of age groups enrolled in primary, secondary and tertiary educational institutions, enrolment in vocational institutions and adult literacy rate of male and female. The purpose of education projects is therefore to raise the percentage of age groups enrolled in primary, secondary and tertiary education institutions, enrolment in vocational institutions and adult literacy rate of male and female (UNDP, 1997a). Education projects are also a set of investments and of other planned activities aimed at achieving specific objectives with a pre-determined time frame and budget. For example, education project may involve the expansion of primary education in a given country (Psachasospoulus and Woodall, 1985).

2.2 Types of Education Projects

The variability of education projects is considerable, in terms of both their Objectives and of their domains of action or their content. The financing of education projects could be national, state, local governments, another public body, community or external sources of funding or bilateral aid source, World Bank loan or credit. Education projects generally include physical or hardware investment like construction, furniture, equipment, supplies and training, which are important with qualitative or instructional objectives (Lethen and Cooper, 1984).

2.3 Historical Development of Education Projects in Developing Countries.

Education projects were distinguished into three phases (Magnen, 1991). The features of their historical development globally were dated into sixties, seventies and eighties.

During the 1960s, the quality of the civil engineering work was general satisfactory. But the supplying of equipment was almost plaqued by delays and its quality sometimes turned out to be poor. The evaluation of projects in the sixties which was carried out at the beginning of the subsequent decade, showed that they did infact help the beneficiaries to achieve their expansion objectives in the education sector.

Four main objectives of variable importance were pursued in 1970s, depending on the funding organisation; both generalized selective development of levels of education and training to meet the demand for qualified manpower improvement of the effectiveness and quality of education and finally equalization of opportunities and access to education. All levels of education turned out to be costly or ill suited to the country's needs, the search for another form of education that could be

generalized and selective development of the subsequent levels of education were carried out.

Financial constraints in 1980s, made it necessary to examine education expansion projects with mere caution, and to give priorities to the renovation of existing facilities, qualitative improvement and institutions development.

Last Twenty-five Years:

The features of education projects in the last twenty-five years in developing countries as specified by Mahlick and Magnen (1992) are as follows.

- 1. An increasingly detailed study of the national education situation and of the government policy with respect to the country's economic, social and financial context before elaboration of the projects.
- 2. An increasingly closer linkage between projects and policies favouring adjustments of the same education system to the financial constraints.
- 3. A gradual opening up of projects to encompass all types, levels and institutions of education.
- 4. The growing importance of quality improvement and institutional development objectives of the same level of education.
- 5. The gradual expansion of donor and multi-lateral bank firm to all categories of education projects expenditure including operating costs and salaries.

2.4 Plans, Policies, Objectives and Education Projects

Education project plans have dual function: First to mobilize efforts for educational development and to provide a coherent framework for the integration of the efforts. The framework may be a set of projects, which represent the means of implementing the plan or making it operational. The presentation of an investment

budget, in the form of a logically structured set of projects makes it possible for national or state authorities to easily obtain national, regional or external aid support.

The planning process is divided into three main stages:

- definition of the educational policy: this is the foundation structure where government defines its educational policy, which include both general policy and sectoral policy. The educational policy sets out the general objectives pursued by the government in to education sector. The general objective means the long-term goals, the priorities and strategy of educational development.
- 2. Estimation of available resources: This is the projection of the resources. The resources may constitute constraints for the plan objectives. In the domain of education in particular, committed expenditure absorbs a very large share of total available resources.
- 3. Elaboration of projects: the education project managers draw up activities that are aimed at achieving the objectives of the plan. Then, they estimate the amount of investment required to implement them. Education programmes may consist of certain projects. The plans coordination term, in order to ensure overall coherence and to keep total activities within the limits of available resources, then revises the projects.

Education plans are really conceived at the time of elaboration of the plan. In most cases, they are products of the workings of the educational system, which is not necessary in step with the planning process. It is rare for education project execution to coincide with the plan. The mobilization of national efforts and the implementation of education policy, have more or less given way to the need to

seek out and motivate external, financing. Many education plans have failed and others missed their mark, whether aimed at increasing school attendance, proving the quality of education or reforming the system as a whole. The most evident cause of these failures is the lack of realism of plans, their objective often having been established without sufficient prior analysis and merely on the basis of the society's values and traditions or its leaders ideologies. Failures can also be as a result of under estimation or over estimation of resources available for new actions and financial difficulties of countries.

2.5 Advantages of Education Projects

- 1. Breaking down of investment budget into distinct projects makes it possible to rationalize the implementation of educational policies.
- 2. There is logical structuring of problems of educational objectives, of proposed solutions and of projected investments.
- 3. There is certain degree of rigor on the part of policy makers and administrators in project elaboration and execution.
- 4. It makes it possible to ensure that initial objectives do not lose sight of the expenditure and that allocated resources reused in a rational manner.
- 5. The specificity of objectives and the need to define them clearly forces the education project manager to design projects realistically.
- 6. The concrete nature of projects gives them good visibility, which is highly appreciated by external aid agencies.
- **7.** Fragmentation of actions and clarification of their objectives make it ensure good results and to learn lessons for the future.

2.6 Disadvantages of Education Projects

 Project utilization seems to be poorly suited to subsectors that require many small investments in the field such as primary education.

- 2. Shortage of precise data cannot be used to clearly define problems and objectives.
- 3. Projects cannot eliminate any coherence which the plan might have, because of the fragmentation they introduce to its implementation.
- 4. Incoherence occurs when the plan is aimed more at seeking and receiving external financing than at implementing national development policies.
- The project planning process is then completely inverted because projects likely to enjoy the support of a foreign aid source are identified as only a second stage.

2.7 The Role of the Education Project Manager

The education project manager plays a great role in the planning process of education projects. He is involved in defining the educational policy, estimation of resources and elaboration of projects in order to achieve education project objectives.

2.8 Summary

This chapter focused on the concept of education projects management, historical development of education projects, plans, policies, objectives and education projects for understanding such concept in the Nigeria context. The understanding will led to successful application of education project management in the educational institutions.

2.9 Review Questions

- 1. What do you understand by the concept of education projects?
- Education projects has variability in terms of objectives and their domains of action or content. Discuss.

- 3. Trade the historical development of education projects in developing countries.
- 4. Discuss the planning process of education projects.
- 5. Enumerate the advantages and disadvantage of education projects.
- 6. What are the functions of the education project manager in education projects?