TABLE OF C	ONTENTS	PAGES
DECLARATION		ii
DEDICATION		iii
ACKNOWLEDG	EMENTS	iv
ABSTRACT		vi
LIST OF TABLE	S	xix
LIST OF FIGUR	ES	xxi
LIST OF CHART	TS	xxiii
LIST OF APPEN	DICES	xxiv
LIST OF ABBRE	EVIATIONS AND ACRONYMS	XXV
CHAPTER 1: In	troduction of the Study	1
1.1. Introduction		1
1.2. Background	of the Study	1
1.3. Statement of	the Problem	6
1.4. Purpose of th	e Study	7
1.5. Research Ob	jectives	8
1.6. Research Qu	estions	9
1.7. Research Hy	potheses	10
1.8. Justification	of the Study	10
1.9. Scope/Delim	itations of the Study	12
1.10. Limitation	as of the Study	12
1.11. Originalit	y of the Study	13
1.12. Brief Lite	rature Review	14
1.13. Definition	of Key Terms and Concepts	17
	aff Development (SD)	17
1.13.2. Co	ontinuous Education (CE)	18
1.13.3. Co	ontinuing Professional Development (CPD)	19

1.13.4. Continuing Professional	Education (CPE) 19
1.13.5. Staff Training	20
1.13.6. Training, Development,	Learning and Education 20
1.13.6.1. Training	21
1.13.6.2. Development	21
1.13.6.3. Learning	21
1.13.6.4. Education	22
1.13.7. Employee Development	(ED) 23
1.13.8. Career Development (CI	<b>D</b> ) 23
1.14. Research Methodology	25
1.14.1. Research Approach	25
1.14.2. Research Design	26
1.14.3. Data Collection Techniq	ues 28
1.14.3.1. Questionnaires	28
1.14.3.2. Interviews	29
1.14.3.3. Observations	31
1.15. Population	32
1.16. Sampling	33
1.16.1. Sampling Size	34
1.17. Data Analysis	36
1.18. Validity and Reliability of Data	Collection Instrument 37
1.19. Ethical Considerations	38
1.20. Organisation of the Study	39
1.21. Conclusion	40
CHAPTER 2: Models, Theories and	Frameworks that Supports
Staff Development Programmes	41

2.1. Introdu	iction	41
2.2. Kirkpa	trick's Evaluation Model	44
2.3. The Re	eturn On Investment (ROI) Process Model	50
2.3.1.	The Evaluation Planning	53

	2.3.2.	Collecting Data	53
	2.3.3.	Isolating the effects of training and development programmes	53
	2.3.4.	Converting data to monetary value	53
	2.3.5.	Tabulating the cost of the training and development programme	54
	2.3.6.	Calculating the Return On Investment	55
	2.3.7.	Identifying intangible benefits	56
	2.3.8.	Reporting with impact study	57
	2.3.9.	The operating standards: guiding principles of ROI process	58
2.4	. RPTIM M	Iodel for staff development	59
2.5	. Theory of	E change and theory of action in practice	62
2.6	. Adult lear	rning theory	66
2.7	. Staff deve	elopment cost model	67
2.8	. Profession	nal development logic model	70
	2.8.1.	Using the logic model to explain the impact of professional	
		activities on professional development	72
2.9	. The Fram	ework for continuing professional development	75
2.1	0. Framew	ork for evaluating professional development for adult education	85
2.1	1. Model f	or evaluating the impact of professional development in eight steps	94
2.1	2. Career d	levelopment model	96
	2.12.1.	Internal and external career movement	97
2.1	3. Conclus	ion	98

<b>CHAPTER 3</b>	: Literature Review	101
3.1. Introduct	on	101
3.2. The conc	ept of training and development	101
3.2.1.	Difference between training, education, development and learning	103
3.2.2.	Training needs analysis/assessment	106
3.3. Staff train	ning and development	115
3.3.1.	Purpose of staff development	116
3.3.2.	Staff training and development policy	118

3.3.3.	Responsibility for staff training and development	119
3.3.4.	Funding of staff training and development programmes	121
3.3.5.	Challenges facing staff training and development programmes	123
3.4. Monitor	ing and evaluation of staff training and development programmes	124
3.5. The effects of staff training and development on job performance		128
3.6. Measuring return on investment		132
3.7. Measuri	ng effective library and information services	137
3.8. Conclus	ion	143

# CHAPTER 4: Background and profiles of institutions and university

libraries in (	Ghana	145
4.1. Introduc	tion	145
4.2. Universi	ty of Ghana	145
4.2.1.	Colleges	146
4.2.2.	Mission statement	147
4.2.3.	Associations and Links	148
4.2.4.	Staff and Student population	148
4.2.5.	The University library	149
4.2.5.	1. Mission of the library	149
4.2.5.	2. Departments and services	150
4.2.5.	3. Collections	151
4.2.5.	4. Library staff population	152
4.3. Universi	ty of Cape Coast	152
4.3.1.	Colleges	153
4.3.2.	Vision and Mission Statement	153
4.3.3.	Staff and Student Population	154
4.3.4.	The University library	154
4.3.4.	1. Mission of the library	155
4.3.4.	2. Departments and services	155
4.3.4.	3. Collections	156

4.3.4	4. Library staff po	pulation 1	156
4.4. Univers	ty of Education Winneba	1	156
4.4.1.	Vision and Mission Sta	tement 1	157
4.4.2.	Campuses, Colleges, Fa	aculties, Institutes	157
4.4.3.	Staff Population	1	158
4.4.4.	The University Library	1	158
4.4.4	1. Departments an	d services 1	159
4.4.4	2. Collections	1	159
4.4.4	3. Library staff po	pulation 1	159
4.5. Central	University College	1	160
4.5.1.	Vision and Mission Sta	tement 1	161
4.5.2.	Faculties and Schools	1	161
4.5.3.	Staff and Student Popu	lation 1	161
4.5.4.	The University Library	1	162
4.5.4	1. Vision and Miss	sion of the library 1	162
4.5.4	2. Departments an	d Services 1	162
4.5.4	3. Collections	1	163
4.5.4	4. Library staff po	pulation 1	163
4.6. Method	st University College Gha	ana 1	164
4.6.1.	Mission statement	1	164
4.6.2.	Aims and objectives	1	165
4.6.3.	Campuses and Facultie	s 1	165
4.6.4.	Staff and Student popul	lation 1	166
4.6.5.	The University College	library 1	166
4.6.5	1. Vision and Miss	sion of the library 1	167
4.6.5	2. Departments an	d Services 1	167
4.6.5	3. Collections	1	168
4.6.5	4. Library Staff Po	opulation 1	168
4.7. Conclus	on	1	169

CHAPTER	5: Research Methodology	170
5.1. Introdu	ction	170
5.2. Researc	h approach	171
5.2.1.	Qualitative research approach	171
5.2.2.	Quantitative research approach	174
5.2.3.	The difference between qualitative and quantitative approaches	177
5.2.4.	Mixed methods research approach	179
5.2.5.	Research design	183
5.3. Data co	llection methods	184
5.3.1.	Qualitative data collection instruments	185
5.3.1	.1. Interviews	185
5.3.1	.2. Observation	187
5.3.2.	Quantitative data collection instrument	192
5.3.2	2.1. Questionnaires	192
5.3.2	2.2. Pre-testing of questionnaires	196
5.3.2	2.3. Distribution of questionnaire	198
5.4. Validity	and reliability	198
5.5. Data an	alysis	200
5.5.1.	Analysis of qualitative data	201
5.5.1	.1. Thematic content analysis technique	201
5.5.2.	Quantitative data analysis	204
5.6. Populat	ion	204
5.6.1.	Table of Population	207
5.7. Samplin	ng	207
5.7.1.	Probability sampling	207
5.7.1	.1. Systematic random sampling	208
5.7.1	.2. Stratified random sampling	209
5.7.2.	Non-probability sampling	210
5.7.2	2.1. Purposive sampling	210
5.7.3.	Mixed sampling method	212
5.7.4.	Sample size 213	

5.7.4.1. Sample size frame	217
5.8. Ethical consideration	218
5.9. Conclusion	221
CHAPTER 6: Presentation of Findings	223
6.1. Introduction	223
6.2. Demographic information on participants	224
6.3. Staff training and development programmes	236
6.3.1. The use of staff training and development programmes	
by library staff	238
6.3.2. Contribution of staff training and development programmes	
to work performance	240
6.3.3. Relationship between awareness, use and satisfaction with	
staff training and development programmes	242
6.3.4. Evaluation of staff training and development policy	243
6.3.5. Training needs analysis	245
6.3.6. Training needs analysis methods	245
6.3.7. Benefits of staff training and development programmes	247
6.3.8. Areas of work that staff development programmes has	
benefited library staff	248
6.3.9. Responses from library staff on monitoring and evaluation	
of staff training and development programmes	250
6.3.10. When is monitoring and evaluation done?	251
6.3.11. Who is responsible for monitoring and evaluation	
of training and development programmes	252
6.4. The use and satisfaction with library services	253
6.4.1. Satisfaction with library services	255
6.4.2. Influence of library services on academic work	257
6.4.3. Specific areas of academic work that are influenced	
by effective library services	259
xiv	

6.5. Testing o	f hypotheses	261
6.5.1.	Hypothesis one	261
6.5.2.	Hypothesis two	264
6.5.3.	Hypothesis three	266
6.5.4.	Hypothesis four	271
6.6. Assessme	ent of performance of training on library staff work performance	272
6.6.1.	Importance of staff training and development programmes	272
6.6.2.	Assessment of performance of library staff	274
6.6.3.	Return on investment in training	275
6.6.4.	Assessment of performance in relation to investment to training	275
6.7. Problems	and recommendations	276
6.7.1.	Problems/challenges	277
6.7.2.	Recommendations	277
6.8. Analysis	of interview/observation results	278
6.8.1.	Assessment of Staff training and development policy	279
6.8.2.	Training needs analysis	281
6.8.3.	Staff training and development programmes	283
6.8.4.	Criteria for selecting trainees for training	284
6.8.5.	Training objectives	284
6.8.6.	Monitoring and evaluation of staff training	
а	nd development programmes	285
6.8.7.	Contribution of staff training and development on staff	
v	vork performance	286
6.8.8.	Benefits of staff training and development programmes	288
6.8.9.	Calculating return on investment in training	288
6.8.10	. Challenges with staff training and development programmes	288
6.8.11	. Recommendations on how to improve upon library staff	
t	raining and development programmes	289
6.9. Conclusi	on	290

CHAPTER 7	7: Interpretation and discussion of findings	292
7.1. Introduct	tion	292
7.2. Demogra	aphic information on participants	293
7.2.1.	Institutional distribution of participants	293
7.2.2.	Age distribution of respondents	294
7.2.3.	Tenure of service of faculty and library staff	294
7.2.4.	Distribution of faculty respondents	295
7.2.5.	Distribution and qualification of library staff	295
7.3. Staff trai	ning and development programmes	298
7.3.1.	Awareness of staff training and development programmes	299
7.3.2.	The use of staff training and development programmes	300
7.3.3.	Contribution of staff training and development programmes	
	to effective library and information services	302
7.3.4.	Evaluation of staff training and development policies	304
7.3.5.	Training needs analysis/assessment	306
7.3.6.	Monitoring and evaluation of staff training and development	
	programmes	311
7.3.7.	The use and satisfaction with library services	313
7.3.8.	Influence of library services on academic work	315
7.3.9.	Importance of staff training and development programmes	316
7.3.10.	Assessment of the performance of library staff	317
7.3.11.	Return on investment in training and development	
	programmes	317
7.4. Testing of	of hypotheses	319
7.4.1.	Hypothesis one	319
7.4.2.	Hypothesis two	321
7.4.3.	Hypothesis three	322
7.4.4.	Hypothesis four	325
7.5. Challeng	es with staff training and development programme	326
7.6. Conclusi	on	327



CHAPTER 8: Summary, conclusions and recommendations 329				
8.1	8.1. Introduction 3			
8.2	. Research	purpose	329	
	8.2.1. Research questions			
8.3	. Summary	of findings	330	
	8.3.1.	Satisfaction with staff training and development policies	331	
	8.3.2.	Staff training and development programmes	332	
	8.3.3.	Training needs/analysis/assessment	332	
	8.3.4.	Contribution of staff training and development programmes		
		to the individual library staff and institutional work performance		
		in the provision of library and information services	333	
	8.3.5.	Benefits of staff training and development programmes	334	
	8.3.6.	Monitoring and evaluation of training and development		
		programmes	334	
	8.3.7.	Relationship between staff training and development		
		and work performance	335	
	8.3.8.	The correlation between the findings and existing literature	336	
	8.3.9.	Contribution of library services to academic work	340	
	8.3.10.	The return on financial investment in staff training		
		and development	341	
	8.3.11.	The challenges of implementing staff training		
		and development programmes	342	
8.4. Conclusion			343	
	8.4.1.	Conclusion on staff training and development policies	343	
	8.4.2.	Conclusion on staff training and development programmes	344	
	8.4.3.	Conclusion on the contribution of staff training and development		
		programmes to effective library and information services	344	
	8.4.4.	Conclusion on training needs analysis/assessment	345	
	8.4.5.	Conclusion on monitoring and evaluation of staff training		
		and development programmes	346	

8.4.6. Conclusion on the benefits of training and development					
		programmes to library staff and the institutions	347		
	8.4.7.	Conclusion on influence of effective library and information			
		services on academic work	347		
	8.4.8.	Conclusion on return on investment in training	348		
8.5.	Recomme	endations	348		
	8.5.1.	Recommendations on staff training and development policies	349		
	8.5.2.	Recommendations on staff training and development programmes	350		
	8.5.3.	Recommendations on the contributions of staff training			
		and development programmes to effective library and information			
		services	352		
	8.5.4.	Recommendations of training needs analysis/assessment	353		
	8.5.5.	Recommendations on monitoring and evaluation of staff training			
		and development programmes	353		
	8.5.6.	Recommendations on how university libraries can derive			
		the full benefits of training and development	355		
	8.5.7.	Recommendation on how to ensure that training and development			
		of library staff promote the work of academic staff/academic			
		work	355		
	8.5.8.	Recommendation on how to maximise the return on investment			
		in training	356		
8.6.	Possible i	mpact of the findings on future staff training and development			
	programmes				
8.7.	8.7. Suggestions for further research				
8.8.	8.8. Final conclusion 359				
	Lists of R	eferences	361		

# LIST OF TABLES

Table 5.1	Table of Population	207
Table 5.2	Sample size frame	
Table 6.1	Distribution of respondents by institutions	
Table 6.2	Awareness of staff training and development programmes by all respondents	237
Table 6.3	The extent of use of staff training and development programmes by library staff	239
Table 6.4	Contribution of staff training and development programmes to work performance	241
Table 6.5	Correlation between awareness of staff training and development programmes use and satisfaction with the programmes	243
Table 6.6	Evaluation of staff training and development policy	244
Table 6.7	The most used methods of training needs analysis	246
Table 6.8	Benefits from staff training and development programmes	
Table 6.9	Areas of work where staff training programmes has benefited library staff	249
Table 6.10	Criteria and methods of monitoring and evaluation of staff training and development programmes	
Table 6.11	When is the monitoring and evaluation of staff training and development programme done?	251
Table 6.12	Responsibility for monitoring and evaluation of staff training and development programmes	252
Table 6.13	The use of library services by faculty and students	254
Table 6.14	Level of satisfaction with library services by faculty and students	256
Table 6.15	Influence of library services on academic work	258
Table 6.16	Specific areas of academic work that are influenced by effective library services	260

Table 6.17	Correlation between staff training and development programmes and work output of staff in the provision of effective library and information services	263
Table 6.18	Performance of library staff who were aware and utilised training and development programmes in the provision of library and information services	265
Table 6.19	Correlation matrix of awareness of STDP, satisfaction with library services, academic work, benefit to work, contribution to performance and satisfaction of STDP	267
Table 6.20	Standard multiple regression analysis on relationship between awareness of STDP, satisfaction with library services, academic work, benefit to work, contribution to performance and satisfaction to STDP	269
Table 6.21	Correlation between performance in the provision of library services and academic work	271

# LIST OF FIGURES

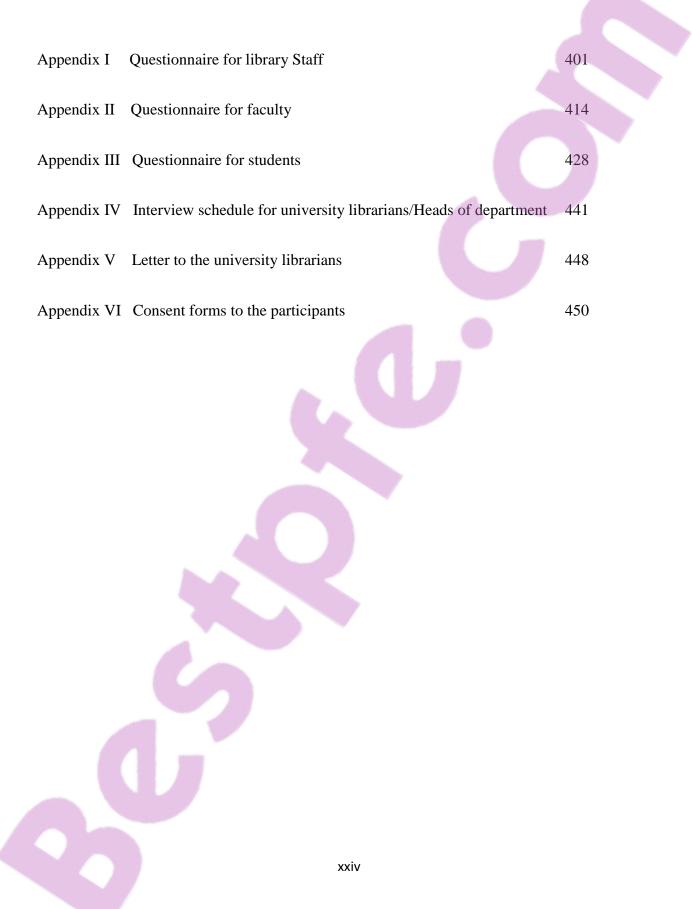
Figure 2.1	Kirkpatrick's Evaluation Model 4		
Figure 2.2	The Return On Investment (ROI) process model		
Figure 2.3	The RPTIM model for staff development	60	
Figure 2.4	Theory of action in practice	64	
Figure 2.5	Staff development cost model	68	
Figure 2.6	Professional development model	70	
Figure 2.7	The logic model for professional development	73	
Figure 2.8	Elements of the logic model	74	
Figure 2.9	Framework for continuing professional development	76	
Figure 2.10	The planning cycle		
Figure 2.11	Evaluation as part of an on-going professional development process	86	
Figure 2.12	Component of a professional development evaluation framework	90	
Figure 2.13	Conceptualisation of the Librarians internal/external career movement model	97	
Figure 6.1	Distribution of respondents by institution	225	
Figure 6.2	Gender distribution of participants	226	
Figure 6.3	Gender distributions of participants by stratum	227	
Figure 6.4	Age distribution of participants	228	
Figure 6.5	Age distribution of participants by stratum	229	
Figure 6.6	Number of years of service (Tenure)	230	

Figure 6.7	Number of years of service (Tenure) by stratum		
Figure 6.8	Distribution of library staff		
Figure 6.9	Academic qualifications of library staff		
Figure 6.10	Distribution of faculty staff	233	
Figure 6.11	Subject areas of faculty staff	234	
Figure 6.12	Type of degree pursued by student participants	235	
Figure 6.13	Student programme of study	236	
Figure 6.14	Response on conduction of training needs analysis	245	
Figure 6.15	Rating the importance of staff training and development programmes to Library Staff	273	
Figure 6.16	Assessment of the performance of library staff by faculty staff and students	274	
Figure 6.17	Assessment of the performance of Library Staff in relation to investment	276	

# LIST OF CHARTS

Charts 1	Distribution of respondents by institution	225
Charts 2	Gender distribution of participants	226
Charts 3	Gender distribution of participants by stratum	227
Charts 4	Age distribution of participants	228
Charts 5	Age distribution of participants by stratum	228
Charts 6	Number of years of service (Tenure)	229
Charts 7	Number of years of service (Tenure) by stratum	230
Charts 8	Distribution of library staff	231
Charts 9	Academic qualification of library staff	232
Charts 10	Distribution of faculty staff	233
Charts 11	Subject areas of faculty staff	234
Charts 12	Type of degree pursue by students participants	235
Charts 13	Students programme of study	236
Charts 14	Response on conducting of training needs analysis	245
Charts 15	Rating the importance of staff training and development programmes to library staff	273
Charts 16	Assessment of the performance of library staff by faculty staff and students	274
Charts 17	Assessment of the performance of library staff in relation to return on investment in training	276

### LIST OF APPENDICES



# LIST OF ABBREVIATIONS AND ACRONYMS

AAU	_	Association of African Universities	
ACU	_	Association of Commonwealth Universities	
ANOVA	_	Analysis of Variance	
BA	_	Bachelor of Arts	
BBA	_	Bachelor of Business Administration	
BCR	_	Benefit Cost Ratio	
BEd	_	Bachelor of Education	
BSC	_	Bachelor of Science	
CARLIGH	_	Consortium of Academic and Research Libraries in Ghana	
CAS	_	Current Awareness Service	
CE	_	Continuous Education	
CED	_	Continuing Education Development	
CILIP	_	Chartered Institute of Library and Information	
		Professionals	
CIPD	_	Chartered Institute of Personnel Development	
CMI	_	Chartered Management Institute	
CPD	_	Continuing Professional Development	
CPE	_	Continuing Professional Education	
CUC	_	Central University College	
HFRP	_	Harvard Family Research Project	
HGSE	_	Harvard Graduate School of Education	
HR	_	Human Resource	
IAC	_	Information Access Centre	

IAU	_	International Association of Universities	
ICGC	_	International Central Gospel Church	
ICT	_	Information Communication Technology	
IT	_	Information Technology	
KC	_	Knowledge Commons	
LWU	_	League of World Universities	
MA	-	Master of Arts	
MBA	-	Master of Business Administration	
MPhil	-	Master of Philosophy	
MSc	-	Master of Science	
MSDE	-	Maryland State Department of Education	
MUCG	-	Methodist University College Ghana	
NGO	_	Non-Governmental Organisation	
NSF	_	National Service Foundation	
OPAC	-	Open Public Access Catalogue	
PNDC	_	Provisional National Defence Council	
QAS	-	Questions and Answers Service	
RC	-	Research Commons	
ROI	_	Return On Investment	
RPTIM	-	Readiness, Planning, Training, Implementation and Maintenance	
SDI	-	Selective Dissemination of Information	
SHS	-	Senior High School	
SPSS	_	Statistical Package for Service Solution	
SSS	_	Senior Secondary School	
STDP	_	Staff Training and Development Programme	



TCA	_	Thematic Content Analysis
UCC	_	University of Cape Coast
UEW	_	University of Education Winneba
UG	_	University of Ghana
UGcat	_	University of Ghana Catalogue
UGLS	_	University of Ghana Library System
UK	_	United Kingdom
UNISA	_	University of South African
UST	_	University of Science and Technology

#### **CHAPTER ONE**

### **INTRODUCTION TO THE STUDY**

#### 1.1 Introduction

The central focus of this study was to investigate the contribution of staff training and development policies and programmes to effective delivery of library and information services in the university libraries in Ghana.

This Chapter presents the background to the study. The intent of the Chapter is to set out the nature and scope of the study as well as to outline the structure of the thesis. The Chapter comprises three sections. The first section presents the statement of the problem, research objectives and questions, research hypotheses, justification, and scope and limitations of the study. The second section presents a brief review of existing related literature on the subject. The third section outlines the research methodology for the study as well as the validity and reliability of data collection instruments.

#### **1.2 Background of the Study**

The current dynamic changes in social and economic organisations, enabled by advances in information and communication technology, leading to the creation of knowledge based economies and market globalisation has made the development of human resources in organisations a key issue. Knowledge has become the only reliable instrument of gaining a competitive advantage and staff training and development has become the optimal answer to the many business challenges.

Increasingly, high performing organisations are recognising the need to use best training and development practices to enhance their competitive advantage. Staff are now seen not just as employees, but as the organisations greatest asset which when given development opportunities, will deliver services to meet the changing needs of customers (Alan 2009: 1-5).

According to Sardar (2010: 185) training is increasingly considered to be a key function in helping organisations achieve their goals through its staff, as it is becoming more generally accepted that there is a correlation between organisational success and investment in training and development. In theory, the organisational pay-off for trained, satisfied and highly motivated employees is improved job performance and higher productivity which leads to a high level of organisational goals attainment. It is therefore very important for individuals and organisations to receive the full benefits of staff training and development programmes.

Staff training and development can be a means of producing organisational change. The benefits of staff training and development are also evident at several levels for both the individual and the organisation. Effective training can make an individual staff member feel confident in his or her abilities. The feedback an individual staff member receives from competent job performance can also affect a higher level of psychological needs, for example self-esteem. Organisations that invest seriously in the area of staff training and development usually reap the benefits of an enriched working environment with higher level of staff retention as well as increased productivity and performance.

The constantly evolving technological and organizational changes in libraries have dramatically increased the scope of librarians' responsibilities. Libraries must therefore make a commitment to answer the need for skills and expanded services with staff development and continuing education (Callahan & Watson 1995: 380). Staff training and development in libraries is therefore intended to strengthen the capabilities of the library to perform its mission more effectively and efficiently in an increasing information technology era. Staff training and development programmes in libraries will also affirm the ability of the individual and the libraries to grow and for each to contribute to the growth of the other (Jurrow 1992: 5).

The training of library staff and the quality of staff are important intangible assets embodied in a library's human capital development. Continuous training of library staff is a significant factor in encouraging innovation and creativity and ensuring that the library is the information starting point for its community of users. The objective of staff training and development programmes is to ensure that individual staff members and the organisation maximise the benefits of its investment in the training and development programmes. For individuals and organisations to receive the full benefits of training and development activities there is the need to evaluate training in terms of reaction, learning, behaviour change, results and return on investment to determine the added value to the individual staff and the organisation. Many organisations simply evaluate the effectiveness of training interventions based on the initial reaction of participants. Organisations must ensure that staff training and development programmes are evaluated and staff who benefit from training transferred the newly acquired knowledge, skills, and abilities to the job.

University libraries face new challenges every day, for instance the collection development function of the university libraries now consists of providing knowledge gateways (Ravi 2008:4), modern methods of cataloguing involves attaching appropriate metadata to information objects to ensure that users will readily find the correct information when searching (Dempsey 2006). Despite the popularity of internet and the World Wide Web, users need significant guidance in using electronic resources than they did with the use of print materials (Pantry & Griffiths 2003).

The university libraries therefore require librarians in all areas to possess a greater variety of skills to utilise modern information and communication technologies to expand services and provide adequate resources for the university community. Staff training and development in the university libraries is therefore of utmost importance as it helps to build the capacity of library staff to cope with the current technological and organisational changes taking place in university libraries. University library administrators must therefore recognise that before library staff can contribute effectively to the fulfilment of the library's mandate and strategic objectives, staff should be given opportunities to develop their skills, knowledge and abilities through training and development programmes.

University libraries in Ghana have instituted several staff training and development programmes with the goal of developing the capacity of library staff to perform their functions effectively and efficiently for higher productivity. According to Lamptey and Agyen-Gyasi (2010: 20) academic libraries in Ghana will in future need a team of flexible experts with a variety of aptitudes and specialisation who will collaborate as researchers, managers and technologists. They also have to be proactive to help in the fulfilment of the mission of their respective universities. This will make university libraries in Ghana different from what we know.

The staff training and development programmes that have been instituted in the university libraries in Ghana generally include orientation programmes, on-the-job-training, opportunity to attend workshops/seminars/conferences, opportunity to prepare for advancement activities, research and publications, membership of library associations and networks, study leaves, assignments, job rotation etc. However, the extent to which these training and development programmes contribute to the provision of library and information services in the university libraries in Ghana is not known. It is against this background therefore that the need for this study was envisaged.

#### **1.3** Statement of the Problem

Much research has been done on how information technology in particular affects the provision of library and information services in university libraries. However, the invaluable contribution of human resources (information professionals) particularly the effects of staff training and development programmes on work performance of the university library staff in Ghana which should reflect in effective and efficient provisioning of library and information services has not been properly and adequately researched.

University libraries in Ghana like many other organisations face continuous challenges due to rapidly evolving technologies, increased demands from the university communities for multiple new services coupled with shrinking budgets. University libraries are changing in response to changes in the learning and research environment. New technologies are also changing the services that libraries provide for example, online reference and instructions, desktop document delivery and automated self-service systems. Staff training and development programmes have therefore been instituted to help keep library staff up-todate with these new developments in the field of librarianship. Despite the recognised importance of staff training and development programmes, these libraries have not effectively utilised the full potential of staff training and development programmes neither have they received the full benefits of training and development because most of these training and development programmes are not evaluated to ascertain the extent to which they contribute to improved work performance. As a result the university libraries are still struggling to design and implement automation projects; poor delivery of library services; lack of knowledge in current best practices; poor collection management and the majority of library users are not information literates.

This study, therefore, investigated the contribution of staff training and development programmes to effective library and information services in the university libraries in Ghana and makes detail recommendations on how to improve upon staff training and development and its contribution to library staff efficiency and effectiveness in the provision of library and information services.

#### **1.4 Purpose of the Study**

The purpose of this study was to determine in detail staff training and development programmes that were available to the university library staff in Ghana and which of these programmes were contributing to effective job performance in terms of the provision of library and information services to the university community. The rationale was to find ways of improving upon staff training and development programmes or developing better ways of adding value to staff to enable them provide effective library services.

### 1.5 Research Objectives

This research focused on the following objectives:

- To examine the effectiveness of staff training and development policies and programmes, instituted in the university libraries in Ghana.
- To examine the effectiveness of training needs analysis/assessment on staff development programmes in the university libraries in Ghana.
- To examine the effectiveness of the mechanism used for monitoring and evaluation of training and development programmes in the university libraries in Ghana.
- To establish how staff training and development programmes have affected both individual library staff and institutional performance in the provisioning of library and information services in the university libraries in Ghana.
- To establish if there is any relationships between staff training and development programmes and work performance.
- To establish the contribution of effective library and information services on academic work in the universities in Ghana.
- To identify the deficiencies and challenges in the implementation of staff training and development policies and programmes.
- To make recommendations on how to improve on staff training and development and its contribution to work performance.

#### **1.6 Research Questions**

Onwuegbuzie and Leech (2006: 475) contend that: research questions in mixed methods studies are vitally important because they, largely dictate the type of research design to be used, the sample size and sampling scheme employed, and the type of data collection instruments administered as well as the data analysis techniques to be used. Research questions are used for obtaining both qualitative and quantitative data (Onwuegbuzie & Leech 2006: 475). The following specific questions served as a guide to the study:

- Which staff training and development policies and programmes in place, in the university libraries in Ghana, have been effective?
- How has staff training and development programmes affected both individual library staff and institutional performance in the provision of library and information services?
- Is there a relationship between staff training and development programmes and work performance?
- How does the result of this research correlate with the existing literature from previous studies?
- How has effective library and information services contributed to efficient academic work?
- Does the financial investment made in library staff training and development result in higher productivity?
- What are the deficiencies and challenges in the implementation of staff training and development programmes?



• How can one use the findings of this research and knowledge generated to improve upon staff training and development practices in the university libraries in Ghana?

#### **1.7 Research Hypotheses**

- The more effective staff training and development policies/programmes are, the better the work output of library staff in the provision of library and information services will be.
- Staff training and development programmes will affect the work performance of both individual library staff and the institution in the provision of library and information services.
- There is a relationship between staff training and development programmes and satisfaction with library services and if the work output is better there will be satisfaction with the services.
- Effective library and information services will contribute to efficient academic work in the universities in Ghana.

### **1.8 Justification of the Study**

The significance of a study refers to the manner in which the study relates to the long term issues and uses a persuasive rationale to justify the reason for the study (Kothari 2004: 31). The realisation of the importance of staff training and development programmes to work performance make it reasonable for university libraries in Ghana to determine the

contribution of staff training and development practices to effective library and information services. This study emphasises the critical role that staff training and development programmes can play in the achievement of organisational goals and objectives. It also highlights the effectiveness or otherwise of staff training and development programmes on work performance, especially in the provision of library and information services. Staff training and development is likely to emerge as a new viable mode of improving work performance. The study establishes the extent to which staff training and development programmes can be adopted to enhance staff work performance in the provision of library and information services.

The study also raises the awareness about the importance of effective staff training and development programmes that will enable library administrators to concentrate efforts on developing these programmes. The result of the study will hopefully help university management including university library administrators to ascertain whether they are getting value for their investment in staff training and development activities. Although this study is confined to a limited geographical and functional area, its outcome may hopefully be applied in the broader context of information science in Ghana and beyond.

Finally, the findings will contribute to the theoretical concepts and knowledge on staff training and development programmes and its effects on work performance in general and in the university libraries in particular.

#### 1.9 Scope/Delimitations of the Study

The study focuses on staff training and development in university libraries in Ghana. Five universities namely, University of Ghana, Accra; Methodist University College Ghana, Accra; Central University College, Accra; University of Education Winneba and the University of Cape Coast were involved in the study. The choice of these university libraries was based on staffing, student/faculty strength, availability of a resourceful library and staff development policy/programmes as well as a representation of both public and private universities in Ghana.

The results of the study may represent what pertains in other university libraries in Ghana. The results may therefore be generalised as the prevailing situation in the university libraries in Ghana. Staff training and development programmes in the university libraries are expected to improve staff morale, job satisfaction, competency and productivity.

#### 1.10 Limitations of the Study

The study has some limitations based on the choice of methodology. The first has to do with restriction of existing literature to only what was accessed by the researcher. There exists a literature gap in staff training and development programmes in relation to university libraries. The researcher had difficulties in accessing internally published training reports from the participating institutions. However, the personal relations between the researcher and some of the heads of the five selected university libraries helped to minimise this limitation.

The second limitation was the issue of possible bias regarding the data provided by the respondents. It is very difficult to vouch for the full authenticity of some of the data collected. However, the mixed methods research approach which combines qualitative and quantitative research approaches helped to minimise the bias. The third limitation is that the study was affected by practical research limitations such as lack of full cooperation from senior management and staff of the participating institutions as well as financial and time constraints.

### 1.11 Originality of the Study

In research, originality starts with the tools, techniques and processes used. The tools refer to the data collection instruments such as questionnaire, interview or observation used for the study. Originality also involves the exploration of the unexplored and the unanticipated. This study is original in the sense that it critically examined and established the effect of the staff training and development programmes on the individual library staff and the institutions as well as its contribution to the provision of effective library and information services.

The originality of the study lies in making a contribution to a knowledge gap in the following ways: carrying out empirical work that has not been done before in Ghana,

bringing about a synthesis that has not been made in Ghana, using the already known materials such as previous literature but with a new interpretation, examining and looking at areas that people in the discipline have not looked at before (Dunleavy 2003: 27; Philips 1993).

According to Johnson, Onwuegbuzie and Turner (2007); Neuman (2006: 149) and Patton (2002: 247) the multiple data collection instruments namely; questionnaires, interviews and observation enabled the collection of multiple data using different strategies, approaches and methods in such a way that makes the result original.

#### **1.12 Brief Literature Review**

This study builds on previous studies on staff training and development, and continuous education, in university libraries across the world, particularly in the following areas, training needs analysis and assessment, monitoring and evaluation of training, effects of training and development on job performance, measuring return on investment in training and effective library and information services.

Several authors including: Mackenzie and Smith (2012); Fritts and Casey (2010); Kisby and Holler (2009); Weaver, Holland and Tonner (2009); Abba and Dawha (2009); Broady-Preston (2009); Paster (2004); Baldwin, Gibbs and Slough (1997) and Snyder and Sander (1978) investigated staff training and development initiatives and structures put in place in university libraries. Although these authors investigated staff development initiatives,

these studies were limited in scope to specific geographical regions and did not adequately establish the contributions of staff training and development programmes on work performance especially in the delivery of library and information services.

Several other studies relevant to the current research include the works of Brewsaugh and Valleroy (2011); Thorton (2010); Kalin (2010); Benn and Moore (2009); Golden (2006); Elaine (2006) and Harvey and Sayer (2009). These studies provide the career development directions for future librarians and the skills needed by the next generation of librarians to enable them perform their duties efficiently.

Furthermore, Varlejs (1987) recommends a broad range of training and development activities for librarians. These include on-the-job-training, orientation, in-service workshops, guest lectures, consultancy works, membership of committees and associations, job rotation, mentoring, research and publications. However these studies did not establish how these training and development programmes/methods have affected staff work performance, especially in the provisioning of library and information services.

Several other authors including Dawo, Simatwa and Okwatch (2012: 316); Kunche *et al.* (2011: 1-3); Asare-Bediako (2008: 179) and Rama and Naagurvali (2001: 722) attempted to evaluate the effects of staff training and development programmes on work performance in the library environment. However, these studies did not adequately establish the extent

to which staff training and development programmes have contributed to effective library and information services.

The studies of Effah (1998); Lamptey and Agyen-Gyasi (2010); Adanu (2007) and Alemna (2001: 44-47), are closely related to this study. According to Adanu (2007: 1-5) the majority of librarians working in the state owned university libraries in Ghana are aware of continuous professional development programmes. However, they have not taken advantage of these programmes because there are financial constraints in funding continuous professional development programmes in the libraries. Lamptey and Agyen-Gyasi (2010: 1-5) suggest the need to train future librarians in academic libraries in Ghana to meet future job requirements.

To summarise, even though the reviewed literature investigated staff development practices in university libraries the emphasis was not on establishing the contribution of staff development on the provisioning of library and information services to the university community. This study differs from previous studies in the following ways:

• It focuses on investigating and establishing the contribution of staff training and development programmes on university library staff and university libraries work performance.

- It also focuses on establishing the contribution of effective library and information services to academic work
- The study also establishes the relationships between staff training and development programmes and work performance.
- Finally, this study reviewed a range of literature on the subject area to draw lessons which are relevant to Ghana's situation hence making this study different from other studies which have been conducted.

# **1.13 Definition of Key Terms and Concepts**

This section presents the definitions of key terms and concepts applicable to this study.

# 1.13.1. Staff Development (SD)

According to Webb (1996: 194) staff development involves all activities, actions, processes, policies, programmes and procedures employed to facilitate and support staff so that their performance and potentials may be enhanced and that they may serve their individual and institutional needs.

Creth (1989: 120) defines staff development to include a range of activities designed to provide development programmes for all levels and categories of staff including professional, support, part- time and voluntary employees. It helps to equip the staff with knowledge, skills and attitude required for them to meet their current responsibilities and adapt to future changes. Staff development can therefore be described as a systematically planned, comprehensive set of professional learning opportunities carried out overtime to achieve specific objectives.

# **1.13.2.** Continuous Education (CE)

Dasgupta and Saptathi (2006: 239-246) define continuous education as systematic and continuous schooling and a process of developing human consciousness in all aspects. Similarly, Snyder and Sander (1978: 145) describe continuous education as a learning process that individuals utilise in fulfilling their needs to learn and grow personally and professionally after their preparatory education and work experience.

Varlejs (1987: 362) also describes continuing education in libraries as a process whereby library staff updates their knowledge, broadens their scope or gains a more in depth understanding of some aspects of their profession. It is also the means by which people identify a new career interest and seek the necessary competencies to pursue this new interest. Kigongo-Bukenya (1999: 93) summarises the objectives of continuing education as follows:

- To enable staff to perform better in their present positions
- To equip staff to move to more desirable positions

• To satisfy staff's desires to explore further aspects of the profession.

Continuing education aims at keeping staff up- to-date with knowledge of the information profession and also provides opportunities for professional growth. Continuing education is therefore education provided for adults after they have left a formal education system. It consists typically of short or part-time courses.

## **1.13.3.** Continuing Professional Development (CPD)

Continuing professional development is a continuing and deliberate organisational sponsored process aimed at assisting, encouraging and enabling professionals to improve their knowledge, skills, abilities and competence (Tracey 2004: 540). Continuing professional development is a process of personal growth to improve the capability and realise the full potential of professionals. This can be achieved by obtaining and developing a wide range of knowledge, skills and experience which are not normally required during initial training and routine work and which develop and maintain competence to practice. CPD activities for librarians include all learning activities undertaken after initial qualifications whether provided on-the-job or are provided outside by agencies such as the library schools and associations (Tracey 2004: 540).

# **1.13.4.** Continuing Professional Education (CPE)

Continuous professional education is a life-long process through which individuals update knowledge, skills and attitudes acquired during their education. It is usually self-initiated



learning in which individuals assume responsibility for their own development. CPE is not an end in itself, but a means to an end. It is crucial for those professionals who have had the benefit of education, but need to acquire new knowledge. There are a number of reasons why one would undertake continuing professional development or education. These include:

- The desire to develop professional knowledge and skills.
- A condition placed on membership of a professional body.
- A condition placed on promotion in employment.
- To demonstrate professional standing to clients and employers (Tracey 2004: 540).

# 1.13.5. Staff Training

Staff training is the process of developing the skills, awareness or expertise of staff, and this is important for both professional and non-professional employees. Training may consist of an induction into a system or routine, the organisation of new skills or attitudes, the development of existing skills in order to elevate efficiency, job satisfaction levels, commitment, interchangeably, cooperation, and to facilitate promotion. It is important, therefore, that training be prepared carefully, in response to staff and organisational needs, and its effectiveness be monitored (Prytherch 2000: 733).

## **1.13.6.** Training, Development, Learning and Education

This section provides the definitions of training, development, learning and education.

#### 1.13.6.1. Training

According to Noe (2008: 3-4), training of employees is a planned effort by a company to facilitate employees learning of job-related competencies including knowledge.

# 1.13.6.2. Development

Development on the other hand is a formal education, job experiences, relationship and assessment of personality and ability that help employees to perform effectively in their current or future job (Noe 2008: 266).

## 1.13.6.3. Learning

Learning is defined as a relatively permanent change in behaviour, cognition, or effect that occurs as a result of one's interaction with the environment. In other words it is the process by which a new capability is attained or a process within an organisation which results in the capacity for changed performance which can be related to experience rather than motivation (Werner & DeSimone 2006: 77).

Learning can be described as a process of active engagement with experience. It is what people do when they want to make sense of the world. It may involve an increase in skills, knowledge, understanding, values or capacity. Effective learning may lead to change in attitude and behaviour. According to Amstrong (2009: 664) learning is the means by which a person acquires and develops new knowledge, skills, capabilities, behaviour and attitudes. Learning can, therefore, be described as a process whereby individuals acquire knowledge, skills and attitudes through experience, reflection, study or instruction. It is

also a continuous process that not only enhances existing capabilities, but also leads to the development of skills, knowledge and attitudes that prepare people for higher- level responsibilities in the future.

## **1.13.6.4.** Education

The British Manpower Services Commission (1981: 17) describes education as activities which aim at developing the knowledge, moral values and understanding required in all aspects of life rather than knowledge and skills relating to only a limited field of activity.

The purpose of education is to provide the conditions essential to young people and adults to develop an understanding of the training and ideas influencing the society in which they live and to enable them to make a contribution to it. It also involves the study of their own cultures and laws of nature as well as the acquisition of linguistics and other skills which are basic to learning, personal development, creativity and communication. Education also contributes to each individual's development by facilitating the attainment of mental powers, character and socialisation as well as specific knowledge and skills. Training is a more short-term aid in the process of education which helps individuals to master defined tasks or areas of skills and knowledge to pre- defined standards. Lundy and Cowling (1996: 224) agree that education is the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment and generally preparing for mature life.

#### **1.13.7. Employee Development (ED)**

Employee development refers to an integrated set of planned programmes provided over a period of time to help assure that all individuals have the competence necessary to perform to their fullest potential in support of the organisational goals (Jacobs &Washington 2010).

As a process, employee development encompasses the learning of all individuals in organisations – including frontline employees, professionals or managers and can be delivered through a range of approaches including, off-the-job and on-the job training programmes. The overall intent of employee development programmes is to provide a systematic path for increasing the employees competence, regardless of whether that increased in competence would be used for doing present or future work (Jacobs & Washington 2010).

#### **1.13.8.** Career Development (CD)

Career development can be described as the interaction of psychological, sociological, economic, physical and chance factors that shapes the sequence of jobs, occupations or careers that a person may engage in throughout life. Career development is a major aspect of human development. It covers one's entire life span. It also involves a person's self-concept, family life and all aspects of one's environmental and cultural conditions.

According to Zunker (1994: 3) the terms career development, occupational development and vocational development can be used interchangeably. The author refers to career development as a life-long process of developing beliefs, values, skills, aptitudes, interests, personality characteristics and knowledge of the world of work. Career development can therefore be explained to involve the development of individual needs and goals associated with stages of life and taking career choices that will help the individual to fulfil career goals. Wilding (1989: 899) describes career development in libraries as the acquisition of knowledge and skills that eventually leads to the accrual of additional or different responsibilities and ultimately leads to the achievement of an individual's personal development. Career development covers almost the entire life span through which a person develops the capacity to engage in work as part of their total life.

According to Smith (1995: 25) career development goes through the following processes:

- An employee must assess his/her own career goals and capabilities through internal needs assessment.
- Managers must work with the employees to provide information and assistance in matching personal and organisational concerns.
- Employers must work together to develop an action plan for the ownership of the process and take responsibility for the result.

To summarise, career development just like staff development must be a shared responsibility, the employee must determine their career paths in consultation with their supervisors and the employer must support and encourage employees in their career development activities.

24

#### 1.14. Research Methodology

This section describes the research structure, activities and outcomes. It starts with a general overview of the research design, followed by a description of the chosen data collection strategies and finally illustrates, the methodologies used for data analysis as well as validity and reliability instruments.

## **1.14.1 Research Approach**

There are basically three approaches to research namely, qualitative, quantitative and mixed methods. The qualitative research approach tends to apply a more holistic and natural approach to the solution of a problem than quantitative research. Quantitative research however is appropriate where quantifiable measures of variables of interest are possible, where hypothesis can be formulated and tested, and inferences drawn from samples of the population (Connaway & Powell 2010: 77). Rassel and O'Sullivan (1995:478) describes the quantitative approach as research in which values of variables are characterised by numbers or symbols. It constructs hypotheses and tests them against the hard facts of reality (Leedy 1996: 144).

The mixed method approach is defined as a type of research in which the researcher combines elements of qualitative and quantitative research approaches (for example, the use of qualitative and quantitative viewpoints, data collection, analysis and inference techniques) for the broad purposes of breadth and depth of understanding and corroboration (Johnson & Christensen 2008: 445; Johnson & Onwuegbuzie & Turner 2007: 129; Creswell 2003: 210).

This study made use of a mixed methods approach, thus a combination of quantitative and qualitative approaches. The mixed methods was applied in data collection, data analysis and interpretation of the findings in the current study. A mixed methods approach was deployed in this study for triangular purposes as a means of seeking convergence across qualitative and quantitative approaches. The qualitative approach was used to collect and analyse data from the university librarians and some heads of departments/sections while quantitative approach was used to collect and analyse data from the suger to collect and analyse data from the faculty, library staff and students.

#### 1.14.2 Research Design

According to Kothari (2004: 31), research design refers to the logical sequence that brings together the empirical data to a study's initial research questions and eventually to its conclusion. The selection of a research design for this study considered the ability of the approach to help provide answers to the research questions and meet the research objectives of the study.

Mouton and Marais (1990: 34) also state that the research design involves the planning and structuring of the way in which the research will be conducted in terms of data collection and analysis in a way that is relevant to the purpose of the research. A research design must be planned in such a way that it ensures the validity of the research findings. This involves a series of rational decisions to eliminate disturbing factors that could undermine the validity of the research (Mouton & Marais 1990: 35).

The study adopted the survey research method. Survey research involves the collection of information from a sample of individuals usually through their responses to questions. It is an efficient method for systematically collecting data from a broad spectrum of individuals and educational settings. The survey method owe its popularity to its versatility, efficiency and generalisation. The survey method was chosen for this study because, surveys are efficient in that many variables can be measured without substantially increasing time and cost. Survey data can be collected from a large population at a relatively low cost and depending on survey design. Survey methods lend themselves to probability sampling from large populations.

However, the survey method also has some weaknesses. For instance, it is said to be inflexible, and the survey method once adopted cannot be changed in the process of data collection. The researcher has to use the same process throughout the data collection process. Questions asked in survey methods are always standardised before administering them to the subjects. The researcher is therefore forced to create questions that are general enough to accommodate the general population. Sometimes, these general questions may not be as appropriate for all the participants as they should be. A good example of this situation is administering a survey which focuses on affective variables, or variables that deal with emotions. The researcher took all the weaknesses of survey method into consideration in designing the questionnaire for data collection. For instance experts were consulted and questionnaires were tested on selected sampled population with the aim of making sure that the final questions that were asked will stand the test of time.

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#### **1.14.3 Data Collection Techniques**

This section highlights how data was collected, and the justification for the use of the instruments. The data collection instruments that were used for the study are questionnaires, interviews and observation. These instruments of data gathering are the most commonly used in survey research.

# 1.14.3.1 Questionnaires

A questionnaire is a self-report data collection instrument that each research participant fills in (Johnson & Christensen 2008: 203). This study made use of structured and self-administered questionnaires. Respondents were asked to complete the questionnaires themselves. Both open-ended and closed-ended questions were used. Open-ended questions are useful for exploration and survey research, where complex and relevant dimensions are not known. While closed-ended questions are standardised and easy to administer and understood by the respondents (Denscombe 1998: 100).

According to Connaway and Powell (2010: 150), closed-ended questions, tend to have more reliability than open-ended questions. This is because there is a limited set of responses and thus less potential for variation from testing. However, the limitation with the use of closed-ended questions is that the questionnaire has a limited set of possible replies from respondents and choices may fail to correspond exactly with the respondent's position. The use of the questionnaire enabled the researcher to collect data from a wide range of the research subjects; most people are familiar with questionnaires. The questionnaires also have the advantage of being economical compared to the other instruments of data collection (Busha & Harter 1980: 63).

However, there are some limitations with the use of questionnaires which include the following: they do not allow respondents the ability to describe ambiguous issues, they prevent personal contact with the respondents, perhaps causing the researcher to gain insufficient knowledge about participants in the study, pre-coded questions can be frustrating for respondents and this discourage them from answering the questions and finally the use of questionnaire may make it difficult to obtain responses from a representative cross-section of target population (Busha & Harter 1980 : 63).

The researcher took these limitations into consideration in designing the questionnaire for this study. For instance precise, straight forward, structured and unambiguous questions were asked. The instructions for completing the questionnaire were also very clear. The research assistants were also trained to explain and assist participants who had difficulties with the questions.

## 1.14.3.2 Interviews

An interview is a data collection instrument in which an interviewer asks an interviewee questions (Johnson & Christensen 2008: 203). This study made use of the standardised



structured interview technique. In a structured interview, each respondent is faced with the same questions. The process involves the use of an interview schedule which is usually pre tested. Effective interviewing requires practice and careful preparations. The interview method was used for the five university librarians and some heads of department/sections. The interview enabled the researcher to find out more about the policies, staff development programmes, selection criteria for staff training and development as well as training institutions. The merits of the interview instrument include the following: It allows both parties to explore the meaning of questions posed and answers proffered, and to resolve any ambiguities. Interviews also allow the researcher to receive an immediate response to a question unlike the other forms of data collection instruments, which may result in significant delays in the data collection process. Personal contact may also be of special importance if the questions refer to matters that are confidential, unflattering, embarrassing or sensitive in any way. The interview is appropriate if the respondent cannot read and write for some reasons. Finally, the interview gives a familiar and more personal emphasis to the data collection process (Gorman & Clayton 2007: 126).

However, there are some limitations with the use of the interview instrument, which were taken into consideration in using this instrument. The limitations include: interviews are time consuming, lack of selectivity means that sorting out the important points from large data can be difficult, verbal data, by virtue of its quantity and varying degree of structure are particularly susceptible to errors in interpretation, because it is face to face, anonymity is lost and finally the ever-present danger of bias may be overwhelming (Gorman & Clayton 2007: 126).

The researcher was guided by the existing theories on the advantages and limitations of the interview instrument. For instance, the interview was limited to only five university librarians and ten heads of departments because of the time factor involved in interviewing. Furthermore, structured questions were designed and given to the university librarians and heads of department in advance before the interview date. Multiple data storage devices were used including recorders and note taking during the interview.

# 1.14.3.3 Observation

The observation instrument of data collection typically involves the systematic recording of observable phenomena or behaviour in a natural setting (Gorman & Clayton 2007: 40). While observation may not tell the researcher very much about the stated attitudes or self-perceptions of the subject, it does provide useful insights into unconscious behaviour and how this might relate to self-perceptions of those involved in an event. Observation begins with the attempt to achieve deeper understanding of an event, process or phenomenon (Gorman & Clayton 2007: 40). General objectives must be established before final observation, so that one avoids recording a considerable amount of unwanted data (Gorman & Clayton 2007: 41). There are however, merits and demerits in using the observation instrument of data collection. The merits include the following: the observation instrument has a verifying character where-by what people say they do can be compared with what they actually do; it allows behaviour to be observed in its natural setting; it permits the study of people who may be unable to give their own reports of their activities (Gorman & Clayton 2007: 41).

The demerits of observation include; people who are aware of being observed tend to change their behaviour; it is not always possible to anticipate a spontaneous event and so be ready to observe it; not all types of events lend themselves to observation, some events such as personal or intimate activities cannot be observed; observation can be very time consuming even when appropriate events and situations are chosen. The subjectivity of the observer must always be taken into account (Gorman & Clayton 2007: 105).

This study took into consideration the merits and demerits of using the observation instrument as a tool for data collection. It used the unobtrusive observation technique, which helped to minimise the inherent limitations of this instrument. The researcher made use of the observation instrument to determine the behaviour and conduct of staff at work at the selected university libraries to confirm some of the issues that needed further clarification. The researcher constantly analysed what was observed in order to help tease to out the meaning of the observation. The researcher also tried as much as possible to avoid personal bias in the analysis.

# 1.15 Population

The population of a study constitutes the total collection of all units of analysis about which the researcher wishes to make specific deductions or conclusion (Welman, Kruger & Michell 2005: 52; Johnson & Christensen 2008: 224). The study focused on the library staff at all levels, faculty and students communities of some selected university libraries in Ghana namely; University of Ghana, Methodist University College Ghana, Central University College and University of Education Winneba and the University of Cape Coast. The five universities were carefully selected to represent both public and private universities in Ghana. The total population of the library staff from the five libraries was 503. The researcher considered all the various categories of library staff, namely, professional librarians, non-professional librarians as well as support staff. The second targeted population was the faculty of the five selected institutions. The total population of this group was 2417 and the faculty group consists of professors, associate professors, senior lecturers, lecturers, assistant lecturers, teaching assistants, research fellows.

The third targeted population was the students of the selected institutions which consisted of both post graduates and under graduates. The total population in this group was 126,463. The interviews were conducted with the five university librarians and ten heads of department. The researcher observed ten events.

# 1.16 Sampling

It is not possible to study the entire population, and therefore sampling techniques are used to select from the target population. Sampling is an empirical survey research method that depends upon a sample which is assumed to represent the population accurately. Therefore, the techniques by which the sample is chosen are vital to the validity of the research findings. This study made use of mixed methods sampling techniques, which involve the selection of units or cases for a research study using both probability sampling and nonprobability purposive techniques (Teddlie & Tashakkori 2009: 171). Probability sampling is a basic sampling procedure in which each member of the population has an equal and independent chance of being selected. The primary purpose of sampling is to select elements that accurately represent the total population from which the elements were drawn. Probability sampling enhances the likelihood of accomplishing this objectives and also provides methods for estimating the degree of probable success; that is it incorporates probability theory, which involves the basic probability of being included in the sample (Connaway & Powell 2010: 199).

This study made use of the stratified random and purposive sampling techniques. This is because the study dealt with different categories of subjects. According to Denscombe (1998: 12-13) stratified sampling enables every member of the population an equal chance of being selected to the proportion within the population. The advantage of this technique is that it helped the researcher to maintain some control over the selection of the samples in order to guarantee that the crucial people are covered, and in the proportion that they exist in the wider population. The sample from the selected university libraries represented the larger population. Care was however, taken to cover different views and feelings of all categories of staff, for example male and female, professional and non-professional, supervisors, as well as the management staff.

## **1.16.1** Sampling Size

A sample is defined as a set of elements taken from a larger population according to certain rules and the number of people or elements in a sample is regarded as sample size

(Johnson & Christensen 2008: 224). Singleton, Straits and Straits (1993: 169) recommends at least 100 cases should be used for adequate statistical data analysis in social science.

According to Kumar (2005) a sample size is determined by three factors; the level of confidence that the researcher wants to achieve in the result, the degree of accuracy the researcher requires, and the estimated level of variation with respect to the variables being studied. Usually, social science researchers assume that if the population is large the sample size has to be large as well. However, several authors including Nguluke (2005); O'Sullivan, Rassel and Berner (2008) do not agree with this assertion. O'Sullivan, Rassel and Berner (2008) do not agree with this assertion. O'Sullivan, Rassel and Berner (2008) that there are misconceptions about the sample size and argue that a sample size must include some minimum proportion of the population.

The main factors that determined the sample size for this study were the desire for accuracy and the confidence level. The use of multiple methods research and triangulation were intended to enhance accuracy. The total population from which samples were taken for this study is 139,383. To achieve a confidence level of 95% and a confidence interval of 0.05, a sample size of about 384 was required. This produced a relative standard error of 5.10%. A simplified form of the above equation is available and gives an equally good approximation of the sample size (Yamane 1967: 886). Given that in administering a survey, there could be a degree of non-returns and to achieve the desired confidence level, the following strategy was adopted. The total sampling size of 860 was chosen based on the staff/student and composition of the population.

Considering the total population size of the selected five universities, the researcher administered 240 questionnaires at each of the three state owned universities namely University of Ghana, University of Cape Coast and University of Education Winneba and 110 questionnaires were administered at the private universities namely Methodist University College Ghana and Central University College. The questionnaire covered the three groups of the population namely faculty, students and library staff. The selection of the appropriate sample size helped the researcher to achieve the desired confidence level of the results.

## **1.17 Data Analysis**

Quantitative and qualitative methodologies were used to analyse the data that was gathered from questionnaires and interviews. Data analysis involves the categorising, ordering, manipulating and summarising of data to obtain answers to the research questions. According to Boshoff (1988: 4) the researcher should decide whether to use the services of a professional statistician or a formalised computer programme to do the analysis of data, instead of doing it himself/herself. This study made use of the services of a professional statistician and computer programmes such as Statistical Product and Service Solution (version 16) and Microsoft Excel. Measureable data was reported, coded and analysed using computerised statistical packages.

The completed questionnaires were analysed to identify significant relationships between variables. The objective of the statistical analysis was to ascertain information about the

relationships between staff training and development programmes and work performance. This study used the t-test of statistical significance, ANOVA, Chi square and Pearson correlation coefficient to measure the contribution of staff training and development on work performance. Finally each research question and/or hypothesis was appropriately presented and/or analysed with relevant test statistics or by the use of illustrations.

## 1.18 Validity and Reliability of Data Collection Instruments

Validity is defined as the appropriateness, meaningfulness and usefulness of the specific inferences made from the data. While reliability refers to the degree to which observed data are free from errors of measurement (Dooley 2001: 76). Generally speaking, research is considered to be valid when the conclusions are true, reliable and when the findings are repeatable (Connaway & Powell 2010: 60). It is well acknowledged that seeking an expert's view on the research instrument ensures its validity in social science research (Frankfort–Nachmias & Nachmias 1996: 66).The researcher engaged two experts a statistician and an information specialist to validate the questionnaire and other forms of data collection instruments.

Reliability is a process undertaken by a researcher to ensure that the variable/random errors in the measuring instruments during a survey are removed (Frankfort–Nachmias & Nachmias 1996: 66). The validity and reliability issues were addressed in this research through triangulation. Triangulation is the process of using multiple data collection methods, data sources, analysis or theories to check the validity of the findings. Also, the interview guide and the pre-testing of the questionnaire helped to increase reliability, validity and practicability of the chosen data collection instruments.

## **1.19 Ethical Considerations**

Ethics refers to the principles of right and wrong that individuals use to make choices to guide their research (Laudon & Laudon 2010: 151). The first ethical issue that was addressed in this study was that, the prospective research participants were fully informed about the procedures and risks involved in the research and they gave their consent to participate. According to Johnson and Christesen (2008: 109) and Bailey (2007: 16), the subjects of research need to be informed about the objectives of the research and their rights if they decide to participate in the research. The researcher explained the objectives of study and the rights of the participants in the introduction to the questionnaire and interview schedule.

The second ethical issue that was addressed was confidentiality: the study respected the confidentiality of information that was provided by research participants. As recommended by Bailey (2007: 24), it is the researcher's responsibility to assure personal confidentiality of the participants/respondents. The researcher assured the participants of the confidentiality of the information they provided. Further, all sources used were duely acknowledged. Finally, the study adhered to the University of South Africa (UNISA) code of conduct of research throughout the study.

#### **1.20** Organisation of the Study

This study is organised into eight chapters. Chapter one starts with information on the background of the research problem, the research objectives, and questions and hypotheses, as well as the scope and delimitations.

The purpose of the research is to find ways of improving upon staff training and development programmes in the university libraries or developing better ways of adding value to library staff to provide effective services. Chapter two examines the various theoretical frameworks that guide the study. Chapter three provides a review of the literature on the research topic with specific reference to how it relates to this study. It also explains gaps or problems in the research area.

Chapter four provides the background and profile of the five selected institutions/libraries namely, University of Ghana, University of Cape Coast, University of Education Winneba, Central University College and Methodist University College Ghana. Chapter five discusses the research methodology adopted for the study and relevant justifications. Chapter six presents the findings on the contribution of staff training and development programmes to effective library and information services in the university libraries in Ghana.



In Chapter seven the findings are discussed and interpreted and finally, Chapter eight presents the summary and conclusions drawn from the research findings and recommendations that will enhance the contribution of staff training and development programmes to effective library and information services in university libraries in Ghana

# 1.21 Conclusion

The research problem is introduced in this Chapter by giving a background to the statement of the problem. The Chapter also clearly specifies the research objectives and questions as well as the research hypotheses. In order to clearly demonstrate that there are gaps in the research area, existing related literature in the study area were reviewed. While justifying the need for this study, it was possible to also look at the originality of the study. A brief summation of the research methodology and design was given, as well as data collection techniques. The importance of upholding high ethical standards, and the need for truth and accuracy of data was emphasised in this chapter.

#### **CHAPTER TWO**

# MODELS, THEORIES AND FRAMEWORKS THAT SUPPORT THE EVALUATION OF STAFF TRAINING AND DEVELOPMENT

## 2.1 Introduction

This chapter discusses the models, theories and frameworks that helped to conceptualise the current study in order to gain understanding of the prevailing situation. In a broader context, a model is viewed as a representation of reality; it delineates those aspects of the real world which the researchers consider to be relevant to the problem being investigated. It makes explicit the significant relationships among aspects and it enables the researcher to formulate empirically, testable propositions regarding the nature of these relationships (Frankfort-Nachmias & Nachmias 1996: 44).

High-level quality performance requires a high level of competent staff. Competent and efficient staff are very essential for growth and survival of modern organisations. The human resource development activities therefore help to increase the effectiveness and productivity of organisations. The main objective of human resource development is to prepare the staff (human resources) to face the challenges of socio-economic and technological changes. It also helps to prepare staff for better performance in the future (Thomaskutty 2010: 6).

Training and development programmes deal with the individual values, behaviours, actions and thoughts of staff of an organisation. These programmes are undertaken to promote the cultural, social and economic development of the individual to maximise their highest human capital potential as a resource for the organisation (Thomaskutty 2010: 7-8).

Training needs therefore exist at all levels of organisations and meeting these needs at all times is expected to make staff more effective and productive. In recent times, because of the potential of training and development to improve performance and promote high efficiency, organisations are investing a lot of time and resources into training and development programmes. It is therefore necessary to periodically evaluate the effectiveness of training and development programmes to ascertain whether it is making the necessary impact on staff work performance. An accepted method to determine the effectiveness of staff training and development programmes is to evaluate such training and development programmes.

Thomaskutty (2010: 11) describes training evaluation as the process of ascertaining whether the training offered has been effective to the employee in terms of achieving the goals of the organisation. Every evaluation process should consider the following:

- Assessment of the effectiveness of an on-going training programme to know if it is achieving its objectives.
- Relying on the standards of project design to distinguish a programme's effects from those of other forces.

• Aiming at improving future training programmes through modification of (Thomaskutty 2010: 11).

Ceffai (2009: 42) and Birnbrauer (1998: 81) suggest that the evaluation of training and development programmes should enable organisations to determine if the intended learning goals, objectives and outcomes were achieved. It should also allow trainers to discover if the needs and desires of participants were fulfilled. The measurement of the effects of the training on participants in terms of growth and change in behaviour can help in decision-making about future training programmes. According to Ceffai (2009: 42) staff training and development programmes that are not evaluated runs the risk of being ad-hoc, lacking direction and occurring in isolation without having any relevance to either the staff or the organisation. Birnbrauer (1998: 81) also argue that evaluation should be mandatory for every training programme because it is the only way of determining whether or not training benefits have paid off. Staff training and development is central to the successful achievement of strategic plans and objectives of organisations. Evaluation of staff training and development programmes is, therefore, very important for assessing the effectiveness of learning and development of individuals, the team and the library.

Given the importance of staff development to both staff and organisations, it is critical to design evaluation models to help understand the benefits of professional development efforts on staff work performance (HFRP 2004: 1). Some of the models, theories and frameworks that provide understanding to the evaluation of staff training and development programmes that are discussed in the next section are as follows:

- Kirkpatrick's evaluation model
- The Return On Investment (ROI) process model
- RPTIM model for staff development
- Theory of change and theory of action in practice
- Adult learning theory
- Staff development cost model.
- The logic models of professional development
- The framework for continuing professional development
- Framework for evaluating professional development for adult education.
- Model for evaluating the impact of professional development in eight steps
- Career development model

# 2.2 Kirkpatrick's evaluation model

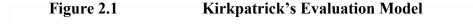
The Kirkpatrick evaluation model was developed by Donald L. Kirkpatrick in 1959 and is considered to be the most useful framework in the evaluation of training programmes (Basarab & Root 1992; Rothwell & Sredl 1992; Philips 1991). According to Falletta (1998: 259), Kirkpatrick's model allows for the measurement of potential effects of training at four levels:

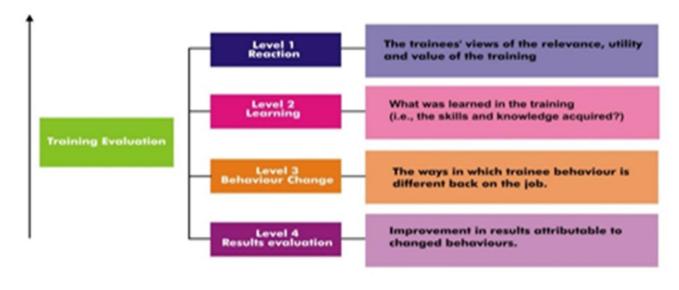
- Participants' reaction to the training
- Participants' learning as a result of the training
- Participants' change in behaviour as a result of the training
- Impact on the organisation as a result of the participant's behaviour change.

The Kirkpatrick's model enables the trainers, trainees as well as organisations to determine the extent to which trainees are satisfied with the training programme, and thus, whether they learned from the programme and are able to apply the newly acquired knowledge and skills on the job, and the subsequent impact on the organisation.

Falletta (1998: 259) in a review of Kirkpatrick's model provides three basic reasons for evaluating training:

- To justify the existence of a training function by showing how it contributes to organisational goals and objectives,
- To decide whether to continue a training programme, and
- To improve training in future.





Source:

Adapted from Nickols (2013: 5)

#### Level 1. Reaction evaluation

As illustrated in Figure 2.1 Level 1 measures how participants in a training programme react to the training. Reaction evaluation helps to ascertain the participants' personal reaction to the training or learning experience, for instance the evaluation must find answers to the following questions:

- Did the trainees like and enjoyed the training?
- Did they consider the training relevant and was it a good use of their time?
- Did they like the venue, the style, timing, logistics etc?
- Level of participation,
- Level of efforts required to make the most of the learning (Nickols 2013: 5). Reaction evaluation can be done immediately after the training ends.

#### Level 2. Learning evaluation.

Learning evaluation refers to the measurement of the increase in knowledge or intellectual capability of the trainees, before and after the training experience. Some of the questions that must be asked include the following:

- Did the trainees learn what was intended to be taught?
- Did the trainees experience what they were intended to experience?
- What is the extent of advancement or change in the trainees after the training? (Nickols 2013: 5).

#### Level 3. Behaviour evaluation

Behaviour evaluation refers to the measurement of the extent to which the trainees applied the learning and changed their behaviour. This evaluation is either done immediately after the training or several months after the training, depending on the situation. The questions to ask at this level of evaluation should include:

- Did the trainees put their learning into effect when back on the job?
- Were the relevant skills and knowledge obtained?
- Was there noticeable and measurable change in the activity and performance of the trainees -when they were back on their jobs? (Nickols 2013: 5).

Measurement of behaviour change is less easy to quantify and interpret than reaction and learning evaluation.

## Level 4. Results evaluation

Results evaluation refers to the measurement of the effects of the training on the business or environment resulting from the improved performance of the trainee. The measurement of results is usually done in volumes, values, percentages, timescales, return on investment, and other quantifiable aspects of organisational performance; this could be in terms of the number of complaints, staff turnover, attrition, failure, wastage, quality rating, noncompliance, standards, accreditation and growth. Individual results evaluation is not particularly difficult but results evaluation across the entire organisation is much more challenging. Also, external factors greatly affect organisational and business performance (Nickols 2013: 6).

Evaluation enables managers to understand the effects of the training on increased production and sales, cost reduction, improved quality, higher profits or return on investment etc. According to Shelton and Alliger (1993: 43-46) the overwhelming popularity of Kirkpatrick's models can be traced to several factors:

- The model guides training professionals to understand training evaluation in a systematic process. It also helps to assess and ascertain the extent to which training programmes have achieved the stated objectives.
- Kirkpatrick's model implies that information about the results of evaluation is perhaps the most valuable or descriptive information about training that can be obtained.

The Kirkpatrick model has, therefore, provided a means for trainers in organisations to evaluate the results of their training programmes and training functions to ascertain whether training is contributing to the success of the organisation.

Bates (2000: 342) outlines the following as the limitations of Kirkpatrick's model of evaluation:

• The model is incomplete: the four- level model presents an over simplified view of training effectiveness that does not consider individual or contextual influences in the evaluation of training.

- The assumption of causal linkages: Kirkpatrick's model assumes that the levels of criteria represents a causal chain such that positive reactions lead to an ability to learn and transfer skills which subsequently leads to positive organisational results. Although Kirkpatrick is vague about the precise nature of the causal linkages between training outcomes, Holton (1996: 5-21) suggest that a simple causal relationship exists between levels of evaluation.
- Incremental importance of information: Kirkpatrick's model assumes that each evaluation provides data that is more informative than the last (Alliger & Janak 1989: 331-342). This assumption has generated the perception among training evaluators that establishing the level four results will provide the most useful information about training programme effectiveness. In practice, however, the weak conceptual linkages inherent in the model and the resulting data it generates does not provide an adequate basis for this assumption (Bates 2000: 342).

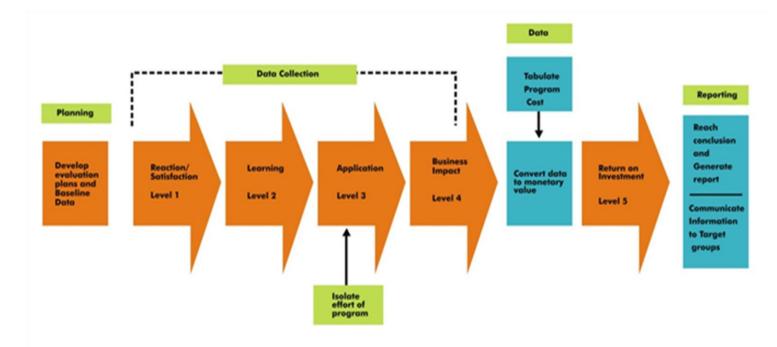
Kirkpatrick's model has been widely used for evaluating training programmes. It also provides a systematic approach for evaluating the effects of training at various levels. However, the model is not able to provide feedback on the extent to which training and development affects job performance of the trainees. The Kirkpatrick evaluation model provided this study with a framework that helped to understand the evaluation of training programmes in four key areas namely, reaction, learning, behaviour and results. For instance the researcher used the model as one of the yardstick to measure the effects of staff training and development programmes.



## 2.3 The Return On Investment (ROI) Process Model

The return on investment process model adds a fifth level to the four levels of training evaluation developed by Kirkpatrick. The concept of different levels of evaluation is both helpful and instructive in understanding how the return on investment is calculated.

Figure 2.2 The Return On Investment (ROI) Process Model



Source: Adapted from Philips (2003: 25)

As illustrated in Figure 2.2 Level 1 assesses the reaction and satisfaction of the trainee. This is usually done with the use of a questionnaire. Almost all the training and development programmes are evaluated at this level in one way or another. Although evaluation of reaction and satisfaction is important, a favourable result does not ensure that the trainee will use the newly acquired knowledge and skills on the job (Philips 2003).

The evaluation at level 2 focuses on measuring what the trainees learned during the training programme. A learning check is helpful to ensure that the trainee acquires new skills and knowledge and are capable of using the new knowledge and skills. However, a positive measurement at this level is no guarantee that the newly acquired knowledge and skills will be used on the job (Philips *et al.* 2007).

Level 3 evaluates the ability of the trainee to apply or implement the newly acquired knowledge and skills on the job. The frequency and use of the new skills are important measures at this level. In addition, the evaluation at this level includes all the steps, actions, tasks and processes involved in the implementation of the training programme. Although Level 3 evaluation is important in assessing the success of the training programme, it still does not guarantee the measurement of a positive impact on the organisation.

Level 4 on the other hand focuses on evaluating the actual results achieved by the training and development programme. This level measures output, quality, cost, time and customer satisfaction. Although the training may produce a favourable impact on the business; the training cost may still be too high compared to the benefits.

Level 5 evaluates the return on investment. This involves a comparison of the monetary benefits of the training with the cost. Although the return on investment can be expressed in several ways; it is usually presented as a percentage or benefit/cost ratio (Philips 2003).

Measuring return on investment is often a difficult and expensive process. This is because it is necessary to evaluate the first four levels before coming to measure the fifth level which is the return on investment, There is a chain of impact that occurs from the evaluation of one level to another. It is also difficult to conclude that the results achieved were actually produced by the training and development programmes (Philips 2003: 25).

The ROI process framework however is comprehensive, data is collected and analysed at different times and from different sources. The application of the return on investment process model is discussed at the hand of Figure 2.2.

# 2.3.1 The Evaluation Planning

The first stage of the return on investment process model focuses on planning the evaluation and this involves the development of appropriate objectives for the training and development programme. The next step is to develop a detailed evaluation plan. This may involve data collection plan which must indicate the type of data to be collected, the method for a data collection, data sources, the timing of collection, and the various responsibilities (Philips 2003:25). This is followed by the ROI analysis plan which should provide details on how the training programme will be isolated from other influences; how data is converted to monetary values; the appropriate cost categories; the expected intangible measures; and the anticipated target audience for communication. These planning activities are necessary for the process to be implemented appropriately (Philips 2003: 25).

## 2.3.2 Collecting Data

The data collected during training and development programmes is used to measure reaction and satisfaction at level 1 and learning at level 2. The results and feedback from the evaluation at these levels ensure that adjustments are made when necessary to keep the process on track. Post-training data are then collected and compared with the pre-training data to determine the level of trainee improvement (Philips 2003: 25).

# **2.3.3** Isolating the effects of the training and development programmes

An often overlooked issue in most evaluations is the process of isolating the effects of training and development programmes. Specific strategies are explored to determine the level of performance improvement directly related to the training programme. This step help to determine the amount of improvement expected from the training programme. It also increases the accuracy and credibility of ROI calculations (Philip *et al.* 2007: 23).

#### **2.3.4** Converting data to monetary values

The calculation of the return on investment (ROI) requires that business impact data are converted to monetary values and compared with training costs. This implies that a monetary value must be put on each unit of the data related to the training and development programme (Philips *et al.* 2007: 24). Philips *et al.* (2007) and Philips (2003) suggest several techniques for converting data to monetary values as follows:

- Output data can be converted to profit contribution or cost savings based on their contribution to profit or cost reduction.
- The cost of quality can be calculated and quality improvements are directly converted to cost savings.
- Employee benefits can also be used in a situation where the employee saves time at work as a result of training. Value is put on the time saved.
- Internal and external experts can be used to estimate the value for an improvement of work output.

This step in the ROI process is critical and is absolutely necessary for determining the monetary benefits from the training and development programmes (Philips 2003 & Philip et al. 2007).

## **2.3.5** Tabulating the cost of the training and development programmes

It is important to tabulate the cost involved in developing all the training programmes that will help in calculating the ROI (Philips 2003: 28). The cost components of training programmes include:

- The cost of designing and developing the training programme
- The cost of training materials
- The cost of the trainers/instructors
- The cost of training facilities/ logistics
- The cost of monitoring, evaluation and reporting

- The cost of training needs assessment.
- Administrative overheads related the training programme (Philips et al. 2007: 25).

## 2.3.6 Calculating the Return on Investment

The return on investment is calculated using benefits and costs of the training programme. The Benefit/Cost Ratio (BCR) is the benefit of the training and development programme or intervention divided by the cost (Philips 2003: 29).

In formula form see below:

 $BCR = \frac{HR Programme Benefit}{HR Programme Costs}$ 

Sometimes this ratio is stated as a return on investment, although the formula is similar to that of the BCR. The return on investment is calculated by dividing the net benefits with the cost (Philips 2003).

In formula form, it is:

 $ROI\% = \frac{Net HR Programme Benefits}{HR Programme Costs} \times 100$ 

This is the same basic formula used for evaluating other investments in which the ROI is traditionally reported as earnings divided by investment.

The BCR and the ROI present the same general information but with slightly different perspectives (Philips *et al.* 2007: 26). Here is an example to illustrate the use of these

formulas. An HR training programme produced benefits of GH¢581, 000, (Ghana cedis) with a cost of GH¢229,000. Therefore, the benefit/cost ratio would be:

#### BCR=GH¢<u>581,000</u> = 2.54 (or 2.5:1)

#### GH¢229,000

As this calculation shows, for every GH¢1 invested, GH¢2.50 in benefits was returned. In this example, the net benefits were GH¢581,000 - GH¢229,000 = 352,000.

#### $ROI\% = GH \underline{c352,000} X 100 = 154\%$

#### GH¢229,000

This means each  $GH\phi1$  invested in the Human Resource training programme returned  $GH\phi1.50$  in net benefit after costs were covered.

# 2.3.7 Identifying intangible benefits

Apart from calculating the tangible monetary benefits, most training and development programmes will want to identify intangible, non-monetary benefits as well. What is usually done during data analysis, is to convert all data to monetary values. All hard data such as output, quality, and time are converted to monetary values. The conversion of soft data is done for each data item. However, if the process used for conversion is too subjective or inaccurate and the resulting values lose credibility in the process, then the data are listed as intangible benefits with the appropriate explanation. For some interventions, intangible, non-monetary benefits have extreme value, often communicating as much influence as the hard data item (Philips *et al.* 2007: 23). Some examples of intangible benefits of training include:

- Improved public impact.
- Increased job satisfaction.
- Increased organisational commitment.
- Enhanced technology leadership.
- Reduced stress.
- Improved team work.
- Improved customer service.
- Reduced customer response time (Philips 2003: 30).

# 2.3.8 Reporting with an impact study

The final step of the ROI process involves developing appropriate information to report the results achieved by the training and development programme and to communicate the results to the various interested groups (Philips *et al.* 2007 : 26). The report must cover the five categories of data collected and analysed beginning with level 1, reaction and satisfaction and then moving through to level 5 which calculate the ROI. The results of intangible measurement are presented in a rational logical process, showing the building blocks to the success for the study. The key issue in this step of the ROI process is the analysing of the stakeholders (detailed in the evaluation plan) and developing the appropriate report to meet their specific needs (Philips 2003: 30).

# 2.3.9 The operating standards: guiding principles of ROI process

Philips *et al.* (2007) and Philips (2003: 31-32) suggest the operating standards to guide the procedures for calculating return on investment in training as follows:

- When a higher level evaluation is conducted data must be collected at lower levels.
- When an evaluation is planned for a higher level, the previous level does not have to be comprehensive.
- When collecting and analysing data, use only the most credible sources.
- When analysing data, chose the most conservative approach among alternatives.
- At least one method must be used to isolate the effects of the programme/ initiative.
- If no improvement data are available for a population or from a specific source, it is assumed that little or no improvement occurred.
- Estimates of improvement should be adjusted for the potential error of the estimate.
- Extreme data items and unsupported claims should not be used in ROI calculations.
- The first year of benefits (annual) should be used in the ROI analysis of short term projects/initiatives (Philips *et al.* 2007: 26; Philips 2003: 50).

The return on investment process model provides a scientific and systematic approach for measuring the cost benefits on investment in staff training and development programmes. The model therefore provides a framework for this study to determine and understand whether the five selected university libraries were getting value for the money invested in training and development programmes which is one of the main objectives of this study. The researcher used the framework as a yardstick to determine whether the various institutions were calculating return on investment in training in monetary terms. For instance the framework provided this study the formula for calculating the return on investment in training in the university libraries in Ghana.

## 2.4 **RPTIM model for staff development**

The Readiness, Planning, Training, Implementation and Maintenance (RPTIM) model for staff development was developed by Woods, Thompson and Russell in 1981. It remains one of the most comprehensive models for evaluating effective staff development programmes. This model conceptualises staff development into five stages and 38 practices. The 38 practices within each stage of RPTIM model are research based (Wood, Thompson &Russell 1981). The five stages of the RPTIM model are:

Phase I. Readiness

Phase II. Planning

Phase III. Training

Phase IV. Implementation

Phase IV. Maintenance





Figure 2.3 The Rptim Model for Staff Development

Source: Adapted from Wood, Thompson & Russell (1981)

As illustrated in Figure 2.3, **the Readiness Stage (Phase I)** suggests the development of a positive climate before staff development activities are executed. The activities associated with this stage include the establishment of goals for the improvement of future programmes. Current staff development programmes and those practices not yet found are examined to determine which ones are congruent with the professional development goals. When readiness is considered to be at a high level, specific planned programmes are implemented (Wood, Thompson & Russell 1981).

# **Planning Stage (Phase II)**

The planning stage involves activities such as the examination of the differences between desired and actual practices to identify staff development needs. The learning styles of participants are also considered. The specific objectives of the various staff development programmes are determined and the leadership is shared among teaching and administrative personnel (Wood, Thompson & Russell 1981).

## **Training Stage (Phase III)**

The training stage also involves the training of staff using various training methods that will meet the training needs of the individual staff and the organisation. The individual staff members are encouraged to develop their own objectives for professional learning. Leaders of staff development programmes are determined according to their expertise and when the individuals or groups become increasingly confident in their abilities, they assume more responsibilities for their own development (Wood, Thompson & Russell 1981).

# **Implementation Stage (Phase IV)**

The implementation or application phase refers to the stage at which the newly acquired skills and knowledge by individual staff are put into practice. At this stage resources are allocated to support the implementation of new practices and work behaviour (Wood, Thompson & Russell 1981).

# Maintenance Stage (Phase V)

The final stage of the RPTIM process involves the evaluation of procedures and programme outcomes. The results of assessment and changes are recorded for the purpose of improving future staff development programmes. At the maintenance stage, a systematic programme of instructional supervision is used to monitor and support new work behaviour. The results relative to new practices and behaviour are assessed through a variety of methods, which include changes in trainees behaviour and achievement (Wood, Thompson & Russell 1981).

The RPTIM model remains one of the most comprehensive model that support effective staff development. The model also provides a systematic procedure that staff training programmes should go through in order to be successful. The RPTIM model provides this study with some understanding of staff training and development processes and procedures. It is obvious that for a staff development plan to be successful, it has to go through some predetermined processes. The model also served as a guide to this study as it helped to ascertain whether the staff development programmes undertaken by the selected universities libraries in Ghana goes through a systematic process from planning through the implementation to evaluation. However, this theory need further development in order to be applicable and suitable for the library environment.

# 2.5 Theory of change and theory of action in practice

The theory of change and theory of action provides some understanding to the evaluation of staff development or professional development programmes. Weiburd and Sniad (2006: 20) used the theory of change and theory of action to help address questions about how to develop and evaluate professional development programmes. The theory of change identifies the processes through which a given type of social change is expected to occur and the theory of action in practice maps out a specific pathway in the change process within an organisation to enable it achieve the objectives of change.

The theories provide a defined approach and strategy on how to measure the effects of professional development programmes on staff work performance. Weisburd and Sniad (2006: 20) provides a comprehensive evaluation approach to theory of change and action in practice discussed as follows:

# i. Identify desired outcomes of professional development

Continuous professional development practices will lead to positive outcomes. The development process, leads to improvement in learning and this ultimately leads to high quality outcomes from the professional development activities.

#### ii. Identify a focused set of professional development activities and staff competencies

There should be a plan to build staff skills as well as the programme-level practices to help staff to sustain what they have learned.

#### iii. Identifying indicators of change

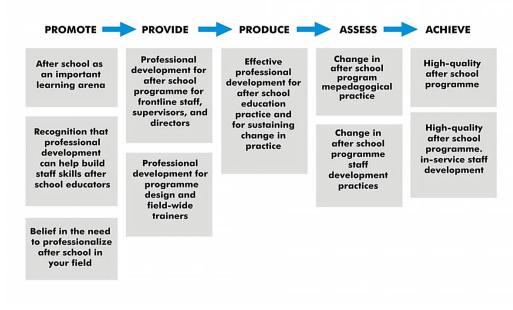
The theory suggests the development of indicators to measure whether professional development has effects on the practitioner and programme levels as articulated in the learning objectives. Positive learning environments and adequacy of resources will lead to positive impact on staff development.

## iv. Uncovering the complexities of evaluating impact

The theory of action highlights the complexities of evaluating the impact of professional development after formal education. Direct professional development is one part of a complex system which needs to improve staff skills and build programme quality (Weisburd & Sniad 2006: 20).

Professional development programmes may be well organised, but if the other parts of the system are not looked at, the effects may not be manifested or sustained in practice. The action theory suggests that adult learning and change are on-going processes, which may require ideas to percolate. What constitute professional development should therefore produce change, demonstrate the value of such professional development, and move the field towards improving staff capacities to provide high quality work after school experience (Weisburd & Sniad 2006: 20).

Figure 2.4 Theory of action in practice



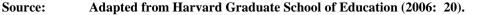


Figure 2.4 illustrates the theory of action in practice. The 'Promote' column demonstrates the activities that have to take place in order to promote professional development.

The "Provide" column indicates that staff should be encouraged to undertake professional development programmes after their main stream education, particularly the frontline staff, supervisors and directors. This is followed by the "Produce" column which explains that staff should pursue professional development programmes after their formal education to make them efficient and effective in their work performance.

The process must continue with an assessment of the change that occurred in the staff immediately after school in comparison with the change that occurs after staff participation in the professional development programmes. The final stage is to "Assess" the effects of the change that occurred in the staff behaviour as a result of professional development programmes and its effects on the organisation (Weisburd & Sniad 2006: 20).

The theory of change and the theory of action in practice provides this study with a systematic approach or framework for evaluating staff training and development programmes. Nevertheless, the theory of action in practice falls short of determining the extent to which the professional development programmes has affected staff job performance. This study also used the theory of change and the theory of action to

determine changes that occurred in library staff as a result of professional development programmes and how this contribute to their job performance.

# 2.6 Adult learning theory

The Adult learning theory, as developed by Malcom Knowles and Jane Velle, focuses on the idea that adults learn best when they talk to others about their life experiences and learning processes. Knowles (1984) identified six principles of adult learning outlined below:

- Adults are internally motivated and self-directed;
- Adults bring life experiences and knowledge to learning experiences;
- Adults are goal oriented;
- Adults are relevancy oriented;
- Adults are practical and
- Adult learners like to be respected (Knowles 1984).

The Adult learning theory is based on the following assumptions:

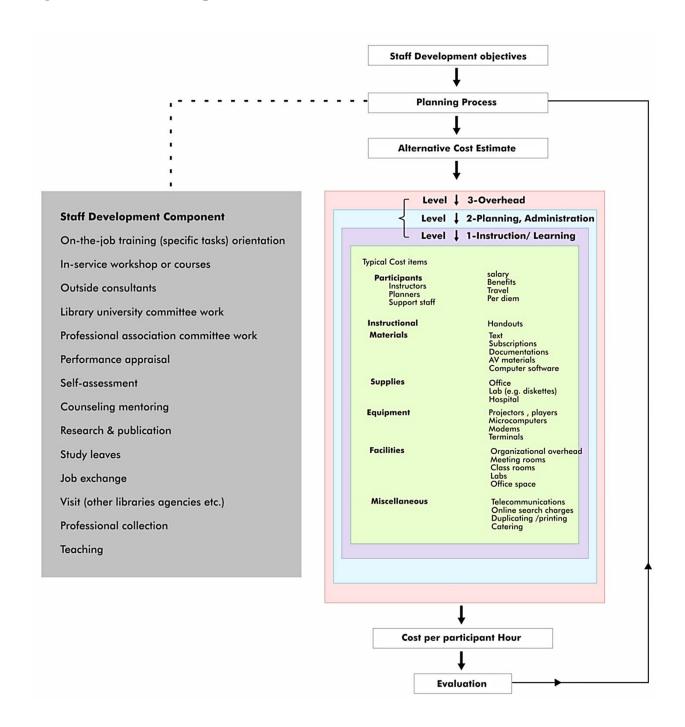
- Adults are motivated to learn as they experience needs and interests that the learning would satisfy.
- Learning by an adult is life-long.
- Experience is the main resource for adult learning.
- Individual differences among people increase with age.

- Adults have a need to be self-directed in their learning, so the learner decides how, when and what to learn.
- The experience of the learner is valued as a rich human resource (Knowles 1984 & Merriam 2001).

The Adult learners therefore are motivated to learn for specific purposes. The researcher o the theory as a guide to understand the planning of training and development programmes for adult learners within the university libraries in Ghana.

# 2.7 Staff development cost model

The Staff development cost model provides a framework which facilitates the identification of cost factors for any particular training activity and the determination of how cost might vary as the method of implementing change. The model also permits the aggregation of staff development.



# Figure 2.5 Staff development cost model

Source : Adapted from Varlejs (1987 : 362)

As illustrated in Figure 2.5 the first step in developing a simple cost model is to identify basic cost variables and relationships. Most costs are divided into direct and in-direct costs, where direct cost is usually associated with a specific activity or course and the indirect costs are those relating to the administration and context of the entire staff development programme (Varlejs 1987: 362). Varlejs (1987: 362) identified the various levels of cost associated with training and

development programmes as discussed below:

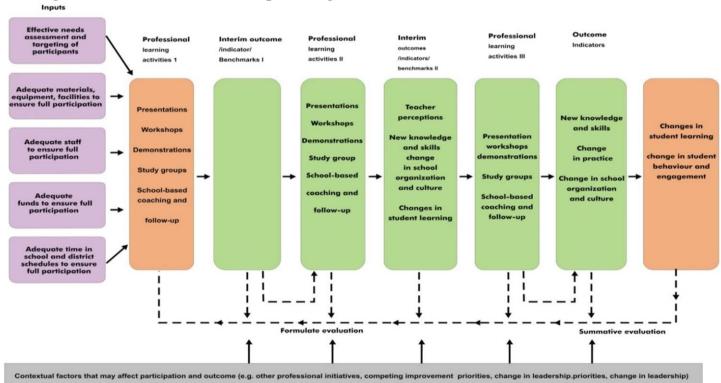
- Level 1 costs refer to classroom costs. It includes the cost of facilitators, learning materials and equipment.
- Level 2 costs on the other hand list the costs incurred in planning and organising training activity. It includes costs such as expenses incurred on administrative or clerical workers, curriculum development and supplies, ie. direct costs associated with the administration of the programme.
- Level 3 costs list the general expenses or operational costs of the organisation. These include personnel cost that are not directly linked to the organisation of the training programme. For instance expenses incurred in book keeping services and cost of training facilities (Varlejs 1987: 362).

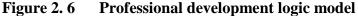
The model allows one to weigh systematically the cost of one training activity against another and also allows libraries to arrive at a figure which represents its total investment in staff training and development programmes. The staff development cost model clearly provides this study understanding of how to cost training and development programmes and also determine the most cost effective training and development programmes.



#### 2.8 Professional development logic model

The professional development logic model helps to identify key components of professional development and the underlying assumptions, the timeline, and the expected outcomes. Creating the logic model is especially helpful in planning long-term professional development that includes several kinds of professional learning. It is equally helpful in planning an evaluation of the impact of professional development programmes on staff (Mclaughlin & Jordan 1999: 65-72).





Source: Adapted from Maryland State Department of Education (2010: 15)

As illustrated in Figure 2.6, the professional development logic model can be used to explain the impact of professional development programmes or initiatives on staff development. The boxes on the left column of the logic professional model list the inputs necessary for professional development. Evaluation planners recognise that identifying staff learning needs and who will participate in the professional development programmes will go a long way towards determining the baselines against which to gauge improvement in knowledge, skills, and change learner's outcomes. Identifying all of the inputs in the Logic model is important but carefully identifying learning needs is even more important (Bruce- Haslam 2010: 14-15). Professional development planners explicitly or implicitly assume that all learners have the same learning needs. Professional development that depends on this assumption tends to reflect a one-size-fit all model, which means that the professional development does not actually fit anyone's needs very well (Millar, Simeone & Carnevale 2001: 73-81).

Learning activities I, II and III indicate that professional learning may be on-going and extends over a number of months or even several years. The activities included in each of these boxes may differ as the professional development unfolds, or some may be repeated several times (Bruce-Haslam 2010: 16). The professional development programmes or initiatives may require only one of the learning activity boxes. Some initiatives may requireseveral boxes adequate description boxes labelled "Interim or Outcomes/Indicators/Benchmark I and II". Outcomes/indicators can include the various outcomes, indicators and benchmarks that planners expect to observe and/or measure at different times as the professional development continues, for example, the first set of interim outcomes could include participants' perceptions of the usefulness of the

professional development, initial mastery of new knowledge and skills, and changes in staff behaviour and organisational performance (Bruce-Haslam 2010: 16).

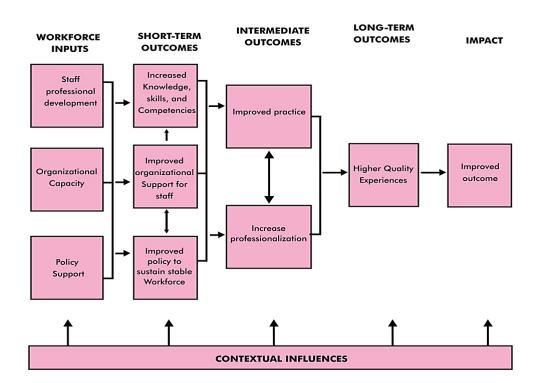
The last set of boxes on the right side depict what changes are expected in professional practices as a result of participating in professional development programmes and what improvements are expected of the trainees. As a general rule, evaluation begins by thinking about the final outcomes and related indicators depicted by the boxes on the right side of the logic model, especially when planning longer-term professional development programmes (Millar, Simeone & Carnevale 2001: 73-81).

# **2.8.1** Using the logic model to explain the impact of professional activities on library staff professional development

The logic model process is a tool that has been used for more than twenty years by programme managers and evaluators to describe logical linkages between programme resources, activities, outputs, audiences, and short, intermediate and long term outcomes related to a specific problem or situation. Once a programme has been described in terms of the logic model, critical measures of performance can be identified (Mclaughlin & Jordan 1999: 65-72).

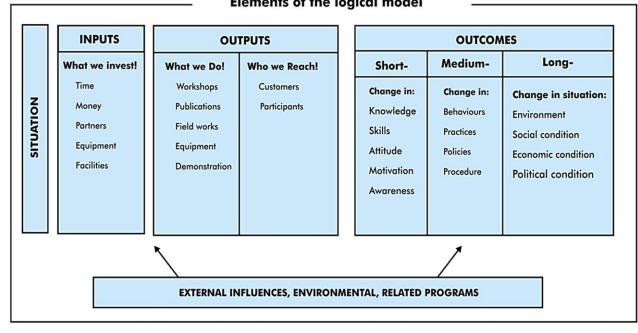
In the logic model, there are narratives or graphical depictions of processes in real life that communicate with the underlying assumptions upon which an activity is expected to lead to a specific result. The logic model illustrates a sequence of cause and effect relationships. It uses the systems approach to communicate the path towards a desired result (Millar, Simeone & Carnevale 2001: 73-81).A common concern of impact measurement is that of limited control over complex outcomes. Establishing desired long-term outcomes such as improved financial security is tenuous, because of the limited influence the planners may have over the target audience and complex uncontrolled environmental variables. The logic model addresses this issue by describing the concepts that need to be considered when planners seek such outcomes. The logic model links the problem (situation) to the interventions (inputs and outputs) and the impact (outcomes). The model also helps to identify partnerships critical to enhancing performance (Millar, Simeone & Carnevale 2001: 73-81).





Source: Adapted from Harvard Graduate School of Education (2006: 3)

#### Figure 2.8



Elements of the logical model

Source: Adapted from Harvard Graduate School of Education (2006: **4**)

As illustrated in Figures 2.7 and 2.8, the elements of the logic model consists of inputs, outputs and outcomes. The inputs consists of time, money, partners, equipment and facilities invested in professional training programmes. While the output consist of what they do, for example workshops, publications, field work, equipment and demonstrations. It also covers both customers and participants. The outcomes are classified into short, medium and long term outcomes (Millar, SimeOne & Carnevale 2001: 73-81).

The short term outcomes can be a change in knowledge, skills, attitude, motivation and awareness. While the medium outcomes can be in the form of change in behaviour, practices, policies, motivation and awareness, the long-term outcomes reflect in the form of change in situations such as environment, social, economic and political conditions (Millar, SimeOne & Carnevale 2001: 73-81). The logic model has established that; professional development through education and organisational support and opportunities for advancement will help increase staff retention and ultimately improve outcomes (Millar, SimeOne & Carnevale 2001: 73-81).

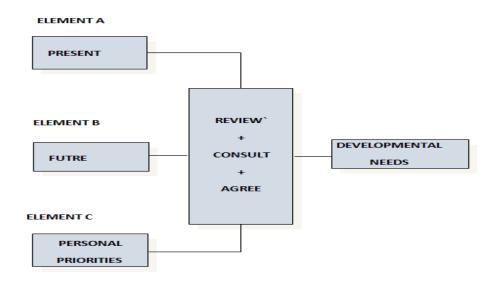
The study made extensive use of the logic model to explain the interrelationship between the workforce (staff of the university libraries) inputs in the form of professional development, organisational and policy support and the ultimate outcomes in the provision of information in the five selected university libraries in Ghana. The model also helped the researcher to understand what informed decisions about the professional development programmes and how to prioritise staff participation in these programmes.

# 2.9 The Framework for continuing professional development

The framework for continuing professional development for staff engaged in library and information services is an international framework developed in 1992 by the Continuing Education Department of the Library Association (UK). The framework was used by the Chartered Institute of Library and Information Professionals (CILIP) in the UK to assist and enable its members to keep pace with the rapid changes in the environment of work (CILIP 1992: 1).

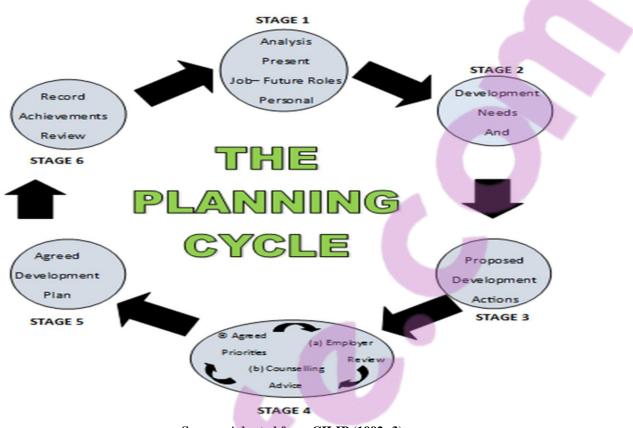
According to CILIP (1992) significant social, economic, political and educational developments impact on the delivery of library and information services. Changes in funding regimes, administrative structures, technology and shifts in the expectations of library users also lead to changes in the nature of services provided. This in turn means that library and information staff have to ensure their skills and competencies to match the changes in the demands of users and employers (CILIP 1992: 1).

Figure 2.9 Framework for continuing professional development



Source: Adapted from CILIP (1992: 4)





Source: Adapted from CILIP (1992: 3)

# The Stage1 Analysis (Element A)

As illustrated in Figures 2.9 and 2.10 the first stage in the planning cycle of continuing professional education is to analyse the three elements: A present job roles, B future job roles and C personal priorities in order to identify staff/employer development needs and aims at stage 2 (CILIP 1992). The aim of this stage is to maintain and improve upon the present job performance. The key questions to ask at this stage are:

- What are the key areas in your present job which need improvement?
- For each area, what are the training needs that will ensure improvement in the present job?

• How will new technology and other changes affect information professionals on the job? (CILIP 1992: 5).

The framework provides that library and information professionals should break their job down into four key areas:

- Library and information skill.
- Personal effectiveness/communication.
- Management skills.
- Corporate skills.

The framework also explains that information professionals should take the objectives of their jobs and job descriptions into consideration in deciding their future education. According to CILIP (1992: 5) the knowledge and skills required by library and information professionals are classified under four key areas as follows:

# Library and information skills

- Identify needs of library user.
- Meet user needs and demands.
- Customer care.
- Organisation of knowledge and information.
- Retrieval of knowledge and information.

- Identify sources of information.
- New development in products processes and services (CILIP 1992: 5).

# Personal effectiveness/communication

The framework further describes the specific knowledge and skills that will provide information professionals with personal effectiveness/communication skills:

- Acquisition of problem solving skill.
- Verbal and written communication skills.
- Coaching, teamwork and leadership skills.
- Planning and management skills.
- Finance/budgeting abilities.
- Personnel/staff management/performance review.
- Marketing skills (CILIP 1992: 5).

# **Corporate skills**

The training on corporate skills should also be designed to address the following:

- Help staff to achieve goals and objectives of the parent organisation through library and information services.
- Help staff to be aware of national and local policies.
- Political know-how (CILIP 1992: 5).



# Stage 1 Element B

The stage 1 Element B phase of the framework as illustrated in Figure 2.10 help the information professionals to anticipate changes in the future job role(s) to enable them take the necessary action .The framework further provides that information professionals should do self-evaluation or assessment at every stage of their professional development by asking the following questions:

- What areas of staff work are likely to change?
- What additional knowledge and skills should staff acquire in order to meet these needs?
- Would job change(s) make better use of staff abilities? (CILIP 1992: 7).

# Stage 1 Element C

The stage 1 Element C phase as, illustrated in Figure 2.10, provides that information professionals and employers should consider individual interest, priorities and propose a training and development plan over 3-5 years period. The following questions should be asked?

- What are the main interest of staff members (work related and not work related).
- Rank these in order of priority.
- For each interest what does staff hope to achieve in the next 3-5 years? (CILIP 1992: 9).

## **Stage 2 Plan for development needs**

The framework also provide for development needs plan as illustrated in Figure 2.10. It might be useful for information professionals to consult other colleagues or supervisors at this stage.

## **Stage 3 Propose development actions**

The framework also explains that reference should be made to development aims from stage 2 and a list prepared on the proposed action sheets (CILIP 1992: 13).

# **Stage 4 Agreeing priorities**

In drawing up the plan, it is important to discuss the proposal with the employer to obtain their views and agree on their role and support in carrying out the planned actions. Employers aim at utilising their employees most effectively to achieve their organisational objectives. Staff, therefore, need to make sure that their personal objectives fall in line with the objectives of the employers' plans. Most employers react favourably to professional development programmes that meet their organisational needs and goals.

# Stage 5 Staff development plan

Arriving at a realistic staff development plan involves seeking help from the employer and colleagues, counsellors, advisors and mentors.

# **Stage 6 Recording achievements**

There are three parts to this stage:

# a. In this first part staff record and evaluate the following activities:

- Job experience/secondment
- Reading books/journals
- Professional meetings/conference
- Coaching/tutoring
- Special projects
- In-house courses
- External courses and open learning (CILIP 1992: 16).

# b. Evaluate development activities

This part should be used to assist staff to do a detailed evaluation of their individual development activities.

# c. Update personal records.

The framework also provides for staff to update their personal records.

# Guidelines for individual staff, employers and providers of CPD activities

The framework for continuing professional development for library and information service staff also provides the following guidelines for individual staff, employers and providers of CPD activities:

# **Guidelines for individual staff members:**

- Show commitment to continuing professional development.
- Identify personal needs for continuing professional development.
- Develop a personal continuing professional development plan.
- Implement the continuing professional development plan.
- Record continuing professional development activities, review position and assess benefits (CILIP 1992: 26).

# Guideline for CPD for the employers (University libraries/Institutions)

- Show commitment to continuing professional development.
- Identify needs for continuous staff development.
- Implement continuing professional development plans.
- Assess the benefits of continuous professional development in relation to the employing organisation's performance (CILIP 1992: 27)

# **Guidelines for providers of CPD programmes**

The purpose of these guidelines is to create and maintain a continuous learning environment recognising the contribution of both structured and unstructured activities and giving due attention to systems of evaluation, recognition and reward. Providers include; employers, educational and training organisations, academic institutions and professional bodies (CILIP 1992). The framework provides the following guidelines:

- Recognise and assess the range of professional development opportunities in the working environment.
- Review the range of continuing professional development needs, both current and emerging.
- Develop and deliver flexible cost effective courses and learning materials.
- Evaluate continuing professional development activities.
- Consider appropriate recognition and/or reward for continuing professional development (CILIP 1992).

The framework is very useful to the informational professionals, as it provides a systematic approach to a wide variety of learning opportunities. According to Simmonds (1994:360) the framework caters for all library and information service staff regardless of their age, level of responsibility and size of the organisation. It encourages individual staff to take responsibility for their own self life-long learning and to influence their own future rather than simply reacting to an event (Simmonds 1994: 360). However, the framework is very elaborate and going through it can be time consuming.

The CILIP framework for continuing professional development provides this study with an understanding of what goes into planning and assessing the individual library staff, employing organisations (Universities) as well as the training institutions that provide professional development programmes for the library staff. The framework also provides the knowledge and skills required by librarians at the professional level. It also provided this study with guidelines that regulate the provision of professional development programmes with regards to the individual library staff, employers (universities in Ghana) and providers of professional development activities (universities, professional associations).

### 2.10 Framework for evaluating professional development for adult education

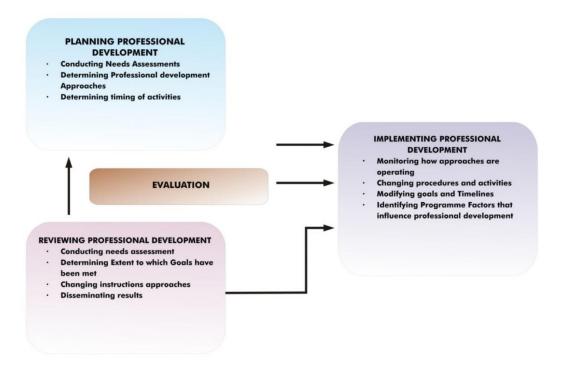
Kutner *et al.* (1997: 1) describe the framework for evaluating professional development in adult education as a process which enables instructors of training programmes to gradually acquire a body of knowledge and skills to improve upon the quality of teaching and this continuous process ultimately enhances the trainees' learning outcomes. This framework attempts to establish the relationship between professional development activities, instructional behaviour, programme processes and learning outcomes in adult education. Professional development evaluation must be incorporated into all aspects of professional development programmes, if useful data are to be provided for administrators, professional development providers as well as instructors (Kutner *et al.* 1997:1).

The framework explains that professional development evaluation plays two important roles in the development process:

- Promotes continuous programme development.
- Ensures programme accountability (Kutner et al. 1997: 2).

The framework also indicates that evaluation should be integrated into the planning, implementation and review processes of professional development activities and it should be a continuing activity rather than a single event that occurs at the end of professional development programmes. The framework further explains that evaluation data must be collected on an on-going basis and measures must be put in place to ensure that this happens. These procedures and measures must be incorporated into the professional development programmes the strategies for collecting and analysing evaluation data must always be considered and implemented by professional development agencies (Kutner *et al.* 1997:4).

Figure 2.11 Evaluation as part of an on-going professional development process



Source: Adapted from Kutner et al. (1997: 4)

As illustrated in Figure 2.11, evaluation data provides information on goals attainment. Obstacles to the anticipated outcomes are used to refine and adjust the professional development planning and implementation process (Kutner *et al.* 1997: 5). In addition, data from professional development evaluation feedback into the needs identification process and becomes part of the planning process for professional development. Evaluation data is used by many different stakeholders for distributing funds to support professional development programmes (Kutner *et al.* 1997: 5).

The model for evaluating professional development programmes also highlights some issues that must be considered and addressed when developing and implementing the type of on-going evaluation efforts necessary to assess the impact of adult professional development. The framework indicates that professional development is a change process which affects instructors, programmes and trainees. The change is not easy to document and measure overtime. It also explains that obtaining information about the effectiveness of professional development programmes can be complicated as a result of the following:

- Single professional development programmes and multiple or sequential activities occurring over a period of time.
- Short term and long term changes (Kutner *et al.* 1997: 5).

87

Kutner *et al.* (1997: 5-6) suggest the following important issues should be noted when evaluating professional development programmes:

# i. Sufficient time should be allowed to pass before professional development programmes can be expected to show success.

It is normally not useful to evaluate the effect of a single professional development activity on individual staff work performance. For instance, participating in one workshop is not likely to change behaviour or job performance. Evaluation that focuses on a series of activities will have a more cumulative effect on long-term professional growth and are more likely to provide useful data. Evaluation of a single professional development activity is usually required by administrators who fund professional development programmes for accountability purposes. It is equally important to allow some reasonable time before beginning to expect the effect of training and development on work performance.

# ii. The impact or effect of training should be measured on the instructors, the training programme and the trainees

The ultimate reason for offering professional development services is to improve upon the trainees output. Professional development programmes must, therefore, be positively perceived by instructors who participate in such activities and the continuous participation in training programmes must enhance their knowledge and skills as well as have an impact on their future instructions. Changes in instructors' behaviour should ultimately have some impact on the trainees. It is therefore necessary to assess the impact of professional development programmes on the three stakeholders namely, instructors, the training programme and trainees.

# iii. Data must be collected concerning the context in which instruction takes place.

The data collected must cover the extent to which administrative and other support structures reinforce practices promoted through professional development and the nature of the professional development programmes themselves.

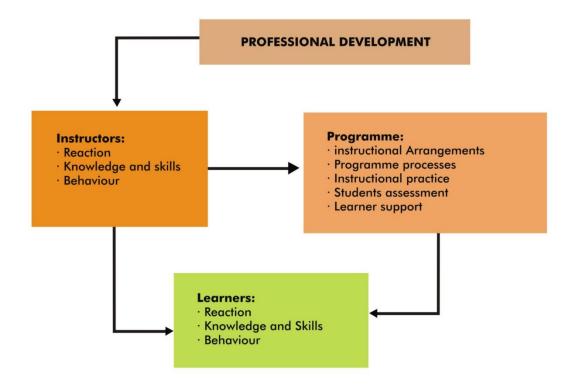
# iv. Professional development programmes can only result in improved instruction and better instructional practices.

This will happen only if the training programmes encourage and support instructors by allowing them access to special knowledge, and provide them the time to focus on the requirements of a new task. There is the need for time to practice new instructional strategies as information alone is not sufficient to produce change.

Administrative support, in the form of study groups also helps to integrate professional development into the culture of the organisation and this also help to foster change. Other support structures such as professional networks are important and help to promote staff work performance (Kutner *et al.* 1997: 6).







Source: Adapted from Kutner et al. (1997: 11)

As illustrated in Figure 2.12, professional development is shown to have its most immediate impact on instructors if there is a positive reaction to their instructional activities, For instance, the knowledge and skills the instructors obtain as a result of continuous instructional activities help to enrich their knowledge and skills and this has a positive impact on their behaviour and future instructional activities.

The change in instructors' knowledge, skills and behaviour also have some positive effects on the training programme. It can, for instance lead to a change in the content of a professional development programme (Kutner *et al.* 1997: 11).

Support for trainees can also be changed by the new knowledge. The change in the behaviour of instructors and professional development programmes can affect trainees reaction, knowledge, skills, and behaviour as well. This evaluation framework embodies two critical assumptions about professional development:

- The hallmark of successful professional development depends on changes in the instructors behaviour and the training programme.
- Trainees' work output can be changed only through professional development programmes (Kutner *et al*.1997: 12).

Evaluation of instructors or trainers can provide answers and future strategies to the following questions for planners, administrators and instructors:

- What types of professional development programmes are being provided?
- How are these activities meeting the development needs of instructors?
- How many hours do instructors participate in different types of professional development programmes (e.g. workshops/presentations, research, programme/product development etc)?
- To what extent are instructors satisfied with the professional development opportunities they have experienced?
- What changes are there in the knowledge and skills level of instructors as a result of professional development opportunities?

- Are instructors consistently using newly learned knowledge and strategies in the ways they were intended to be used?
- What type of support (administrative, informal and formal networks) are in place that will help foster change in instructional behaviour? (Kutner *et al.* 1997: 12).

In order to ascertain the impact of professional development programmes on the trainees, the framework provides a critical look at the programme itself. The focus here is to change the instructional processes and content of the programme. Assessment of the impact of professional development on the trainee is also very important. The evaluation should aim at ascertaining trainees reaction to the programme.

The framework further explains that an evaluation of the acquisition of new knowledge and skills and the subsequent changes in behaviour of the trainees as a result of the professional development programmes. Some of the key questions to ask during trainees evaluation include the following:

- Are the trainees satisfied with the instructional services as a result of professional development?
- Are the trainees making learning gains?

Has he trainees' behaviour changed as a result of the professional development programmes (Kutner *et al.*1997: 17). As instructors use new strategies or content materials, it is important to explain to adult learners why these strategies are being used, and what is expected from them as a result of the new strategies. It is also important for the instructors to determine how trainees feel about the content and the process of instruction.

This can help trainees to adjust their own attitudes. Evaluating trainees' reaction is a very crucial step in the process, just as it is important to instructors in their own professional development. The final and most complex aspect of evaluating professional development is to determine whether the trainees used the knowledge and skills they learned to enhance their lives and work. One dimension of how to evaluate how trainees use the newly acquired knowledge and skills involves observing whether the learning process is close to real life situations. Another dimension for evaluating the use of learning skills is to assess the ability of the trainees to transfer the newly acquired knowledge and skills to work (Kutner *et al.* 1997: 18-19).

The framework for evaluating professional development provides a systematic and comprehensive approach for evaluating the impact of professional development programmes on both the individual library staff and organisational performance. The model also provides this study with a framework for evaluating the effects of professional development programmes at three levels, thus, evaluating the impact of the training on the instructors, the programme and the trainees. The model therefore served as a guide to determine the difference between a partial and holistic evaluation of training programmes in the university library environment. For instance the framework emphasise the importance of allowing some time after training before the evaluation is done, this is because in some situations it takes time before effects of training is realised.

#### 2.11 Model for evaluating the impact of professional development in eight steps

Killion (2002: 5) has outlined an eight-step process for measuring the impact of professional development. The eight-step-evaluation process encourages evaluators to build pathways to measure the impact of professional development on work outputs. The steps are discussed below:

#### **Step 1 Assess Evaluability**

Evaluators must examine the design of the professional development programmes to determine the likelihood of producing the intended results. They must also scrutinise the programme goals, objectives, standards of success, indicators of success, theory of change and logic model; and ask about the programmes clarity, feasibility, and strength.

The evaluation will help to determine whether the programme was valuable or not. If the programme was valuable, the evaluation can move to step 2, if not the programme has to be revised (Killion 2002).

# **Step 2 Formulate evaluation questions**

The next stage is for the evaluators to design both formative and summative questions, which must focus on the initial and intermediate outcomes and the programme's goals and objectives. This will help evaluators to ask questions about the results and it also makes it easy for them to measure the impact rather than programme delivery (Killion 2002).

## **Step 3 Construct the evaluation framework**

The evaluators should be in the position to determine what type of data to collect and from, what sources to collect the data and be able to analyse the data (Killion 2002).

#### **Step 4 Collect data**

At stage four the evaluators should use data collection methods determined in step 3 to collect data to answer the evaluation questions (Killion 2002).

# Step 5 Organise and analyse data

The evaluators should organise and analyse the collected data and display the analysed data in multiple formats to be used in step 6 (killion 2002).

#### **Step 6 Interpret data**

The evaluators should interpret the data to make sense of it, draw conclusions, assign meaning, and formulate recommendations. Stakeholders should be included to enhance the meaning of data (Killion 2002).

#### **Step 7 Report findings**

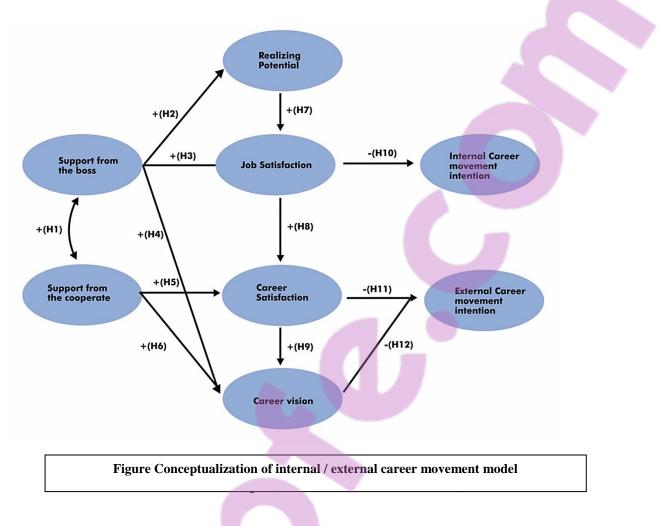
The evaluators should report findings in multiple formats to the audience. Rather than a single technical report, evaluators must prepare multiple reports in various formats (Killion 2002).

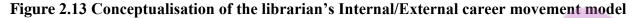
#### **Step 8 Evaluate the evaluation**

The evaluator should analyse the methodology, processes, resources and skills used. Evaluators should also look back at the work done and identify its strengths and what needs continuous refinement and growth. The researcher made extensive use of the professional impact evaluation model to ascertain the effects of the professional development programmes instituted by the five selected university libraries on the work performance of library staff especially in relation to the provision of library and information services. The model also provides a scientific or systematic approach for evaluating the impact of professional development programmes on the library staff and institutional work output.

#### 2.12 Career development model

The career development model explains the career path of the librarians. The model also provides the reasons why librarians decide to change their career either internally or externally.





Adapted from Noh (2011: 213-214)

## 2.12.1 Internal and external career movement

As illustrated in Figure 2.11, a horizontal movement in the career path of the librarian refers to a change of job description within the organisation, this is described as internal career movement. A librarian career movement to a similar job outside of one's associated organisation is called external career movement (Noh 2011: 213-214).

According to Kim *et al.* (2005: 247-270), as illustrated in Figure 2.11, the support from the direct boss is critical to an individual in realising his or her full potential and job satisfaction. The extent in which an employee realises his or her potential clearly influences job satisfaction; which in turn influences career satisfaction and vision. What is interesting is that the lower the sense of job satisfaction, the higher is one's intent to change career internally and on the other hand, the lower career satisfaction and career vision are experienced perceived to be, the greater is one's intent to change career externally (Kim *et al.* 2005: 247-270). This model also provides this study some understanding of the factors that contribute to career movement by librarians in the university libraries in Ghana.

## 2.13 Conclusion

The above theories, models and frameworks on staff training and development, continuing professional development, continuing education and career development provided the researcher with significant understanding of how to evaluate the effects of training and development programmes on library staff and institutional work performance.

Kirkpatrick's training evaluation model, the Adult learning theory and the Return on investment process model clearly provide scientific and systematic approaches for evaluating training and development programmes. These models also provide a theoretical framework that was used in this study to investigate the effects of staff training and development programmes on information provision in the selected university libraries in Ghana. The staff development models, namely the RPTIM model for staff development and the Staff development cost model equally provided this study with the necessary guidelines to understand the processes involved in designing staff development programmes as well as the costing of staff development programmes.

The frameworks on continuing professional development and continuing education models such as the Theory of change and theory of action in practice, the Framework for evaluating professional development for adult education, the Logic model for professional development and evaluating the impact of professional development in eight models on the other hand provided this study with some guidelines that were used to evaluate professional development and continuing education activities of library staff in the five selected university libraries in Ghana.

The conceptualisation of the librarian's internal/external career movement model also provided some understanding of the career development path of librarians. This model also helped the researcher to understand the motivation behind the career choice and path of the library staff in university libraries in Ghana.

A review of the literature on the theoretical frameworks discussed above identified some similarities and differences between the various frameworks. The researcher also



considered the strengths and weaknesses of these theoretical frameworks before applying them to this study.

#### **CHAPTER THREE**

#### LITERATURE REVIEW

## 3.1 Introduction

This Chapter is devoted to a review of relevant literature on the subject of staff training and development in the library environment. A literature review is essential as it provides the framework for the study and also helps to define the key concepts and justify the findings of the study. According to Leedy and Ormrod (2005: 66), a literature review allows a researcher to examine what scholars have done in the subject area that are similar though not necessarily identical to the problem under investigation. The reviewed literature, therefore, helped to put this study in context, determined the appropriate research design for the study as well as helped to discover gaps and deficiencies in the existing literature.

This Chapter discusses training and development concepts, training needs analysis and assessment, staff training and development, monitoring and evaluation of training, effects of training on job performance, measuring return on investment in training and effective library and information services.

#### **3.2** The concept of training and development

Although the term training has been defined by several authors including Thomaskutty (2010: 5) and Noe (2005: 3) the British Manpower Services Commission's (1981: 62) definition was adopted for this study. It defines training as:

A planned process to modify attitude, knowledge, skills or behaviour through learning experience with the aim of achieving effective performance in an activity or range of activities. Its purpose in the work situation is to develop the abilities of the individual and to satisfy the current and future needs of the organisation. The goal of training is to enable staff or employees to master knowledge, skills and change behaviour. It is also used to gain a competitive advantage and the process involves more than just skills development.

Development on the other hand is growth in knowledge, skills, attitude and ability or realisation of a person's ability through conscious or unconscious learning. It is also a process which requires pre-planning and goal setting through which the employee must go through to achieve his or her goals (Thomaskutty 2010: 11). Development is the result of training which has enabled the trainee to achieve growth, improve performance, and personality development. Development also indicates a movement to an improved situation in the individual staff which means the employee is advancing towards the performance of higher responsibilities (Bolton 1995: 15).

Training and development can, therefore, be described as a systematic process through which work-related knowledge, skills and expertise of the employees are developed for the purpose of enhancing job performance. Training and development help the organisation to fulfil its objectives and goals while contributing to the overall development of workers. It also helps workers to qualify for a new job.

# 3.2.1 Difference between training, education, development and learning

The terms training, education, development and learning are often used interchangeably, even though they have some similarities and differences. It is, therefore, necessary to delineate these differences in order to clarify the activities associated with each term and desired outcomes within an organisation.

Employee training, in particular, is associated with on-the-job skills acquired for a particular role, while education is seen as relating to acquisition of formal academic knowledge. However, in very complex organisations, it may be argued that aspects of training, development, education and learning are necessary to maximise employee potential.

"Learning" in contrast to "training" is generally defined more holistically as a process that encompasses training as well as education (Jensen 2001: 3). According to Sloman (2005: 2) learning can be described as a self-directed, work-based process leading to increased adaptation capacity. This process should be on going and lifelong, it may not always be clearly planned or even intentional (Garavan, Heraty & Barnicle 1999: 169). Mumford (1995: 13) also observed, that the learning process includes the acquisition of skills as well as insights or factual knowledge and it is at play whenever people can demonstrate that they know something that they did not know before (insights and realisations), as well as facts and/or when they do something they could not do before. Development on the other hand covers a wide range of activities, including coaching and formal education. The term development is a fairly recent one and gradually becoming to mean essentially the same thing as training and some use the two terms synonymously (Herr 2001: 196). The Chartered Institute of Personnel Development, UK (2007), however, argues that the conflation of training and development is confusing and inappropriate and it distinguishes between training and development by defining training as.

"A learning activity that is designed for immediate impact for the job or role that one performs at present". Development is a learning activity that is designed for future impact, for a job or role one will perform in the future. The Institute further suggests that learning is the broader umbrella term under which both training and development are best understood (CIPD 2007).

Garavan (1997: 42) also argues that learning is better seen as an overarching concept under which formal education and training take place, with development as the resulting outcome of these pursuits. The author further explains that training can be associated with learning by doing, whereas education is more synonymous with learning, development involves learning. Absolutist definitions are not really helpful in understanding the role of training, development, education and learning in the context of human resource management and development but in practice such distinctions have occurred and still do occur (Garavan 1997: 42). Training can be distinguished from education as an activity normally associated with organisations which help to enhance quality and increased profits, unlike education, which is predominantly concerned with the acquisition of knowledge through formal education. The learning by doing element of training is normally presumed to lead to specific, concrete results and enhances specific kinds of skills (Hughey & Mussnug 1997: 52-57).

In general, it is right to point out that the concepts of training, development, education and learning all overlap in meaning and purpose and are used interchangeably. Nevertheless, it is useful to consider the work of Garavan (1997: 39), which reviews the history and scholarly definitions of all the four terms in order to better understand their roles in human resource management. The author concludes that learning is best seen as an umbrella term which covers training, education and development, all of which tend ultimately to be defined in practical rather than theoretical terms.

To summarise, while the concepts of training, education, development and learning can be difficult to disentangle, it is useful, from an organisational perspective, to develop precise and separate definitions in order to better understand the specific, concrete challenges and outcomes associated with each type of activity. Though their meanings are closely interrelated, it can be misleading to simply use these terms synonymously, as it is often done. In the field of human resource management, where the immense benefits of appropriate employee training, education, development and/or learning are widely recognised, working with more precise definitions can help to clarify the ambiguity

between the terminologies. Nevertheless, it can be argued that training, development and education activities all aim at promoting learning.

#### 3.2.2 Training needs analysis/assessment

The Chartered Management Institute (CMI), UK (2013: 2) defines "training need" as a shortage of skills or abilities which could be reduced or eliminated by means of training and development. Training needs hinder employees in the fulfilment of their job responsibilities or prevent an organisation from achieving its objectives. It may be caused by a lack of skills, knowledge or understanding that arises from a change in the work place. Training needs analysis therefore involves a set of procedures to identify the training needs of employees, departments or the entire organisation in order to help the organisation to perform effectively (CMI 2013: 2). The effectiveness of training needs on effectiveness of the process used in identifying training needs. Training needs can be described as skills required by individuals or groups of employees. Training which focuses on these needs can be productive to the organisation. Training should be a continuous process (Certo & Certo 2009:300).

Armstrong (2009: 690) further explains that training needs are concerned with defining the gap between what is happening and what should happen. In other words, it is the difference between what people know and can do and what they should know and be able to do. This gap has to be filled by training. The author also suggests that training needs should be analysed first and foremost by the organisation to ascertain the corporate, departmental and

individual needs. Cole (2000) also describes a training need as any shortfall in terms of employee knowledge, understanding, skills, and attitudes against what is required by the job or demands of the organisation.

Training needs analysis help organisations to design training programmes that will ensure that training addresses the existing problems of the organisation. A training needs analysis process involves

- Monitoring current performance with the use of technology and data collection instruments such as observation, interview and questionnaire.
- Anticipating future shortfalls or problems.
- Identifying the type and level of training required and analysing how this can best be provided (CMI 2013: 2).

Training needs assessment on the other hand refers to the method of determining if a training need exists and if it does, what training is required to fill the gap. A training needs assessment seeks to identify accurately the levels of the present situation. It is also done using interviews, observation and questionnaire data collection instruments. The gap between the present status and desired status may indicate problems that can be translated into training needs (CMI 2013: 4).



Barbazette (2006: 1-6) describes the following as types and methods of training needs assessment: performance or gap analysis; feasibility analysis; needs versus wants analysis; goal analysis; job/task analysis; target group analysis and contextual analysis. Monappa and Saiyadain (2008) also suggest that training needs identification should consider:

- Views of the line managers or supervisors
- Performance appraisal reports
- Organisation and developmental plans
- Views of training managers
- Analysis of the job difficulties and job descriptions.

Dessler (2008: 297) also summarises the process of training identification and analysis into two as follows:

- In the case of new employees the task here is to determine what the job involves and to break it down into sub tasks which are taught to the new employees.
- In the case of current employees training needs analysis for current employees is more complex since the human resource development and supervisors have the added task of determining the performance gap and offer training as the solution.

Ivancevich (2004: 402) further suggest four ways to determine employee training need as, observe employees, listen to employees, ask supervisors about employee needs and examine the problems employees have. Other methods of determining training needs include the review of records, surveys and seeking experts' opinions. These methods of data and information gathering provide the basis for the type of training that would be

needed, who should be selected for training, when training must be done and whether training is the solution to the deficiencies identified.

Several articles were reviewed on the subject of training needs analysis/assessment in the library environment across the world. Abba and Dawha (2009:2) observes that the library profession is becoming aware of the need to conduct training needs analysis and assessment to determine the training needs of staff before embarking on staff development initiatives. A thorough training needs analysis must be carried out to identify the actual needs of staff in order to avoid training programmes which might be ill-directed and inadequately focused and also ensure that training is designed with the right framework, techniques and tools that meet training requirement of both staff and the organisation (Ondari-Okemwa 2000: 267).

The studies of Kigongo-Bukenya (1999: 93); Urquhart *et al.* (2005: 35) and Ondari-Okemwa (2000: 257) support the view that there is a need for training needs analysis in libraries. There are many changes that are taking place in the library profession and there are many more which are yet to come. These changes are likely to affect the working environment of libraries, hence the justification for librarians to be trained in preparation towards management of such changes. One area that these changes have affected is library automation and a shift towards virtual libraries, which requires new skills especially in information technology. Even professional librarians who have attained the top professional qualification need further training (Ondari-Okemwa 2000: 257). Library



schools should therefore change their curriculum to accommodate programmes that will equip graduate professionals with knowledge, skills and abilities to enable them to acquire, organise, and disseminate information according to the new demands of library users (Kigongo-Bukenya1999: 93; Bressaugh & Valeroy 2011: 215-223).

The study of Urquhart *et al.* (2005: 35) suggests that a training needs analysis helps libraries to identify what type of training is required, how the training should be delivered and which staff members qualify to participate in the training programmes. It is therefore necessary for library administrators to undertake a systematic and scientific training needs analysis or assessment before embarking on staff training and development activities. Several other authors in the reviewed literature on this subject focused on identifying the training needs of librarians and libraries. The studies of Urquhart *et al* (2005: 35); Paster (2004: 37-46); Kigongo-Bukenya (1999: 93); Morgan (1995: 453) and Paterson (1999: 143-149) summarises training needs of librarians and libraries and libraries as:

- Information management skills.
- Managerial skills.
- Information marketing skills.
- Publishing skills.
- Information technology skills.
- Information literacy skills.
- Strategic information management.
- Skills in assessing and analysing information needs of users.

• Research and teaching skills.

Sha (2004: 1-12) on the other hand, suggest that training needs of library staff should include:

- Computer skills: web browsers, Ms Word/Excel/Power point, email management, database creation, scanning techniques, presentation techniques, web page creation, metadata standards and desktop publishing.
- Inter personal skills: oral and written communication, human relations, managing priorities, stress management, managing change and team building skills.
- Supervision/management: training new employees, work flow design, project management, departmental coordination, interviewing skills, staff appraisal/evaluation and meetings management.

Staffs of academic libraries are described as organisers, gate keepers and interpreters of knowledge and must be trained to become experts in information management and research to enable them to assist scholars striving to extend the boundaries of disciplines and adding to the sum of human knowledge (Paterson 1999: 143-149; Paster 2004: 37-46). A similar study conducted in Ghana by Lamptey and Agyen-Gyasi (2010: 56-70) suggest that in the future academic libraries in Ghana will need a team of flexible experts with a variety of aptitudes and specialisations who will collaborate as researchers and managers, proactive in the fulfilment of the mission of their respective universities.

Some other authors in the reviewed literature including Chang and Bright (2012: 213-219); Bopape (2005: 64); McClure (1980: 2388-2391); Brooks (2009: 149) and Alemna (2001: 47) are of the view that training needs of library staff vary from one group of staff to another. It may also vary from one institution to another. The authors suggest that the training needs of management staff of libraries are different from that of the middle level managers and general staff. For instance management staff of libraries require professional development programmes to update their professional knowledge and managerial skills, while the middle level managers require both professional development programmes, as well as continuous education, while the lower level staff require continuing formal education. The authors also suggest that the training needs of management staff of libraries should include:

- Staff management
- Communication skills
- Planning and evaluation
- Leadership and management
- Financial management

Librarians in management positions hardly thought of themselves as managers, instead they see themselves as librarians tasked with additional managerial work. Attention should, therefore, be given to training librarians in management techniques (McClure 1980: 2388-2391). Librarians consider themselves first and foremost as specialists. Several articles were also reviewed on the special training needs of librarians. Fritts and Casey (2010: 617-627) investigate training needs of distance learning librarians and the findings reveal that the training and development needs of distance learning librarians will continue to grow in importance. Librarians are pursuing distance learning because they have to combine their jobs with further studies. Training institutions should, therefore, design distance learning programmes to support the training needs of distance learning librarians.

Kalin (2010: 283-298), in a study to determine the training needs of the next generation of librarians, argues that the next generation of librarians have to possess a combination of technical expertise and appropriate behavioural attributes. According to the author, in recent times, employers and educators have been placing a growing emphasis on behavioural attributes that are crucial to the delivery of excellent services, instead of technical expertise which can easily be taught to librarians as long as the aptitude and motivation to learn exist. For instance, librarians without patience cannot suddenly develop it although they can learn to be patient. Library staff in senior management positions should, therefore, be supported and encouraged to attend management development programmes including coaching and mentoring, management science, leadership and character development while the middle level and general staff training needs may vary from formal education to participation in seminars, conferences and workshops.

In an unpublished MIS dissertation done at the University of South Africa, Ramalibana (2005: 1-4; 76-87) investigated how library staff training and development needs were met. The findings show that personal development of staff was hindered because only selected staff were supported to participate in training programmes. All training programmes should

be based on training needs expressed during annual performance appraisal. Training needs assessment should be based on the objectives of the organisation (Snyder & Sander 1978: 145-148).

To summarise, training needs analysis and assessment should always precede any training and development programme. The training needs of library staff depend on the category of staff involved while management staff requires professional development opportunities, the middle level and general staff require advanced knowledge and skills in information studies and information technologies applicable to library management.

It is also important to distinguish between the general training needs and special training needs of library staff, some aspects of the library work now requires specialised skills and a strategic approach, hence special training should be given to librarians and library staff in these areas to meet the growing needs of university libraries. Training and development initiatives which are based on training needs analysis and assessment most often provide solutions to the needs of the individual employees and organisations. Training needs analysis and assessment should therefore be a priority of library administrators, however it should be a collective process involving the managers, supervisors and the trainees.

#### 3.3 Staff training and development

Staff development is a process of providing employees with new knowledge, skills and abilities in line with the goals and values of the organisation and in relation to the interests and needs of the employees. Staff development is intended to strengthen the capability of an organisation to perform its mission more effectively and efficiently by encouraging and providing for growth of human resources. It makes the most of the present potential and prepares the individual staff for future responsibilities (Snyder & Sander 1978: 145). Staff development in the library environment can therefore be described as a purposive effort intended to strengthen the library's capability to fulfil its mission effectively and efficiently by encouraging and providing for growth of its human resources.

Staff training and development programmes provide opportunities for individual employees to expand their knowledge, skills and experience in a library and information related field. It also enables staff to acquire new ideas, knowledge and skills, which make them productive to contribute to higher job performance. Staff development activities in libraries cover a broad range of activities designed to provide staff with development opportunities. The activities include orientation for new staff, on-the-job training, mentoring, job rotation, supervision, counselling, coaching, classroom learning, simulation and games, conferences, seminars, workshops, professional meetings, reading, publishing in journals and books, internships, exchange programmes and study visits. Osei (1996: 31-36) and Snyder and Sander (1978: 146) suggest that staff development programmes in

libraries should be expanded and developed to meet the expressed needs of staff. It should include in-service training, short courses, workshops, orientation and the following:

- Job rotation
- Seminars, conferences/workshops
- Sabbatical leave
- Research and publications
- Classroom learning
- Professional associations

Staff development programmes should also be carefully planned, timed and spaced so that periods of major activities will not coincide with peak periods of operational activities. This will help minimise the lost of productivity as a result of staff participation in training activities. The reviewed literature on the subject of staff development suggests that the training and development programmes undertaken by university libraries across the world are almost the same. The choice of training programme however depends on the training needs of individual library staff and the organisation as well as the category of staff involved.

#### **3.3.1** Purpose of staff development

The studies of Alemna (2001: 47) and Asiagodo (1989: 31-36) summarise the purpose of staff training and development. They are to:

- Provide employees with training and development opportunities that will enable them to update their professional knowledge, skills and abilities for higher productivity.
- Foster a climate that facilitates personal self-fulfilment, institutional effectiveness, creativity and system renewal.
- Save money. It is costly to hire and then dismiss employees who do not work well, it is also costly to lose good employees because they are frustrated by lack of opportunity for professional growth.
- Enhance the standard of performance of all staff in the current and future jobs.
- Help maintain and increase job satisfaction.

- Provide support for career advancement within the organisation.
- Maintain good staff morale and increase productivity.

Staff training and development activities in the university libraries do not only help staff to meet the challenges of providing information to support the academic programmes of the university but it also helps to sustain the growth of the library which eventually helps to improve upon the individual staff effectiveness. Professional development of a librarian begins the moment he/she steps into the profession. Formal classroom instruction covers generalised knowledge about fundamental concepts and theories of library systems and operations. Professional librarians are evaluated and promoted based on scholarship and professionalism and this requires that librarians continue to be engaged in staff development activities (Pan & Hovde 2010: 2-4).

Alemna (2001: 47) provides further justification for staff training and development activities. According to the author librarians' training is outdated almost immediately after school, hence, the need to frequently update their professional knowledge. Professional development should however be founded on the previously acquired knowledge, skills and attitudes. Learning must be a lifelong and continuous activity. In recent times library staff depends on technology to provide effective library and information services. The need for staff development activities in university libraries cannot be over-emphasised.

## **3.3.2** Staff training and development policy

Staff training and development policy is a comprehensive set of policies, practices, procedures and guidelines that regulate employees' training and development activities in an organisation. The policy normally should cover all relevant issues relating to training and development. A staff training and development policy for a university library should:

- Clearly define the procedures for selecting staff to participate in training and development activities.
- Define the training and development programmes appropriate for all categories of staff in the organisation.
- Provide for monitoring and evaluation of training and development programmes.
- Should be equitable and cover all categories of staff.
- Should indicate all those who have responsibilities for implementing the policy.
- Provide avenues for funding the development activities (University of Manchester 2005).

The studies by Lockhart and Majal (2012: 44); Abba and Dawha (2009: 1-8); Kisby and Holler (2009: 1-9) and Paterson (1991: 143), support the view that staff development programmes should be based on policies, guidelines, procedures and good collaboration with all stakeholders. Formalisation of staff development activities will help to increase the participation of all employees and create equitable opportunities for all staff to participate in the development activities. Lockhart and Majal (2012) explain how Training and Development Internal library policy practically served as a guideline for library staff training and development programmes at the Cape Peninsula University of Technology. The policy provide a framework to staff and their line managers and ensure that staff receives the necessary training and development at the right time while keeping in mind the demands of day to day operations. There was very limited literature on this subject.

Staff development programmes begin with institutionalisation of the policy and showing commitment to execute the programmes. It is however possible to have staff training and development policies in place but if the system and mechanism for executing these policies are not properly activated the policy will not work.

# **3.3.3** Responsibility for staff training and development

Staff training and development initiatives should be a collective responsibility of heads of institutions, line managers/supervisors, the trainees or employees as well as the trainers which may include training institutions and professional associations. The heads of institutions must bear the primary responsibility for the implementation of the staff



development policy, while the line managers and supervisors play the key role of assisting staff to determine their training needs and also help them to transfer their newly acquired knowledge and skills on the job. The employees also have a responsibility of providing feedback and taking advantage of the development opportunities.

In their studies, Kisby and Holler (2009: 1-9) and Harvey and Sayer (2009: 205) argue that staff development in university libraries should be a shared responsibility. The authors suggest that the responsibility of staff training and development in the university libraries should be a collective responsibility, the library directors and managers must ensure consistent commitment to a positive attitude, participation and funding of staff development programmes, while the supervisors should determine the training needs and provide flexible working schedules as well as help staff to transfer their new skills on the job. The staff also have a responsibility to participate in the training programmes. The institutions that provide training and development programmes also have a responsibility to provide training opportunities based on the needs of library and information professionals.

The effectiveness of any staff training and development activity depends on the actions and purposeful participation of the individuals involved. The effects of staff development activities to an organisation become beneficial if all the stakeholders are involved in the planning and execution of the training and development programmes (Kisby & Holler 2009: 1-9).

# **3.3.4** Funding of staff training and development programmes

Funding of staff training and development programmes has become very important to organisations to the extent that large sums of money are now being spent on staff development programmes. Staff development should not only be an integral component of the budget but should also be given adequate attention in the budgets of university libraries. However, library administrators must make sure that staff development programmes are cost-effective and provide value for money for the investment made in these initiatives.

Varlejs (1987: 359-364) and Snyder and Sanders (1978: 146) argue that staff development planning and budgeting should receive adequate attention just like other activities and there should be frameworks to support staff development activities in university libraries. Staff development decisions should be cost-effective in relation to institutional needs for human resource development. The cost effectiveness in this context refers to the examination of the cost involved in using a variety of methods to achieve the desired objectives. The least expensive way of satisfying the objectives is the most cost-effective. This type of analyses differs from cost-benefit analysis which requires that a value be placed on the achievement of the objectives so that the benefits can be measured against costs.

Another important consideration on funding staff development programmes is cost sharing, where the organisation and the individual staff have to share the cost of training and development programmes. Maesaroh and Genoni (2010: 1-4), in a study of Indonesian

academic library staff, reveal that library staff were bearing a considerable proportion of the training costs for the simple reason that employers expect that trained staff may eventually use their newly acquired skills for their promotion or seek new jobs. In contrast, Varlejs (1987: 362) argues that supporting or subsidising of continuing education of the staff which are not job related can benefit the organisation by improving the morale of the staff. It must also be noted that some training and development programmes such as mentoring, coaching and job rotation may not necessarily require any cost allocation. Academic libraries most of the time do not indicate clearly how much is allocated to staff development. In most cases the training and development is hidden the greater the difficulty of determining the price of alternative methods of achieving training objectives and the greater the danger of waste rather than saving cost. It is difficult to ascertain the cost and benefits associated with the training programmes (Certo & Certo 2009: 299-302).

Training costs must be an integral part of the library's budget. It is also important for university libraries to put policies in place to regulate the sponsorship of staff development programmes. The training policy should be clear on the role of the individual library staff and the institution in funding training and development programmes. There was very limited literature on this subject.

# **3.3.5** Challenges facing staff training and development programmes

The reviewed literature identified a number of challenges facing staff training and development programmes. Eze (2012: 1) and Yadapadithaya and Stewart (2003: 108-123) suggest inadequate funding, absence of transfer of learning, weak interaction between the industry and institutions providing training, lack of systematic and comprehensive training needs analysis, failure to evaluate the effectiveness of training more vigorously, absence of training and development policies, inadequate training institutions and facilities, inadequate staffing to enable the institutions to release some staff to participate in development activities as some of the challenges facing staff training and development policies.

Lamptey and Agyen-Gyasi (2010: 56-70) and Osei (1996: 31-36) observe that academic librarians in Ghana face challenges in supporting teaching, learning, research and knowledge dissemination. This therefore requires that training needs should be conducted to provide the requisite training needs of staff to enable them perform their duties effectively. Professional development in university libraries in Ghana have many challenges such as inadequate funding, limited time of training programmes and the inability of the individual staff to fulfil the rising institutional expectations after training. Professional development is often thought of as an optional extra issue which is considered when there is adequate funding, hence sufficient resources are not allocated for staff development programmes.

Ghanaian university libraries face the problem of getting sponsorship to attend staff training and development programmes (Adanu 2007: 1-19; Alemna 2001: 44-47; Osei 1996:31-36). The challenges faced by staff of the five university libraries selected for this study are not different from what was ascertained from the reviewed literature. Despite these challenges, university library administrators must prioritise staff development activities and make adequate budgetary provision for training and development programmes.

## **3.4** Monitoring and evaluation of staff training and development programmes

Rossi, Lipsey and Freeman (2004: 431) define monitoring of training as the systematic documentation of aspects of the training programme performance that are indicative of whether the programme is functioning as intended or according to some appropriate standard. Monitoring generally involves assessing performance related to programme process and outcomes. Monitoring of training is done during the implementation of training and should aim at detecting deficiencies, obstacles and/or make adjustments in a timely manner to enhance the expected results. Monitoring also involves a strict follow-up of what is happening during the implementation. The monitoring indicators systematically collect and report trends with the purpose of informing those in charge. Monitoring also helps to introduce corrections to keep the training programme on course until completion (Rossi, Lipsey & Freeman 2004: 432).

The monitoring and evaluation of staff training and development programmes is often over looked completely or done with little thought. Monitoring and evaluation should be taken equally seriously because the feedback and suggestions from monitoring and evaluation can help to improve upon future training and development programmes. Godzins (1989: 87-92) argues that while no library is rich enough to squander precious money and staff time on training and development activities that are not useful, librarians pay very little attention to the long term results of training programmes. In most cases training is regarded as complete when the workshop was attended. The real text of the programme success is whether or not the trainee is using the new knowledge or skills acquired six months after the training.

Cheng and Ho (2001: 22) also suggests that a training programme should be designed to include evaluation of its effectiveness. Employee performance is usually one of the crucial measurements emphasised by top management. Employees should therefore be concerned about their productivity and obsolescence of knowledge and skills. Effective training and development activities make them more aligned to career growth. The reasons for monitoring training and development programmes can be summarised as to:

- provide accountability
- track the implementation of the training programmes
- improve upon the programme
- establish whether the training programme is meeting its objectives

 document good practices and provide a model for workforce development (Rossi, Lipsey & Freeman 2004: 431).

Evaluation of training on the other hand can be described as a systematic process of assessing whether the training is achieving its objectives or not. It involves the collection and analysis of data to determine the effectiveness of a training programme. It is the most essential aspect of the training process (Kunche *et al.* 2011: 1-3; Noe 2002; Raab *et al.* 1991 & Hamblin 1974).

Training evaluation is, therefore, a systematic process of collecting information for and about a training activity. This information can be used for decision making and to assess whether training is meeting its objectives. Evaluation is not merely an activity at the end of the training. It should be an on-going process throughout the training. It is further suggested that after the training has been completed management should value its effectiveness because training is an investment. Certo and Certo (2009: 299-302) and Wilkinson and Lewis (2006: 356) argue that training programmes should be evaluated to ascertain return on investment. Bernthal (2013: 1-5) and Kunche *et al.* (2011: 2) summarise the reasons for evaluating staff training development activities as to:

- Justify the financial investment in staff training and development programmes.
- Compare the effectiveness of two or more training programmes.
- Meet the requirements set up by professional organisations or government regulations.
- Give feedback to trainees and trainers on outcome performance

• Determine whether the actual outcomes matched with the expected outcomes.

Training evaluation has received extensive acknowledgement as being advantageous and useful, It should, therefore, be done before, during and after training. The use of observation, questionnaire and interview data collection instruments to collect data for training evaluation is recommended. Training evaluation should cover trainees, trainers, as well as the training programme (Manju & Sureth 2011: 58-70; Sharon & Fiona 2014: 5-6; Kunche *et al.* 2006: 2).

The reviewed literature support the assertion that monitoring and evaluation of staff training and development programmes should be an important component of staff training and development policy. The monitoring is done to ensure that training does not only conform to standards but also meets the objectives set down before the training, while evaluation which is done before, during and after the training helps to ascertain the effectiveness of the training and its impact on the trainee and the organisation.

Monitoring and evaluation should be a continuous process and efforts should be made to use multiple evaluation methods. It is also recommended that monitoring and evaluation should cover all aspects of training including trainees, trainers and training programmes. There was very limited literature on monitoring and evaluation of staff development programmes in the library environment.

#### **3.5** The effects of staff training and development on job performance

Rama and Nagurvali (2012: 722) describes an effective training programme as one that addresses training needs and deliver training according to training objectives. Training effectiveness refers to the benefits which organisations and trainees receive from training. The benefits to the trainee may include acquisition of new skills or behaviour and the benefits to the organisation may include an increase in productivity and satisfaction of customers.

Training effectiveness involves the assessment of the extent to which training and development efforts contribute to improved performance and results. Training is said to be effective when the training outcomes match with its objectives. Training programmes should therefore be designed and delivered to meet the needs of both the employees and the organisation. The employees should be able to apply what they learned on the job and this should reflect in reduced cost of production, saved time, improved services, increased customer satisfaction, improved morale, decreased grievances or complaints and improved capabilities to meet future demands and higher productivity. The way to know if there was an improvement is to have these variables, that is time, service, morale, capability before training and after training measured to determine if there was improvement (Kunche *et al.* 2011: 1-3 & Hurque & Vyas 2008: 188-204).

Asare-Bediako (2008: 179) suggests that training transfer could be facilitated through the collaborative efforts involving three parties namely, trainee, trainer and the supervisor and

that each of the three parties need to take some form of action before, during and after the training programme. It is however difficult to measure training effectiveness because training results may not be immediately reflected in the job performance of the trainee. What is even, more difficult is the measurement of training results in monetary terms. Creg and Bradley (2000: 212) further explain that while many attempts have been made to measure the results of training in financial terms the complexity of organisations and the myriad variables involved often frustrate such attempts. There is also extreme difficulty of isolating the effectiveness of training in reference to job performance.

Training programmes are, therefore, effective only to the extent that the skills and behaviour learned can actually be transferred to the job. It is also important to emphasise that training efforts have the most lasting beneficial effects when staff are engaged in the discussion about the training right from the planning stage. In this way training is likely to impact positively on job performance.

It can also be argued that the provision of staff training and development opportunities alone cannot lead to effectiveness and higher productivity. There are many other factors that contribute to job performance, effectiveness and productivity. Effective job performance requires an environment that enables employees to apply knowledge, skills and abilities in ways that support the mission and goals of the organisation.



Dawo, Simatwa and Okwatch (2012: 316), in a study to evaluate the effects of staff development practices on job performance in some selected universities in Kenya, established that staff development practices alone did not contribute significantly to job performance. The authors suggest that staff development practices were supported with other human resource management/development strategies such as reward, promotion, salary increase, and other motivation strategies to engineer staff interest for improved job performance. In a similar study conducted by Osei (1996: 31-36) at the University of Science and Technology, Ghana, the author argued that staff development flourishes in an atmosphere where professionals are adequately and sufficiently motivated. In a situation where staff development fails to motivate staff, because of the inability of the organisation to provide resources and materials which the professionals need to do their work, it invariably leads to frustration. For instance, a person who returns from a course anxious to practice a new technique or skills will quickly lose enthusiasm if his/her efforts are met with hostility or indifference. The use of the right approach to motivate library staff will in no doubt enable university libraries to accomplish their goals and objectives of providing the required information to support teaching, learning, research and knowledge dissemination (Lamptey, Boateng & Antwi 2013: 4).

Several authors in the reviewed literature however have established that effective staff training and development programmes contributed to improved job performance and higher productivity. Onyia and Aniogbolu (2011: 103-113) carried out a study on the effects of training and retraining of library workers on their job performance at Delta State Polytechnic Library, Nigeria, The findings show that staff training and development

provided by the organisation had contributed to a large extent to staff performance on the job. A planned staff development process helps to equip library staff with new technological skills needed to enhance their job performance and prevent skills obsolescence. Staff training and development programmes should be evaluated to determine cost effectiveness of training programmes. This will give room for the introduction of new techniques, provide for succession, enable qualified placement and raise the standard of unskilled personnel. Akintude (2004) also supports the argument that staff training and development initiatives contributed enormously to the job performance of library workers.

The results of studies of several authors including Abba and Dawha (2009: 1-8); Harvey and Sayers (2009: 205); Dasgupta and Satpathi (2006: 239-246); and Martell and Dougherty (1978: 153-159) have established that continuous educational programmes enabled employees to acquire the knowledge that help them to cope with the tasks of providing better information services to support teaching and learning. The findings of these studies show that continuing education was helping library staff to build and update previously acquired knowledge, skills and attributes and this was contributing to better job performance, job satisfaction, decrease turn over and further job advancement.

A similar study conducted by Osei (1996: 31-36) at the University of Science and Technology, Ghana reveals that since 1951 staff development programmes has benefited UST library in the following ways:

- It has enabled staff to cope with modern technologies, new trends and current developments.
- It has broadened and widened staff knowledge and experiences, thus made staff more skilful and effective in the performance of their job.

In summary, the reviewed literature reveals that staff training and development programmes contributed to the acquisition of new knowledge, skills, ability and change behaviour. These eventually affect job performance and productivity. Nevertheless, all these studies failed to establish the extent to which effective training and development contributes to effective library and information services in the university libraries environment.

## **3.6** Measuring return on investment in training

Return on investment (ROI) refers to the process of ascertaining whether the training was worth doing or finding out if the organisation receives something of value compared to the cost of providing the training. Monetary value can be put on return on investment in training. The value can be ascertained through increased productivity (Bartel 2000: 503). Measuring return on investment is a very important aspect of any investment. The ultimate aim of training is to improve the quality of staff to enhance their job performance. It is therefore important that the improvement that training brings is measurable so that an effective return on investment can be determined. The reason for training staff is to enable them to learn new skills and techniques that will enable them do their jobs. The effect of training can reflect in the form of staff acquiring new skills and knowledge and abilities to understand their new job roles and application of new technologies to work. It is therefore important for organisations to accurately measure the rate of return on investment in employee training to guide human capital investment decisions. When the return on training is under estimated it will lead to a low investment in training, whereas if it is over estimated, employers will over invest in training (Bartel 2000: 503). According to Bartel (2000: 503), knowledge of the rate of return on investment in training is not only important to organisations, it is also important to the government and other policy makers, who may be interested in allocating government resources to subsidise private investment. The benefits of training therefore, accrues to the individual staff, organisation, government and the society.

Calculating the employee return on investment is however very complicated and difficult, because of a number of reasons:

- The employees may be sharing the cost and return of training with the organisation
- A sound return on investment analysis requires data collection on numerous variables, and measurement is usually done on many employees at multiple points. Many organisations are not equipped to undertake such an effort for the purpose of evaluating training programmes.
- Benefits are very difficult to determine in financial terms (Matalonga & SanFeliu 2008: 42-47).

Some authors argues that training is not an investment, it is simply an expense. In business terms an investment implies the adding of capital to an organisation. Calculation of return on investment is effective if the organisation keeps records about employees' job performance and when the cost factors of training are known. Measuring the return on investment in training starts with defining the reasons and goals for the training, determining how much the training will cost and verifying the amount of return. The critical questions to ask include:

- What is the training for?
- What is the investment in training?
- How is the return measured? (Wilkinson & Lewis 2006: 356)).

The investment in training consist of the cost of training and the time spent by the staff on the training and it covers the cost of:

- Course development
- Instructional materials
- Equipment/facilities for training
- Salaries/wages of instructors and staff working directly on the training
- Lost of productivity due to trainees' attendance (Matalonga & SanFeliu 2008: 42-47).

The return on investment should be noticed in the area of time spent in production, reduction in the cost of producing quality products or services. The benefits of training should include:

• Time savings

- Increased productivity
- Improved quality of output
- Enhanced staff performance (Matalonga & SanFeliu 2008: 42-47).

The return on investment can be calculated when both training benefits and cost can be converted into monetary value. Matalonga and SanFeliu (2008: 42-47) further suggests the processes for calculating return on investment as follows:

Step 1. Validate entry criteria

Step 2.Execute the production process. The organisation must generate the data to be used as input for causal analysis.

Step 3. Analyse defects. Defects can be analysed from an organisational point of view, or within a single training programme.

Step 4.Plan training interventions.

Step 5. Establish agreement to measure objectives. Stakeholders must obtain agreement on how the training results will be measured. This probably will depend on decisions made in the previous two steps. It is recommended that senior management staff should be involved during the selection or validation of the variable used to measure training agreement.

Step 6. Deliver training. Training must be delivered according to the organisation's standard.

Step 7. Evaluating return on investment. In order to calculate return on investment for the training interventions the cost and benefits of the training must be identified.

Step 8. Communicate results. The examination of the methods should enable the training department to communicate the results of the training interventions in terms of return on investment.

Step 9. Validate exit criteria. After execution of this process, the organisation should have;

- Performed causal analysis and reported results.
- The training department has planned and executed training interventions.
- The results of the training interventions should be communicated in terms of return on investment (Matalonga & SanFeliu 2008: 42-47).

The formula for calculating return on investment is as follows:

#### ROI% = Net Programme Benefit (Benefit - Cost) X 100

Programme Cost (Matalonga & SanFeliu 2008: 42-47).

To summarise, return on investment analysis allows decision-makers to determine the financial returns from training by comparing net programme – benefits, minus costs. Return on investment is therefore calculated by taking the net benefit of training, multiplying by training cost and multiply by hundred. Return on investment is always expressed as a percentage.

Lockhart and Majal (2012:9) in a study on the effects of library training and development programmes at Cape Peninsula University of Technology, South Africa suggest two ways in which libraries can maximise the return on investment in training as follows:

- Use train-the-trainer strategy where a few staff members are trained and after they have acquired the needed expertise, they are used to facilitate training programmes for their colleagues.
- Staff who participate in conferences, workshops, seminars are required to provide a report within two weeks after the event to give feedback and highlight the important knowledge and skills that was acquired and these are shared among the entire staff. These strategies can help libraries to maximise return on investment in training

The reviewed literature, however suggest that most of the university libraries do not measure or calculate the return on investment in training and development. The situation is the same with the university libraries in Ghana that were investigated in this study.

#### 3.7 Measuring effective library and information services

Academic institutions rely on libraries to provide information resources and services to support teaching, learning and research. Academic libraries must therefore be adequately resourced to be effective and efficient in the provision of library and information services. In order for these libraries to be effective there is the need to explore the crucial relationship between the library, faculty, students and management staff. Academic libraries must also focus on developing and managing their collections, services and technologies to enable them to provide effective library and information services.

The results of the study by Fabunmi (2004: 147-158) suggest that library effectiveness is measured in terms of the satisfaction expressed by its users and he describes library effectiveness as the provision of information to meet the individual and institutional needs of library users. An effective library system provides timely, relevant and adequate information for its users. Service effectiveness can be described as a judgment on how well a service is performing by the direct users of that service. In other words it is the extent to which an activity fulfils its intended purpose or function. Academic libraries, therefore, need to critically and regularly examine the effectiveness of their services.

Library effectiveness can be measured by using three approaches, namely the goal approach which focuses on the extent to which the library is able to achieve its objectives or reasons for its establishment and how well the library is able to provide services to meet the needs of its users; the process approach focuses on how well the library staff performs their functions and activities depending on set up standards; and the structural approach on the other hand focuses on the facilities in the library, qualifications of library staff with the view that the resources will aid the delivery of effective library and information services (Du Mont & Du Mont 1982).

The results of the studies by Chandrashakara and Adithya (2013: 1); Arinawati (2011: 1) and Harvey (2004) further explain that library effectiveness can be measured in terms of the various methods adopted to acquire required information resources, use of the budget, maintenance of library stock, managing periodicals, reference and technologies. A study conducted by Cullen and Calvert (1993: 143-164) in New Zealand public libraries reveals ninety-five possible indicators of library effectiveness. The most important of the ninety-five includes; library staff competence and the ability to manage the libraries, awareness of resources and services, awareness of the information needs of the community and provision of information services to meet the needs of the community. The authors suggest four areas that should be assessed to ascertain effectiveness of library services as: resources, services, library customer interaction and access:

## i. Resources

- Breadth and depth of the collections.
- Ability to obtain needed materials.

## ii. Services

- Sufficiency of searching tools.
- Sufficiency of library opening hours.
- Availability of library staff assistance.
- Courtesy of library staff.
- Librarians' professional knowledge.
- The speed of acquisition of new materials.
- The speed of provision of items through inter library loan.
- Sufficient guidance and user training sessions.



- Sufficiency of book loan period.
- Conducive place for research and study

# iii. Access

- Ease of use of Open Public Access Catalogue (OPAC)
- Accessibility of OPAC
- Accessibility of online databases.
- Organised materials.
- Frequency of use of the library resources and services.

## iv. Customer Interaction

- Sufficiency of ways to interact with the library.
- Users' awareness of the library resources and services (Cullen & Calvert 1993: 143-164).

Basically, libraries offer different types of information services that should be of relevance to the users. These include current awareness services which involve the acquiring of information resources to keep library users up to date with the latest literature published in their subject areas and selective dissemination of information which is customised to individual information needs. The information is provided to the users on selected topics and sources of interest to the library users. The user feedback is important as it helps in the improvement of future library services. The concept of service effectiveness is of utmost importance to university libraries because the effectiveness of the library as a whole can be inferred from its service provision. A well-stocked and efficient library acts as the path finder for researchers and provides them with the inspiration to venture into new areas of research. An ineffective library may lead to low quality or duplication of research thus resulting in the waste of financial, material and human resources. The overall standard of effectiveness is the proportion of library user demands that were satisfied. Satisfaction has however been described as a sense of contentment that arises from an actual experience in relation to an expected experience (Hernon & Whitman 2001: 32; Leckie, Pettigrew & Sylvain 1996: 161-193).

Satisfaction is a judgment on whether a user was satisfied with the service provided at the level of consumption. Satisfaction with library services is therefore a feeling of fulfilment on the part of library users (Hernon & Whitman 2001: 32-38). Buckland (1999) also suggests that, the needs of library users should be taken into consideration when designing library services. It is therefore necessary for university libraries to understand how the user groups view their services in order to aid the planning of future library and information services.

Poll (2008) however suggests that there are basic issues that apply to the overall quality of service delivery in libraries such as, speed and currency of the services; accessibility; competence and helpfulness of staff. In other words for library services to be effective library staff should not only be competent and willing to help users, but they should also

ensure that library services are timely delivered, easy to understand, meet specific needs, and delivered by courteous and knowledgeable staff (Fabunmi 2004: 147-158).

Several authors, including Oyewusi and Oyeboade (2009); Ezeala (2009); Martin (2003) and Popoola (2000), investigated the effectiveness of library resources and services in Agricultural Research Institutes in Nigeria and the findings reveal that more than three quarters of the respondents find the libraries' services ineffective as they indicated dissatisfaction with electronic resources and the library's collections.

Onuoha (2010: 287-297), also assessed library services at Babcock University in Nigeria, and the findings reveal that circulation services, reference, photocopy and binding services are considered by the majority of the respondents to be effective, while compilation of bibliographies, indexing and inter library loan services are considered to be ineffective. Biradar, Kumar and Mahesh (2009: 63-68) and Martin (2003: 15-21) investigated the quality of library services and their findings reveal that the users were generally satisfied with library services, but had specific concerns with areas such as: access to electronic resources, catalogue and insufficient space.

From the reviewed literature one can conclude that in order to provide effective library services, library staff must have capabilities and abilities to:

• Establish and maintain library and information services

- Develop objectives, policies and procedures for effective library services
- Develop and manage convenient and accessible library and information services,
- Analyse and evaluate information needs of library users and information services.
- Provide professional reference and research services
- Organise library materials to make them easily accessible
- Make adequate budgetary provision for library and information services.

## 3.8 Conclusion

From the reviewed literature, this study establishes that staff training and development programmes that were undertaken in university libraries range from orientations, seminars, conferences, workshops, research and publications, job rotation and professional associations. The reviewed literature also supports the assertion that effective staff training and development programmes contributed to work performance and higher productivity of library staff. Some authors however argue that staff training and development alone is not enough to make library staff improve their job performance. In their view, staff development programmes must be supported with other human resource management strategies such as increase in salary, promotion and others forms of rewards.

Nevertheless, the researchers fail to investigate and establish the extent to which staff training and development programmes contributed to effective library and information services as far as measurement is concerned. It also fails to investigate how effective library and information services affect the work of library users namely, faculty, students and staff.

This study is different from previous studies to the extent that it investigated and established the contribution of staff training and development programmes on the job performance of both the library staff and the institutions. It also investigated the contribution of effective library and information services on academic work of faculty and students as well as the return on financial investments made by the university libraries in training and development programmes.

#### **CHAPTER FOUR**

# BACKGROUND AND PROFILE OF THE SELECTED INSTITUTIONS AND UNIVERSITY LIBRARIES IN GHANA

#### 4.1 Introduction

This Chapter discusses the background and profile of the five institutions and university libraries that were selected for this study namely, University of Ghana, University of Cape Coast, University of Education Winneba, Central University College and Methodist University College Ghana.

The purpose of this Chapter is to provide historical background of the institutions and an overview of the universities libraries that were selected for this study. The Chapter also presents information on the mission and vision statements, staff and students population as well as the state of the collections and services of the institutions and university libraries selected for this study.

## 4.2 University of Ghana (UG)

According to the University of Ghana (2014) History, (<u>http://www.ug.edu.gh/about/</u> <u>establishment-university</u>) the university was founded in 1948 as the University College of Gold Coast on the recommendation of the Asquith Commission on Higher Education in the British Colonies. The University College was affiliated to the University of London. The University College of the Gold Coast was founded for the purpose of providing and promoting university education, learning and research.

In 1960-61 academic year the University of Ghana was established by an Act of Parliament (Act 79). The then president Dr. Kwame Nkrumah became the first Chancellor of the University. The University of Ghana is the oldest and largest of the nine public or state owned universities in Ghana. University of Ghana History (<u>http://www.ug.edu.gh /about /establishment-university</u>).

# 4.2.1 Colleges

According to the University of Ghana (2015) Academic overview (<u>http://www.ug.edu.gh/academics/overview</u>) there are four Colleges, the College of Health Sciences, College of Basic and Applied Sciences, College of Humanities and College of Education.

The College of Health Sciences is presently constituted in five Schools: Medicine and Dentistry, Public Health, Nursing, Pharmacy, Biomedical and Allied Health Sciences and Noguchi Memorial Institute for Medical Research as well as the Centre for Tropical, Clinical Pharmacology and Therapeutics.

The College of Basic and Applied Sciences comprised four Schools: Physical and Mathematical Sciences, Agriculture, Engineering and Veterinary Medicine and Institute of Applied Sciences and Technology including four Centres: Biotechnology Research, West Africa Centre for Crop Improvement, West Africa Centre for Cell Biology of Infectious Pathogens.

The College of Humanities also consists of six Schools: Business, Law, Arts, Languages, Social Sciences, and Performing Arts and three institutes: Statistical, Social and Economic Research, African Studies, Population Studies including five Centres: Social Policy Studies, Migration Studies, International Affairs and Diplomacy, Gender Studies and Advocacy, Language and University of Ghana City Campus.

Finally the College of Education comprised three Schools: Information and Communication Studies, Education and Leadership and Continuing and Distance Education (<u>http://www.ug.edu.gh/academics/overview</u>).

#### 4.2.2 Mission statement

The mission of the University of Ghana is to develop world-class human resources and capabilities to meet national development needs and global challenges through quality teaching, learning, research and knowledge dissemination (University of Ghana 2014).

#### 4.2.3 Associations and Links

According the University of Ghana (2014)Institutional affiliation to (http://www.ug.edu.gh/about/institutional-affiliations) the university is a member of the International Association of Universities (IAU), the Association of Commonwealth Universities (ACU), the Association of African Universities (AAU). The university is also a member of the League of World Universities (which comprised renowned research universities all over the world). There are currently twenty-two Institutes and Colleges locally which hold affiliation with the University of Ghana for the purpose of enrolment, teaching and awarding of degrees and diplomas of the University of Ghana.

# 4.2.4 Staff and student population

The University has a total staff population of four thousand eight hundred ninety-eight:

•	Senior members engaged in teaching and research	-	947
•	Administrative and professional staff	-	148
•	Senior staff	-	1319
•	Junior staff	-	2575

(UG Vice Chancellor's Annual Report 2014).

The latest available information indicate the student population of University of Ghana is about thirty thousand eight hundred and ninety-six:

- Post graduate students 1816
- Bachelor degree students 26154

- Sub degrees students 1784
- International students 1142 (UG Vice Chancellor's Annual Report 2014).

## 4.2.5 The University library

The University library started as a "College Library" when the parent institution, the then University College of the Gold Coast was set up in 1948 as a College of the University of London, located at Achimota College, about 8 kilometres from the present Legon campus. In 1959, the "College library" moved into its new building on Legon campus with its parent institution and was named after the first Principal of the University College, David Mowbrary Balme, a British expatriate (UG Balme Library Guide 2014).

Balme Library is the main library of the University of Ghana and coordinates a large number of libraries attached to the various colleges, schools, institutes, faculties, departments, halls of residence and the Accra city campus which form the University of Ghana library system. The central location of the library, its facilities and the scope of coverage of collections makes it a very important and vital part of academic life on campus (UG Balme Library Guide 2014).

# 4.2.5.1 Mission of the library

The Balme Library (2014) indicates that the mission of the library is to provide access to information required by members of the university community to support teaching,



learning and research activities. In this regard, the library is to provide up-to-date and relevant information materials in both print and electronic formats and to create a service culture that will lead to the building of an effective partnership with the academic staff to enhance teaching and learning. Furthermore, the library is to promote information literacy skills among the students to enable them to utilise any available information resources for personal and academic development beyond the campus (Balme Library Guide 2014).

# 4.2.5.2 Departments and services

Balme library has six departments and one special library for the physically handicapped. These are Collection development/Acquisitions, Cataloguing, Periodicals, Reference, Electronic Support, Technical Services and the Braille library (UG Balme Library Guide 2014).

According to UG Balme Library Guide (2014) the library continues to adapt to changing technologies and patron information needs. In this regard, modern facilities such as the 24 hour reading room, Research Commons (RC), Knowledge Commons (KC) and the Information Access Centre (IAC) has been provided. The Research Commons offers personal computers in a networked environment, study carrels, wireless internet among others, to meet the research needs of graduate students, researchers and faculty in the university. Similarly, the knowledge commons meets the study needs of undergraduate students in the university by providing more than seventy personal computers for use. Additionally, the Information Access Centre which is a modern multi-functional facility

provides access to an internet lounge, an instructional lab, a computer lab, a seminar room with video conferencing equipment and an administrative office.

In line with the roll-out plan of the University of Ghana institutional repository, some selected materials are currently being digitised. As part of the digitisation efforts, all microforms in the library are also being converted into digitised formats. The UG catis the Online Public Access Catalogue (OPAC) of the University of Ghana library system (UGLS). It may be searched from anywhere where there is internet access. Personal computers are provided at strategic locations on every floor of the library. The library offers various services such as the special training programme for new graduate students on how to access information in electronic format, such as the internet and other online databases. This is to impart literature search skills to the new students and also to create awareness of such services in the library. The session is organised mid-way through the first semester and is free of charge (University of Ghana 2014).

## 4.2.5.3 Collections

The collections which consist of both electronic and print resources provides essential background reading for the courses that are taught. There are over four hundred thousand (400,000) prints books, 500 microfilms, CD's tapes and impressive holdings of rare books and archives in its collection. The library is an active member of the Consortium of Academic and Research Libraries (CARLIGH) which negotiates access to electronic resources (UG Balme Library Guide 2014).

# 4.2.5.4 Library staff population

There are one hundred and nineteen library staff members, seventeen professional librarians, nineteen para-professionals, sixty-eight junior library assistants, four administrative staff, twenty-one cleaners, one technician, three tradesmen, two drivers and eight security personnel (UG Balme Library Guide 2014).

# 4.3 University of Cape Coast (UCC)

According to the University of Cape Coast about (2014) (http://ucc.edu.gh/aboutus/) the university was established in October 1962 as a University College and placed in special relationship with the University of Ghana, Legon. The College attained the status of full and independent University with the authority to confer its own degrees, diplomas and certificates by an Act of Parliament (Act 390) in 1971. It subsequently became University of Cape Coast by (PNDC Law 278) in 1992.

According to the University of Cape Coast about (2014) (http://ucc.edu.gh/aboutus/) the University was established out of a dire need for highly qualified and skilled manpower in education to provide leadership and enlightenment. Its original mandate was therefore to train graduate professional teachers for Ghana's second cycle institutions and the Ministry of Education in order to meet the manpower needs of the country's accelerated education programme at the time. Today, with the expansion of some of its faculties and the

diversifications of programmes the University has the capacity to meet the manpower needs of ministries and industries in the country, besides the Ministry of Education.

#### 4.3.1. Colleges

According to the University of Cape Coast academics (<u>http://ucc.edu.gh/academics/</u>) the university has six Colleges namely College of Agriculture and Natural Sciences, College of Distance Education, College of Education Studies, College of Health and Allied Sciences, College of Humanities and Legal Studies and College of Graduate Studies and Research.

#### 4.3.2 Vision and mission statements

The University of Cape Coast aim to be a university that is strongly positioned with world-wide acclaim. The mission is to become a university of choice in Ghana, uniquely placed to provide equal opportunity and quality education through the provision of comprehensive, liberal and professional programmes that challenge learners to be creative, innovative and morally responsible citizens. Through distance learning, it also extends expertise and facilities to train professionals for the education enterprise and business by employing modern technologies.

The institution continues to expand its existing highly qualified academic and administrative staff offering a conducive environment that motivates them to the position that enable the University to respond effectively to the development needs of the changing world (UCC Vice Chancellor's Annual Report 2014).

# 4.3.3 Staff and Student Population

The latest information indicates that the University of Cape Coast has a staff population of five thousand and twenty five breakdown is as follows:

- Academic Staff 734
- Support staff 4291 (UCC Vice Chancellor's Annual Report 2014).

The University has a total student population of forty-two thousand, five hundred including distance learning students (UCC Vice Chancellor's Annual Report 2014).

# 4.3.4 The University Library

The University of Cape Coast library is one of the largest academic libraries in Ghana. The collections are housed in a five storey library complex. It has the capacity for holding seven hundred and fifty thousand (750,000) volumes excluding pamphlets and journals. The library can seat two thousand (2000) users at a time. It is the most frequently utilised facility in the University with approximately five thousand visits per day (UCC Library Guide 2014).

# 4.3.4.1 Mission of the Library

The University library's mission is to add to the University's teaching, learning and research activities by providing access to information and working in close partnershipwith the academic staff and students to produce the requisite human resources for national development (UCC Library Guide 2014).

# 4.3.4.2 Departments and Services

The main function of the university library is to support the teaching, learning and research pursuits of the university. The library, therefore, carefully selects and acquires books, journals, pamphlets, audio-visuals and electronic databases to provide an effective library services to the university community. The library also has a good collection of equipment such as photocopiers, microform reader, printers, scanners, braille embossers, and computers as well as internet connectivity (UCC Library Guide 2014). The library currently has the following departments:

- Acquisition.
- Cataloguing.
- Information Technology (Electronic support).
- Periodical.
- Technical services.

The University library system comprised the main library, the faculty, departmental and hall libraries. These are of varying sizes, content and services and are distributed across the campus. The university library provide services and facilities, as well as direct links to wide range of electronic information, including journals and databases (UCC Library Guide 2014).

# 4.3.4.3 Collections

It is a hybrid library with two hundred and twenty-seven thousand four hundred and fourteen hard copies, e-books and databases which could be accessed on the internet (UCC Library Guide 2014).

## 4.3.4.4 Library staff population

The library has total staff strength of two hundred and thirty breakdown as follows:

- Senior members 10
- Senior staff 62
- Junior staff 158 (UCC Vice Chancellor's Annual Report 2014).

#### 4.4 University of Education Winneba (UEW)

According to the University of Education Winneba (2014) about us (http://www.uew.edu.gh/about-us) the university was established in 1992 and charged with

the responsibility of producing professional educators to spearhead a national vision of education aimed at re directing Ghana effort on the path of rapid economic and social development. The University gained full autonomy as a university in May 2004.

#### 4.4.1 Vision and mission statements

The University of Education Winneba aim to become an internationally reputable institution for teacher educators and research. The mission of the University of Education Winneba is to train competent professional teachers for all levels of education as well as conduct research and disseminate knowledge and contribute to educational policy and development (UEW Vice Chancellor's Annual Report 2014).

## 4.4.2 Campuses, Colleges, Faculties, Institutes

According to University of Education Winneba our campuses (<u>http://www.uew.edu.gh/our-</u> <u>campuses</u> the university has three campuses, namely College of Technology Education, Kumasi; College of Agriculture Education, Mampong; College of Language Education, Ajumako and Distance Education Study Centres in all the ten regions of Ghana.

There are six Faculties: Faculty of Science Education, Business Education, Vocational and Technical Education, Education and Communication Science, Agriculture Education, Science and Environmental Education. The University also has an Institute of Educational Research and Innovation Studies.

#### 4.4.3 Staff and Student Population

The latest information indicates that staff population of the University of Education Winneba is one thousand six hundred and twenty-nine:

• Senior members acad	emic -	390
• Senior members admi	nistration -	106
• Senior staff	-	283
• Junior staff	-	850 (UEW Basic Statistics 2014).

The University has a student population of thirty-eight thousand four hundred and fifty nine comprising seventeen thousand four hundred and eighty-seven full time, eleven thousand five hundred and sixty-three distance learners and ten thousand four hundred and nine sandwich/part-time students (UEW Vice Chancellor's Report2014).

# 4.4.4 The University Library

The University of Education Winneba library was founded at the inception of the university in 1992 to provide teaching and learning materials as well as information services to support the University. It has since gone through various developmental stages and is currently a well-established and resourceful academic library that is providing effective and efficient library and information services to support the University (UEW Library Guide 2014).

# 4.4.4.1 Departments and services

The University of Education Winneba libraries include Osagefo Library (the main campus library), College of Technology Education Library, Kumasi campus(which stock materials on technical and vocational education), College of Agriculture Education Library, Mampong campus(which stocks materials on agriculture and environmental studies education), College of Languages Education, Ajumako campus (stocks materials on language education) and five specialised branch and departmental libraries (UEW Library Guide 2014).

# 4.4.4.2 Collections

The University library holds collection of one hundred and ten thousand, eight hundred and seventy-one books, seven hundred and sixty-eight journals, CDs etc. It also subscribed to electronic databases through the Consortium of Academic and Research Libraries in Ghana (UEW Library Guide 2014).

## 4.4.4.3 Library Staff Population

The latest information on the library staff indicates that a total staff strength of one hundred and four as follows:

- Professionals 10
- Para Professionals 28



- Support Staff 55
- Other Staff 11 (UEW Library Guide 2014).

## 4.5 Central University College (CUC)

The Central University College the university college is a non-profit making educational initiative of the International Central Gospel Church (ICGC) to provide Christian-based tertiary education for the expansion of God's kingdom. It has its origins in a short term pastoral training institute which was started in June, 1991 under the name Central Bible College. The name was later changed to Central Christian College in 1993. The College later upgraded its programmes to the baccalaureate level, and in line with national aspirations, the college expanded its programmes to include an integrated and practice-oriented business school and was changed to Central University College in 1997 (CUC President's Annual Report 2014).

The Central University College aim to provide an integrated and christian based tertiary education with particular reference to the needs of the African continent to enable men and women to serve in a variety of supportive leadership roles in the church and society through training and extensive programmes, research and advisory services. The emphasis is to produce devout and well-grounded leaders, who will meet the challenge of recent time and serve as positive influence in the society.

### 4.5.1 Vision and mission statements

The vision is to raise virtuous and transformational leaders for our world CUC President Annual Report 2014). The Central University College is committed to nurturing a vibrant academic community conducive for the study, creation and dissemination of knowledge through research, training and services (CUC President Annual Report 2014).

# 4.5.2 Faculties and Schools

The University College currently has four faculties/schools as follows; Central Business School, Faculty of Arts and Social Sciences, School of Applied Sciences and School of Theology and Missions and School of Graduate Studies and Research.

#### 4.5.3 Staff and student population

The latest information indicates that the Central University College is currently has a staff population stand at four hundred and eighty:

Management Staff	-	3
• Senior members academic	-	196
• Senior members administration	-	62
Senior Staff	-	125
• Junior Staff	-	94 (CUC President's Annual Report 2014).

The student population also stand at nine thousand and eight (CUC President's Annual Report 2014).

### 4.5.4 The University library

The Central University library is of central importance to the institution. It was established at the inception of the University College in 1991. The library is a combination of people, collections, buildings and technology with a mission to transform information into knowledge. Knowledge is said to be power and the mission of a library is to package this knowledge in a way that can be easily accessible to support teaching, research and learning (CUC Library Guide 2014).

### 4.5.4.1 Vision and mission statements of the library

The vision of the library is to strive to acquire all relevant literature that will effectively respond to the needs of the university community (CUC Library Guide 2014). The mission of the library is to apply modern practices to source, package and disseminate relevant information in support of teaching and research activities in the (CUC Library Guide 2014).

### 4.5.4.2 Departments and services

The library presently has five libraries. It works with staff and students to develop a set of values that will influence the work of the library. The library provides the following:

- An environment that is safe and welcoming and offer variety of comfortable spaces that inspire learning, research and creativity.
- Information sources that are easily accessible, relevant, reliable and of high quality.
- User education on how to access information on electronic format, the internet and online databases (CUC Library Guide2014).

# 4.5.4.3 Collections

The library currently holds a collection of forty-three thousand books and materials which covers all the subject areas that are taught at the University College. As a member of the Consortium of Academic and Research Libraries in Ghana (CARLIGH), the library subscribes to electronics journals. A higher percentage of the library's collection is funded from the University's budget. It also receives donations from friends both home and abroad. The institutional repository is currently being populated (CUC Library Guide 2014).

# 4.5.4.5 Library staff population

The library currently has staff strength of thirty-four made up of eight professionals, twelve para professionals and thirteen supporting staff (CUC Library Guide2014).

#### 4.6 Methodist University College Ghana (MUCG)

According to the Methodist University College Ghana (2014) about us (http://www.mucg. edu.gh/aboutus/index.html) the Wesleyan Mission Society arrived in Ghana in 1835. Since then, the Methodist Church has been involved in the provision and development of high quality education at the basic, senior secondary and teacher training levels (MUCG 2014).The role of churches including the Methodist Church, in providing basic, secondary and teacher education was reduced in 1961 under the then educational reform programme. The government decided to be responsible for running the missions schools and training colleges. In order to augment government efforts of providing accessible tertiary education the Church decided at its 36<sup>th</sup> annual conference held in Cape Coast (1997) to establish a Methodist University College. The Methodist University College Ghana was granted accreditation by the National Accreditation Board in august 2000. It is affiliated to the University of Ghana.

#### 4.6.1 Mission statement

The mission of Methodist University College Ghana is to impart knowledge and skills in disciplines relevant to national development within the context of general global development and at the same time an all-round development of the student mentally, physically and spiritually on the basis of Christian principles (MUCG Principal's Annual Report 2014. The vision of the Methodist University College Ghana is to promote and develop academic excellence, spirituality, morality and service within the Ghanaian society (MUCG Principal's Annual Report 2014).

#### 4.6.2 Aims and objectives

The Methodist University College Ghana aim at providing facilities for learning and to give instruction and training in such branches of knowledge as the University College may desire to foster and in doing so to enable students to obtain the advantage of a liberal education bearing in mind the manpower needs of the country. The specific objectives are:

- To promote by research and other means the advancement of knowledge and its practical application to social, cultural, economic, scientific and technological problems;
- To develop students' ability to think critically and to develop the highest ethical and human values and excellent aesthetic taste;
- Provide opportunity to qualified candidates to have university education irrespective of race, gender or religion.
- Provide students with the best academic, professional and practical training including the development of the spirit of entrepreneurship and innovation.
- Encourage students to appreciate the importance of hard work and dignity of labour.
- Stimulate, particularly through teaching and research, interest in and appreciate of African culture and heritage.
- Encourage students to yield their lives to God such that lives will reflect christian principles, values and ethics including love of neighbour, honesty, humility and loyalty to their country (MUCG Principal's Report 2014).

#### 4.6.3 Campuses and Faculties

The Campuses and Faculties of the Methodist University College Ghana are:

The University College currently has three campuses namely, main campus at Dansoman, Accra, Tema and Wenchi campuses (MUCG Principal's Annual 2014). The University College has four faculties namely, Faculty of Arts and General Studies, Business Administration, Social Studies and Applied Sciences (MUCG Principal's Annual Report 2014).

### 4.6.4 Staff and student population

The current staff strength stands at three hundred and eighty five as follows:

Senior members academics - 150
Senior members administration - 26
Senior and Junior staff - 209 (MUCG Principal's Annual Report 2014).

The student population currently stands at five thousand six hundred (MUCG Principal's Annual 2014).

## 4.6.5 The University College library

Founded in the year 2000, the MUCG library is one of the largest and leading academic libraries of the private universities in Ghana. The computerised library provides a dynamic, relevant and evolving collection of resources, facilities and services to support the university college mission of teaching, learning, research and public service (MUCG Library Manual 2014).

### 4.6.5.1 Vision and mission statements of the library

The vision of the library is to provide exemplary services that demonstrate a commitment to meeting the individual and collective information needs of the clients (MUCG Library Manual 2014).

The mission of MUCG Library is to enhance and enrich teaching, learning and research endeavours of the University College by delivering flexible access to extensive and relevant information resources (MUCG Library Manual 2014).

### 4.6.5.2 Departments and services

The main library is located at Dansoman campus, Accra with three other branch libraries at Tema and Wenchi campuses.

The library has four main sections as follows:

- Acquisitions and cataloguing
- Circulation and reader service
- Reference and information service
- Electronic support service (MUCG Library Manual 2014).

The library provides limited web based services, it has an Open Public Access Catalogue (OPAC) which is currently available on the University intranet. The library provides the following specific services:

- Provide access to information
- Book lending services

- Internet and photocopy services
- Manual/electronic literature searches
- Inter library/referral services
- Training on information literacy skills
- Advisory services in publishing (MUCG Manual for Users 2014).

# 4.6.5.3 Collections

The Library currently has a stock of thirty four thousand volumes of books, two hundred and six serial titles, six hundred and forty four pamphlet collections, three thousand four hundred and sixty-six dissertations/thesis, nine hundred and twenty-eight CDs, eighty-one audio visual materials. The library also subscribed to over thirty-eight electronic databases through the Consortium of Academic and Research Libraries in Ghana (MUCG Library Manual 2014).

# 4.6.5.4 Library staff population

The staff strength is currently sixteen, made up of five professionals, six para professionals and five administrative staff (MUCG Library Manual 2014).

## 4.7 Conclusion

The five institutions and libraries that were studied have a number of things in common. The governance and management structures are almost the same across the Universities. The libraries are independent departments which receive in adequate funding especially for staff training and development activities. The libraries do not have their own staff development policies instead they depend on the university wide staff development policies. It was also observed that while the state owned university libraries have some capacity to support staff development activities, the private university libraries do not have adequate financial resources to support staff development programmes.



#### **CHAPTER FIVE**

#### **RESEARCH METHODOLOGY**

## 5.1 Introduction

The purpose of this Chapter is to review the research methods that were used in this study, justify the research approach and design appropriate for the work. It describes the various procedures and processes that were employed to collect and analyse the data. It also explains the population as well as sampling procedures used for the study.

The chapter also discusses the instruments that were used to collect data explaining why they were seen as appropriate and issues that arose from their use. Procedures for data analysis are also discussed to establish whether there was any thing that made it easier or difficult for the researcher to carry out the study, issues and processes, detailing the experiences of the researcher throughout data collection and analysis. The researcher chose what he saw as the appropriate research methods and design that helped to find answers to the research questions. According to O'Sullivan, Rassel and Berner (2008: 25) research methodology takes the following steps:

- Deciding when and how often to collect data.
- Developing or selecting measures for each variables.
- Identifying a sample or test population.
- Planning the data analysis.
- Presenting findings.

170

# 5.2 Research approach

There are three well established approaches to research design: qualitative, quantitative and mixed methods which, as the name implies, is a combination of the other two methods.

#### 5.2.1 Qualitative research approach

Burn and Grove (2003: 19) describes the qualitative research approach as a systematic and subjective approach used to describe life experiences and situations to give them meaning. Similarly, Parahoo (1997: 59) states that the qualitative research approach focuses on the experiences of people as well as stressing the uniqueness of the individual. Holloway and Wheeler (2002:30) also refer to qualitative research as a form of social enquiry that focuses on the way people interpret and make sense of their experiences in the world in which they live. Rassel and O'Sullivan (1995: 477) further state that qualitative research involves detailed verbal descriptions of characteristics, cases and settings. It means fewer cases are investigated but in more depth than with quantitative research.

Qualitative studies usually aim at in depth understanding of issues. It also focuses on discovering the underlying motives and desires of human behaviour (Kothari 2004:3). Leedy and Ormrod (2005: 133) further explain that the qualitative design focuses on phenomena that occur in their natural settings or real world as well as studying those phenomena in their entire complexity. The qualitative research design involves a close relationship between the researcher and those being studied. The outcome focuses on

understanding rather than predicting general patterns of behaviour. Qualitative researchers believe that studying social systems and problems should include giving voice to those who are being studied as a way of empowering them (Mugenda & Mugenda 2003: 201).

The researcher was guided by the characteristics of qualitative research approach as suggested by Key (1997: 2) and Patton (2002: 404) as follows:

- **Condition:** natural inquiry to study real world situations as they unfold naturally.
- **Purpose:** understanding seeks to understand people's interpretations.
- **Instrumentation:** human centred the human person is the primary collection instrument.
- **Reality:** dynamic systems assumes change as an on-going process whether the focus is on the individual, an organisation or the entire culture.
- Focus: holistic perspective the whole phenomenon under study is understood as a complex system.
- **Data:** subjective data are perceptions of people in the environment, interviews help to capture direct quotations about people's personal perspectives and experiences.
- Voice: perspective and reflexivity a qualitative analyst owns and is reflective about his/her own voice and perspective.
- Orientation: discovery theories and hypothesis are evolved from data as collected.
- Sample: usually a small number of subjects and also non-random selection.
- Context sensitivity: Be careful about generalisation across time and space.

**Results:** valid – the focus is on design and procedures to gain real rich and deep data (Key 1997: 2; Patton 2002: 404). For instance the researcher asked questions on real world situations regarding staff training and development programmes at the university libraries. The information obtained from the Head Librarians and Heads of departments was not manipulated, there was openness in adapting inquiry in order to understand situations.

The researcher captured direct quotations about personal perspectives and experiences as a way of paying attention to credible and authentic voice of the interviewees. The interviews focus on complex inter dependencies and system dynamics that cannot be reduced to a few discrete variables, the researcher personal experiences were important and critical in understanding the phenomenon and processes involve in staff training and development programmes in university libraries.

This study used in part a qualitative approach to explore the behaviour, perspective, experience and feelings of the participants and to emphasise the understanding of these elements. The rationale for using the qualitative approach in this study is to explore and describe the opinions of all the stakeholders. The researcher tried to obtain rich, actual, deep and valuable data from a rational point of view. The qualitative design was also used to provide more details on quantitative results and helped to find answers and explanations to controversial issues. The qualitative research instruments used for both data collection and analysis helped to give the results and findings a true reflection of the situation.

#### 5.2.2 Quantitative research approach

Rassel and O'Sullivan (1995:478) describe the quantitative approach as research in which values of variables are characterised by numbers or symbols. In quantitative research many variables of large numbers of cases are measured and data is summarised and analysed with statistical techniques. Quantitative research may be classified as descriptive, analytical or experimental. It is practically designed to test theory. Quantitative research methods aim to manipulate variables and control natural phenomena. It also constructs hypotheses and tests them against the hard facts of reality (Leedy 1996: 14 & Taylor 2000: 1644).

Usually quantitative data are collected under controlled conditions in order to rule out the possibility that variables other than the ones under investigation could account for the relationships among variables. The quantitative approach assumes that the world and the law that govern it are stable and predictable which makes it possible to apply scientific procedures to research.

According to Denscombe (1998: 175), one of the key features for quantitative research is the correctness with which the research design is established at the outset of the study. Quantitative research relies on its comparative statistical evaluation on standardisation. This leads to a situation where in a questionnaire the order of questions and the possible responses are strictly prescribed in advance, and the condition under which the questions are answered and held constant for all participants in the study (Flick 2004: 9). The quantitative approach is also based on the assumption that reality exists out there and can be researched independently, and that the investigator has the ability to detach himself from the objects of investigation to avoid biases.

Leedy (1993: 144) affirms that quantitative researchers try to understand the facts from the outsider's perspective, thereby, maintaining a detailed objective view that hypothetically is free from all biases. Quantitative research involves the use of structured questions where the response options have pre-determined answers and a large number of respondents are involved.

The quantitative research design is also used to answer questions about the relationship among measured variables with the purpose of explaining, predicting and controlling phenomena (Leedy & Ormrod 2005: 179). Quantitative research aims at determining the relationship between one thing (an independent) variable and another (dependent) variable in a population. Quantitative designs are either descriptive (subjects usually measured once) or experimental (subjects measured before and after a treatment). The objective of quantitative research is to develop theories, hypotheses or get answers to research questions. Quantitative researchers collect data in the form of numbers and use statistical packages to analyse the data.

According to Neuman (2000: 161), the measurement process for quantitative research follows the sequence of first conceptualising, then operational sing, followed by measuring

of data. Conceptualisation is the process whereby the meaning that will be used for particular terms are specified (Babbie 1998: 120; Uys 2003: 118-119). Conceptualising in this study was done by developing the theoretical models based on literature review on the concepts of staff training and development. Quantitative research data were collected and presented in the form of numbers representing some measurements. In this study nominal measurement was used where the respondents were divided into different categories, namely library staff, faculty and students.

The researcher was guided by the suggestions of Key (1997: 2) and Patton (2002: 404) on the characteristics of the quantitative research approach as follows:

- Data objective data is collected from a questionnaire answered by respondents and the number of respondents whose answers count.
- Sample: usually a large number of subjects can be chosen randomly to represent a whole.
- Reality: focus is concise and narrow.
- Measurable: measures what it assumes to be a static reality hoping to develop universal laws.
- Reasoning is logistic and deductive.
- Strives for generalisation.
- The researcher may not be part of the process. The respondents complete the questionnaires on their own and at their own time.
- The basic element of analysis is numbers.

- The report is a statistical analysis.
- Highly controlled setting as opposed to the natural setting in qualitative research.

The researcher used scientific processes to collect objective data. Multiple sampling techniques were also used to decide on the sample size. Data was properly analysed and necessary generalisation were made.

# 5.2.3 The difference between qualitative and quantitative approaches

According to O'Leary (2004: 99) quantitative and qualitative approaches have come to represent a whole set of assumptions that separates the world of methods and limits the potential of researchers to build their methodological designs from their questions. The distinction between qualitative and quantitative paradigms lies between the quest to understand an in-depth inquiry.

Several authors, including Flick (2006: 3);Taylor (2000: 6); Henning (2004:3); O'Leary (2004: 99); Babbie and Mouton (2001: 309); Denscombe (1998: 174) and Leedy (1993: 139) distinguish between qualitative and quantitative approaches. These authors explain that the feature which separates qualitative approach from quantitative approach is the focus on words rather that numbers as the unit of analysis. Qualitative studies also display the use of expressive language and the presence of voice in the text. It is considered a warm approach because it involves interpersonal relationships, personal values, meanings, belief, thoughts and feelings (Leedy 1993: 142).

Flick (2004: 8) and Taylor (2000: 164) also argued that quantitative studies usually begin with the analysis of individual cases, and then as a second step the cases are summarised from a general view point, while the qualitative approach begins with observation of the phenomenon and then data are recorded and classified. This means detailed examination of phenomena prior to analysis.

Another distinguishing characteristic of qualitative research is that data is collected in their natural context and statements are analysed in the context of the answers provided. (Flick 2004: 8;Taylor 2000: 90). In qualitative research, researchers depend entirely on information provided by the participants, a high level of communication and analytical skills is therefore, needed to accurately report the full experience to reflect holistic and detailed views of participants (Leedy 1993: 141 & Taylor 2000: 164). In qualitative research the researcher is the main instrument of both data collection and data interpretation, because of the personal interaction with the people under study.

Some researchers including Colins, Onwuegbuzie and Jiao (2007: 267); Teddlie and Yu (2007: 77); Creswell and Plano Clark (2007: 112); Creswell (2007: 125); Leedy and Ormrod (2005: 133); O'Leary (2004: 103); Mugenda and Mugenda (2003: 201) and Balnaves and Caputi (2001: 95) however, believe that qualitative research lacks objectivity. These authors argued that observation for instance can be influenced by perceptions, impressions and biases. According to these authors qualitative researchers

exploit the relationship between them and the respondents. They also argued that with the qualitative approach the researcher purposefully selects individuals and sites that can provide the necessary information based on specific purposes associated with answering research questions central to the phenomenon.

### 5.2.4 Mixed method research approach

The mixed methods research approach uses a method and philosophy that attempts to fit together the insights provided by qualitative and quantitative research designs into a workable solution. Cameroon (2009: 141) and Johnson and Onwuegbuzie (2004: 16) describe the mixed methods research design as a "quiet revolution due to its focus on resolving tensions between the qualitative and quantitative methodological approach". Mixed methods research, generally speaking, is an approach to knowledge that attempts to consider multiple viewpoints including the stand point of qualitative and quantitative research (Johnson, Onwuegbuzie & Turner 2007). The mixed methods research approach employs strategies of enquiry that involves collecting data either simultaneously or sequentially to understand the research problem. The data collection also involves gathering information using both the questionnaires and interviews (Johnson & Onwuegbuzie 2004:14; Creswell 2003: 19).

For this study the researcher adopted the mixed methods research approach because of its numerous benefits. Several authors including Creswell (1994, 1998); Creswell and Plano Clark (2007); Onwuegbuzie and Leech (2004: 786) and Creswell (2003: 203) and



Ngulube, Mokwatlo and Ndwandwe (2009: 109) and Denzin and Lincoln (2003), justify the use of the mixed methods research approach. These authors stated that a researcher can make use both qualitative and quantitative approaches to make up for the inherent weaknesses of each type. There has been continued interest in using the mixed methods given the strengths and weaknesses found in using a single design.

This study took into consideration the difference between the mixed methods design and mixed model design as explained by Cameroon (2009: 141). The mixed methods design is the use of both quantitative and qualitative approaches only in the methods stage of a study, while mixed model design involves the use of both qualitative and quantitative approaches during several stages of a study. The researcher adopted the suggestions of Tashakkori (2009: 289) and Creswell and Tashakkori (2007: 308) that mixed research methods must have two types of data (quantitative and qualitative), mixed questions and two types of analysis that might include the conversion of one type of data to another and integrated inference. The authors explain that in sequential mixed methods design, a researcher may begin with a quantitative survey embracing a post-positivist perspective to answer a theory driven research question and move to collecting qualitative data that embrace a constructive perspective response to a qualitative question. The researcher was also guided by the conceptual and methodological issues agreed upon by scholars as suggested by Tashakkori (2009: 288) as follows:

- The importance of identifying a sequence of qualitative and quantitative strands/phases. For example, sequential, parallel or conversion process of data collection and analysis;
- Explicitly identifying what type of data collection procedure or type of data needed, for example observation and self- report questionnaire that answers the mixed research questions.

This study adopted a sequential mixed model design because more than one methodology was used and both qualitative and quantitative data were collected. The sequential mixed method that was used in this study was based on the typology of the mixed model design as suggested by Johnson and Onwuegbuzie (2004: 19). The aims, objectives and the research questions in this study were formulated through a review of relevant documentary literature. Questionnaires and interviews were also used to collect both qualitative and quantitative data.

Creswell (2003: 213) points out that a concurrent triangulation strategy happens when the researcher collects both quantitative and qualitative data concurrently and then compares the two databases to see if they collaborate. For instance, interviews were conducted with the university librarians and heads of department/section for the purpose of cross validation. Some observations were also made to confirm or otherwise some of the controversial issues raised in the questionnaires and interviews.

The researcher also took into consideration the four emerging interests in the use of the mixed methods as suggested by Creswell (2003: 206) as follows: Timing of data collection, the weighting or priority given to either qualitative or quantitative aspects of the study, the mixing or merging of the data and the theorising or deciding on the theoretical perspective that guides the entire design.

The researcher began with the collection of quantitative data in order to be sure that the interview and observation instruments were used to find answers to questions and issues that were not sufficiently addressed in the responses to the questionnaires. In some instances priority was given to the qualitative approach because the researcher was dealing directly with the respondents and had the opportunity to probe for further answers that were provided during the interview process. Where the answers provided from both qualitative and quantitative instruments were the same the researcher merged the qualitative and quantitative data.

According to Onwuegbuzie and Collins (2007: 293) a parallel relationship denotes that the samples for qualitative components are different from quantitative even though they are drawn from the same underlying population. This means that those who received questionnaires were not necessarily the same as those interviewed.

The combination of the two research approaches helped the researcher to reach out to the relevant stakeholders in the five selected university libraries for additional information or clarification on controversial issues that were raised in the responses to the questionnaires. The use of the mixed methods research approach in this study also helped to minimise the biases, limitations and weaknesses of the individual approaches and this makes the results very authentic and reliable.

However, Fidel (2008: 267) raises concerns about the mixed methods research and argue that some scholars give different interpretation to the concept especially when it comes to validity, sampling and merging of data. There are no clear standards to guide the application of the approach. Despite the concerns the mixed methods research remains the most suitable research approach for this study (Fidel 2008: 267).

# 5.2.5 Research design

Burn and Grove (2003: 195) and Parahoo (1997: 142), refer to a research design as a blue print for conducting a study with maximum control over factors that interfere with the validity of the findings. According to the authors a research design describes how, when, and where data are to be collected and analysed. A research design links the philosophical assumptions to specific methods and techniques of data collection and analysis.

This study made use of the survey research method. This is a research strategy that encompasses any measurement procedures that involves a survey in which questions are asked of respondents. Direct or indirect contact is made with the units of study for example individuals, organisations and communities by using systematic methods of measurement such as questionnaires and interviews (Creswell & Clark 2007:5 & Powell & Connaway 2004).

According to Powell (1997) the survey research method is suitable for studying a large number of cases, even when they are geographically dispersed. It may include several different individuals, things or people not studied in as much detail for a longer period.

This study therefore made use of the survey method because the study involved a large population and covered a geographically dispersed population. The selected participants were however considered as one unit for the purpose of analysis.

#### 5.3 Data collection methods

According to Parahoo (1997: 52-325) a research instrument is a tool used to collect data. An instrument is a tool designed to measure knowledge attitude and skills. Data was collected from both primary and secondary sources using varied data collection instruments. Primary data was collected with the use of a questionnaire, interview and observation instruments. Secondary data, which refers to existing literature or information on the subject area, was collected from libraries, information centres, archives, websites and internet sources.

### 5.3.1 Qualitative data collection instruments

The qualitative data collection instruments that were used for this study were; the interview and observation.

#### 5.3.1.1 Interview

An interview involves a one-on-one verbal interaction between the researcher and a respondent (Melville & Goddard 2001: 49). The researcher was guided by the view of Denscombe (1998) that interviewing is not an easy option and it needs good planning, proper preparation and sensitivity to complex values of the interaction taking place during the interview.

As suggested by Babbie (2001: 2581), the researcher asked questions personally and recorded the answers of the respondents. The researcher used a structured interview guide in which a list of questions to be asked, also known as the interview schedule, was prepared and sent to the interviewees in advance. The interview schedule was used because it provided the respondents with ample time to go through the questions before the interview was conducted. It also enabled the researcher to conduct a well organised interview and helped to avoid repetition of questions.

The researcher was also aware that effective interviewing requires practice and careful preparation. The interviews for this study were conducted with five university librarians, and ten selected heads of department/section from the five selected institutions.

The face-to-face interview technique was used in this study because it allowed the researcher to obtain a large amount of data and to probe issues deeply. It also allowed the researcher to ask more, complex and sensitive questions. The researcher prepared the same structured questions for the university librarians and heads of department. The questions were both open-ended and close-ended. The interviews enabled the researcher to solicit adequate information from the respondents. The questions for the university librarians focused on ascertaining information on the background of their respective libraries, the state of training and development policy and training needs analysis/assessment, staff training and development programmes, monitoring and evaluation of training programmes, the effects of training and development programmes on staff performance as well as the measurement of return on investment in training. Notes were taken throughout the interviewing process were compared to what was tape recorded in order to guard against possible omissions of parts of the interview process. The personal contact with interviewers helped and encouraged respondents to provide full information and explanations. The interview process also allowed the researcher to study and analyse perceptions, attitudes and motivations of the interviewees.

186

As with other data collection instruments and techniques, bias presents a real challenge with the interview instrument and this may affect the validity of some of the answers obtained from the interview. The interviewer tried to avoid this ensuring that the interviewer did not over react to appropriate responses.

### 5.3.1.2 Observation

Observation means to watch attentively in a scientific or systematic manner. Observation is one of the oldest data collection instruments. Scientific observation should be systematic, objective and free from bias; quantitative whenever possible; strong in usability, reliable and valid (Connaway & Powell 2010: 178).

A major advantage of gathering data through observation is that by watching people's behaviour directly rather than asking questions about their feelings, you can get a true reflection of the situation for analysis. The observer can also see at first hand the types of practices that go on in reality (Anderson 2009: 182-183). However, there are significant ethical and legal issues that must be taken into account before using the observation instrument. It is also argued that the presence of the observer might influence behaviour in one way or the other which may affect the authenticity of the observed situation.

Robson (2002) suggests that the observer must be clear about the purpose of any observation and the way in which it will be carried out. DeWalt and DeWalt (2002) assert that there are three broad types of observation as follows:

- Primary observation Things noted at the time, or very near to the time,
- Secondary observation- How other people that were there saw it; questioning and interviews with participants as part of the research process would generate this sort of data.
- Experiential observation- How the researcher felt about what he/she observed and experience as time passed. Here a diary format used was and it is helpful in enabling the researcher to record how his/her feelings or values have been developed.

In this study, the researcher was guided by the suggestions of Robson (2002) on the range of approaches to be adopted for participants observation as follows :

- Complete participation- The observer becomes a full member as much as possible of the group or organisation that is being studied.
- The participant as observer- The observer makes it clear to those involved that research is his/her explicit role although he/she may also participate in the activity in one way or another. This is not an easy option and it is important to gain the trust of those involved. It does, however, provide opportunities for observer to ask people to explain what is going on and why.
- The observer as participant- This approach occurs when the main role of the observer is merely to observe, but to some degree, participation in the situation is unavoidable by their very presence.
- The complete observer- This is someone who takes part in the activity but whose role as an observer and the research purpose is known to the participants. In many ways there is little distinction between this end of the spectrum and being an observer or

participants because it is hard to see how the presence of someone to be observed would not affect the behaviour of those being observed (Robson 2002).

In planning and deciding on the observation technique used for this study, the researcher took into account the participants or the subjects, the settings, the purpose for the subjects being where they are, the type of behaviour to be observed, and the frequency and duration of the behaviour.

The researcher used both obtrusive and unobtrusive techniques of observation. The obstructive technique refers to the situation where the subjects are aware of the observation, while unobtrusive technique, on the other hand, refers to the situation where the subjects are not aware of the observation. The researcher used obtrusive techniques to observe the library operations at the circulation desks, reference and electronic support service centres. Most of the observed situations were recorded.

The unobtrusive observation technique was used at the security check points to observe when staff reported and signed off from work. The turnaround time for serving library users and the time it took to perform assignments given to staff by their superiors were also observed and recorded. Permission was, however, obtained from the heads of department/section before the observation. The researcher made on the spot notes and recorded events during the observations in order to maximise accuracy. It is best to record observations as unobtrusively as possible, even if the researcher is a participant. Record keeping should not be distracting from the note-taking. The latter technique obviously



tends to be less reliable and less accurate. The researcher used audio-visual equipment to record observations as accurately as possible. Using audio visual equipment is useful for providing an overall view of some behaviour and it permits the researcher to analyse the behaviour more closely.

The researcher took note of what Connaway and Powell (2010: 181-183) suggest to ensure accuracy in unstructured:

- The use of two observation techniques of sound and visual recordings, and after which results were compared.
- Have two or more people observe the same behaviour with the same technique and then compare the results.
- Be careful to distinguish between actual behaviour and perceptions or interpretations of the behaviour when taking notes. Researcher bias can easily creep in during this stage.
- Be careful not to take behaviour for granted.
- Obtaining reactions from the participants, reading the accuracy of the observations can be useful in situations where the subjects are fully aware of the role of the researcher. But the researcher has to be careful that the observation does not affect the subjects.

The researcher therefore took the following steps to ensure accuracy of the observation results:

• The kind of behaviour to be observed was defined, recorded and studied.

- The observers (researcher and research assistants) were trained to ensure that they are adequately prepared and that they had confidence in their ability or judgment to check the appropriate categories.
- Appropriate measures were put in place to avoid observer bias generally the observer took behaviours at their face value and not interpret their "real" meaning at least not at the time of the observation (Connaway & Powell 2010: 181-183).

The researcher took these guidelines into consideration in planning the observation technique, For instance both sound and visual recordings were made during the observation after which the results were compared. The observation was done by the researcher and trained assistants and all the events to be observed were defined in advance. The researcher also tried as much as possible to avoid personal biases during observation and in analysing the data obtained from interviews. The researcher also considered the advantages of the observation instrument as suggested by Connaway and Powell (2010: 182).

- The use of observation instrument makes it possible to record behaviour as it occurs.
- Observation allows one to compare what people actually did with what they say they did. Participants in a study may consciously or unconsciously report their behaviour as different from the way it in fact occurred: the observed behaviour may well be more valid.
- Observation techniques can identify behaviour, actions and so on that people may not think of reporting because they seem unimportant or irrelevant.
- Observation techniques can be used by a researcher to study subjects who are unable to give verbal or written reports.

• The use of observation is generally independent of the subjects willingness to participate (Connaway & Powell 2010: 182).

The researcher also took into consideration the following limitations of observation instruments as suggested by Connaway and Powell (2010: 180):

- It is not always possible to anticipate a spontaneous event and thus be prepared to observe them.
- The duration of an event affects feasibility of observing them.
- Some types of behaviour are obviously too private or personal in nature to be observed.
- It is generally somewhat more difficult to quantify observational data than other kinds of data. Behaviour simply cannot always be broken down into neat categories. (Connaway & Powell 2010: 180).

### 5.3.2 Quantitative data collection instrument

The questionnaire was used to collect quantitative data for this study.

### 5.3.2.1 Questionnaire

A questionnaire is self-report data collection instrument that each research participant completes as part of a research study (Johnson & Christensen 2008: 203). The use of a questionnaire as a data collection instrument has the following advantages:

- It encourages frank answers, as it is easier for the respondents to provide answers because anonymity is guaranteed.
- It eliminates interviewer bias; there is no style of verbal presentation which can influence the response.
- The fixed format of the questionnaire tends to eliminate variation in the questioning process once the questions have been written in the final version and included in the questionnaire, their content and organisation will not change.
- It encourages provision of accurate answers.
- It can be constructed so that quantitative data are relatively easy to collect and analyse.
- It facilitates the collection of a large amount of data in a relatively short period of time.
- Questionnaires are usually relatively inexpensive to administer (Connaway & Powell 2010: 146-147).

The researcher took note of the limitations of a questionnaire as suggested by Connaway and Powell (2010: 147-148):

- It eliminates personal contact between the researcher and the respondents.
- It does not allow the respondents to provide clarifications to ambiguous answers.

The advantages and disadvantages or limitations of questionnaires were considered by the researcher in designing the questionnaires for this study. Leedy (1996: 144) and Melville and Goddard (2001: 48) state that a good questionnaire uses clear and understandable

language, asks only relevant questions, is short, has objective questions, gives clear instructions and is carefully worded.

A questionnaire usually consists of a variety of questions addressing a number of components of a broader topic. In designing the questionnaire for this study the researcher considered the easiest format that would enable the respondents to provide adequate, definite and uniform answers. Open-ended or unstructured questions, as the name indicates, are designed to permit free responses from participants rather than limiting them to specific alternatives. The limitations of an open-ended questionnaire is that there is no limit to the possible response of an open-ended question, the answers are usually more difficult to categorise and analyse than close-ended questions. They may also discourage responses because they typically take longer time to answer.

Structured or closed-ended questions on the other hand limit the responses of the participants to stated alternatives. The possible responses may range from simple "yes" or "no" to a checklist of possible answers to a scale indicating various degrees of a particular response. Structured questions have several advantages and disadvantages in comparison with unstructured questions. Structured questions easily accommodate pre-coding and the possible responses are generally known and stated. The pre-coding in turn, facilitate the analysis of data gathered by the questions. Pre-coding essentially involves anticipating responses, establishing numerical codes or symbols for the various responses.

The responses to structured questions tend to have more reliability than responses from the unstructured questions. This is because there are limited set of responses and, thus, less potential for variation from answers to the questions. Structured questionnaires are standardised, simple to administer and easier to understand by the respondents in terms of the dimensions along which the answers are sought. It also helps to ensure that the answers are given in a frame of reference that is relevant to the purpose of the enquiry.

However, the disadvantage of structured questions is that a limited set of possible replies can force a respondent to select inaccurate answers, none of the choices may correspond exactly to the participant's position or may allow qualification. It may force a statement of opinion on any issue about which the respondent does not have one. The respondent is able to provide reasonable answers even when they know nothing about the subject. Closed questions on the other hand are more efficient where the possible alternative responses are known, limited in number and clear cut. It is appropriate for securing factual information and for elating expressions of opinion about issues on which people hold clear opinions.

This study made use of a combination of structured and unstructured questions and both open-ended and closed-ended questionnaires were used. In all, three sets of questionnaires were designed for faculty, library staff and students of the five selected university libraries in Ghana. Each questionnaire had a different number of items consisting of both open-ended and closed-ended questions. The questions for library staff were divided into four sections, A - D. In section A questions were asked about the background information of the respondents, while section B questions were asked about the awareness and use of

training and development programmes and training needs analysis/assessment. Section C dealt with questions about the effects of training and development programmes on employee performance, while in section D questions were asked on monitoring and evaluation of training and development programmes and return on investment in training.

The questions for faculty were also divided into four sections, A - D. Section. The section A questions were about the background of the respondents, while section B questions were about the awareness and use of library services. Section C dealt with questions about the effects of training and development programmes and job performance. The section D questions were on return on investment in training.

The questions for students were also divided into four sections A - D. The section A questions were about the background of the respondents, while section B questions were about the awareness and use of library services. The questions in section C were on the effects of training and development programmes and job performance, while section D questions were on the measurement of return on investment in training.

### 5.3.2.2 Pre testing the questionnaire

Pre-testing of questionnaire is part of the preparation for the actual interview or administering of questionnaires. It is, therefore, an important step to undertake in order to eliminate and avoid mistakes of which the researcher may not be aware. The researcher administered the questionnaires on some randomly selected sampled population within the research population from three institutions, namely Methodist University College Ghana, University of Ghana and Central University College to check if there were errors, such as unclear terms, ambiguity and poor wording.

The researcher was guided by the suggestion of Babbie (2001: 280) which states that the pre-test subjects should comprise a representative sample although the researcher should use people to whom the questionnaire is relevant. The researcher also sought the opinion of five experts in research methods to check the methodological weaknesses in the instruments such as faulty scales, inadequate instructions and the face validity of the questions.

Booysen (2003: 140); Welman and Kruger (2001: 141) and Babbie (1998: 159) agree that pre-testing a questionnaire is essential and it must be conducted on a small sample. According to Booysen (2003: 140), a researcher should carefully consider all the comments of the respondents who participated in the pre-test because they are often insightful and helpful, but need not accept all the comments. The comments and weaknesses of the pre tested questionnaires were, therefore, considered and where appropriate, the questions were modified.



### 5.3.2.3 Distribution of questionnaires

Research assistants were hired to distribute the questionnaires and in some cases the questionnaires were mailed to the respondents. The respondents were given a maximum period of ten days to complete and return the questionnaires. The research assistants went back to collect the completed questionnaires. The researcher monitored the distribution and return of completed questionnaires. After receiving the completed questionnaires, the researcher assigned a numerical code to each questionnaire. Out of the 860 questionnaires that were distributed 544 completed ones were returned.

## 5.4 Validity and reliability

Validity refers to the appropriateness, meaningfulness and usefulness of specific inferences made from research data, while reliability can be described as the degree to which observed events or data are free from errors (Dooley 2001: 76).

In the view of Connaway and Powell (2010: 60), research is considered valid when the conclusions are true, reliable and when the findings are repeatable. Anderson (2009: 148-149) also described reliability as the extent to which similar results would be obtained in all similar occasions and validity is a judgment about whether the data really provides evidence about what it is supposed to be.

The researcher was guided by the suggestions of Easterby-Smith *et al.* (2002) and Robson (2002) on the questions that need to be asked in order to achieve reliability and credibility:

- How likely is it that the method used would generate the same or similar results in other comparable research?
- To what extent has the research communicated clearly how data was collected and analysed
- Is it easy to understand how raw data has been gathered and analysed?
- What difference might the context of the investigation make to the data that is generated?
- To what extent has the enquiry process itself influenced the possible answers?
- How easy is it to separate cause from effect in the data?
- How sure can you be that other factors (intervening variables) have not affected your data?

The researcher applied the suggestions of Anderson (2009); Esterby-Smith *et al.* (2002); and Robson (2002) to help reduce biases and errors throughout the research process especially during the orientation and interviewing. Careful rehearsal helped to reduce biases and errors.

Triangulation the process of using multiple data collection and analysis methods was also used to ensure validity of the findings. Triangulation is generally considered one of the best ways to enhance validity and reliability in qualitative research (Babbie & Mouton 2001: 275).Triangulation helped the researcher to get an in-depth understanding of the answers provided by the respondents.



According to Creswell and Clark (2007: 134), internal validity refers to the situation where the researcher can only draw inferences from the sampled population, while external validity refers to the situation where correct inferences can only be drawn from features of the perceive settings of past and future situations. The interview guide and pre-testing of questionnaires also helped to increase reliability and validity of the chosen data collection instruments. Appropriate respondents were identified for the qualitative data collection and this helped to get the appropriate answers.

### 5.5 Data Analysis

Bogdan and Biklen (1992) view data analysis as a process of arranging or organising information gathered from research so as to increase the researcher's understanding and enables a presentation of what has been uncovered to the readers. Data analysis is also a means to organise, provide structure and elicit meaning.

The researcher made used of the mixed analysis methods. According to Onwuegbuzie *et al.* (2007: 5) the fundamental principle of a mixed analysis methods involves the use of quantitative and qualitative analytical techniques that are utilised either concurrently or sequentially, after the data collection process from which interpretations are made either in a parallel, integrated or iterative manner. The mixed analysis process goes through the following stages; data reduction, data display, data transformation, data correction, data consolidation, data comparison and data integration (Onwuegbuzie *et al.* 2007: 11).

#### 5.5.1 Analysis of qualitative data

The qualitative data collected from the interview and observation instruments were analysed using thematic content analysis technique.

# 5.5.1.1 Thematic Content Analysis Technique (TCA)

The thematic content analysis technique is a descriptive presentation of qualitative data. Qualitative data may take the form of interview transcripts collected from research participants or other identified texts that reflect experientially on the topic of the study. A satisfactory thematic content analysis portrays the thematic content of interview transcripts (or other texts) by identifying common themes in the texts provided for analysis (Anderson 1998: 69-84).

The thematic content analysis, make multiple copies of interview transcripts including post-interview notes and mark them with a highlighter. Meaningful units are then separated by a break or change in meaning. Similar units are then coded and put together. This is follow by labelling each file as initial categories (themes) using key words or phrases copied from highlighted texts (Anderson 1998: 69-84). The researcher was guided by principles for using TCA. The entire interview transcripts were reviewed and distinct units were identified, grouped and re grouped. Similar and dissimilar units re-labelled. The categories or themes were then considered as a whole to render meaning to the highlighted texts given the topics.

The researcher finally read through each theme separately and combined categories/themes for all interview transcripts and notes until he was satisfied with the themes.

The qualitative data analysis for this study was based on two principles, analysis as an ongoing process that feeds back into the research design right up to the last moment of data gathering and the use of the principle that whatever model, theory or hypothesis eventually developed must grow naturally from data analysis rather than standing to the side as a priori statement that the data affirm.

Qualitative analysis for this study began with sorting and arranging the data from interviews and observations into an excel spread sheet. For each of the identified questions, a new work sheet was created and the words and phrases used by the interviewees were entered into the worksheet. The detail analysis began with a coding process, coding involved dividing the text data into categories and labelling the categories with terms as suggested by Anderson (1998: 64-96).

The recorded interview data was transcribed, analysed and coded into categories. The data was later compared with the researcher's notes taken during the interview process to scan for possible omissions or additions. The data was subsequently integrated using the thematic content analysis technique. Patterns were assessed to identify common attributes which by and large helped in making meaning out of the data. The observed behaviour was also recorded, analysed, coded and categorised. The coding of observed behaviour focused on defined events that were to be observed.

The study was also guided by the suggestions of Anderson (1998: 64-96) that the first stage of data analysis or the interpretation process requires that the survey responses are entered into a database using database management systems. The next stage was data preparation and cleaning. This involves identifying and removing or at least correcting the various types of problematic responses that occur in the data collection process.

The researcher after recording, analysing, coding and categorising the interviews and observed data, entered the processed data into Microsoft excel database created for this purpose. This was followed with cleaning of data. Neuman (2000: 316) agrees that errors made when entering data into a computerised database can threaten the validity of measurement and cause misleading results. Some of the common and visible mistakes were identified and the necessary corrections made.

According to Welman and Kruger (2001: 194), an appropriate statistical procedure to analyse the data should be decided on before starting the data collection process. The researcher decided ahead of time to use the thematic content analysis technique for the qualitative data. In this study the researcher critically looked out for patterns both in the interview and observed results and the interpretation of the results was based on the observed patterns.

#### 5.5.2 Quantitative data analysis

Quantitative research requires multivariate, descriptive and inferential statistical analysis. The quantitative data that were collected was coded and analysed with the use of the Statistical Package for Service Solution (SPSS) version 16.

The software was used for analysis at various stages. The descriptive statistics in the form of frequency distribution, percentages, pie charts, histograms and regression models were used. The frequency distribution percentage was used to determine the proportion of respondents choosing the various responses. This was done for each group of items relating to the research questions. The proportion showed the diverse views of respondents on the issues raised in the questionnaires. Tables, charts, graphs were also used to ensure easy understanding of the analysis. Information from the data analysis was summarised and conclusion/recommendations were made. The research questions and hypotheses served as a guide in the analysis. Inferential statistics such as simple analysis of variance (ANOVA), t test, pearson product correlation and chi square were used to establish significant differences between variables. The software also helped in conducting in-depth data analysis. The inferential statistics was also used to reach conclusions and make generalisations. The package also helped to investigate and establish relationships of interest.

## 5.6 **Population**

Burns and Grove (2003: 213) describe the research population of a study as all the elements that meet the criteria for inclusion in the study. The population constitutes all the units of analysis about which the researcher wishes to study.

Jonhson and Christensen (2008: 224); Welman, Kruger and Michell (2005: 52); Babbie and Mouton (2001: 174); Cohen, Manion and Morrison (2000: 172) and Rassel and O'Sullivan (1995: 34), describe population as a group that is the subject of research interest. In other words a study population is the aggregation of elements from which the sample is selected.

A research population can therefore be described as the total of all cases that conform to a pre-specified criterion or set of criteria. The determination of the research population must precede the selection of the samples. The determination of the population must be done carefully with regard to predetermined criteria such as the desired size and the parameters of the survey population. It is important to consider costs in terms of time and money when selecting a population. If the population is too large or expensive to manage then the study will be handicapped from the start. Obviously members of the population must be readily accessible to the researcher; otherwise it will be difficult if not impossible to collect the necessary data.

The first targeted population for this study was the library staff of the five selected university libraries in Ghana namely, University of Ghana, Methodist University College Ghana, Central University College, University of Cape Coast and University of Education Winneba. The selection of the five institutions took into consideration the need to have both public and private universities represented; the location or accessibility; and the state of the university libraries amongst others. The selection of the libraries also took into consideration the composition of the library staff which consisted of professional and para professional librarians, as well as administrative and IT staff. The total population of library staff from the five university libraries was 503.

The second targeted population for this study was the faculty of the participating institutions. The selection took into consideration, the composition of Faculty which consists of Professors, Associate Professors, Senior Lecturers, Lecturers, Assistant Lecturers, Research Fellows and Teaching Assistants. The total population of this group was 12417.

The third targeted population were the students of the five selected institutions. The researcher took into consideration the need to include undergraduates and postgraduates. The total population in this group was 126,463.

The three groups namely library staff, faculty and students were selected for this study because they are stakeholders in the management, provision and use of library and information services. For instance the library staff as the focus group of this study are responsible for the provision of library and information services to the university community. The faculty and students as the main beneficiary of library and information services are also in a better position to assess the contribution library staff to effective library and information services.

#### 5.6.1 Table of population

Table of population				
	Library Staff	Faculty Staff	Students	Total
University of Ghana	119	4898	30896	35913
University of Cape Coast	230	5025	42500	47755
University of Education Winneba.	104	1629	38459	40192
Central University College	34	480	9008	9522
Methodist University College Ghana	16	385	5600	6001
Total	503	12417	126463	139383

#### 5.7 Sampling

Sampling is the process of selecting units of analysis from a population (Jupp 2006:271). Melville and Goddard (2001:34) also define a sample as a subset of a population. Sampling is an empirical survey research method that depends upon a sample which is assumed to represent a population accurately. Therefore, the techniques by which the sample is chosen are vital to the validity of the research findings. There are basically three kinds of sampling techniques; probability, non-probability and mixed sampling methods.

# 5.7.1 Probability sampling

Probability sampling occurs when people constituting a sample are chosen because the researcher has some notion of the probability that they will represent the population being studied. Probability sampling enhances the likelihood of accomplishing the objective of selecting elements that accurately represent the total population from which the elements were drawn. The objective is to provide a method for estimating the degree of probable success; it incorporates probability theory which provides the basis of probability of being included. A probability sample may consist of random, systematic, stratified, quota,

cluster, or multi stage sampling (Teddlie & Tashakkori 2009:171 & Teddlie & Yu 2007: 72-77).

# 5.7.1.1 Systematic random sampling

Systematic random sampling involves the selection of a sample from the whole population using a list arranged purely in a random order, for example alphabetical order. The advantage of this technique is that it is highly representative of all the subjects that participate. The disadvantage, however, is that the technique can lead to serious biases if the list is ordered in a way that makes trends to re-occur, in which case the random starting position can affect the results. It is also uneconomical to achieve. It can be disruptive to isolate members from a group, the timescale may be too long and the data sample could change.

In spite of the disadvantages the systematic random probability technique was used in this study to select from three sampled strata of the population, namely library staff, faculty and students. The researcher made extensive use of the services of a professional statistician to assist in the application of the technique and this helped to minimise the errors of the result.

# 5.7.1.2 Stratified random sampling

Patton (2002) describes stratified sampling as a technique of selecting samples within samples. According to Kothari (2004: 62), stratified sampling divides a population into

several sub-populations that are individually more homogeneous than the total population. The different sub-populations are called strata and items are selected from each stratum to constitute a sample.

Bowling (2002: 185) argues that stratified sampling guards against obtaining by chance an unrepresentative sample which under or over represents certain groups of the population. It also increases the precision of the sample and ensures that different population groups in the population strata are correctly represented in the sample in the proportion in which they appear in the population. The simple or systematic probability sampling technique is used to select from the stratum (Bowling 2002: 185). The significant advantage of stratified sampling is that the researcher can maintain some control over the selection of the samples in order to guarantee that crucial people are covered in the population (Denscombe 1998: 13). The limitations, however, of the stratified sampling technique are that, it is more complex and requires greater effort than the simple or systematic random techniques and the strata must be carefully defined. The choice of the size of the samples inside each stratum can be problematic. It may also be difficult to divide some populations into strata.

The stratified sampling technique was used in this study to divide the population into three strata which consisted of library staff, faculty and students. The sampling units in this study included the various designations of faculty and library staff as well as the students. For instance, the library staff of the various selected university libraries consists of professional librarians, para-professional librarians, administrative and information



technology staff. The researcher was interested in understanding the views of the various groups of the population and the stratified sampling technique was viewed as appropriate.

The faculty group consisted of professors, associate professors, senior lecturers, lecturers, assistant lecturers, research fellows and teaching assistants. The student group was also made up of post graduate and under graduate students. The researcher ensured that the various categories and levels of staff and students were represented in the sampled population. The systematic random sampling technique was used after the stratified random sampling technique had been used to divide the population into strata to select from the stratified samples.

#### 5.7.2 Non- probability sampling

The Non-probability sampling methods include purposive sampling, quota sampling, snowball sampling and dimensional sampling. This study made use of purposive sampling which is discussed as follows:

# 5.7.2.1 Purposive sampling

Purposive sampling is a non-probability and qualitative sampling technique. It involves selecting certain units or cases based on a specific purpose (Tashakkori & Teddlie 2003: 713). According to Creswell and Plano Clark (2007); Uys and Puttergi (2003: 113); Mason (2002: 140) and Miles and Huberman (1994) purposive sampling frameworks are

typically informed ones based on an expert judgment. The samples are typically designed to pick smaller number of cases that will yield the most important information about a particular phenomenon. It is designed to hand pick subjects on the basis of specific characteristics and it ensures a balance of group sizes when multiple groups are to be selected. At times, it may seem preferable to select a sample based entirely on one's knowledge of the population and the objectives of the research.

The researcher makes the assumption that such a sample would be reasonably typical of the selected population. Unfortunately sometimes such an assumption may not be justified. There is no assurance that purposive samples are actually representative of the total population. Babbie (1998: 195) argues that purposive samples are not easily defensible as being representative of the population due to the potential subjectivity of the researcher.

The researcher used the purposive sampling technique to select some library and faculty staff as well students whose views were relevant to the study but were within the underlying sampled population. For instance, some key library and faculty staff and students were selected through the use of purposive sampling because of the role they played in the management and use of the university libraries. The researcher made use of expert advice in applying the purposive sampling technique to this study in order to minimise the errors associated with this method.

211

# 5.7.3 Mixed sampling method

Tashakkori and Teddlie (2003: 712) describe mixed methods sampling as a sampling strategy in which both probability and non-probability sampling techniques are used at different levels of a study.

The researcher made use of mixed sampling methods to sample the population for this study. For instance, the stratified random sampling technique was used to divide the population into three strata namely; Library staff, Faculty and Student groups, while the systematic random sampling technique was used to select samples from the various strata. The purposive sampling framework was also used to select some key people from the various strata into the sampled population. The researcher was guided by the suggestions by Miles and Huberman (1994) in using the mixed sampling methods:

- The sampling strategy should stem logically from the research questions and hypotheses that are being addressed by the study. Most mixed methods studies involve the use of both probability and non-probability sampling techniques, but there are some cases where either probability sampling or purposive sampling alone is appropriate.
- Researchers should be sure to follow the assumptions of probability and purposive sampling techniques that they are using.
- The sampling strategy should generate both qualitative and quantitative data based on the research questions.
- The sampling strategy should allow the researcher to draw clear inferences from both the qualitative and quantitative data.

- The sampling strategy must be ethical; there are very important ethical considerations in
  mixed methods research Specific issues related to sampling include informed consent
  to participate in the study. Whether participants have actually been given informed
  consent to participate, the potential benefits and risks to the participants, the need for
  absolute assurances that any promised confidentiality can be maintained and the right to
  withdraw from the study at any time.
- The sampling strategy should be feasible and efficient.
- The sampling strategy should allow the researcher to transfer or generalise the conclusions of the study. This refers to external validity and transferability.
- The researcher should describe the sampling strategy in all detail that other investigations can understand what they actually did and perhaps strategies in future studies.

The researcher used the mixed sampling methods because of the nature of the research questions and the aim to minimise errors with the findings of the study.

## 5.7.4 Sample size

Prashant and Supriya (2010: 55-57), describe a sample size as the number of participants in a sample. The principle and methods used to calculate sample size must ensure confidence level. For instance the acceptable level of significance is a p value of ("p"<0.05) which means that there is 5% probability that the results were observed by chance and not due to intervention. A 5% chance of erroneous reporting is significant but acceptable. The factors that influence the sample size include population size and the sampling error that may be allowed. In addition to these, the three criteria that need to be specified in order to determine an appropriate sample size are, the level of precision required, the confidence level or risk and the degree of variability in the attributes being measured (Israel 1992; Miaoulis & Michener 1976).

A number of strategies exist for actually determining the sample size. For small population one may use a census of the entire population as the sample size. However as the population size grows cost make the strategy less attractive. It is ideal for population less than 200. The method eliminates sampling error as each individual in the population is considered. One may also decide to use a sample size as used in previous studies. This method can be very convenient however, unless the previous study scrutinised for accuracy, errors in the previous study may simply be repeated.

Tables published in literature may also be used to help determine the sample size, Such tables will provide the sample size required for a given set of criteria such as for some given combinations of precision, confidence level and variability.

Finally, one may decide to calculate the sample size using a formula. There are a number of formulae available, for this purpose, the researcher used the formula proposed by Cochcan (1963: 75) to provide a representative sample for infinite populations:

$$n_o = \frac{Z^2 p q}{e^2} \tag{1}$$

where  $n_o$  is the sample size required

Z is the value of the z-score obtained from tables and takes into account the desired confidence level.

*p* is the estimated proportion of an attribute present in the population

*q* is 1-*p* and

e is desired level of precision

For a finite population, a corrected or modified form of the equation is used to allow for size of the population

$$n = \frac{n_o}{1 + \frac{(n_o - 1)}{N}}$$
 2

where *n* is the sample size required and *N* the size of the population.

The total population from which samples were collected for this study is 139,383. Using the formula provided, in order to achieve a confidence level of 95% and a confidence interval of 0.05, the sample size was computed to be 384. This produced a relative standard error of 5.10%. A simplified form of the above equation is available and gives an equally good approximation of the sample size (Yamane 1967: 886).

$$n = \frac{N}{1 + N(e)^2} \tag{3}$$

Using the simplified formula, we obtain a value of 399 which is in good agreement with the calculated value and gives us confidence in the approach adopted.

Given that in administering the survey, there could be a degree of non-returns and to achieve the desired confidence level, the following strategy was adopted.

The total sample size from the five institutions was 860. The population was divided into three strata, namely library staff, faculty and students. A systematic random probability technique was used to select from the various strata. A total of 300 participants were selected from the Faculty group, 80 each from the University of Ghana, University of Cape Coast and University of Education Winneba and 40 each from the Methodist University College Ghana and Central University. The selection was based on the total staff strength of the faculty group from the five institutions. Apparently, the total number of faculty staff at the public universities were more than that of the private universities. The selection of faculty sample size was also based on the formula used to determine the total sample size.

The library staff group sample size was 160 participants selected from the five institutions as follows, 40 each from University of Ghana, University of Cape Coast and University of Education Winneba and 20 each from Methodist University College Ghana and Central University. The selection was based on the total staff strength of the various universities libraries. The library staff of the public universities were obviously more that of private universities. The selection of the library staff sample size was also based on the formula used to select the total sample size.

The sample size of the students group from the five institutions was four hundred with the break down as follows; 100 each from the University of Ghana, University of Cape Coast and University of Education Winneba and 50 each from Methodist University College Ghana and Central University College. Again the selection was based on the total student

numbers at the participating institutions. In this way, even if there was a high degree of non-returns, the desired confidence level would still be achieved. The selection of the students sample size was based on the formula used for to select the total sample size.

INSTITUTION	FACULTY	LIBRARY STAFF	STUDENTS	TOTAL
 Methodist	40	20	50	110
University				
College Ghana				
University	80	40	100	240
of Ghana				
Central	40	20	50	110
University				
College				
University	80	40	100	240
of Cape Coast				
University of	60	40	100	240
Education				
Winneba				
Grand total	300	160	400	860

# 5.7.4.1 Table 5.2 Sample size frame

#### 5.8 Ethical considerations

Ethical consideration refers to the moral standards that the researcher should consider throughout the research process. Strydom (2005a: 571) defines ethics as a set of moral principles which are suggested by individuals or groups and, subsequently, widely accepted as rules and behavioural expectations about the most correct conduct towards experimental subjects and respondents. Ethical behaviour is important in research and even so when the research involves human subjects.

This study was guided by the principles suggested by the Belmout Report developed by (the National Commission for the protection of Human Subjects of Biomedical and Behavioural Research) namely beneficence, respect for human dignity, respect for privacy and fair treatment of the participants and the UNISA policy on Research Ethics (UNISA 2007: 9). According to Babbie and Mouton (2001: 525), the researcher has a right to search for truth but not at the expense of the rights of other individuals. The researcher has the right to collect data through interviewing people, but not at the expense of the interviewee's right to privacy.

O'Leary (2004: 43) and Patton (2001: 405) also state that the purpose of a research interview is first and foremost to gather data and not to change people. Therefore, the researchers need to recognise that power can influence the research process and researchers must exercise power with responsibility. Both the integrity of the knowledge produced and the well-being of the research subjects must be protected.

Even though this study did not necessarily involved potential physical risks, the researcher bore in mind the psychological consequences such as loss of job and disciplinary action that some of the participants could suffer by participating in the study. The researcher was also sensitive to the participants' emotions when probing with questions that could psychologically affect them. The participants were therefore told to ignore answering questions that were sensitive to them and made aware of their right to withdraw from the study at any time. All the participants were assured of their privacy and the fact that the information they provide would not be used against them in any way.

The researcher ensured that researcher–participants' relationship was not exploited. The participants were not coerced into taking part in the study. They had the right to decide whether to participate or not. The researcher fully explained the nature and purpose of the study to the participants. The participants' right to fair treatment was paramount. The following were considered throughout the study:

- No-pre judicial treatment of the participants who refused the take part or withdraw from the study.
- The participants had access to the researcher at all times to clarify issues.
- The researcher was sensitive to the participant's beliefs, habits, lifestyle, culture and emotions.
- The purposive sampling technique that was used was based on selecting participants with experience.
- The study was conducted in the participant's natural settings.



The UNISA policy on research ethics also served as a guide to this study. The following were considered:

- A written authority to conduct research was sent to the participating institutions explaining the nature of the study.
- An informed consent form was designed for participants to sign before engaging them in the research.
- The right to participate was voluntary and the right to withdraw from the research at any time was mentioned in the form.
- The purpose and procedure of the study was explained in the questionnaires and during the interviews.
- The study protected the anonymity of individual respondents during the research. The participant names were disassociated from the responses during the coding and recording process (UNISA 2007: 9).

The researcher took into consideration the suggestions on research ethics by Tochim (2006b); Welman, Kruger and Michell (2005: 181); O Leary (2004: 50) and Creswell (2003: 66). For instance, aliases or pseudonyms were used for individuals and places to protect the identities of participants. The researcher also ensured that the participants signed a consent form of participation. They were also assured of the confidentiality of their responses. In this study, the information leaflet and the introduction to the questionnaire and interviews contained information pertaining to confidentiality.

The principle of voluntary participation which requires that research participants were not be forced to participate in the research was enforced. In order to ensure that voluntary participation took place, the heads of departments from the various participating libraries were written to and their consent sought for staff and students to participate in the research. A leaflet was prepared to explain the purpose and objectives of the research. Informed consent means that prospective research participants must be fully informed about the procedures involved and they must give their consent to participate. In order to ensure that this principle was followed, each participant was given a consent form to complete.

#### 5.9 Conclusion

The chapter presented the research methodology that was used for this study. The theoretical perspective of the research approach and design, data collection instruments, sampling techniques and data analysis were discussed. The mixed methods research approach was adopted for this study and the reasons for selecting mixed methods approach for the study is to ensure the accuracy of the findings as much as possible.

The researcher adopted a survey research method because of the large and geographical dispersed population involved in the study. The chapter also discussed in detail the data collection techniques (interview, observation and questionnaire) that were used for this study and the justification for selecting these techniques. It also discusses the measures that were put in place to ensure the validity and reliability of the results.

The researcher adopted a mixed sampling method approach where the researcher combined both probability and non-probability sampling methods in sampling the population for the study. The population for the study consists, of library staff, faculty and students from the five selected universities in Ghana. The total population was 136,463. The sample size was 860. The Chapter further discusses the data analysis methods; thematic content analysis technique was used to analyse the qualitative data, while the Statistical Product for Service Solution (SPSS) version 16 was used to analysed the quantitative data. Finally the chapter presents the ethical considerations that were put in place to ensure moral standards in the research process.

#### CHAPTER SIX

#### **PRESENTATION OF FINDINGS**

## 6.1 Introduction

This Chapter presents the results of the data obtained from the questionnaires administered and interviews conducted for this study. The results were analysed and presented according to the stated research objectives and hypotheses. Both qualitative and quantitative data as described in previous chapters constitute the sources of the data.

A combination of descriptive and quantitative analysis was used. Descriptive analysis was used to describe variables as they exist whilst quantitative analysis which was mainly based on parametric tests was used to test for significance. The parametric tests used included the independent t-test and Pearson's r and the Standard multiple regression. The independent t-test was for instance used to test for significance differences between two independent variables. The presentation of findings was guided by themes from the research questions.

This study investigated the contribution of staff training and development programmes to effective library and information services and its effects on academic work in some selected university libraries in Ghana. The results obtained from the above variables represent what is described in this chapter. Data coding, processing and analysis were conducted with the Statistical Product and Service Solutions (version 16). The Chapter is divided into four sections (1) demographic information of participants (2) testing of hypotheses (3) Assessment of the effects training on library staff work performance (4) analysis of interview/observation results.

# 6.2 Demographic information of participants

The demographic background of participants is presented in a form of frequency tables and bar charts as follows:

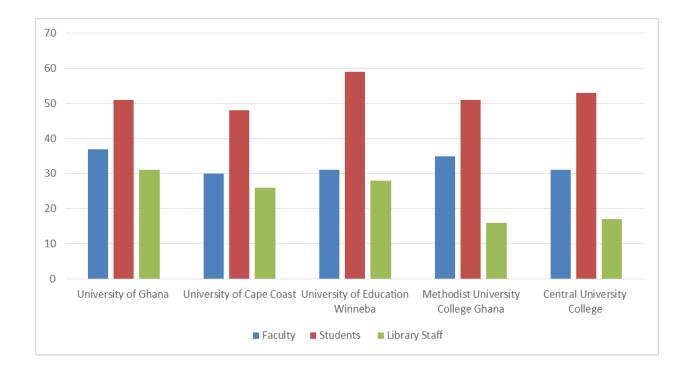
# Table 6.1: Distribution of respondents by institution

(n=	544)
(**-	•••

University	Faculty	Students	Library Staff	Total
University of Ghana	37(6.8)	51(9.4)	31(5.7)	119 (22)
University of Cape Coast	30(5.5)	48(8.8)	26(4.8)	104 (19)
University of Education Winneba	31(5.7)	59(10.8)	28(5.1)	118 (22)
Methodist University College Ghana	35(6.4)	51(9.4)	16(2.9)	102 (19)
Central University College	31(5.7)	53(9.7)	17(3.1)	101 (18)
Total	<b>164</b> ( <i>30</i> )	262(48)	118(22)	544 (100)

\*Percentage in brackets and italics

# Source: Field data (2015).



# Figure 6.1 Distribution of respondents by institution

#### Source: Field data (2015).

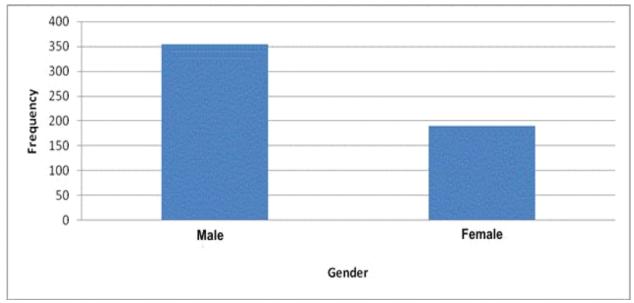
The percentage returns from all the five institutions was about the same, the lowest return of (18%) came from Central University College and the highest return of (22%) came from the University of Ghana.

The results in Table 6.1 indicate that faculty respondents represented 164 (30%) of the total sample. The researcher received almost an equal number of responses from faculty group respondents from the five institutions. The faculty from the University of Ghana and the Methodist University College Ghana constituted the majority of respondents in this category with slightly more respondents than the rest, while the faculty from the University

of Cape Coast were the least in number. This may be attributed to higher staff population at the University of Ghana.

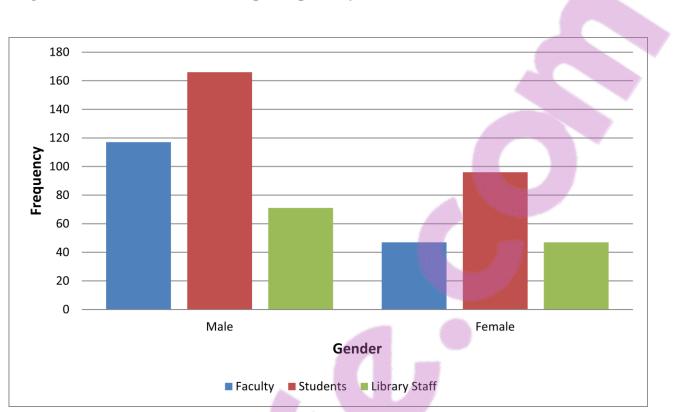
In the case of the Methodist University College Ghana the researcher was known to faculty hence their willingness to support the study. This view may however not be entirely accurate as the numbers from these two institutions were only slightly higher than the other universities.

Students represented 262 (48%) of the total sample out of which those from the University of Education Winneba were the majority whiles those from the University of Cape Coast were the least. Library staff were 118 (22%) of the total sample. Those in the majority among the library staff group were from the University of Ghana and the least from the Methodist University College Ghana.



**Figure 6.2: Gender distribution of participants** 

Source: Field data (2015).



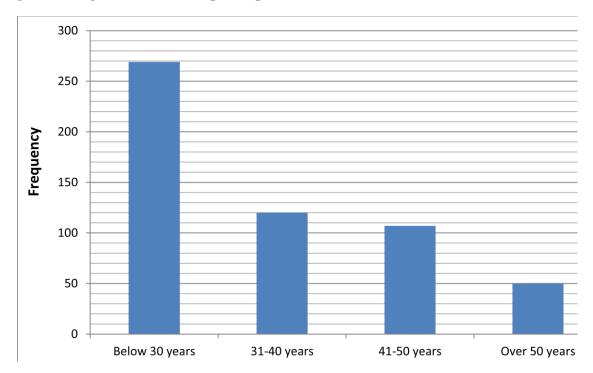
# Figure 6.3 Gender distributions of participants by stratum

Source: Field data (2015).

The results in Figure 6.2 reveal that males dominated in the overall respondents (faculty, library staff and students). The results reflect the gender distribution of workers and students in Ghana where males usually dominate females.

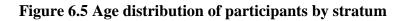
The results in Figure 6.3 further reveal the gender distribution by stratum which indicates the gender distribution of the individual respondent groups.

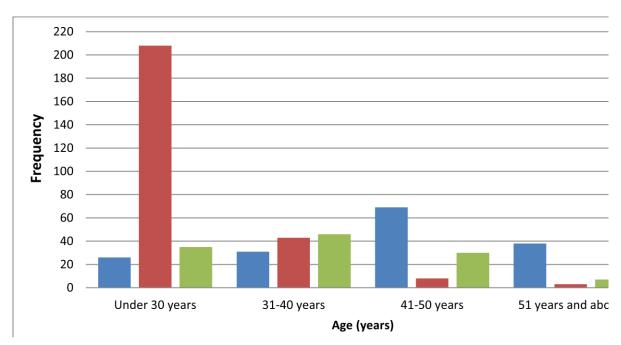




**Figure 6.4 Age distribution of participants** 

Source: Field data (2015).

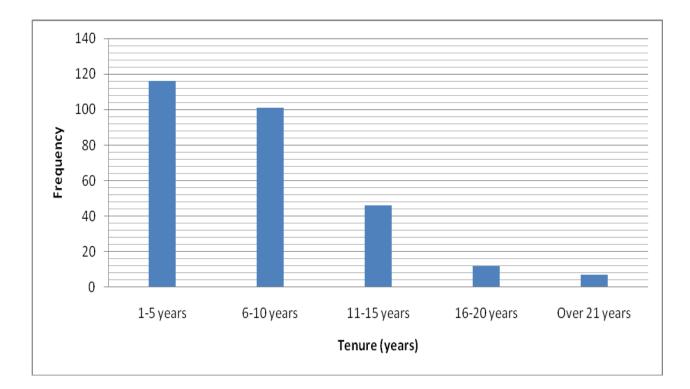




Source: Field data (2015).

Results in Figure 6.4, depict that 269 (49%) were below the age of 30 years. This was followed by 120 (22%) whose age fell within 31-40 years 120 (22%), 107 (20%) were within the 41- 50 years category. Only 50 (9%) were over 50 years. Results also show that (52%) of faculty and library staffs were in the age range of 31-40 years.

The results in Figure 6.5 show a breakdown of the age distribution of the various groups.



# **Figure 6.6: Number of years of service (Tenure)**

Source: Field data (2015).





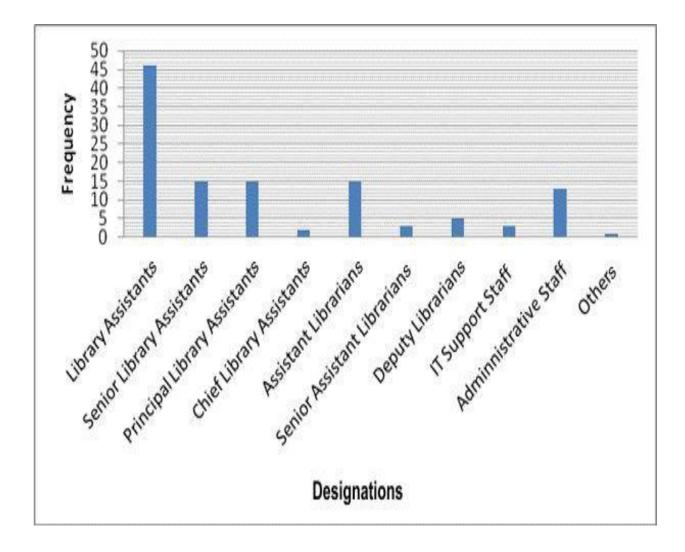
Figure 6.7: Number of years of service (Tenure) by stratum

Source: Field data (2015).

The researcher also attempted to find out the duration of service of both faculty and library staff. The findings on the number of years of service of faculty and library staff are presented in Figure 6.6 and Figure 6.7.

The results of Figure 6.7 reveal the tenure of work of the respondents by the individual groups. It is interesting to note that there was no library staff who had worked at the various institutions for over 21 year.

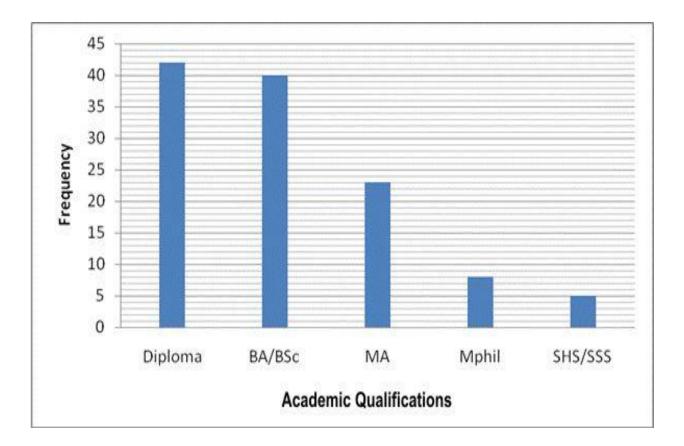
Figure 6.8: Distribution of library staff



Source: Field data (2015).

Figure 6.8 shows that library staff respondents comprised 46 (39%) library assistants,15 (13%) senior library assistants, 15 (13%) principal library assistants, 2 (2%)chief library assistants, 15 (13%) assistant librarian, 3 (3%) senior assistant librarians.5 (4%) deputy librarian, 3 (3%) IT support staff, 13 (11%) administrative staff and 1 (1%) other staff.

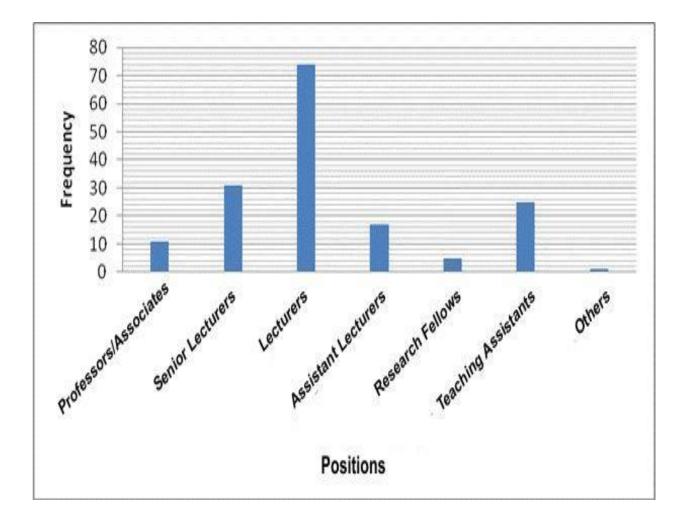




Source: Field data (2015).

The academic qualifications of library staff indicated the following: The highest number of 42 (36%) had a diploma. The next highest 40 (34%) had BA/Bsc. In the category of postgraduate degrees 23 (20%) had a Master of Arts degree and 8 (7%) had MPhil. Only and 5 (4%) had SHS/SSS. The results show that the majority of library staff respondents were para professionals and had obtained at least the minimum qualifications to work in their various positions.

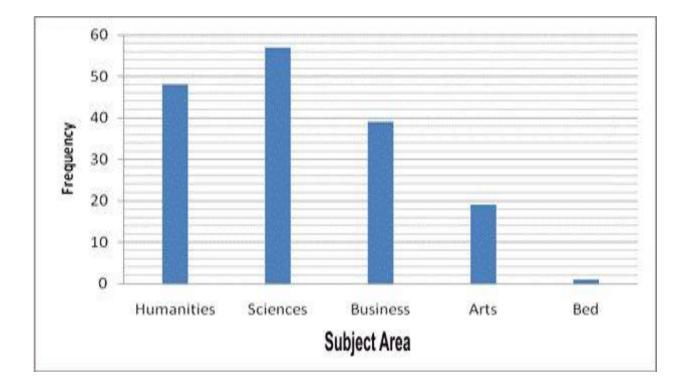
Figure 6.10: Distribution of faculty staff



## Source: Field data (2015).

Figure 6.10 shows the distribution of faculty: 11 (7%) were professors/associates, 31 (19%) were senior lecturers, 74 (45%) were lecturers, 17 (10%) were assistant lecturers, 5 (3%) were research fellows, 2 (15%) were teaching assistants. The "other" category was only 1(1%).

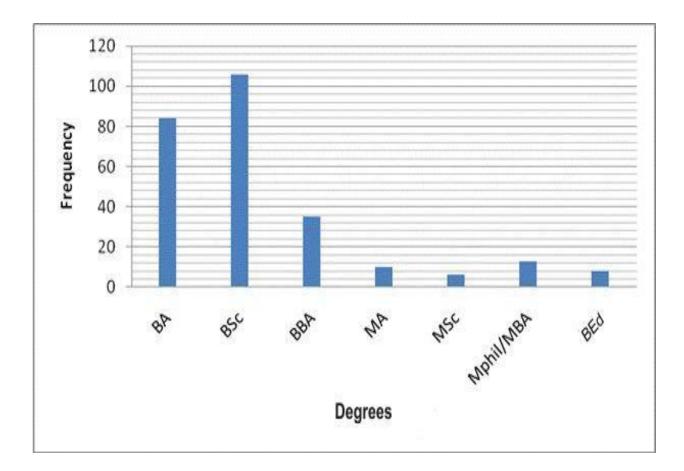
Figure 6.11: Subject areas of faculty staff



Source: Field data (2015).

Figure 6.11 reveals that the subject areas of faculty included, Humanities 48 (29%), Sciences 57 (35%), Business 39 (24%), Arts 19 (12%) and B ED 1 (1%).

With regard to the students, the findings show that they were enrolled in different types of degree programmes. This is shown in Figure 6.12.

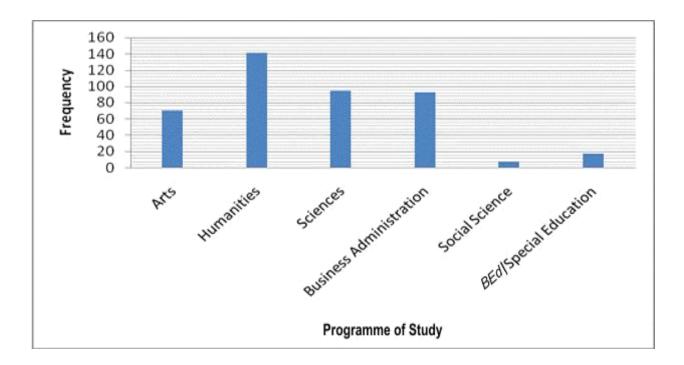


**Figure 6.12: Type of degree pursued by student participants** 

#### Source: Field data (2015).

The results in Figure 6.12 show that the degrees pursued by students consisted of 84 (32%) BA; 106 (41%) were studying BSc; 35 (13%) were pursuing BBA; 10(4%) were pursuing MA; 6 (2%) were studying MSc; 13 (5%) were pursuing MPhil/MBA and 8 (3%) were studying BEd/Special Education. The results show that there was a fair representation of students across the various academic programmes. Both undergraduates and post graduates were represented in this study.

Figure 6.13: Student programme of study



#### Source: Field data (2015).

The results in Figure 6.13, shows that student respondents programme of study included: 71 (17%) were pursuing programmes from the Arts; 141 (33%) were pursuing programmes from the Humanities; 95 (22%) were pursuing programmes from the Sciences; 93 (22%) were pursuing from business administration; 8 (2%) were pursuing programmes from Social Science and 18 (4%) were programmes from BEd/Special education. The results suggest that the various faculties were fairly represented amongst the student group.

### 6.3 Staff training and development programmes

The study attempted to find answers to a number of issues about staff training and development programmes in the selected university libraries in Ghana. These include,

awareness of the staff training and development programmes, extent of use of these programmes by library staff, contribution of the programmes to library staff work performance, satisfaction with the programmes, monitoring and evaluation of staff training and development programmes, training needs analysis, effects of staff training and development on academic work as well as satisfaction with library services.

 Table 6.2: Awareness of staff training and development programmes by all respondents

Awareness	Faculty	Students	Library	Total
			Staff	
Aware	110(20)	200(37)	70(13)	380 (70)
Unaware	54(10)	62(7)	48(9)	164 (30)
Total	<b>164</b> ( <i>30</i> )	262(48)	118(22)	544 (100)

### Source: Field data (2015).

The results from Table 6.2 show that the majority 380 (70%) were aware of the existence of staff training and development programmes in their respective universities in Ghana. The findings further revealed that all the respondents had benefited either directly or indirectly from staff training and programmes though not all of them were working with the university libraries.

This question was asked all the respondents namely library staff, faculty and students because the researcher wanted to ascertain the opinion of both library staff and users on staff training and development and its effect on job performance especially in the delivery of library and information services, the result of well-trained library staff reflects directly on the services provided to the library users, for instance a library staff who received training on effective search of e resources should be able to transfer the knowledge and skills directly to library users. Library users are therefore in the position to know the contribution of training and development to job performance based on the work outputs of library staff.

#### 6.3.1 The use of staff training and development programmes by library staff

The findings on the extent of use of staff training and development programmes are presented in Table 6.3.

	1	2	2	4	
Training and development	1	2	3	4	5
programmes					
Classroom training	79(66.9)	21(17.8)	8(6.8)	6(5.1)	4(3.4)
Job rotation	57(48.3)	39(33.1)	9(7.6)	1(0.8)	12(10.2)
Consultant training	86(72.9)	22(18.6)	1(0.8)	5(4.2)	4(3.4)
Mentoring /Coaching	86(72.9)	14(11.9)	4(3.4)	0(0.0)	14(11.9)
Workshop/Seminars/ Conferences	60(50.8)	20(16.9)	19(16.1)	7(5.9)	12(10.2)
Long distance learning	95(80.5)	6(5.1)	6(5.1)	8(6.8)	3(2.5)
Study visits	98(83.1)	14(11.9)	1(0.8)	3(2.5)	2(1.7)
Case studies	107(90.7)	8(6.8)	1(0.8)	0(0.0)	2(1.7)
Simulation and use of games	108(91.5)	6(5.1)	2(1.7)	0(0.0)	2(1.7)
Publications and research	97(82.2)	12(10.2)	7(5.9)	0(0.0)	2(1.7)
Professional association	88(74.6)	21(17.8)	3(2.5)	3(2.5)	3(2.5)
Average	87(73.7)	17(14.4)	6(5.0)	3(2.5)	5(4.2)

# Table 6.3 The extent of use of staff training and development programmes by library staff

Percentage in italics 1- Never used, 2- Once a year, 3- Twice a year, 4- Thrice a year, 5- More than four times a year.

## Source: Field data (2015).

N=118



Table 6.3 shows the results of the extent of use of staff training and development programmes by library staff. The results depict that an average of 87 (73.7%) of the total sample of the library staff group never benefited to any of the staff development programmes. Job rotation turned out to be the most used staff training and development programme with 39 (33.1%) of the library staff using it once in a year. The least used methods were long distance learning, simulation/ use games, with 6 (5.1%) each.

# 6.3.2 Contribution of staff training and development programmes to library staff work performance

The findings on the contribution of staff training and development programmes to work performance in the opinions of library staff respondents are presented in Table 6.4

Training and	1	2	3	4	5
development programmes					
Class training	29(24.6)	55(46.6)	20(16.9)	1 (0.8)	13(11.0)
Job rotation	14(11.9)	82(69.5)	12(10.2)	3(2.5)	7(5.9)
Consultant training	7(5.9)	57(48.3)	18(15.3)	17(14.4)	19(16.1)
Mentoring /Coaching	17(14.4)	52(44.1)	25(21.2)	3(2.5)	21(17.8)
Workshop/seminars/	29(24.6)	54(45.8)	23(19.5)	9(7.6)	3(2.5)
conferences					
Long distance learning	18(15.3)	43(36.4)	20(16.9)	9(7.6)	28(23.7)
Study visits	7(5.9)	51(43.2)	18(15.3)	12(10.2)	30(25.4)
Case studies	12(10.2)	40(33.9)	25(21.2)	14(11.9)	27(22.9)
Simulation and use of	9(7.6)	36(30.5)	29(24.6)	13(11.0)	31(26.3)
games					
Publications and research	19(16.1)	34(28.8)	15(12.7)	28(23.7)	22(18.6)
Professional association	18(15.3)	41(34.7)	22(18.6)	22(18.6)	15(12.7)
Average	16(13.5)	<b>49</b> ( <i>41.5</i> )	21(17.8)	12(10.2)	20(16.9)

# Table 6.4: Contribution of staff training and development programmes to work performance

Percentage in italics 1- Extremely, 2- High, 3- Neutral/Not sure, 4- Moderate, 5- No contribution.

Source: Field data (2015).

Table 6.4 shows the results on the extent to which staff training and development programmes have contributed to work performance of library staff. The results depict that a total of 65 (55.0%), indicated that staff training and development programmes had contributed immensely to their work performance, with 16 (13.5%) and 49 (41.5%), responding "extremely" and "highly" respectively, to the question on the level of the contribution of staff training and development to library staff work performance. Among the training programmes, job rotation turned out to be the programme that had contributed most to library staff work performance with a total of 96 (81.4%), responding "extremely" and "highly" to the level of contribution.

This was followed by classroom training (71.2%), workshop/seminars/conferences (70.4%), mentoring/coaching (58.5%), consultant training (54.2%) and long distance learning (51.7%). On the other hand, simulations and use of game were the least contributing programme to staff performance with only 45 (38.1%) responding "extremely" and "highly".

# 6.3.3 Relationship between awareness, use and satisfaction with staff training and development programmes

The bi-variate correlation analysis was conducted to determine the relationship between awareness and use of training programmes and satisfaction. Relevant information on this is presented in Table 6.5. 

 Table 6.5: Correlation between awareness of staff training and development programmes,

 use and satisfaction with the programmes

(n=118)					
Variables	Mean	Std dev.	df	R	Sig
Level of awareness	17.47	6.81			
Use of training programmes	14.08	4.85	424	0.372	0.021
Level of awareness	17.47	6.81			
Satisfaction with training	16.46	6.97	424	0.283	0.036

### Source: Field data (2015).

Results in Table 6.5 shows that a positive correlation exists between the level of awareness of staff training and development programmes and the use of these programmes  $[r_{(424)} = 0.372, p = 0.021]$ . A significant positive correlation also exists between level of awareness of training and development programmes and satisfaction  $[r_{(424)} = 0.283, p = 0.036]$ .

### 6.3.4 Evaluation of staff training and development policy

The library staff respondents were asked to evaluate the staff training and development policies of the various universities and the results obtained on this are presented in Table 6.6 below.

(1110)					
Staff training and development	1	2	3	4	5
policy					
Coverage of policy	27(22.9%)	55(46.%6)	19(16.1%)	13(11.0%)	4(3.4%)
Selection criteria	34(28.8%)	40(33.9%)	26(22.0%)	11(9.3%)	7(5.9%)
Relevance of T&D programmes	24(20.3%)	67(56.8%)	13(11.0%)	14(11.9%)	0(0.0%)
Training methods	21(17.8%)	65(55.1%)	19(16.1%)	11(9.3%)	2(2.7%)
Organisational support	15(12.7%)	60(50.8%)	28(23.7%)	8(6.8%)	7(5.9%)
Monitoring and evaluation	24(20.3%)	29(24.6%)	33(28.0%)	17(14.4%)	15(12.7%)
Average	24(20.0%)	53(44.9%)	23 (19.5%)	12(10.5%)	6(5.1%)

#### Table 6.6: Evaluation of staff training and development policy

Percentage in italics, 1-Very satisfied, 2- Satisfied, 3- Neutral/not sure, 4- Dissatisfied, 5- Very dissatisfied

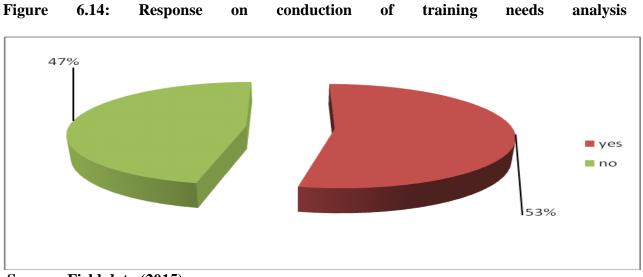
Source: Field data (2015).

(n=118)

Results in Table 6.6 show that a significant proportion of the library staff respondents with an average of 77 (64.9%), were satisfied with the staff training and development policies of the respective universities. This satisfaction was high in relation to; the coverage or content of the policies (79.5%), relevance of the training and development programmes (77.1%)) and training methods (72.9%). The least satisfaction was with monitoring and evaluation of the staff training programmes (44.9%).

### 6.3.5 Training needs analysis

Responses on whether the institutions conducted training needs analysis/assessment are presented in the chart below.



Source: Field data (2015).

Figure 6.11 shows the results on whether or not training needs analysis was carried out by the respective institutions. More than half (53%) of the library staff reported that training needs analysis was conducted in their respective institutions.

### 6.3.6 Training needs analysis methods

Information on the most used methods in identifying training needs analysis in the university libraries are presented in Table 6.7.

Table 6.7: The methods	used to identify	training needs	participants

Methods	Frequency	Percentage (%)
Questionnaire	40	33.9
Observation	35	29.6
Interview	44	37.3
Job description	47	39.8
The difficulty analysis	1	0.8
Problem solving conference	22	18.6
Appraisal review	52	44.1
Drive pattern analysis	4	3.3
Analysis of organisational policy	14	11.8

# Source: Field data (2015).

The results in Table 6.7, show that the methods often used to identify training needs of respondents included the appraisal review 52 (44.1%), job description 47 (39.8%), interview 44 (37.3%) and questionnaire 40 (33.9%) methods. The least used methods included the difficulty analysis method 1 (0.8%), drive pattern analysis method 4 (3.3%), analysis of organisational policy 14(11.8%), problem solving method 22 (18.6%) and observation method 35 (29.6%).

The highest rated method with 52 (44.1%) was the appraisal review and the drive pattern with 4 (3.3%) was the least used method.

## 6.3.7 Benefits of staff training and development programmes

On the benefits derived from staff training and development programmes by library staff, the following result was obtained.

Effects	Frequency	Percent
Increased job satisfaction	81	68.6
Improved conditions of service	32	27.1
Increased job security	37	31.4
Increased knowledge, skills and experience	97	82.2
Improved customer service	70	59.3
Improved employee/staff relations	66	55.9
Increased productivity	73	61.9
Increased staff motivation	40	33.9

# Source: Field data (2015).

The results in Table 6.8 show that among the benefits respondents derived from training and development were increased knowledge, skills and experience 97 (82.2%), increased job satisfaction 81 (68.6%), increased productivity 73 (61.9%) and improved customer service 70 (59.3%). The other benefits included improved employee relations 66 (55.9%), increased staff motivation 40 (33.9%), increased job security 37 (31.4%) and improved conditions of service 32 (27.1%).

#### 6.3.8 Areas of work that staff development programme has benefited library staff

The study attempted to find out which were the particular areas of library work where staff training and development programmes had benefited library staff. The findings are presented in Table 6.9.

Table 6.9: Areas of work	where staff	training and	development	programmes has
benefited library staff				

Areas of work	1	2	3	4	5
Understanding information needs of users	49(41.5)	55(46.6)	13(11.0)	1(0.8)	0(0.0)
Understanding information sources	40(34.7)	62(33.9)	14(11.9)	1(0.8)	1(0.8)
Acquisition of information based on needs	41(34.7)	57(48.3)	17(14.4)	3(2.5)	0(0.0)
Organization of information	40(33.9)	61(51.7)	12(10.2)	4(3.4)	1(0.8)
Information search/retrieval	59(50.0)	39(33.1)	14(11.9)	6(5.1)	0(0.0)
Evaluation of information	30(25.4)	54(45.8)	28(23.7)	5(4.2)	1(0.8)
Searching/retrieval of information	47(39.8)	63(53.4)	6(5.1)	2(1.7)	0(0.0)
Timely delivery of information	45(38.1)	47(39.8)	24(20.3)	2(1.7)	0(0.0)
Meeting information needs of users	39(33.1)	59(50.0)	19(16.1)	1(0.8)	0(0.0)

Percentage in italics, 1–Extremely, 2-High, 3–Neutral/not sure, 4 -Moderate, 5–No contribution

#### Source: Field data (2015).

As depicted in Table 6.9, the areas of work where staff training and development programmes had benefitted library staff either extremely or highly in the opinion of the respondents included; searching/retrieval of information 110 (93.2%), understanding information needs of the users 104 (88.1%) and understanding information sources 102 (86.4%). The least areas of



contribution included: evaluation of information 84 (71.2%) and timely delivery of information 92 (77.9%)

# 6.3.9 Responses from library staff on monitoring and evaluation of staff training and development programmes

The results on the responses of library staff on monitoring and evaluation of staff training and development programmes are presented in Table 6.11 below.

# Table 6.10: Criteria and methods of monitoring and evaluating staff training and development programmes

Type of evaluation	Observation	Interview	Questionnaire	Records analysis
Reaction	38(61.3)	13(21.0)	7(11.3)	4(6.5)
Learning	40(46.5)	27(31.4)	6(7.0)	13(15.1)
Behaviour	57(78.1)	4(5.5)	6(8.2)	6(8.2)
Results	27(40.3)	9(13.4)	3(4.5)	28(41.8)
Return on investment	33(49.3)	8(11.9)	3(4.5)	23(34.3)

Source: Field data (2015).

Results of the study show on the criteria used to monitor and evaluate training programmes reveal the following, reaction 62 (72.8%), learning 86 (72.8%), behaviour 73 (61.8%), results 67 (56.7%) and return on investment 67 (56.7%).

#### 6.3.10 When is monitoring and evaluation done?

The researcher found out from the library staff respondents when and how often the monitoring and evaluation was done after training. The findings are presented in Table 6.1.

# Table 6.11: When is the monitoring and evaluation of staff training and development programmes done?

Monitoring and Evaluation Period	Yes	No
Before and during training	39(33.1)	79(66.9)
During and after the training	65(55.1)	53(44.9)
Before and immediately after the training	38(32.2)	80(67.8)
Before, during and after the training	18(15.3)	10084.7)
Six months after the training	1(0.8)	117(99.2)
One year after the training	7(5.9)	111(94.1)
Continuous monitoring and evaluation	35(29.7)	83(70.3)

Source: Field data (2015).

Responses on when monitoring and evaluation was done varied. The highest response rate was on monitoring and evaluation done during and after training 65 (55.1%). The others were before and during training 39 (33.1%), before and immediately after training 38 (32.2%), continuous monitoring and evaluation 35 (29.7%). The least rated monitoring and evaluation periods were before, during and after training 18 (15.3%), one year after training and six months after the training 7 (5.9%) and 1 (08%) respectively.

# 6.3.11 Who is responsible for monitoring and evaluation of training and development programmes?

Findings on the responsibility for monitoring and evaluation staff training and development programmes in the opinion of library staff respondents are presented in Table 6.13.

# Table 6.12 Responsibility for monitoring and evaluation of staff training and development programmes

Monitoring and evaluation responsibility	Yes	No
HR department	60(50.8)	58(49.2)
Trainers/training institutions	38(32.2)	80(67.8)
Clients (library users)	25(21.2)	93(78.8)
Immediate supervisors	73(61.9)	45(38.1)
Colleagues/co workers	25(21.2)	93(78.8)

#### Source: Field data (2015).

Table 6.13 shows the authorities responsible for carrying out the monitoring and evaluation of staff training and development programmes. These included the human resource

department 60 (50.8%), trainers/training institutions 38 (32.2%), clients/library users 25 (21.2%), immediate supervisors 73 (61.9%) and colleagues/co-workers 25 (21.2%).

### 6.4 The use and satisfaction with library services

The study also attempted to find out the opinion of faculty and students on the level of use and satisfaction with the various library services. The findings are presented in Table 6.14.

N=426							
Library services	1	2	3	4	5	6	7
Book lending	0(0.0)	0(0.0)	248 (58.2)	91(21.4)	46(10.8)	25(5.9)	16(3.8)
Literature searches	233(54.7)	103(24.2)	28(6.6)	4(0.9)	58(13.6)	0(0.0)	0(0.0)
References assistance	299(70.2)	72(16.9)	25(5.9)	7(1.6)	23(4.2)	0(0.0)	0(0.0)
(SDI, QAS, CAS RS)							
Inter – library loan	370(87.1)	40(9.4)	11(2.6)	4(0.9)	0(0.0)	0(0.0)	0(0.0)
Bibliographic control	339(79.8)	63(14.8)	13(3.1)	2(0.5)	8(1.9)	0(0.0)	0(0.0)
Information literacy	291(68.3)	94(22.1)	23(5.4)	5(1.2)	13(3.1)	0(0.0)	0(0.0)
training							
Advise on information	251(58.9)	118(27.7)	26(6.1)	5(1.2)	26(6.1)	0(0.0)	0(0.0)
sources							
Provision of study space	194(45.5)	99(23.2)	37(8.7)	24(5.6)	72(16.9)	0(0.0)	0(0.0)
Internet services	177(41.5)	111(26.1)	18(4.2)	31(7.3)	89(20.9)	0(0.0)	0(0.0)
Photocopy services	223(52.3)	104(24.4)	35(8.2)	34(8.0)	30(7.0)	0(0.0)	0(0.0)
Average	238(55.9)	80(18.8)	46(10.8)	28(4.8)	40(9.4)	2(0.5)	1(0.2)

# Table 6.13 The use of library services by faculty and students

Percentage in italics 1- Aware, 2- Not Aware, 3- Never Used, 4- Once a month, 5- Twice a month, 6 - Twice a week, 7 – More than three times a week Source: Field data (2015).

The results from Table 6.14 show that 238 (55.9%), were aware of the existence of the various library services. From the responses on the use of library services book lending was the most used service with 147 (32.2%); indicating that they used this service either "once a month" or "twice a month". This was followed by internet services (28.2%) and the provision of study space (22.5%). Bibliographic control was the least used library service with only 2.4%, responding "once a month" or 'twice a month".

#### 6.4.1 Satisfaction with library services

The findings on the satisfaction expressed by faculty and students with the library services are presented in Table6.15.

Library services	1	2	3	4	5
Book lending	149 (35.0)	123(28.9)	111 (26.1)	31(7.3)	12(2.8)
Literature searches	105(24.6)	153(35.9)	133(31.2)	22(5.2)	13(3.1)
References assistance (SDI,	94(22.1)	111(26.1)	175(41.1)	26(6.1)	20(4.7)
QAS, CAS RS)					
Inter – library loan	66(15.5)	69(16.2)	212(49.8)	31(7.3)	48(11.3)
Bibliographic control	61(14.3)	89(20.9)	230(54.0)	18(4.2)	28(6.6)
Information literacy training	77(18.1)	121(28.4)	163(38.3)	40(9.4)	25(5.9)
Advise on information sources	128(30.0)	132(31.0)	113(26.5)	35(8.2)	18(4.2)
Provision of study space	180(42.3)	116(27.2)	81(19.0)	24(5.6)	25(5.9)
Internet services	164(38.5)	132(31.0)	66(15.5)	34(8.0)	30(7.0)
Photocopy services	126(29.6)	117(27.5)	120(28.2)	31(7.3)	32(7.5)
Average	115(26.9)	116(27.2)	140(32.9)	29(6.8)	25(5.8)

# Table 6.14. Level of satisfaction with library services by faculty and students

Percentage in italics 1- Very Satisfied, 2- Satisfied, 3- Neutral/Not sure, 4- Dissatisfied, 5- Very Dissatisfied.

Source: Field data (2015).

The results from Table 6.15 show that a total average of 231 (54.1%) of faculty and students were satisfied with the library services, with 115 (26.9%) and 116 (27.2%) responding "very satisfied" and "satisfied" respectively. However, internet service and the provision of study space turned out to be the most satisfying among the services with a total of 296 (69.5%) of the total faculty and students sample responding "very satisfied" and "satisfied" to each of them. This was followed by book lending 272 (63.9%), advise on information sources 260 (61%) and literature searches 258 (60.5%), while inter-library loan turned out to be the least satisfying service with only a total of 135 (31.7%) of the total faculty and students sample responding "very satisfied" and "satisfied".

#### 6.4.2 Influence of library services on academic work

The influence of effective library services on academic work was one of the objectives of the study. The objective of this study was to find out the effects of effective library and information services on academic work at the universities in Ghana. The findings on the influence of library services on academic work are presented in Table 6.16.

Library services	1	2	3	4	5
Book lending	96(22.5)	100(23.5)	73(17.1)	59(13.8)	98(23.0)
Literature searches	112(26.3)	107(25.1)	56(13.1)	52(12.2)	99(23.2)
Reference assistance (SDI,	68(16.0)	90(21.1)	96(22.5)	21(4.9)	151(35.4)
QAS, CAS RS)					
Inter – library loan	49(11.5)	45(10.6)	124(29.1)	13(3.1)	195(45.8)
Bibliographic control	36(8.5)	65(15.3)	134(31.5)	21(4.9)	170(39.9)
Information literacy	60(14.1)	100(23.5)	91(21.4)	47(11.0)	128(30.0)
training					
Advise on information	109(25.6)	98(23.0)	66(15.5)	34(8.0)	119(27.9)
sources					
Provision of study space	144(33.8)	93(21.8)	54(12.7)	37(8.7)	98(23.0)
Internet services	171(40.1)	101(23.7)	38(8.9)	32(7.5)	84(19.7)
Photocopy services	122(28.6)	85(20.0)	47(11.0)	40(9.4)	132(31.0)
Average	97(22.7)	88(20.6)	78(18.3)	36(8.4)	127(29.8)

# Table 6.15: Influence of library services on academic work

Percentage in italics 1- Extremely, 2- High, 3- Neutral/Not sure, 4- Moderate, 5- No influence.

# Source: Field data (2015).

The results as shown in Table 6.16 indicate that a significant proportion of 185 (43.3%) faculty and students agreed that library services influenced their academic work. 97 (22.7%) and 88 (20.6%) respectively responded that library services influenced their academic work either "extremely" or "highly". However, internet service turned out to be the service that mostly influenced their academic work, with 272 (63.8%) of faculty and students sample, responding that library services influenced their academic work either "extremely" or "highly". This was followed by "provision of study space" 237 (55.6%) and "literature searches" 219 (51.4%). Inter-library loans turned out to be the service that had the least influence on their academic work, with only 94 (22.1%), of the faculty and students sample, responding "extremely" or "highly".

#### 6.4.3 Specific areas of academic work that are influenced by effective library services

The researcher was also interested in ascertaining the specific areas of academic work that were influenced by effective library services. The findings are presented in Table 6.16



n = 426					
Areas of Impact	1	2	3	4	5
Provide wide range of resources on my	93(21.8)	134(31.5)	65(15.3)	38(8.9)	96(22.5)
course					
Expedited my research activities	84(19.7)	127(29.8)	71(16.7)	68(16.0)	76(17.8)
Enhanced preparations for exams	88(20.7)	128(30.0)	61(14.3)	37(8.7)	112(26.3)
Enhanced my information literacy skills	71(16.7)	121(28.4)	80(18.8)	61(14.3)	93(21.8)
Average	<b>84</b> ( <i>19</i> .7)	128(30.0)	<b>69</b> (16.1)	51( <i>11.9</i> )	94(22.0)

 Table 6.16:
 Specific areas of academic work that were influenced by effective library

 services

Percentage in italics 1- Extremely, 2- High, 3- Neutral/Not sure, 4- Moderate, 5- No effect.

#### Source: Field data (2015).

The results as shown in Table 6.17 indicate that a significant proportion of faculty and student respondents 212 (49.7%) agreed to the fact that effective library services influenced academic work. 227 (53.3%) of the faculty and student respondents indicated that effective library services either "extremely" or "highly" influenced the provision of a wide range of resources to support academic work. This was followed by 216 (50.7%) indicating that effective library services either extremely or highly enhanced preparations for examinations in support of academic work.

#### 6.5 Testing of Hypotheses

The findings from the study show that the majority 91 (77%) of library staff agreed that their institutions had implemented some staff training and development programmes. It is interesting, however, that 27 (23%) responded otherwise. This may be as a result of the fact that they had not used staff training and development programmes and were therefore not in the position to evaluate training and development programmes. Results also reveal that 63 (53%) of the library staff indicated that their institutions conducted training needs analysis but 55 (47%) responded otherwise.

The researcher therefore tested four hypotheses to establish the fact that staff training and development programmes contribute to library staff work performance and the institutions as a whole.

#### 6.5.1 Hypothesis one

Hypothesis one states that "The more effective staff training and development policies and programmes are, the better the work output of library staff in the provision of library and information services".

Pearson's product moment correlation coefficient analysis of the correlation between level of use of staff training and development programmes and its contribution to work performance of library staff was conducted to test the stated hypothesis. According to LAERD Statistics (2014) the Pearson product correlation coefficient is a measure of the strength of a linear association between two variables and is denoted by r. Pearson product – moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient, r indicates how far all these data points are to this line of best fit. Pearson correlation coefficient r can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association; that is as the value of one variable increases, so does the value of the other variable. A value less than 0 indicates a negative association; that is as the value of the variable increases, the value of the other variable decreases. The stronger the association of the two variables, the closer the pearson correlation coefficient, r will be either +1 or -1 depending on whether the relationship is positive or negative respectively (LAERD Statistics 2014). The Pearson product – moment correlation coefficient was used to test hypothesis one and results of the test are presented in Table 6.18.

 Table 6.17: Correlation between staff training and development programmes and work

 output of staff in the provision of effective library and information services.

Library Staff (n=100 )					
Variables	Mean	Std. dev.	df	r	Sig
Number and level of use of staff training and development. programmes	16.16	6.97			
Library information services work output	14.75	4.66			
			284	.577	.000

### Source: Field data (2015).

The results in Table 6.18 reveal that the mean number and level of use of staff training and development programmes is 16.16 with a standard deviation of 6.97. Library and information services output mean score recorded is 14.75 with a standard deviation of 4.66. Pearson correlation coefficient analysis show that a positive correlation exists between the number and participation in staff training and development programmes and library staff work output with regards to the provision of library and information services(r = .577, Ps.001). This result implies that library staff that benefited from training and development programmes showed increased work output in the provision of library and information services. In other words when library staff were effectively trained and developed and it resulted in increased work job performance that the first hypothesis is supported by the results of the analysis.

#### 6.5.2 Hypothesis two

Hypothesis two states that "Staff training and development programmes will affect the work performance of both individual library staff and the institution in the provision of library and information services.

The "Independent Samples t-test of comparison" was run on the work performance of library staff who were aware and benefitted from staff training and development programmes and those who were not aware and did not benefit from staff training and development programmes. According to LAERD Statistics (2014), independent-sample t-test compares the means between two unrelated groups on the same continuous, dependent variables. The use of independent t test involves checking to make sure that the data you want to analyse can actually be analysed using an independent t-test. There are six assumptions underlying the use of independent t test as follows:

- Dependent variables should be measured on a continuous scale (measured at interval or ratio level)
- Independent variables should consist of two categorical independent groups e.g. male and females.
- Independent of observations which means there is no relationship between the observations in each group or between groups.
- No significant outliers. Outliers are simply single data points within data that do not follow the usual pattern.

264

- Dependent variables should be appropriately normally distributed for each group of the independent variables.
- There is need for homogeneity of variance (LAERD Statistics 2014).

The researcher took these assumptions into consideration in using the independent t-test. The results of the test of hypothesis two are presented in Table 6.19.

 Table 6.18: Performance of library staff who were aware and utilised training and

 development programmes in the provision of library and information services.

Staff Awareness	Mean	Std dev.	df	t	Sig
Staff aware of STDP	34.66	4.13			
Staff not aware of STDP	22.79	6.12			
Total	28.73	5.13	98	6.390	.004

Source: Field data (2015).

As shown in Table 6.19, respondents who were aware of training and development programmes recorded a mean performance score of 34.66 with a standard deviation of 4.13. Their counterparts who were not aware of training and development programmes recorded a mean performance score of 22.79 with a standard deviation of 6.12. These means were subjected to a t-test analysis and the results show that staff who were aware

and utilised training and development programmes performed better than those who are not aware and did not utilise training and development programmes. The results, therefore, support the assertion that staff who benefited from training and development programmes perform better, and this also affects institutional performance in the provision of library and information services. The results, therefore, support hypothesis two.

#### 6.5.3 Hypothesis three

Hypothesis three states that "There is a relationship between staff training and development programmes and satisfaction with library services, staff work performance and academic work".

To test this hypothesis the correlation between awareness of staff training and development programmes and satisfaction with library services was tested. The awareness and level of utilisation of staff training and development programmes was correlated with variables such as the level of satisfaction with library services, academic work, benefit to work in general, contribution to performance and satisfaction with staff training and development programmes. Results obtained from this analysis are presented in Table 6.20.

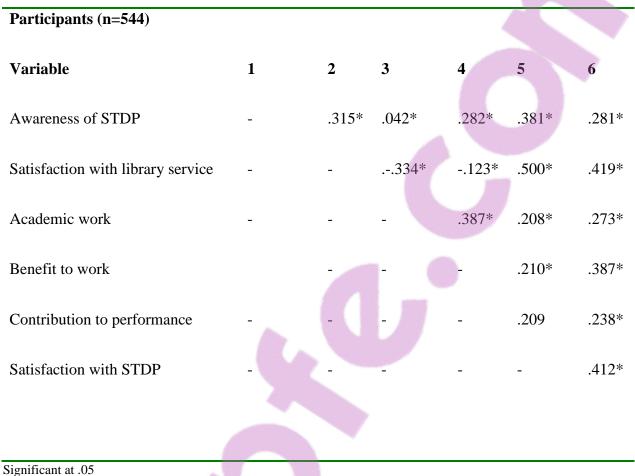


Table 6.19: Correlation matrix of awareness of STDP, satisfaction with library services, academic work, benefit to work, contribution to performance and satisfaction of STDP

### Source: Field data (2015).

The correlation between awareness of staff training and development programmes and satisfaction with library services, academic work, benefit to work, contribution to work performance and satisfaction with staff training and development programmes were tested. As shown in Table 6.20, the correlation between awareness of staff training and development programmes and the rest of the variables (satisfaction with library services,

academic work, benefit to work, contribution to performance, and satisfaction with staff training and development programme) is significant.

Meanwhile, the five variables together (satisfaction with library services, academic work, benefit to work, contribution to performance, and satisfaction with staff training and development programmes) control (16.4%) variability in awareness and utilisation of staff training and development programmes [ODD Ratio = .164]. This is significant as indicated by the ANOVA/F ratio [F ( $_{5,498}$ ) = 27.502, p < .000].

However, in order to confirm the significant correlation between awareness and utilisation of staff training and development programmes and the rest of the variables, multiple regression analysis was conducted.

The results from standard multiple regression analysis following the above observations are presented in Table 6.21.

Table 6.20: Standard multiple regression analysis on relationship between awareness of STDP, satisfaction with library services, academic work, benefit to work, contribution to performance and satisfaction of STDP

(11=544)				
Variables	В	Beta	t	Sig
Awareness of STDP	-	-	-	-
Satisfaction with library services	.298	.285	2.413	.038
Academic work	.492	.332	4.519	.008
Benefit to work	.587	.223	5.221	.000
Contribution to performance	1.150	.366	7.452	.000
Satisfaction with STDP	.319	.426	8.915	.000

(n=544)

## Source: Field data (2015).

The results in Table 6.21, show that a significant correlation exists between awareness and utilisation of staff training and development programmes and satisfaction with library services [t  $_{(542)} = 2.413$ , p = .038]. Thus, the more staff utilised training and development programmes the more the level of satisfaction with the library services. Awareness and utilisation of staff training and development programmes significantly influenced academic work among both faculty and students [t  $_{(542)} = 4.519$ , p = .008]. The more staff and students were aware and utilised staff training and development programmes, the better their academic work. Awareness and utilisation of staff training and development



programmes again significantly predict satisfaction with staff training and development programmes [t  $_{(542)}$  = 8.915, p = .000].

Thus participants who utilised staff training and development programmes more, were more satisfied with the programmes. Awareness and utilisation of staff training and development programmes were based on the results obtained on hypotheses one and two in which the number, awareness and utilisation of staff training and development programmes positively and significantly influenced or affected staff work performance. One can therefore conclude that the staff training and development results significantly benefited library staff and the institutions [t  $_{(542)} = 5.221$ , p = .000]. It also contributed significantly to their performance resulting in higher productivity [[t  $_{(542)} = 5.221$ , p = .000].

The results, therefore, establish that staff training programmes helped to improve upon the skills and abilities of library staff, which led to improved job performance and higher productivity, which ultimately reflected in the effective provision of library and information services. Effective library and information services also bring about satisfaction with library services and efficient academic work. The results, therefore, support hypothesis three.

## 6.5.4 Hypothesis four

The fourth hypothesis states that "effective library and information services will contribute to efficient academic work in the universities".

To test this hypothesis, library staff's work performance with regard to the provision of library and information services was correlated with its level of influence on academic work. Results obtained are presented in Table 6.22.

 Table 6.21: Correlation between performance in the provision of library services and academic work

Staff awareness	Mean	Std dev.	df	r	Sig
Performance on information provision	14.75	4.66			
Contribution to academic work	16.46	6.97			
			414	.463	.001

## Source: Field data (2015).

The results in Table 6.22 show that a positive correlation exists between staff training and development and the provision of library and information services. Effective library and information services also contribute significantly to academic work. The results as shown

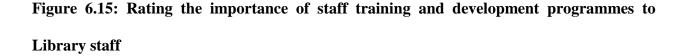
in Table 6.22 indicate a mean of14.75 for library staff performance in the provision of information services with a standard deviation of 4.66, while contribution to academic work show a mean of 16.46 with a standard deviation of 6.97. This result also supports the fourth hypothesis that "effective library and information services results in efficient academic work".

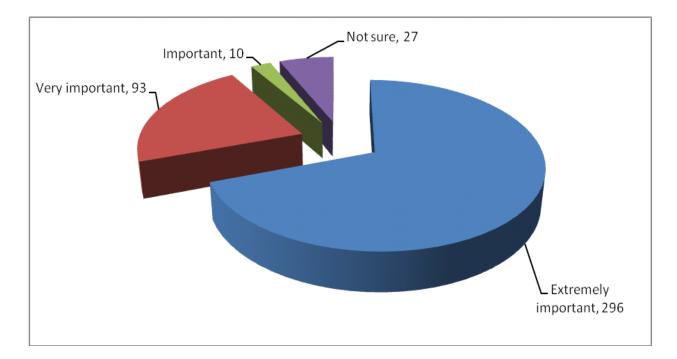
#### 6.6 Assessment of effects of training on library staff job performance

This section presents the results on the respondents' assessment of staff training and development programmes in relation to investment in library staff training.

#### 6.6.1 Importance of staff training and development programmes

The study also obtained the views of the respondents on the importance of staff training and development programmes. The findings are presented in Table 6.11.





Source: Field data (2015).

As depicted in Figure 6.12, a majority 296 (70%) of the faculty and student respondents rated the importance of staff training and development programmes to library staff as extremely important. The rest rated the training and development programmes as very important 93 (22%), important 10 (2%), or not sure 27 (6%). The reasons given for the favourable rating of the training programmes for library staff included:

- Enhanced studies and research work.
- Helped staff to be abreast with technology.
- Helped the staff to be efficient and effective in the work.
- Enhanced good information retrieval skills.
- Promoted the development of the library.

• Helped librarians to understand the information needs of the users.

## 6.6.2 Assessment of performance of library staff

The majority 161 (98%) of the faculty and student respondents indicated that staff training and development programmes can help improve job performance of library staff. Only 4 (2%) thought otherwise. Faculty and students assessed the performance of the library staff favourably. The opinion of faculty and students on the performance of library staff is presented in Figure 6.12.

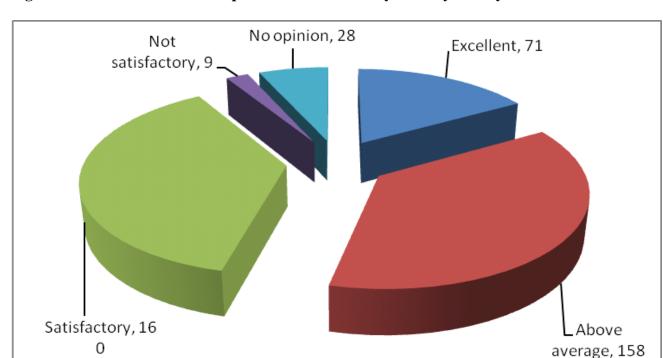


Figure 6.16: Assessment of the performance of library staff by faculty staff and students

Source: Field data (2015).

As shown in Figure 6.1, 71 (16%) respondents rated the performance of the library staff as excellent, while 158 (37%) rated them above average, 160 (38%) and 158 (37%) rated them satisfactory not satisfactory respectively.

#### 6.6.3 Return on investment in training

The researcher also wanted to find out what the views regarding the return on investment in training were. 390 (91.5%) of faculty and student respondents considered training of library staff as a good investment. Only 36 (8.5%) indicated training of library staff was not a good investment.

The results also show that the majority 365 (84%) of faculty and student respondents reiterated that their institutions are getting a good return on investment in training. However 70 (16%) thought otherwise.

#### 6.6.4 Assessment of performance in relation to investment in training

In the assessment of the current performance of the library staff in relation to the investment in training, the following was established.

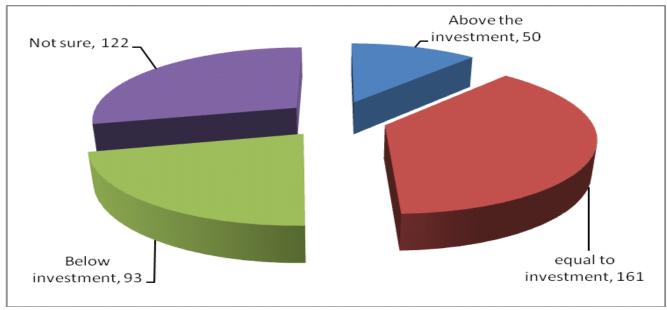


Figure 6.17: Assessment of the performance of library staff in relation to return on investment in training

As shown in Figure 6.14, faculty and student respondents assessed the performance of library staff in relation to the investment made in training. 161 (38%) indicated that the benefits of training are equal the investment, while 93 (22%) indicated that the benefits of training library staff, compared to investment was low. Only 50 (12%) indicated that the benefits in training library staff compared to the investment were above the investment. As many as 122 (27%) were not sure but this is not surprising because of the difficulties involved in calculating the return on investment in training.

## 6.7 Problems and recommendations

The problems and challenges indicated by the respondents (faculty, library staff and students) are presented in this section.

Source: Field data (2015).

#### 6.7.1 Problems/challenges

For the library staff, the challenges include delays in promotion after training, lack of financial support for staff to attend training and development programmes, the allocated for training was usually too short; study leave was not granted to staff to pursue further studies; training needs assessment was inadequate; Some institutions failed to identify specific training needs of library staff; lack of senior management commitment and encouragement for staff development; junior officers were neglected in training programmes and inadequate training resources.

The faculty and students groups however indicated the following: difficulty in transferring knowledge and skills on to the job and library users in terms of information literacy training; results of training were not adequately reflecting in the delivery of library inadequate training needs analysis as well as inadequate training programmes for library staff. University libraries are not equipped with up-to-date collections.

#### 6.7.2 Recommendations

Recommendations from library staff include; adequate financial support should be given library staff by university authorities; promotion must be on time, right trainers/institutions must be selected to train library staff, staff should be granted study leave, monitoring and evaluation must be given special attention, staff should be encouraged to go for further studies and there should be equal opportunity for all. The faculty and student respondents enumerated a number of recommendations geared towards resolving the problems/challenges: Stakeholders should invest in staff development programmes for library staff, organisation of training and development programmes should be intensified for library staff; library staff should be trained in new library technologies and practices, training should be done regularly for library users, adequate funding should be provided and there should be cost sharing in training between staff and the universities and library collections should be frequently up dated to meet the needs of library users.

## 6.8 Analysis of interview/observation results

This section provides the results of analysis of qualitative data. What follows is the integration of information gained from interviews with the university librarians and heads of department as well as the observation made of events from the participating institutions. Responses to the interview questions and observations confirm almost all the findings obtained in relation to the quantitative data. The five university librarians and their deputies had the requisite qualifications for their positions, most of them had a Master of Arts or Master of Philosophy degrees in library and information studies and in some cases additional graduate degrees. They had worked in their respective libraries/institutions and positions for 3- 29 years. The results also reveal that the university librarians had a minimum of 17 and maximum of 139 staff working under them. These staff included professionals, para professionals and support staff. The number of library users which

consisted of faculty, students and other staff of the institutions varied from 5600 to 35922. The university libraries' facilities included books, journals, online databases, photocopying and computer use services. The ten heads of departments were either senior assistant librarians or assistant librarians who also held Masters of Arts degrees in library and information studies. Most of them had worked in their respective positions for more than 6 years. The researcher also observed ten events and the results are integrated with the interview results as prescribed by the thematic content analysis technique.

#### 6.8.1 Assessment of staff training and development policies

Almost all (except two) participants interviewed reported that their institutions had documented staff training and development policy. It was explained that these policies were comprehensive and covered all aspects of staff training and development programmes. The researcher personally observed and examined copies of the training and development policies affirming the interview results. Four out of the five university librarians and eight out of ten heads of department interviewed mentioned that they were not involved in the formulation of staff training and development policies in their respective institutions. They were, however, involved in the implementation of the policies. They also expressed their satisfaction with some aspects of the existing policies especially with the coverage, content, training methods and the selection criteria used for training and development programmes. They also indicated that, library staff were aware of the training and development policies as a result of awareness creation initiatives employed by the institution.



The interview results further reveal that the university librarians as well as the heads of department thought that a staff training and development policy ensured the following: only qualified library staff were nominated and supported to attend training programmes; opportunity for training and development was for all categories of staff; the right training methods, facilities, logistics and trainers or training institutions were selected and this helped in the planning, execution as well as budgeting for training and development activities.

The interview results however indicated that the university librarians and heads of department had issues with current training and development policies in their respective institutions. The weaknesses listed include: (a) inadequate knowledge about the staff training and development policies (b) monitoring and evaluation aspect of the policies were not emphasised (c) the policies were not specific to training needs of library staff (d) lack of commitment on the part of university authorities to support staff development policy. They also mentioned absence of review of the policies over a long period of time, new directives on training and development which were not part of the policies were not specific to the training and development staff and inadequate financial allocations for staff development.

## 6.8.2 Training needs analysis

All the university librarians and heads of department agreed that their institutions had a system in place for assessing the individual library staff and institutional training needs. It was explained that training needs analysis/assessment was done in collaboration with the human resource managers, departmental heads, supervisors and the trainees as well as trainers and training institutions. The interview and observation results further show that the assessment were done either annually or as the needs arose. The participants also mentioned observation, interview, job description, performance appraisal and conference opinion methods as some of the methods used to determine the training needs of other library staff/institutions. In all cases the university librarians carefully planned all training and development programmes and these programmes were executed based on the training objectives and needs of library staff and the institutions. All the stakeholders namely library staff, heads of department, university librarians and university statutory committees and human resource managers were involved in the planning and execution of training and development programmes in the university libraries in Ghana.

The university librarians and the heads of department also indicated that the training needs of the library staff varied from one group of staff to another. According to them the university librarians and their deputies were interested in training that will enhanced their professional and managerial knowledge and skills and ensure international visibility. The middle management staff were interested in training programmes that facilitated their promotion to higher positions. The lower level staff on the other hand were interested in training that enabled them to acquire knowledge and skills to perform effectively to satisfy their supervisors. The university librarians and their deputies were therefore interested in attending international conferences, publishing in international journals, participating in professional associations and sabbatical leave. The middle management staff were also interested in attending conferences, seminars, workshops, research and publications, participation in professional association activities. The lower level staff on the other hand were interested in continuous education in the form of classroom training that could enable them to acquire advanced degrees to facilitate their promotion to higher positions.

The interview and observed results further revealed the processes involved in conducting training analysis and assessment in the university libraries in Ghana. According to the university librarians and the heads of department at the beginning of every academic year, the various categories of staff were asked to submit their individual training needs through their supervisors and heads of department. The needs were compiled and submitted to staff training and development committees which were responsible for nominating staff for training in line with the institutional training needs. The institutional training needs were usually determined by management in consultation with the supervisors or heads of department. The university librarians admitted that the library staff used the framework for continuous professional development as a guide to plan their career advancement. It was also revealed that the library staff of the university libraries in Ghana and the training institutions adhered partially to the guidelines suggested by the framework for continuing professional development as explain in section 2.9.

#### 6.8.3 Staff training and development programmes

The university librarians/heads of departments as well as the observation results confirm the quantitative data on staff training and development programmes and methods that were available to the library staff of the participating institutions. These programmes included: classroom training, job rotation, consultant training, long distance learning, study visits, research/publications, mentorship/coaching, workshops/seminars/conference and involvement in professional associations and sabbatical leave.

The university librarians also indicated that library staff were routinely rotated from one section to another and some also resigned to go and do similar jobs at other universities libraries in Ghana. The interview results indicate that the university libraries were adhering to the career conceptualisation model. There is evidence of internal/external career movement in the university libraries. Library staff career movement was also influenced by job satisfaction and career vision.

The interview results also indicate that staff training and development programmes were taken serious by the university libraries. All the stakeholders namely library staff, library administrators and university authorities played a critical role in the planning and execution of training and development programmes.

The interview/observation results reveal that the university library administrators had difficulties in costing and budgeting for training and development programmes. The

university librarians were not even sure of which office was responsible for the annual budgeting for training and development programmes. Some indicated budget for training should be part of the library's budget, while others suggested that staff training and development budget should be part of the human resource management department's budget.

#### 6.8.4 Criteria for selecting trainees for training

The university librarians and heads of department indicated that a lot of considerations were made before selecting library staff for training and development programmes. These included: qualification and experience of the trainers; availability of relevant and appropriate academic/professional programmes; the location of trainers or the training institutions; accreditation of the trainers/institutions and the cost of the training programmes. The researcher found out that one important criterion that was used, the commitment of staff to work was not considered. The university librarians and heads of department were however satisfied with the selection criteria.

#### 6.8.5 Training objectives

The university librarians and heads of departments reported that their institutional objective for staff training and development was to equip library staff with the needed competencies that made them very effective and efficient to help the library and the institutions to achieve their goals/vision. As a result, staff training and development programmes were implemented to achieve these objectives.

#### 6.8.6 Monitoring and evaluation of staff training and development programmes

All the university librarians and heads of department reported that their institutions did not monitor and evaluate training and development programmes effectively. According to them, the monitoring and evaluation aspect of the training policies were not adhered to. Only a few indicated that their institutions monitored and evaluated training programmes using appropriate methods.

The interview results show that data for monitoring and evaluation of the effects of training on library staff and institution was collected with the use of questionnaires, interviews and observation. Data for monitoring and evaluation were collected through the use of questionnaires, interviews, records analysis and observation techniques. The method of evaluation was based on Kirkpatrick's model of evaluation which included the four levels reaction, learning behaviour, results.

The interview/observation results also show that the human resource managers, trainers or training institutions, library users, immediate supervisors, co-workers and external consultants were responsible for monitoring and evaluation of training and development

programmes. However, not all of the institutions followed the Kirkpatrick model of monitoring and evaluation.

Two out of five university librarians stated that training evaluation in their institutions were usually done before, during and after the training. According to them, training programmes were evaluated before the start of the training programme to ascertain the relevance of the programmes, the course content, and the level of competence of resource persons/ facilitators, appropriateness of training facilities and materials as well as the readiness of the trainees. Two university librarians also indicated that the second assessment was done during the training which helped to ensure training programmes were implemented according to the training plan and objectives and also enabled changes to be made as required. Two university librarians also indicated the final assessment was done immediately after and six months to one year after the training to ascertain the extent of transfer of training and the effects of the training on the staff and institutional work performance.

## 6.8.7 Contribution of staff training and development to staff work performance (provision of library and information services)

All university librarians and heads of departments interviewed described the effects of training and development programmes on library staff work performance as positive. They indicated that staff training and development programmes contributed to staff efficiency in terms of acquisition of new knowledge, skills, experience and increased job satisfaction.

However, the interview results reveal that staff development programmes alone did not contribute to library staff job performance and effective library services. Other factors, such as the provision of appropriate and adequate working tools, commitment of both library staff and senior management, creation of the right working environment, existence of sound management structures, effective communication, staff understanding of the vision, mission and core values of the institution, periodic evaluation of service quality, adequate budgetary provisions and staffing, amongst others also critical to library staff work performance.

Faculty and student respondents rated the contribution of training and development programmes highly in terms of the performance of library staff. Areas rated high included, the understanding of the information needs of library users, understanding information sources, acquisition of information based on needs, organisation of information, evaluation of information, information search/ retrieval, timely delivery of information and meeting information needs of users.

The interview results also reveal that training and development did not only add to knowledge and skills of library staff, but also resulted in changes in the behaviour and attitudes of library staff. For instance library became more courteous to library users, they also appreciated their role in the development of their institutions and understood the core values of their respective institutions. It also led to promotions and associated increases in salary and bonuses to library staff. The institutions also had a skilled pool of staff that rendered effective and efficient services to the library users.

#### 6.8.8 Benefits of staff training and development programmes

The university librarians and heads of department affirmed the quantitative results that showed that staff development programmes benefited the library staff, university libraries and the library users in the following ways: increase in the knowledge, skills and experience, job satisfaction, increase in salary and bonuses of the library staff and with regards to the institutions, training benefited them in terms of: increase productivity, improved customer service, available pool of skilled staff and improved staff relations and the library users are the ultimate beneficiaries of efficient and effective library staff.

#### 6.8.9 Calculating return on investment in training

Though most of the participants reported that there was no method of calculating return on investment in training, they indicated that the benefits of training was equal to the investment in training at their respective institutions. The university librarians stated that they did not have the expertise to calculate the return on investment in training and that this responsibility should be undertaken by the human resource department.

#### **6.8.10** Challenges with staff training and development programmes

The university librarians and heads of departments indicated the following as the challenges facing the implementation of training and development programmes in their respective institutions:

- The staff training and development policies were not regularly updated and adequately publicised.
- Staff training and development programmes were not well monitored and evaluated.
- There was too much concentration on formal education at the expense of professional development programmes that were made relevant to the needs of the library staff.
- Some of the training programmes were not library related.
- The period within which training programmes were organised were unfavourable to some library staff who were on annual leave.
- Resource persons were not well remunerated to motivate them to give off their best.
- Some of the staff did not internalise the training and therefore could not apply the new knowledge and skills to their jobs.
- There were difficulties in budgeting and calculating return on investment in training. According to the university librarians several organisational issues such as absence of specific library staff development policy, limited financial support and inadequate reward for staff also affected the implementation of staff training and development programmes in the university libraries in Ghana.

# 6.8.11 Recommendations on how to improve upon library staff training and development programmes

Recommendations offered by the university librarians and heads of department during the interview included:



- Staff training and development policies should be reviewed periodically
- The universities should emphasise and support short term professional development programmes
- The universities should build their own capacity to train library staff internally
- The universities should ensure library related training for library staff.
- Training should be organised when the full complement of staff are available
- Resource persons should be motivated adequately to encourage them to give off their best.
- Training programmes should be expanded to cover best and current library practices and not limited to only a few areas.
- Trainees should be supervised to ensure that staff use the skills after the training
- Environmental conditions such as peer and superior support must be provided after training to enable staff transfer of their skills unto their job.
- Training needs indicated that staff must be given priority when compiling training needs for library staff.

### 6.9 Conclusion

This Chapter dealt with the presentation of the data collected from the different categories of participants namely library staff, faculty, students and university librarians and heads of department from the five selected institutions. A summary of the major findings was organised and presented according to the stated research questions of the study. The results that emanated from the study reflect the opinions expressed by respondents in the questionnaires, interviews and observations.

#### **CHAPTER SEVEN**

#### INTERPRETATION AND DISCUSSION OF FINDINGS

#### 7.1 Introduction

This Chapter interprets and discusses the data obtained from the analysis of questionnaires, interviews and observations presented in chapter six. The interpretation of the research findings was done in accordance with the specific objectives and theoretical framework discussed in sections 1.3 and 2.1- 2.11 of chapters one and two. The information which emerged from the reviewed literature also provided a source for comparison with the findings of this study.

The purpose of this study was to investigate the contribution of staff training and development programmes for library staff to effective library and information services in the university libraries in Ghana. The interpretation of the results in this Chapter was guided by the following themes that emerged from the findings:

- Demographic information of participants,
- Types of staff training and development programmes,
- Monitoring and evaluation of staff training and development programmes,
- Level of satisfaction of respondents with library services,
- Benefits of library services to academic work,
- Contribution of staff training and development programmes to work performance,

- Importance of staff training and development programmes to library staff,
- Assessment of the performance of library staff,
- Responses of return on investment in training of library staff,
- Testing of hypotheses.

#### 7.2 Demographic information of participants

This section interprets the findings presented in section 6.2 of Chapter six which looked at the demographic information of the participants. The characteristics of the respondents were not part of the specific objectives of this study, but they are relevant for the interpretation of the results.

#### 7.2.1 Institutional distribution of participants

The findings on the institutional distribution of the participants as shown in Table 6.1, section 6.2 of Chapter six reveal that the percentage returns from all institutions were about the same, the least return of (18%) came from Central University College and highest of (22%) from the University of Ghana. The results further reveal that (48%) of the respondents were students, (30%) were faculty, while (22%) were library staff. The higher student population can be attributed to the fact that the students make up the highest sampled population. The researcher is also of the view that students are an important user group of library services and their perceptions of effectiveness of library services were important.

#### 7.2.2 Age distribution of respondents

The findings on the age distribution of the respondents show that forty nine percent (49%) of all the respondents were below 30 years. This may be attributed to the high proportion of student respondents. However more than half of the respondents were over 31 years.

The results, as shown in Figure 6.2 in section 6.2 of Chapter six, reveal that(52%) of the faculty and library staff respondents were in the age group of 31- 40 years. These findings are contrary to a previous study conducted by Sawyer (2004: 223), which established that the universities in Ghana were staffed by senior faculty who were aging and near retirement age and they were not being replaced at the rate required to maintain the appropriate levels of mentorship of the younger faculty. It may be that the trend is now changing and the older senior faculty were now being replaced with younger faculty. The age bracket of 31-40 years is significant since it is an active age in which people are still strong, innovative and enthusiastic and, therefore, should be continuously trained and developed to enable them to give their best.

#### 7.2.3 Tenure of service of faculty and library staff

The findings of this study on the tenure of service of faculty and library staff respondents as shown in Figure 6.4, section 6.2 of Chapter six indicate that (41%) of faculty and library staff respondents had worked for less than 5 years in their respective institutions. This implies that more than half (59%) of library staff and faculty respondents had worked for

more than five years in their respective institutions. This may affect their participation and experience with training and development programmes.

#### 7.2.4 Distribution of faculty respondents

The results on the distribution of faculty respondents as shown in Figure 6.5, section 6.2 of Chapter six, indicate that (45%) of the were lecturers. This result further supports the assertion that there were younger faculty members in the universities in Ghana. It may be that the young faculty were now attracted to work at the universities in Ghana because of the improved conditions of service. It may also be that the younger faculty were not easily promoted to higher positions in the universities in Ghana.

#### 7.2.5 Distribution and qualification of library staff

The distribution and qualification of library staff respondents were considered important to establish the quality of leadership of the university libraries in Ghana. The findings as shown in Figures 6.7 and 6.8 in section 6.2 of Chapter six indicate that (39%) of library staff respondents were library assistants. The assistant and senior assistant librarians represented (14%). The senior management staff represented by the deputy university librarians were only four (4%).

The interview results as shown in section 6.8 of Chapter six also reveal that the university librarians and their deputies had the requisite qualifications. For instance, five university

librarians interviewed had a minimum of a Masters or Master of Philosophy degrees in library and information studies and in some cases additional graduate degree. The results further show that the senior management staff have worked in their respective libraries/ institutions and positions for a long time and for that matter had the requisite experience to work in their various positions.

The findings as shown in Figure 6.7, section 6.2 of Chapter six further reveal that the assistant and senior assistant librarians who represented the middle level managers/supervisors/heads of department also had a minimum of Masters' degree in library and information studies. This implies that the senior and middle level management staff had the requisite formal qualification for their various positions. This result confirms the categorisation of university library staff into three groups namely, senior members, senior staff and junior staff. For the purpose of this study, the researcher classified the library staff into senior management, middle management and lower level or routine staff.

The interview results as shown in section 6.8.2 of Chapter six also show that the training needs of library staff varied from one group to another. The results indicate that the senior management made up of university librarians and their deputies were more interested in training and development programmes that will help them update their managerial and professional knowledge and skills for international visibility. They were, therefore, interested in attending international conferences in the field of librarianship and information management and publishing in world class international journals. Some of

them also stated that they were interested in going on sabbatical leave which gave them the opportunity to gain new ideas and enhanced their work as head of the university libraries.

The middle level staff who were mostly senior assistant/assistant librarians and heads of department/sections/units/branches were interested in training and development programmes that would help them in updating their professional and managerial knowledge to facilitate their promotion to higher positions. They were, therefore, interested in attending conferences/workshops/seminars at both home and abroad. They also listed some of the common training programmes and methods used in their respective libraries/institutions to include job rotation, coaching/mentoring, research/publications and participation in professional association activities. Data gathered using the questionnaires, as shown in Figures 6.7 and 6.8 of Chapter six also show that the lower level or routine staff who consisted of chief library assistants, principal library assistants, senior library assistants and library assistants were interested in continuing education that would help them acquire higher degrees that would make them more productive and meet the operations of their supervisors. These results therefore suggest that the training needs of the various categories of library staff in the university libraries in Ghana varied from one group to another. These findings are in agreement with the results of the studies of Chang and Bright (2012: 213-219); Mackenzie and Smith (2012: 51-70); Brooks (2009: 149); Bopape (2005: 64); Alemna (2001: 47); McClure (1980: 2388-2391); Osei (1996: 31-36) and Snyder and Sander (1978: 146) affirming that training needs of library staff vary depending on the category of staff one belongs to.

The results also support the conceptualisation of the librarian's internal/external career movement model as discussed in section 2.11 of Chapter two. The model describes the career development paths available to librarians. The results of the study, as shown in section 6.6.3 of Chapter six, indicate that the library staff respondents were involved in both internal and external career movements. One of the training methods used the job rotation training method, came with a change of job description. For instance, the middle level management staff and the heads of departments/sections/units/branches were frequently rotated from one department to another of the libraries in the various institutions, which is a form of internal career movement. Other library staff also moved from one institution to another to do the same job, which is an example of external career movement. The results, further suggest that the internal/external career movement of library staff were influenced by job satisfaction and career vision.

#### 7.3 Staff training and development programmes

The primary objective of this study was to gain measurable insight into the contribution of staff training and development programmes to effective library and information services in the university libraries in Ghana. This section, therefore, interprets and discusses findings presented in section 6.3 of Chapter six, which relate to staff training and development programmes in the university libraries in Ghana.

## 7.3.1 Awareness of staff training and development programmes

The findings on the respondents' awareness of staff training and development programmes in their respective institutions show that (70%) of all the respondents were aware of the existence of staff training and development programmes in their respective institutions as indicated in Table 6.3, section 6.3.1 of Chapter six. This result suggests that the majority of the staff were aware of the staff training and development practices by their various institutions. In other words the programmes had been adequately publicised in the various university communities studied in Ghana.

Training and development must not be thought of as an after recruitment programme, but it must rather be incorporated into orientation programmes for the newly recruited staff. New employees must be informed about the training and development facilities available for staff. Training must begin right from the first day at work where senior managers must explain the organisation's way of doing things to the new recruits (Asare-Bediako 2000; Evans & Lindsay 1999). The interview results, as shown in section 6.8.3 of Chapter six, indicate that training and development programmes were taken serious by the university libraries studied in Ghana. All the stakeholders, namely library staff, library administrators and university authorities play a critical role in the planning and execution of training and development programmes. The newly employed library staff were given orientation and information about the training policies on assumption of office.



#### 7.3.2 The use of staff training and development programmes

The results on the use of staff training and development programmes, as shown in Table 6.3, section 6.2.1 of Chapter six indicate that the majority namely, (73.7%) of library staff respondents never used any of the staff training and development programmes. This could be attributed to the high proportion of library assistant respondents who usually were not the main target for professional development programmes.

The findings as shown in Table 6.3 in section 6.2.1 of Chapter six further show that the (33.1%) of library staff respondents who had used or benefited from staff training and development programmes indicated job rotation as the most relevant and used method. This may be as a result of the institutional policy of the universities studied to routinely rotate staff from one department/section/unit/branch to another. This was followed by consultant training (18.6%), classroom training and professional association activities (17.8%), workshop/seminar/conference (16.9%), mentoring/coaching (11.9%). The least used programmes and methods were case studies (6.8%), long distance learning and simulation and the use of games (5.1%). These results suggest that these training and development methods were the most used and effective training and development methods in the university libraries studied.

These findings are in agreement with the result of the studies of Osei (1996:31-36) and Snyder and Sander (1978: 146) who identified staff training and development programmes and methods used by university libraries to include job rotation, workshops, seminars, conferences, research and publications and professional associations. One of the objectives of this study was to assess the training and development programmes and methods that were effective in terms of their contribution to staff job performance and productivity, which is reflected in the provision of library and information services.

The interview results, as shown in section 6.8.3 of Chapter six, also support the data that were obtained from questionnaires that the most used training and development programmes and methods by library staff in the university libraries in Ghana were job rotation, classroom training, workshop/conference/seminar, professional association, research/publications and mentoring/coaching. According to the university librarians and the heads of department, job rotation in particular, enabled the middle level management library staff to acquire knowledge and skills on all operational functions of the library, namely collection development and management, reference and information services, electronic information resources management, cataloguing and technical services, information literacy skills instruction of the libraries and this made them very versatile and They productive. also indicated library staff participation that in workshops/conferences/seminars, as well as mentoring/coaching, had also contributed greatly to the job performance of library staff and the university libraries in the delivery of information services.

## **7.3.3** Contribution of staff training and development programmes to effective library and information services

The results, as shown in Table 6.4, section 6.2.2 of Chapter six, indicate that more than half (55%) of the library staff respondents indicated that staff training and development programmes contributed to effective library and information services in their respective institutions. These results are similar to the results of the studies of Onyia and Aniogbolu (2011: 103-113); Aba and Dawha (2009: 1-8); Harvey and Sayers (2009: 205); Kamal *et al.* (2008); Dasgupta and Satphathi (2006: 239-246); Akintude (2004) and Martell and Dougherty (1978: 153-159), as discussed in section 3.5 of Chapter three. These authors argued that staff training and development programmes helped library staff to acquire knowledge and skills that enabled them to cope with the tasks of providing better information services.

However, the interview results as shown in section 6.8.7 of Chapter six, indicate that staff development programmes alone did not contribute to library staff job performance and effective library services. Other factors, such as the provision of appropriate and adequate working tools, commitment of both library staff and senior management, creation of the right working environment, existence of sound management structures, effective communication, staff understanding of the vision, mission and core values of the institution, periodic evaluation of service quality, adequate budgetary provisions and staffing, amongst others which were critical to library staff work performance.

The findings also support the theory of change and action in practice and adult learning theory as discussed in section 2.4 and 2.5 of Chapter two. The guidelines provided by these models helped the researcher to determine and understand the changes that occurred in library staff as a result of their participation in professional development programmes and how this contributed to their job performance. The theories also helped the researcher to understand the sociological and behavioural factors that motivated adult staff to learn, For instance, the interview results, as shown in section 6.8.7 of Chapter six, indicate that library staff were motivated to learn because of the desire to get promotion to higher positions and also for self-actualisation. Results of this study, as shown in section 6.8.7 of chapter six reveal that training and development did not only add to knowledge and skills of library staff, but also resulted in changes in behaviour and attitudes that made them to be very courteous to clienteles, appreciated their role in the development of their institutions and understood the core values of their respective institutions.

The results also support the professional development logic model, the framework for evaluating professional development and the model for evaluating the impact of professional development programmes in eight steps as discussed in section 2.7, 2.9 and 2.10 of chapter two. These models and frameworks provided this study with guidance and understanding of the procedures for evaluating the effects of professional development programmes on both the individual library staff and institutional job performance. The interview and questionnaire results as shown in Table 6.11 in section 6.3.9 and 6.8.6 of Chapter six indicate that some form of training evaluation took place in the various institutions studied. The researcher, therefore, used these models as a yardstick

to measure the effects of professional development programmes on library staff job performance and its contribution to the institutional performance. The results clearly indicate that professional development programmes contributed to work performance of both the individual library staff and the university libraries in the provision of library and information services.

The results of the hypotheses one and two as shown in Tables 6.18 and 6.19, section 6.5.1 and 6.5.2 of chapter six also support the assertion that staff training and development programmes contributed to work performance and for that matter effective library and information services in the university libraries in Ghana.

#### 7.3.4 Evaluation of staff training and development policies

The results of study, as shown in Table 6.6, section 6.2.4 of Chapter six, indicate that (64.9%) of library staff respondents were either very satisfied or satisfied with the staff training and development policies put in place in their respective institutions. This implies that the majority (64.9%) of library staff were satisfied with the training and development policies. However, the respondents were not satisfied with aspects of the policy on monitoring and evaluation of the training and development programmes in their respective institutions. The interview results obtained from university librarians and heads of department as indicated in section 6.8.6 of Chapter six, support the questionnaire results on the monitoring and evaluation. According to the university librarians the training policies did not emphasise some aspects of the training policy.

Results from Table 6.6 in sections 6.3.4 and 6.8.1 of Chapter six also show that the majority of the library staff respondents were aware of the training and development policy perhaps due to awareness creation initiatives employed by the institutions. Adequate publicity and understanding of training and development policies were important because it provides guidelines for those responsible for implementing training and ensured that organisations training resources were allocated to pre-determined requirements (Armstrong 2006 & Kenney 1992).

Although the interview results, as shown in section 6.8.1 of Chapter six, support the existence of staff training and development policies in the various institutions, the university librarians interviewed indicated that library staff were not involved in the formulation of the policies and for that matter the policies did not address the specific training needs of library staff. The policies rather covered general training and development needs of all the university staff. They also indicated that there were some weaknesses with the implementation of the training and development policies in their respective institutions. For instance, they mentioned the absence of reviewing of the policies over a long period of time, inclusion of new directives on training and development which were not part of the policy and selective implementation of the policies. Other weaknesses were lack of specificity of policy on the needs of library staff and inadequate financial allocations for staff development.

305

The findings of this study on staff training and a development policy are in agreement with the results of the studies of Lockhart and Majal (2012: 44); Abba and Dawha (2009: 1-8); Kisby and Holler (2009: 1-9) and Paterson (1991: 143) as discussed in section 3.3.2 of Chapter three. These authors argue that staff training and development programmes should be based on policies, guidelines, procedures and good collaboration with all the stakeholders. The results of the study therefore confirmed that the institutions had training and development policies in place however there were challenges with the implementation and adequacy of the policies.

#### 7.3.5 Training needs analysis/assessment

The results of the study as shown in Figure 6.10, section 6.2.5 of Chapter six, show that more than half (53%) of library staff respondents indicated that training needs analysis/assessments were conducted in their respective institutions. According to the university librarians as indicated in section 6.8.2 of Chapter six, a process for assessing the individual staff and the institutional training needs exists in their respective institutions. The results of this study, as shown in section 6.8.2 of Chapter six indicate that at the beginning of every academic year, the various categories of library staff were asked to submit their individual training needs through their supervisors or heads of departments. The needs were compiled and submitted to a staff training and development committee, responsible for nominating staff for training based on the institutional training needs. The institutional training needs were usually determined by management in consultation with the supervisors or heads of departments/sections/units/branches and the university

librarians. The researcher agrees that library staff training and development initiatives should be based on training needs analysis and assessment.

Although it is important to link training of individuals to the broader institutional needs, the researcher is of the view that attention must be paid to specific skills required by library staff to make them effective and efficient in delivery of library and information services.

Despite the fact that needs of the respondents were ascertained, the findings indicate that the institutions did have specific training and development policies and programmes for library staff. This suggests that although training needs were assessed the training provided were general rather than specific to the needs of library staff and their respective libraries.

The findings of this study on training needs analysis/assessment are in agreement with the results of the studies of Abba and Dawha (2009: 2); Certo and Certo (2009: 300); Asare-Bediako (2008); Sherman *et al.*(2007); Urquhart *et al.*(2005: 35); Ondari-Okemwa (2000: 267) and Kigongo-Bukenya (1999: 93) as discussed in section 3.2.2 of Chapter three affirming that the success of a training programme depends on the organisation's ability to identify training needs and the care with which they prepares the programme so that the trainees learn what they were supposed to learn. Training content must seek to achieve individual personal needs, and organisational goals. Training must be based on training needs analysis and assessment.

These results also support the RPTIM model for staff development as discussed in section 2.3 of Chapter two. The model provides for a thorough planning and execution of staff training and development programmes. Training and development programmes must go through a planning and execution process as prescribed by the model, namely readiness, planning, training, implementation and maintenance to ensure that training needs were ascertained and prioritised before training is executed based on the needs of the individual staff and the organisation. The interview results as shown in section 6.8.2 of Chapter six indicate that there was some form of thorough planning and execution of training and development programmes at the university libraries in Ghana. For instance, it was revealed that there was a system in place to ascertain and discuss the training needs of library staff and the training programmes were planned and implemented in consultation with the trainees and the trainers. There were also systems in place for monitoring and evaluating training and development programmes, even though this aspect was not well executed.

The framework for continuing professional development as discussed in section 2.8 in Chapter two, also provided guidelines that help to determine the training needs of library staff in terms of library and information skills, personal effectiveness and management skills. The results of this study as shown in section 6.8.2 of Chapter six indicate that the library staff were very familiar with this framework which served as a guide to their career advancement. The library staff training needs depended on their job descriptions. Those who worked at the acquisitions and cataloguing departments were interested in training programmes that helped to enhance their skills and knowledge in collection development and management, while staff who worked at electronic support departments were interested in training programmes on information, communication technologies in relation to library and information management.

The interview results as shown in section 6.8.2 of Chapter six, also reveal that the library staff of the university libraries in Ghana and the training institutions adhered partially to the guidelines suggested by the framework for continuing professional development. The results of the study also support staff development cost model as discussed in section 2.6 of Chapter two. This model served as a guide to the study in understanding the costing of staff development programmes and how to decide on the most cost effective training programmes in the university libraries in Ghana. The interview results as shown in section 6.8.3 of Chapter six, indicate that the university library administrators had difficulties in costing and budgeting for staff training and development programmes. The university librarians stated that they were not even sure of which office was responsible for the annual budgeting for staff training and development as part of their budget. Other university librarians suggested that a staff training and development budget should be part of the human resource management budget.

The results on the methods used to conduct training needs analysis, as shown in Table 6.7, section 6.2.6 of Chapter six reveal that appraisal reviews, job descriptions, interviews and questionnaires were the most used methods for conducting training needs analysis in the respective institutions. The results also show that the human resource managers,



departmental heads, supervisors and trainers were responsible for conducting training needs analysis and assessments. The findings on the methods used to conduct training needs analysis/assessment are in agreement with the studies of Ivancevich (2010: 402); Monappa and Saiyadain (2008); Dessler (2008) and Barbazette (2006: 16), as discussed in section 3.2.2 of Chapter three. They indicated that the methods used for conducting training needs analysis should include; observations, questionnaires, interviews, appraisal reviews, supervisors/managers views, job description and organisational development plans.

The findings on the benefits of staff training and development programmes, as shown in Table 6.8 in section 6.3.7 of chapter six, indicate that the most significant benefits of staff training and development to both the individual library staff and the institutions included: increased knowledge, skills and experience, increased job satisfaction, increased productivity and improved customer service. In the opinion of library staff respondents, staff training and development programmes helped them to build capacity to search and retrieve information, understand information sources and user needs, provide effective information services as well as timely delivery of information to library users. The interview results as shown in section 6.8.8 of chapter six, support the results from the questionnaire. According to the university librarians and heads of department training and development programmes benefited both the library staff, university libraries and the university communities. For instance, the acquisition of new knowledge and skills by library staff who benefited from training and development programmes helped the staff to get promotion to higher positions, increased job satisfaction and improved their

performance. These positively impacted on the performance of the library in the provision of information to the university communities in Ghana.

### 7.3.6 Monitoring and evaluation of staff training and development programmes

The findings of this study on monitoring and evaluation of staff training and development programmes, as shown in Table 6.11 and section 6.3.9 of Chapter six, show that more than half (55.1%) of library staff indicated that their institutions only attempted to monitor and evaluate staff training and development programmes. Results from the analysis of the questionnaires/interviews, as shown in Table 6.11 in sections 6.3.9 and 6.8.9 of Chapter six, also indicate that the evaluation was mostly done during and after the training. It was done by all the stakeholders namely library staff, library users, supervisors, heads of departments, university librarians and human resource managers to ensure relevant feedback was obtained. The interview results as shown in section 6.8.6, however, indicate that monitoring and evaluation of staff training and development programmes were not given the needed attention taken by the various universities studied.

Results as shown Table 6.11, section 6.3.9 of Chapter six, further show that only (15.3%) of library staff respondents indicated that their institutions followed the ideal processes of evaluation, that is to evaluate training and development programmes before, during and after training. The university librarians indicated that evaluation was done before a start of programme to ascertain the relevance of the training programme, the course content, the level of competence of resource persons/facilitators, training facilities and materials as well

as the readiness of the trainees. They indicated that the first level of assessment was done before the training which helped to identify the potential challenges to the execution of the training programme. The second level of assessment was done during the training to make sure that the training programmes were implemented according to what was planned and training objectives as well make changes as required. The final assessment was done immediately or six months to one year after the training to ascertain the effects of the training on the library staff and institutional work performance.

The evaluation processes of the universities in Ghana were designed to assess: staff reaction to the training, the knowledge and skills learned by the trainee, the change in behaviour of trainee as well as the effects of the training on the results or work output of the trainee. The researcher observed that the universities did not monitor and evaluate transfer of training which is crucial in determining whether training had impacted the library staff's job performance.

Monitoring and evaluation of training and development is important as it provide feedbacks to both the trainee and the sponsoring organisation for improvement of future training programmes. The findings of this study on monitoring and evaluation of training and development programmes supports the results of the studies of Sharon and Fiona (2014: 5-6); Manju and Sureth (2011: 58-70); Cefai (2009: 42); Kunche *et al.* (2006: 2); Cheng and Ho (2001:22); Basarab and Root (1992); Philips (1992); Rothwell and Sredl (1992) and Godzins (1989: 87-92), as discussed in section 2.1 and 3.4 of Chapters two and three.

They suggest that evaluation of training should be done before, during and after training and training evaluation should involve, trainers, trainees, training programme, supervisors and managers.

Staff training and development programmes that are not evaluated run the risk of being ad hoc, lacking direction and occurring in isolation without having any relevance to either the staff or the organisation. Evaluation should therefore be mandatory for every training programme in the university libraries in Ghana.

# 7.3.7 The use and satisfaction with library services

The findings on the use and satisfaction with library services, as shown in Table 6.14, section 6.3 of Chapter six, reveal that (55.9%) of the faculty and student respondents were aware of the various library and information services that were provided by their respective university libraries in Ghana. Even though most of the respondents did not answer the question on the extent of use of these library services, (32.2%) of those who answered the question indicated book lending services as the most used service.

The researcher probed further to find out the level of satisfaction with library services. The results, as shown in Table 6.15, section 6.3.1 of Chapter six reveal that more than half (54.1%) of faculty and student respondents were satisfied with the library services provided by their respective institutions. Internet services, the provision of study space and book

lending services turned out to be the most satisfying among the library services. This suggests that the institutions were aware of the influence of technology especially the use of internet in the provision of library services to the users.

The findings on the use and satisfaction with library services are similar to the results of the studies of Onuoha (2010: 287-297); Kumar and Mahesh (2009: 63-68); Ezeala (2009); Oyeboade (2009); Martin (2003: 15-21) and Popoola (2000), as discussed in section 3.7 of Chapter three. They suggest that library users were usually not satisfied with the entire library service. The level of satisfaction varied from one service to another. The needs of library users should therefore be taken into consideration in the design and implementation of training and development programmes.

Some authors including Arinawati (2011:1); Harvey (2004) and Chandrashakara and Adithya (2003: 11), suggest that a good budget, maintenance of library stock and the efficient management of a library as a whole can help improve upon its service provision. Results of this study as indicated in section 6.8 of Chapter six shows that the university libraries in Ghana were well positioned in terms of budget allocations, library collections and management structures and the use of technology to deliver effective library and information services.

# 7.3.8 Influence of library services on academic work

The findings of this study on the influence of library services on academic work, as shown in Table 6.16, section 6.3.2 of chapter six reveal that(43.3%) of faculty and student respondents agreed that library services influenced their academic work, and internet service turned out to be the library service that mostly influenced their academic work. However, more than half (56.7%) of the faculty and student respondents either did not answer to this question or said otherwise. This group of respondents could be those who did not frequently use the library and were not in the position to answer this particular question.

The benefits of well trained and developed library staff as indicated by the respondents included: the ability of the library staff to provide a wide range of information resources for their courses, quick literature searches from books, journals, periodical, reports, databases for research activities, teaching and provision of information literacy. Faculty respondents also indicated that the university libraries served as collaborators in university research activities.

The results of this study on the influence of library services on academic work are similar to the results of Abba and Dawha (2009: 1-8) and Dasgupta and Satpathi (2006: 239). These authors argued that effective library and information services supported teaching and learning. Staff training and development programmes helped library staff to meet the challenges in providing information to support academic programmes. The university library is a critical academic facility which contributes to the core business of the university. The researcher believes that effective library services contribute to efficient academic work. It is therefore not surprising that (43.3%) of faculty and student respondents indicated that well-trained and developed library staff were critical for effective academic work.

# 7.3.9. Importance of staff training and development programmes

The findings of this study as shown in Figure 6.11, section 6.5 of Chapter six, show that the majority (70%) of all the respondents indicated that staff training and development programmes were extremely important to the individual library staff and the institutions. The reasons given for the high rating include: it enhanced studies and research work, helped staff to be abreast with technology, helped staff to be efficient and effective at work, enhanced good information retrieval skills, promoted the development of the library and helped librarians to understand the information needs of library users.

The findings of this study on the importance of staff training and development programmes are in agreement with the results of the studies of Pan and Hovde (2010: 2-4); Alemna (2001: 47) and Asiagodo (1989: 31-36), as discussed in section 3.3.1 of Chapter three, affirming that training and development programmes were very relevant to library staff.

## 7.3.10. Assessment of the work performance of library staff

The results on the assessment of the work performance of library staff, as shown in Figure 6.12, section 6.5.2 of Chapter six, show that the majority (98%) of faculty and student respondents were of the view that staff training and development helped to improve job performance of library staff (75%) of them rated the work performance of library staff of their respective institutions as either above average or satisfactory. This result implies that the library users were satisfied with the work performance of library staff in their respective institutions. It also suggests that library staff had been adequately trained and developed to provide library services required by library users of the universities in Ghana.

# 7.3.11. Return on investment in training and development programmes

With regard to the findings of the study on the return on investment in training library staff, the results, as shown in Figure 6.13, section 6.5.4 of Chapter six, show that majority (91.5%) of faculty and students respondents considered training of library staff as a good investment. The results further reveal that (38%) of faculty and student respondents indicated that their institutions were getting good return on investment in training library staff in their respective institutions. The interview results, as shown in section 6.8.9 of Chapter six, indicate that the university libraries only attempted to measure the satisfaction with training and development programmes and did not calculate the actual return on investment in training. This is an issue that needs to be addressed by the library

administrators and the university as a whole. It is important for management to be able to know the monetary returns on investment made in training.

However, the responses from the faculty and student respondents show that the quality of services received from library staff indicate that there was good return on investment made in training and development of library staff of university libraries in Ghana. All the university librarians and heads of departments were also of the view that carefully planned and executed staff training and development programmes have yielded good returns in the on the investment made in training library staff.

The return on investment process model, as discussed in section 2.2 of Chapter two, helped the researcher to understand the processes involved in calculating the return on investment in training. For instance, the monetary benefits of training were compared with the cost of training to determine the return on training. It is usually presented as a percentage or benefits of training with the cost ratio. The findings of the study on calculating return on investment in training are similar to the results of the studies of Matalonga and SanFeliu (2008: 42-47). The authors argued that the process of determining the return on investment in training is very difficult and expensive.

## 7.4 TESTING OF HYPOTHESES

This section discusses and interprets the results on the four hypotheses tested

### 7.4.1. Hypothesis one

Hypothesis one states that "the more effective staff training and development programmes are, the better the work output of staff in the provision of library and information services".

Pearson's product moment correlation coefficient analysis was used to determine the significance of the relationship, and the results from the hypothesis tested, as shown in Table 6.18, section 6.4.1 of Chapter six, show that the mean number and level of use of staff training and development programmes was 16.16 with a standard deviation of 6.97. Library and information services output mean score recorded was 14.75 with a standard deviation of 4.66.Pearson correlation coefficient analysis show that a significant positive correlation exists between staff training and development programmes and job performance (r = .577. Ps.001).

This result implies that library staff who benefited from training and development programmes showed increased work output in the provision of library and information services. In other words when library staff were effectively trained and developed, it resulted in increased work job performance. The findings therefore, support hypothesis one. The result of hypothesis one also are in agreement with the findings of the studies of



Buckley and Caple (2002) who affirm that training has both intrinsic and extrinsic benefits in which staff who benefited from training have the ability to perform their tasks with better skills and increased job performance. The ultimate goal of training is improvement in individual staff and institutional effectiveness.

The interview results of this study as shown in section 6.8.7 of Chapter six, establish that library staff who participated in staff training and development programmes acquired new knowledge and skills in the various operational areas of library and information management, namely collection development and management, cataloguing, reader service, reference and information service and electronic resources management. These skills indicated enabled them to be efficient and effective.

The results, therefore, support hypothesis one which state that "the more library staff benefited from training programmes, the better their performance". The accumulated knowledge, skills, abilities and capabilities of library staff who benefited from training and development programmes collectively contributed to effective delivery of library and information services in the university libraries in Ghana.

This findings on the benefits that university library staff got from participating in several training and development agree with Kutner *et al.* (1997: 5-6) According to these authors the mere participating in one or two training programmes is not likely to change behaviour. Library administrators must, therefore, allow sufficient time after training before they begin to expect results.

## 7.4.2 Hypothesis two

Hypothesis two states that "staff training and development programmes will affect the work performance of both individual library staff and the institution in the provision of library and information services". An independent sample t-test of comparison was run on work performance of library staff who were aware and benefited from training and development programmes and those who were not aware and did not benefit. The results as, shown in Table 6.19, section 6.4.2 of Chapter six, show that staff members who were aware of training and development programmes recorded a mean performance score of 34.66 with a standard deviation of 4.13. Their counterparts who were not aware of training and development programmes recorded a mean performance score of 22.79 with a standard deviation of 6.12. These means were subjected to the test analysis and the results show that staff who were aware and participated in training and development programmes perform better than those who were not aware and did not participate in the training and development programmes. The results, therefore, support the assertion that staff who benefited from training and development programmes perform better, and this also affects institutional performance in the provision of library and information services. The results, therefore, support hypothesis two.

These results are similar to the results of the studies of Onyia and Aniogbolu (2011: 103-113); Ivancevich (2010); Abba and Dawha (2009: 1-8); Asare-Bediako (2008) and Akintude (2004), as discussed in section 3.5 of Chapter three. These authors suggest, amongst others that staff training and development programmes to a large extent contributed to staff performance on the job. Staff training and development programmes must seek to achieve individual personal needs, goals and self-development and contribute to improving efficiency and effectiveness of the individual library staff and the institution. Staff training and development programmes help library staff to build and update previously acquired knowledge, skills and attributes, to enable them contribute to better job performance (Dasgupta & Satpathi 2006: 239-246 and Martell & Dougherty 1978: 153-159).

The interview and questionnaire results as shown in Table 6.8, section 6.3.7 and section 6.8.7 of Chapter six also indicate that staff training and development programmes build on the professional knowledge and skills of library staff, and this has great impact on the performance of the individual staff and the university libraries in Ghana.

# 7.4.3 Hypothesis three

Hypothesis three states that "there is a relationship between staff training and development programmes and satisfaction with library services, staff work performance and academic work".

The results, as shown in Tables 6.20 and 6.21 in section 6.4.3 of Chapter six, show that there is a correlation between awareness of staff training and development programmes and the rest of the variables (satisfaction with library services, academic work, benefit to work,

contribution to performance, and satisfaction with staff training and development programmes).

The five variables together (satisfaction with library services, academic work, benefit to work, contribution to performance, and satisfaction with staff training and development programmes) control (16.4%). Variability in awareness and utilisation of staff training and development programmes was [ODD Ratio = .164]. This was significant as indicated by the ANOVA/F ratio [F  $_{(5,498)}$  = 27.502, p < .000].

However, in order to confirm that there is a significant correlation between awareness and utilisation of staff training and development programmes and the rest of the variables, multiple regression analysis was conducted. The results from the standard multiple regression analysis show that a significant correlation exists between awareness and utilisation of staff training and development programmes and satisfaction with library services [t  $_{(542)}$  = 2.413, p = .038]. Thus the more library staff participated in training and development programmes the library services. This implies awareness and participation in staff training and development programmes significantly influenced academic work of both faculty and students [t  $_{(542)}$  = 4.519, p = .008].

The more staff and students are aware and utilised library services, the better their academic work. Participation in staff training and development programmes significantly predicts satisfaction with staff training and development programmes[t  $_{(542)} = 8.915$ , p = .000]. In other words the more library staff utilised training and development programmes the more faculty and students became satisfied with the library and information services, in relation to their academic work.

From the results obtained on hypotheses one and two in which the number, awareness in staff training and development programmes positively and significantly influenced staff work performance, one can therefore, conclude that staff training and development significantly benefited both library staff and the institutions, [t  $_{(542)} = 5.221$ , p = .000]. It also contributed significantly to work performance or higher productivity, [[t  $_{(542)} = 5.221$ , p = .000].

The results, therefore, establish that staff training programmes helped to improve the skills and abilities of library staff, which lead to improved job performance and higher productivity, which ultimately reflected in the effective provision of library and information services. Effective library and information services also bring about satisfaction with library services and efficient academic work. The results, therefore, support hypothesis three.

## 7.4.4 Hypothesis four

Hypothesis four states that "effective library and information services will contribute to efficient academic work in the universities".

The result of the test of this Hypothesis, as shown in Table 6.22 in section 6.5.4 of Chapter six, indicate that a positive correlation exists between the provision of library and information services and academic work. It further established that library services contributed significantly to academic work. The results as shown in Table 6.22 in section 6.5.4 of Chapter six indicate a mean of 14.75 for library staff performance in the provision of library and information services with a standard deviation of 4.66, while contribution to academic work shows a mean of 16.46 with a standard deviation of 6.97.

These findings are in agreement with the results of the studies of Abba and Dawha (2009:1-8); Dasgupta and Satpathi (2006: 239-246) and Martell and Dougherty (1978: 153-159. These authors argue that effective library and information services support teaching, learning and research.

# 7.5 Challenges with the implementation of staff training and development programmes

The findings of this study on the challenges faced by the university libraries in Ghana in implementing staff training and development programmes, as shown in section 6.8 of Chapter six include:

- The staff training and development policies were not well publicised and were also not updated frequently as required.
- Staff training and development programmes were not well monitored and evaluated
- Some of the training and development programmes undertaken were not library related.
- The times that training programmes were organised were unfavourable to staff who may be on annual leave.
- Resource persons were not well remunerated to motivate them give their best.
- Difficulties of applying the newly learnt knowledge and skills on the job.
- Staff did not internalise the training.

The findings of this study on the challenges facing the implementation of staff training and development are similar to the results of the studies of Eze (2012: 1); Armstrong (2000); Cole (2000); and Yadapapithaya and Stewart (2003: 108-123) as discussed in section 3.3.5 of Chapter three, confirming that training is bound to face challenges.

This study, therefore, established, as shown in section 6.8.10 of Chapter six that several organisational issues such as absence of specific library staff development policy, limited

financial support and inadequate reward for staff hindered the effective and efficient implementation of staff training and development programmes in the university libraries in Ghana.

## 7.6 Conclusion

This chapter interprets and discusses the findings presented in chapter six. The discussions and interpretations are based on the themes that emerged from the findings outlined in section 7.1. The Chapter summarises the major observations drawn from the findings.

The chapter started with the discussion of demographic information of the participants and it has been established that the situation in 2004 when the universities in Ghana were staffed with aging senior faculty who had reached their retirement age has changed. Currently, faculty were dominated with younger faculty members. The findings also reveal that the university libraries were staffed with very qualified and experienced staff at all levels.

The discussion on the findings of staff development programmes in the university libraries also show that even though the majority of library staff were aware of the training and development programmes in their respective institutions, only a few had actually benefitted from these training programmes. However, the few that benefited indicated that staff development contributed significantly to the effective delivery of library and information services in their respective institutions.

Finally, the chapter discussed the benefits and influence of staff training and development programmes on job performance and academic work.

## **CHAPTER EIGHT**

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 8.1 Introduction

This chapter provides an overall summary of the findings for each of the research objectives and questions using the data presented and interpreted in the Chapter six and seven. It also provides conclusions and recommendations based on the findings of the study and research experience. The importance of this research to the field of study is highlighted and suggestions for further research made.

## 8.2 Research purpose

The purpose of this study was to investigate the contribution of staff training and development programmes to effective delivery of library and information services in selected university libraries in Ghana.

## 8.2.1 Research questions

In order to fulfil the purpose of the study the following specific research questions guided the study:



- What is the extent of effectiveness of staff training and development policies of the universities in Ghana towards equipping library staff with the competencies required for the delivery of library and information services?
- How have training and development programmes affected both individual library staff and the performance of the university libraries in the provision of library and information services?
- Is there a relationship between staff training and development programmes and work performance?
- How does the result of this research correlate with the existing literature from previous studies on the subject under investigation?
- How has effective library and information services contributed to academic work?
- Does financial investment made in library staff training and development results in higher productivity?
- What are the deficiencies and challenges in the implementation of staff training and development activities in the university libraries in Ghana?
- How can one use the findings of this research and knowledge generated to improve upon future staff training and development practices in the university libraries?

## 8.3 Summary of findings

This section presents a summary of the research findings based on the research questions:

### 8.3.1 Satisfaction with staff training and development policies

- Results of the study as shown in Table 6.6, section 6.2 of Chapter six, indicate that all the universities had training and development policies. However, the policies were not specific to library staff and, therefore, did not provide the opportunity to organise training and development programmes that adequately addressed the training and development needs of the library staff.
- Despite the absence of library specific policies the results, as shown in Table 6.6, section 6.2 of Chapter six indicate that more than half (64.9%) of the library staff respondents were either very satisfied or satisfied with some aspects of the current training and development policies in their respective institutions. This result suggests that the training and development policies of the universities partially met the needs of the respondents and the demands of their work as library staff.
- The reasons given for their satisfaction with the training and development policies include: the training programmes/methods used helped to address some of their training needs, and the policies provided the criteria and selecting and sponsoring library staff to participate in training and development programmes.
- The library staff respondents were however not satisfied with the aspects of the policy on monitoring and evaluation of training and development programmes. The selective implementation of the training policies. This position was confirmed by the interview results with the university librarians and heads of departments as discussed in section 6.8.1 of Chapter six.

### 8.3.2 Staff training and development programmes

- Results of this study as shown in Table 6.2, section 6.3 of Chapter six establish that the majority (70%) of respondents were aware of the existence of staff training and development programmes in their respective institutions.
- Results as shown in Table 6.3, section 6.3.1 of chapter six indicate that job rotation, mentoring/coaching, workshops/seminars/conference were among the most used and effective methods of training and development that respondents benefited from in the university libraries in Ghana. This was followed by consultant training and professional association activities. The least used methods were research and publications, long distance learning, case studies, study visits as well as simulation and games.

#### 8.3.3 Training needs analysis/assessment

- The results on the question concerning training needs analysis and assessment practices in the university libraries in Ghana as shown in Figure 6.11, section 6.3.5 of Chapter six reveal that more than half (53%) of library staff respondents indicated that training needs analysis/assessment was conducted at their respective institutions.
- The results further reveal that, appraisal review (44.1%), job description (39.8%), interview (37.3%) and questionnaires (33.9%) were the most used sources of information for identifying training needs of the library staff, university libraries and the universities as a whole.

- 8.3.4 Contribution of staff training and development programmes to the individual library staff and institutional work performance in the provision of library and information services
  - Results of this study show that staff training and development programmes affect all the respondents either directly or indirectly.
  - The findings of the study as shown in Table 6.4, section 6.3.2 of Chapter six, show that more than half (55%)of library staff respondents indicate that staff training and development programmes contributed either extremely or highly to their work performance in terms of the provision of library and information services in their respective institutions. According to the library staff, training and development programmes contributed to their performance in the following ways: understanding of information sources and needs of library users, capacity to evaluate information resources, ability to process and organise information for easy retrieval, ability to search and retrieve information and timely delivery of information to library users. These results imply that training and development programmes and methods contributed to the increase of their professional knowledge, skills and experience and enhanced their job performance in the provision of library and information services to the university community.

### 8.3.5 Benefits of staff training and development programmes

- Results of this study, as shown in Table 6.8, section 6.3.7 of Chapter six, indicate that the majority (77%) of library staff respondents agreed that staff training and development programmes benefited the individual staff in the following ways: increased knowledge and skills, increased job satisfaction, increased job security, increased staff motivation, improved conditions of service. It also benefited the institutions in terms of increased productivity, improved customer relations, improved employer and staff relations. All these collectively contributed to improve the work performance of library staff and the universities.
- Results of hypotheses one and two, as shown in Tables 6.18 and 6.19, section 6.4 of Chapter six, also establish that a positive correlation exists between staff training and development and work performance at both the individual and institutional levels.

#### **8.3.6** Monitoring and evaluation of training and development programmes

- The results, as shown in Table 6.12, section 6.3.9 of Chapter six show that more than half (55.1%) of library staff respondents indicated that monitoring and evaluation of training was done mostly during and after training. Only a few (15.3%) of the respondents indicated that evaluation was done before, during and after training, which is the ideal situation.
- The weaknesses identified with staff training and development policies in the university libraries in Ghana include: absence of periodic review of the policies, lack of guidelines for treating new directives on training and development which were in

conflict with the training policies, selective implementation of the policies, lack of specific policies on the training of library staff and inadequate financial allocations for staff development programmes.

• The results of the study, as shown in Table 6.12, section 6.3.11 of Chapter six reveal that the majority (61.9%) of library staff respondents indicated that their immediate supervisors and human resource managers were responsible for monitoring and evaluation of training and development programmes at their respective institutions.

#### **8.3.7** Relationship between staff training and development and work performance

- Results of hypothesis three, as shown in Table 6.20, section 6.5.3 of Chapter six, establish that a positive correlation exists between awareness, use and satisfaction with staff training and development programmes.
- The results of hypotheses one, two and three as shown in Tables 6.18, 6.19 and 6.20 in section 6.5.1, 6.5.2 and 6.5.3 of Chapter six, also indicate that a positive correlation exists between the number of times staff benefited from training and development programmes and their work output in terms of the provision of library and information services. These results help to establish that staff training programmes contributed to the improvement of the knowledge, skills, abilities and experience of library staff and therefore made them efficient and effective in the delivery of library and information services. Effective library and information services also bring about satisfaction with library services and efficient academic work. In other words the study established that there is a relationship between staff training and development, work performance,

satisfaction with library and information services and academic work.

# 8.3.8. The correlation between the findings and existing literature

The results of this study indicate that there is a correlation between the findings and existing literature on the subject of staff training and development in university libraries. The findings show that the university libraries in Ghana are staffed with highly qualified personnel at all levels namely senior, middle and lower management and that the training needs of the library staff varied from one group to other. These findings are in agreement with the result of studies of Snyder and Sander (1978:146); Osei (1996: 31-36); Chang and Bright (2011: 213-219); Mackenzie and Smith (2012: 51-70); Bopape (2005: 64); McClure (1980: 2388-23); Brooks (2009:149) and Alemna (2001: 47).

The findings on the training and development programmes and methods that were mostly used by the university libraries in Ghana support what was mentioned in the existing literature. The common training and development programmes methods used by university libraries in Ghana included: job rotation, seminars, conferences, workshops, consultant training, classroom training, professional association activities, research and publications and sabbatical leaves affirming the findings of Snyder and Sander (1978:146) and Osei (1996:31-36) on this subject.

The results of this study concerning the contribution of training and development to library staff work performance also support the existing literature. The results of this study establish that staff training and development contributed to individual library staff and institutional effectiveness, confirming the results of the studies of Onyia and Aniogbolu (2011: 103-113); Abba and Dawha (2009: 1-8); Harvey and Sayer (2009: 205); Dasgupta and Satphathi (2006: 239-246); Akintude (2004) and Martell and Dougherty (1978: 153-159)

Results of the study also show that staff training and development programmes based on policies, guidelines, procedures and good collaboration with stakeholders made training and development effective and helped to meet the needs of both staff and the institutions, supporting the studies of Lockhart and Majal (2012:44); Abba and Dawha (2009: 1-8); Kisby and Holler (2009: 1-9) and Paterson (1991: 143).

The findings of this study on training needs analysis also support the studies of Abba and Dawha (2009: 2); Certo and Certo (2009:35); Asare-Bediako (2008); Urquhart *et al.* (2005: 35); Ondari-Okemwa (2000: 267) and Kingongo-Bukenya (1999: 93). Staff training programmes based on training needs analysis are bound to succeed. The results of this study indicate that the university libraries in Ghana had a system in place for conducting training needs analysis/assessment. The training and development process began with an annual training needs analysis/assessment. The training needs analysis and assessment involved all the stakeholders namely library staff (trainees), supervisors, heads of

department (supervisors), university librarians and human resource managers. The researcher believes that the relative success of training and development programmes in the university libraries in Ghana may be attributed to the existence of training policies and a system for assessing the individual library staff and institutional training needs. According to the university librarians all the ad hoc training programmes failed to yield results but training programmes that were carefully planned and executed based on training needs and policies were always successful.

The results of this study establish that effective library and information services affect academic work. The findings supports the existing literature of amongst others Onuoha (2010: 287-297); Abba and Dawha (2009: 1-8); Oyeboade (2009); Ezeala (2009); Dasgupta and Satpathi (2006: 239); Martin (2003:15-21); Kumar and Mahesh (2003: 63-68); Popoola (2000). The authors argued that effective library and information services contributed to effective teaching, learning and research activities. The findings of this study reveal that the library services that were provided in the form of book lending, provision of study space, literature searches, advice on information sources, instructions on information literacy contributed to effective teaching, learning and research activities in the universities in Ghana.

The findings of this study also support the existing literature by Onuoha (2010: 287-297); Oyeboade (2009); Ezeala (2009); Martin (2003: 15-21); Kumar and Mahesh (2003:63-68); Popoola (2000) who assert that the rate of satisfaction with library services vary from one service to another. Library users are usually not satisfied with the entire services provided by the libraries. The researcher attempted to establish whether the institutions were maximising their returns on investment in training. The findings as shown in section 6.6.3 of Chapter six reveal that the majority (91%) of faculty and student respondents thought that training of library staff was a good investment of their institutional scarce resources. The results as shown in Figure 6.14, section 6.6.4 of Chapter six further reveal that (38%) of the faculty and student respondents were of the view that the benefits of training library staff to investment was equal to the investment. Only a few (12%) indicated that the benefits were above the investment and a significant proportion (27%) were not sure. This may be as a result of the difficulties of determining returns on investment in training especially to monetary terms.

The interview results of this study, as discussed in section 6.8.8 of Chapter six, indicate that the university libraries did not have a scientific formula in place for calculating the return on investment in training. The reasons given are in agreement with that of Matalonga and Sanfeliu (2008: 42-47) and Bartel (2000: 504) who pointed out that there were difficulties in calculating return on investment in training. The university librarians indicated that they did not have the expertise to calculate the return on investment in training and suggested that it should be the responsibility the human resource managers.



#### **8.3.9** Contribution of library services to academic work

- The results of this study on the contribution of effective library services to academic work indicate that the most used library services by faculty and students, as shown in Table 6.14, section 6.4 of Chapter six, are book lending (32.2%), internet service (28.2%), provision of study space (22.5%) and literature searches (14.5%).The respondents indicated that they used these services either once or twice a month.
- With regard to the question concerning library users' satisfaction with specific library services results of the study, as shown in in Table 6.15, section 6.4.1 of Chapter six indicated that the faculty and students were generally satisfied with the services provided in their respective libraries particularly (69.5%), provision of study space (69.5%) and book lending services (63%), advise on information sources and literature searches scored (61%) and (60.5%) respectively.
- Results of this study as shown in Table 6.16, section 6.42 of Chapter six further establish that a sizeable proportion (43.3%) of faculty and student respondents indicated that effective library and information services contributed to academic work. The researcher noted that the majority of faculty and student respondents did not answer this particular question, perhaps because they were not frequent users of library services.
- The findings on the question concerning which of the library services contributed most to academic work, as shown in Table 6.16, section 6.4.2 of Chapter six, indicated that internet services (63.8%), provision of study space (55.6%) and literature searches (51.4%) were the library services that contributed most to academic work in the universities in Ghana.

340

- The findings as shown in Table 6.17, section 6.4.2 of Chapter six, further established that the specific areas where library and information services influenced academic work include: the provision of wide range of resources (53.3%), enhancing preparation for examination (50.7%) and expediting research activities (49.5%).
- The results of hypotheses three and four, as shown in Tables 6.20, 6.21 and 6.22, section 6.4 of Chapter six, also establish that there is a correlation between awareness and use of staff training and development programmes, work performance, satisfaction with library services and academic work.

#### 8.3.10 The return on financial investment in staff training and development

The results of this study as shown in section 6.6.3 of Chapter six reveal that the majority (91.5%) of faculty and student respondents thought that investment in training library staff of the university libraries in Ghana is a good investment. The reasons they gave for the favourable rating includes: enhancing studies and research work, helping staff to be abreast with latest technologies, enhancing good information retrieval skills, promoting the development of the library, helping librarians to understand the information needs of the library users and helping staff to be efficient and effective in their work.

• The findings of this study as shown in Figure 6.14, section 6.6.4 of Chapter six also reveal that a significant proportion (38%) of faculty and student respondents thought that the return on investment in training library staff is equal to the work performance of the library staff in the university libraries in Ghana.

• The results on the question concerning calculation of return on investment in training reveal that none of the institutions had systems in place for calculating return on investment in training in the university libraries in Ghana.

#### 8.3.11 The challenges of implementing staff training and development programmes

The findings of the study, as indicated in sections 6.7 and 6.8.10 of Chapter six show that there were some challenges associated with the implementation of staff training and development activities in the university libraries in Ghana. The challenges include:

- Inadequate funding of staff training and development programmes.
- The time allocated for training and development programmes was insufficient
- Difficulty in transferring skills acquired unto the job.
- Inadequate staffing that made it difficult to release staff to participate in training programmes.
- Training needs analysis and assessment were not properly done.
- There were few distance learning programmes.
- Lack of commitment by senior university authorities to support staff development.
- Discrimination and biases in staff selection for training.
- Trained staff were most often underutilised.
- Inadequate training facilities and logistics.
- Lack of management commitment to staff development programmes.
- Absence of staff involvement in the planning of training programmes.

#### 8.4 Conclusions

This section provides the conclusions based on research objectives and themes that emerged from the findings.

#### 8.4.1. Conclusion on staff training and development policies

It can be concluded that, although all the universities included the study had training and development policies in place, the training policies were general staff training and development rather than specific to the training needs of library staff. This, therefore, affected the extent to which the training and development policy could have addressed the specific needs of library staff and the university libraries in Ghana.

Although the staff training and development policies of the institutions studied were general rather than specific, it still ensured that only qualified library staff were nominated and supported to participate in training and development programmes. It also provided opportunities for training for all categories of staff. Despite the fact that the respondents were satisfied with the training and development policies of their institutions, there were concerns with regard to the monitoring and evaluation of training programmes, management's commitment to the implementation of the policy and budgetary provisions for staff training and development programmes.

#### 8.4.2 Conclusion on staff training and development programmes

All the university libraries used effective and appropriate training and development methods for each of category of library staff as attested by the level of satisfaction of the respondents. The senior management who were made up of university librarians and their deputies basically participated in professional association activities, research and publications, and sometimes seminars and conferences mostly at the international level. The middle level management staff, comprised heads of departments, and branch managers participated in job rotation, professional association, workshops, conferences and seminars both at the local and international levels. The lower level library staff on the other hand participated in classroom and consultant training.

This study therefore concludes that the training and development programmes were helping the university libraries in Ghana to confront the current challenges facing their institutions. The university libraries in Ghana were facing difficulties in library automation, management of electronic resources, demand for new and innovative library services and absence of qualified specialist to perform the new functions of a modern library.

### 8.4.3 Conclusion on the contribution of staff training and development programmes to effective library and information services

Based on the findings of this study, the researcher concludes that staff training and development programmes benefited the library staff and the institutions in Ghana in

several ways including: increased job satisfaction, improved conditions of service, increased job security, increased knowledge, skills and experience amongst others. With regard to the institutions, the benefits included: increased staff motivation, improved customer service, increased productivity, increased in confidence and commitment of staff and provision of a pool of skilled staff. These ultimately contributed immensely to efficient and effective library staff and institutional work performance which reflected in effective library and information services in the university libraries in Ghana.

#### 8.4.4 Conclusion on training needs analysis/assessment

This study concludes that most of the university libraries studied conducted training needs analysis before they embarked on any training programme. This was done through the collaborative efforts of the library staff (trainees), heads of department (supervisors) and human resource managers. However, the final decision of who attends a training programme was made by the university librarian to the staff training and development committee or management for approval. The sources of information and methods used by these libraries to identify training needs included: appraisal reviews, job descriptions, interviews, conference opinions and questionnaires.

The results show that at the beginning of each academic year, a questionnaire designed by the human resource departments of the universities was given to all categories of staff to indicate their training needs after which, the library staff submitted their training needs through heads of departments who had to agree with the library staff based on the training needs of the department and the university libraries.

#### 8.4.5 Conclusion on monitoring and evaluation of training and development programmes

This study concludes that there is the need to improve the monitoring and evaluation of training and development activities of the institutions studied although more than half (55.1%) of the respondents indicated that training and development activities were monitored and evaluated. Training and development policies were not reviewed regularly to address new directives that were in conflict with best practices. The university librarians were also not sure of which authority should be responsible for monitoring and evaluation of training and development programmes.

The criteria used to evaluate training and development programmes varied from one institution to the other but in all cases, the training objectives served as the main yardstick for measuring the cost effectiveness of training programmes in the university libraries in Ghana. Most of the institutions used multiple training evaluation criteria such as questionnaires, interviews, observations and record analysis methods to gather data to assess library staff's reaction to the training, testing library staff learning as a result of the training, library staff behavioural change and the effects of the training on the results or work output. Training evaluation should focus on assessing the application of the newly acquired knowledge and skills on the job. However, the institutions did not assess the

application of the newly acquired skills and knowledge by individual library staff and how these impacted on their work performance.

### 8.4.6 Conclusion on the benefits of training and development programmes to library staff and the institutions

The benefits identified for the individual library staff and the institutions included: increased knowledge and skills, increased job satisfaction, increased job security, increased staff motivation, improved conditions of service, increased productivity, improved customer relations. Results of hypotheses one and two confirmed the earlier findings thus a positive correlation exists between staff training and development and work performance at both the individual and institutional levels.

## 8.4.7 Conclusion on the influence of effective library and information services on academic work

Based on the findings in Table 6.16 and section 6,4,2 of chapter six the study concludes that the university libraries provided materials, information resources, facilities and services that supported the core business of their institutions; which were teaching, learning and research. The main objectives of the university library cannot be separated from the mission and vision of the university which is basically teaching, learning and research. The library, therefore, has a direct influence on academic work by providing a wide range of information resources and services to the faculty, students and other staff. The library services provided by the university libraries included in this study therefore helped to promote expected research activities, enhanced preparation towards examinations and provided the library users with information literacy skills that enabled them to learn on their own. All these ultimately help to enhance academic work.

#### 8.4.8 Conclusion on the return on investment in training

The fact that only (38%) of the respondents indicated that there was good return on investment in training library staff suggests the need to improve training and development practices of the institutions studied in order to derive the full benefits of training and development. None of the institutions had a system in place for calculating return on investment in training. They only attempted to measure the satisfaction with training and development programmes and did not go to the extent of calculating the actual return on investment in training in monetary terms.

#### 8.5 Recommendations

The following, recommendations, based on conclusions drawn in the previous section will hopefully, help to address the challenges confronting staff training and development programmes in the university libraries in Ghana.

#### 8.5.1 Recommendations on staff training and development policies

In view of the findings on staff training and development policies of the university libraries in Ghana, the following are recommended:

- The university libraries in Ghana should develop their own training and development policies specific to the needs of the individual library staff and the libraries.
- The training and development policies of the university libraries in Ghana should be linked to the strategic objectives of the institutions; this can help the libraries to develop their mission and vision including training and development policies that will guide them to achieve their goals.
- The university library administrators should be involved in the process of developing training and development policies so that they can offer library specific suggestions that will make the policies relevant to the needs of library staff and the institutions.
- The training and development policies should clearly spell out the guidelines and procedures that will enable all categories of library staff to understand their training and development roles and responsibilities within pre-defined limits.
- There should be adequate publicity and education for managers and first line supervisors to enable them to interpret and administer training and development policies.
- The university library administrators in Ghana should institute measures to ensure that all library staff were made aware of and had adequate knowledge of the training and development policies and the opportunities available to them. The training policy should be known to staff at the time of recruitment and publicised during orientations and staff meetings.



- The university library administrators in Ghana should ensure that all aspects of the training and development policies are implemented in full.
- There is a need to continuously strengthen and revise the training and development policies and programmes of all the universities studied. All the new management decisions and directives on training and development should be incorporated into the training and development manual. This will help to reflect changes in the employee terms and conditions of service and the changing economic and operational circumstances.

#### 8.5.2 Recommendations on staff training and development programmes

The recommendations on staff training and development programmes are as follows:

- The university libraries in Ghana should establish a unit for training and development activities. This unit should be responsible for identifying training needs of library staff and the organisation of training and development programmes which should be supervised by the university librarians. However, the unit should work closely with the human resource department of the universities which could give professional guidance on the running of training and development programmes for library staff.
- The training and development programmes provided for to library staff of the university libraries in Ghana should focus on developing both current and future skills

requirements of library staff. The training should also allow for broadening of skills and possibility of cross-functioning training.

- Furthermore, the training and development programmes should aim at developing skills and increasing knowledge and experience of library staff. The universities should put systems in place to assess and develop attitudes and behaviour of library staff. This will ensure that the potential of library staff are harnessed and organisational and personal success secured.
- The university library administrators should ensure objectivity in the selection of library staff for training so that selection for training and development is based on need as well as equal opportunities for all library staff.
- The training methods should be effectively designed to ensure that the content, methods of delivery are relevant to the job functions of the library staff.
- The training and development programmes should be linked to the vision and mission of the libraries to ensure the overall achievement of the reasons for their existence.

# 8.5.3 Recommendations on the contributions of staff training and development programmes to effective library and information services

In order to maximise the effects of training and development in the university libraries in Ghana the following are recommended:

- The university libraries and the institutions should provide performance feedback to library staff who benefited from training to enable them to know the gaps in their performance and how these could be addressed through further training and development programmes organised by the institutions. Library staff should also be informed about the emerging job requirements of the university libraries and the role of the individual staff in fulfilling the vision and mission of the libraries.
- There should be a reward system for library staff who participated in training and development programmes, and demonstrated a transfer of what was learnt in their delivery of library services to users and this could range from promotion to an increase in salary.
- The institutions should provide adequate and appropriate training logistics and facilities to support university libraries staff development activities.

#### 8.5.4 Recommendations on training needs analysis/assessment

The study recommends that the university libraries in Ghana should establish training and development units that will be responsible for conducting training needs analysis/assessment. This study recommends the following with regard to training needs analysis/assessment in the university libraries in Ghana:

- The individual library staff, his or her immediate supervisor and the human resource manager should be involved in conducting training needs analysis/assessment
- The university library administrators should ensure that the three major sources for obtaining training needs which are organisational analysis, task analysis and person analysis are considered in order to ensure that both individual and institutional needs are catered for.
- In order to ensure that the most important training needs are met, training needs should be prioritised and addressed depending on the availability of funds.
- The training needs analysis should be done on annual basis and when necessary revised and conducted when the need arises.

# 8.5.5 Recommendations on monitoring and evaluation of staff training and development programmes

Monitoring and evaluation of staff training and development programmes are important components of the training and development process. The monitoring aspect of training should be done by the immediate supervisor, and should aim at detecting deficiencies, obstacles and make adjustments in a timely manner to enhance expected results. The involvement of the immediate supervisor can also help to demonstrate the support and involvement of management to the development of the library staff.

It is only through evaluation of training that the institutions can get feedback on the effectiveness of the training and development programmes. The evaluation should therefore consider the trainees reaction, learning, behaviour, results and more especially the overall return on investment in training.

This study, therefore, recommends that the results of training evaluation should be discussed with all the stakeholders, namely trainees (library staff), trainers or training institutions (resource persons, facilitators and library schools, professional associations or universities/colleges involved in training library staff) and the sponsors of the trainees (employers). The training units of the university libraries in collaboration with the supervisors/managers, university librarians and human resource managers should be responsible for monitoring and evaluation of training and development programmes. The training evaluation should therefore be a collective responsibility.

# 8.5.6 Recommendations on how university libraries can derive the full benefits of training and development

The results of this study establish that training and development activities benefited both the individual library staff and the institutions in various ways. It is, therefore, recommended that the university libraries should pay attention to staff development by investing the necessary resources that will enable the individual library staff and institutions maximised the benefits of training and development. In order to derive the full benefits of training and development for library staff, there should always be evaluation right through to needs assessment design and delivery of training in order to identify gaps so that the necessary changes could be made in future training programmes.

## 8.5.7 Recommendations on how to ensure that training and development of library staff promote the work of academic staff/academic work

The university libraries provide materials, facilities and services to support the core business of universities, which are teaching, learning and research. In fact, the university library is an academic facility. It is, therefore, impossible to separate the university library functions from academic work. This study, therefore, recommends that the university libraries in Ghana should take advantage of the emerging technologies to introduce new and innovative services that will help the libraries to meet the information needs of the new generation of library users. Library and information services should be sufficiently marketed in the university community to encourage patronage. Periodic evaluation of library services should also be undertaken. This will enable the university libraries to get feedback on the impact of their services which could help to improve future library services.

#### 8.5.8 Recommendations on how to maximise the return on investment in training

The following is recommended on the return on investment in training in the university libraries in Ghana:

- The results of this study show that the staff development programmes are not adequately funded. Adequate budgetary provisions should be made for staff training and development programmes in the university libraries in Ghana. This will facilitate successful implementation of training and development.
- The train the trainer concept where staff who participated in training and development programmes are asked to train colleagues and or submit a report on the training for the benefit of colleagues, with the aim of reducing the cost of training and maximising the returns on investment in training, should be encouraged in the university libraries in Ghana.
- The training and development units of the university libraries in collaboration with the human resource departments should develop the capacity for determining the return on

investment in training in monetary terms. This will go a long way to help in future financial investment in staff development.

#### 8.6 Possible impact of the findings on future staff training and development programmes

This study contributes to the existing body of knowledge on staff training and development and work performance especially in the university libraries in Ghana.

The findings of the study may be used by university authorities, library administrators, human resource practitioners, researchers and students undertaking studies on the subject in Ghana and possibly other developing countries.

The recommendations, when implemented should be able to help in improving future staff training and development programmes in the university libraries in Ghana.

#### 8.7 Suggestions for further research

The study identified related problem areas that require further research. The researcher therefore suggests further studies in the following areas:

• The findings of this study reveal that staff development alone does not contribute to improved job performance and higher productivity of library staff and the university

libraries. The study established that other motivational factors such as reward, promotion, salary increase ,bonuses, provision of appropriate and adequate working tools, commitment of both library staff and management, creation of the right working environment, sound management structures, effective communication, understanding of the vision, mission and core values of the institutions, periodic evaluation of service quality, adequate budgetary provision and staffing are also critical. All these factors ensured that the trainees attach importance to training and what is learnt is transferred to their jobs. It is, therefore, important to investigate how these other factors contribute to library staff work performance and what their effects are in the provision of library and information services.

- The results of this study reveal that there are no standard instruments for evaluating training and development programmes in the university libraries in Ghana. The researcher, therefore, suggests that research should be done that will lead to the development of a standard instrument and framework for measuring the contribution of staff training and development programmes to work performance in the university libraries.
- The researcher suggests that the environmental factors such as competitors, legislation, clienteles, social and economic factors that influence staff development and organisational performance need to be investigated in detail.
- The researcher suggests future research should consider the match between the levels of staff development outcomes and job expectations in the university libraries.

#### 8.8 Final conclusion

The purpose of this study was to investigate the contribution of staff training and development programmes to effective library and information services in the university libraries in Ghana. The study was guided by research objectives and questions.

The study establishes that a positive and logical relationship exists between staff training and development and the work performance of library staff and university libraries in the provision of library and information services.

The study concludes that carefully planned and well executed staff training and development programmes contributed to job performance of library staff, and the collective work performance of staff affect the delivery of library and information services in university libraries in Ghana. However, the study also establishes that staff development alone is not enough to enhance library staff job performance. Other factors such as reward, promotion, salary increase, bonuses, provision of appropriate and adequate working tools, commitment of both library staff and management to work, creation of the right working environment, sound management structures, effective communication, understanding of the vision, mission and core values of the institution, periodic evaluation of service quality, adequate budgetary provision and staffing support higher productivity and work performance of library staff in the universities in Ghana.



- The difficulty is that staff training and development programmes encompass a collection of diverse training methods and it is sometimes very difficult to measure the contribution of the individual training methods to the organisational performance. The researcher identified the challenges that faced the implementation of staff training and development programmes in the university libraries in Ghana and these include:
- staff training and developments programmes were not well monitored and evaluated,
- some of the training programmes were not related to the library
- the time that training programmes were organised was unfavourable to staff who may be on annual leave
- resource persons were not well remunerated to motivate them give off their best
- staff had no immediate experience after the training leading to the training being forgotten
- staff did not internalise the training to apply the new knowledge gained to their jobs.

This study, therefore, concludes with recommendations that will help in improving future staff training and development programmes in the university libraries in Ghana.

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373

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#### **APPENDIX I**

## AN INVESTIGATION OF THE CONTRIBUTION OF STAFF DEVELOPMENT PROGRAMMES TO EFFECTIVE LIBRARY AND INFORMATION SERVICES IN THE UNIVERSITY LIBRARIES OF GHANA

#### **QUESTIONNAIRE FOR LIBRARY STAFF**

#### Introduction

I am a PhD Student in Information Science at the Department of Information Science, University of South Africa (UNISA).

This questionnaire is being administered to selected participants to solicit information on the above mentioned study. I would be very grateful if you could respond to all the questions providing as much detail as required and return the questionnaire as soon as possible.

The answers given will be used for academic purpose only.

Please be assured that information provided will be treated with absolute confidentiality.

Many thanks for your cooperation.

Mac-Anthony Cobblah

(PhD Candidate)

#### SECTION A

#### **BACKGROUND INFORMATION**

#### INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

- (i). Please read each question carefully and tick the appropriate box (es) to indicate your answer.
- (ii). Use spaces provided to write your answers to the questions.
- (iii). If you use additional sheets of paper for detailed answers, kindly indicate in all cases the question number you are referring to.
- (v). The following abbreviations are used for institutions;
  - Methodist University College Ghana (MUCG)
  - University of Ghana (UG)
  - University of Cape Coast (UCC)
  - University of Education (UEW)
  - Central University College (CUC)
  - Training and Development (T&D)
  - Return On Investment (ROI)
- **Q1.** Please indicate your institution.
  - (i) MUCG [ ]
  - (ii) UG [ ]

Q2.	Name of you	ır Library
	(v) CUC	[]
	(iv) UEW	[]
	(iii) UCC	[]

**Q 3.** Position: please tick  $(\checkmark)$  where appropriate

(i) Library Assistant	[	]	
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- (ii) Senior Library Assistant []
- (iii) Principal Library Assistant []
- (iv) Chief Library Assistant [ ]
- (v) Assistant Librarian [ ]
- (vi) Senior Assistant Librarian []
- (vii) Deputy Librarian/Librarian []
- (viii) IT Support Staff []
- (ix) Administrative staff [ ]
- (x) Other, please specify

•••	 	•••	 	 •••	•••	 •••	 •••	 	 	 	•••	 •••	•••	 •••	•••	 	•••	 •••	•••	 	•••	 •••	•••	• •	•••	 	 	
•••	 	•••	 	 •••	•••	 •••	 •••	 	 	 	•••	 •••	•••	 	•••	 	•••	 	•••	 	•••	 •••	•••	•••	•••	 	 	
•••	 	••	 	 •••	•••	 •••	 •••	 	 	 	•••	 •••	•••	 	•••	 		 	•••	 	•••	 			•••	 	 	

Q4.	Gender:	Male	[]	Female	[	]
Q5.	Age:					
(i) Une	der 30 years		[]			
(ii) 31	1-40 years		[]			
(iii) 4	1-50 years		[]			
(iv) 50	) years and abo	ve	[]			

**Q6.** What is your current academic/professional qualification?

(i)	Diploma	[]
(ii)	BA/BSc	[ ]
(iii)	MA/MPhil	[]
(iv)	PhD	[]
(v)	Others, please spe	ecify

**Q 7.** How long have you been working with your institution?

(i) 1-5 years []
(ii) 6 - 10 years []
(iii) 11 - 15 years []

- (iv) Over 15 years [ ]
- **Q8.** How long have you been in your current position?
  - (i) 1- 3years []
    (ii) 4-5 years []
    (iii) 6-8 years []
    (iv) 9-10 years []
    (v) Over 10 years []

#### **SECTION B.**

## AWARENESS AND USE OF TRAINING AND DEVELOPMENT PROGRAMMES/ POLICY AND TRAINING NEEDS ANALYSIS

Q9. Does your organization have a training and development policy for library staff?

(i) Yes [ ] (ii) No [ ]

**Q10.** If you answered (yes) to Q9, Please rate your assessment of the policy on a scale of 1-5 where 1 = Very Satisfied, 2 = Satisfied, 3 = Neutral/Not Sure, 4 = Dissatisfied, 5 = Very Dissatisfied.

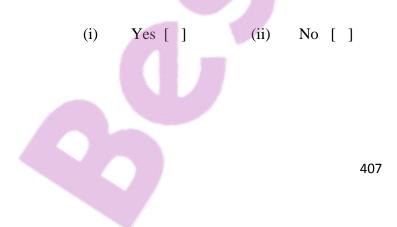
		Level of Sa									
Evaluation of T&D Policy	1	2	3	4	5						
Coverage of policy											
Selection criteria											
Relevance of T&D programmes											
Training Methods											
Organisational support											
Monitoring and Evaluation											

Q11.Awareness and use of training and development programmes.

T&D Programmes	Awar	eness	Level of Use											
	Yes	No	Never used	Once a year	Twice a year	Twice a year	More than four times a year							
Classroom training														
Job rotation														
Consultant training														

Mentoring/Coaching				
Workshops/Seminars/				
Conferences				
Long distance				
learning				
Study visits			-	
Case studies				
Simulation & use of				
games			•	
Publications and				
research		•		
Professional			v	
Association				

Q12a. Does your organisation conducts Training Needs Analysis?



**Q12b.** If you answered(yes) to Q12a, which methods are used in determining your training needs, please tick ( $\checkmark$ ) as many that are applicable.

(i)	Questionnaire method	[]
(ii)	Observation method	[]
(iii)	Interview method	[]
(iv)	Job description method	[]
(v)	The difficulty analysis method	[]
(vi)	Problem solving conference method	[]
(vii)	Appraisal review method	[]
(viii)	Drive pattern analysis method	[]
(ix)	Analysis of organizational policy method	[]
(x)	Others, please specify	

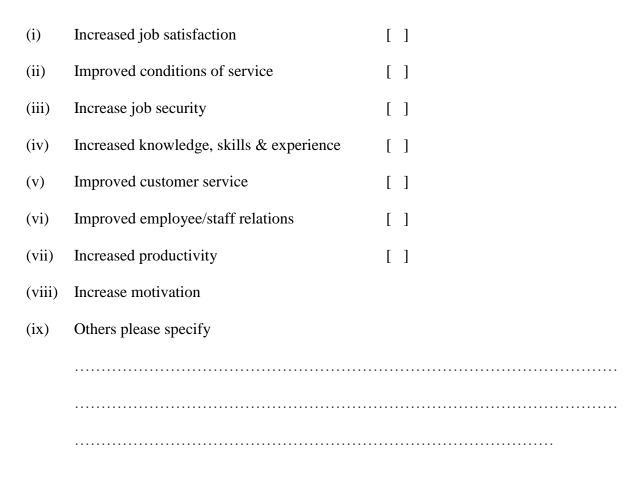
#### SECTION C.

.....

# EFFECTS OF TRAINING AND DEVELOPMENT PROGRAMMES ON EMPLOYEE PERFORMANCE

Q13. Which of the following benefits have you derived from Training and Development

programmes? Tick as many that are applicable



**Q14.** Please indicate the extent to which the following training and development programmes have affected your job performance. Rate your level of effects on the scale of 1-5, Where 1 = Extremely, 2 = High, 3 = Neutral/Not sure, 4 = Moderate, 5 = No Effect.

	Level of Effect										
Training and Development Programmes	1	2	3	4	5						
Classroom training											
Job rotation											
Consultant training											
Mentoring/Coaching											



Workshops/Seminars/Conferences			
Long distance learning			
Study visits			
Case studies			
Simulation & use of games			
Publications and research			
Professional Association			

**Q15a.** Do you think the current training and development programmes provide appropriate training content and methods that can assist you in performing your job?

(i) Yes [ ] (ii) No [ ]

**Q15b.** If you answered yes to Q15a, please indicate the extent to which the training and development programmes have contributed to your job performance in terms of the following. Please rate your assessment on a scale of 1-5, Where 1 = Extremely, 2 = High, 3 = Not Sure, 4 = Moderate, 5 = No Contribution.

Level of

#### Contribution

Effects on information provision	1	2	3	4	5
Understanding the information needs of users					
Understanding information sources					
Acquisition of information based on needs					

Organization of information			
Information search/retrieval			
Evaluation of information			
Searching/retrieval of information			
Timely delivery of information			
Meeting information needs of users			

#### **SECTION D**

## Evaluation and monitoring of Training & Development programmes and Returns on Investment (ROI)

Q16. Does your organization monitor and evaluates training and development programmes and

if yes please indicate the methods used for evaluation. Please tick ( $\checkmark$ ) as many that are

applicable.

Type of evaluation			Methods of evaluation			
	Yes	No	Observatio	Interview	Questionnaire	Records Analysis
			n			
a. Reaction						

b. Learning			
c. Behaviour			
d. Results			
e. Return on Investment			

**Q17.** Who is responsible for the monitoring and evaluation of training and development programmes? Tick as many that are applicable

(i)	HR department	[]
(ii)	Trainers/training institutions	[]
(iii)	Clients-library users	[]
(iv)	Immediate supervisors	[]
(v)	Colleagues/ co-workers	[]

**Q18.** When is the evaluation of training and development carried out? Please tick as many that are applicable.

(i)	Before and during the training	[]
(ii)	During and after the training	[]
(iii)	Before and immediately after the training	[]
(iv)	Before, during and after the training	

(v)	6 months after the training	[ ]
(vi)	1 year after the training	[]
(vii)	Continuous monitoring and evaluation	[]

**Q19.** In your estimation how would you rate your current job performance to the total cost of investment in training?

(i)	Above the investment	[]
(ii)	Equal to the investment	[]
(iii)	Below the investment	[]
(iv)	Do not know	[]

**Q20.** What are the problems and please provide suggestions and recommendations that can help improve upon training and development programmes and future job performance of library staff?

#### 20 (a). Problems

.....

20 (b). Suggestions/ Recommendations

## THANK YOU VERY MUCH FOR YOUR TIME

# AN INVESTIGATION OF THE CONTRIBUTION OF STAFF DEVELOPMENT PROGRAMMES TO EFFECTIVE LIBRARY AND INFORMATION SERVICES IN THE UNIVERSITY LIBRARIES OF GHANA

#### **QUESTIONNAIRE FOR FACULTY STAFF**

#### Introduction

I am a PhD Student in Information Science at the Department of Information Science, University of South Africa (UNISA).

This questionnaire is being administered to selected participants to solicit information on the above mentioned study, I would be very grateful if you could respond to all the questions providing as much detail as required and return the questionnaire as soon as possible.

The answers given will be used for academic purpose only.

Please be assured that information provided will be treated with absolute confidentiality.

Many thanks for your cooperation.

Mac-Anthony Cobblah

(PhD Candidate)

#### SECTION A

#### **BACKGROUND INFORMATION**

#### INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

- (i). Please read each question carefully and tick the appropriate box (es) to indicate your answer.
- (ii). Use spaces provided to write your answers to the questions.
- (iii). If you use additional sheets of paper for detailed answers, kindly indicate in all cases the question number you are referring to.
- (iv). The following abbreviations are used for institutions;
  - Methodist University College Ghana (MUCG)
  - University of Ghana (UG)
  - University of Cape Coast (UCC)
  - University of Education (UEW)
  - Central University College (CUC)
  - Training and Development(T&D)
  - Return on Investment (ROI)

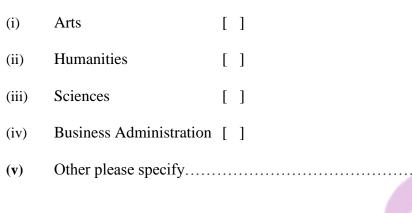
Q1. Please indicate the name of your institution.

- (i) MUCG [ ]
- (ii) UG []
- (iii) UCC [ ]

<b>Q 3.</b> Posi	tion: pleas	e tick ( $\checkmark$ ) where appropriate
<b>Q2.</b> Nam	e of your l	ibrary
(v)	CUC	[]
(iv)	UEW	[]

(i) Professor/Assoc	iate		[]				
(ii) Senior Lecturer			[]				
(iii)Lecturer			[]				
(iv)Assistant Lectur	er		[]				
(v) Research Fellow	V		[]				
(vi)Teaching Assist	ant		[]				
(vii) Other, please s	pecify	y				 	
Q4. Gender: N	Aale	[]		Female	[]		
<b>Q5.</b> Age:							
(i) Under 30 years 1		[]					
(ii) 31-40 years		[]					
(iii) 41-50 years		[]					
(iv) 51 years and above		[]					

**Q6.** Please tick ( $\checkmark$ ) the subject area;



**Q7.** How long have you been working with your institution?

(i) 1-5 years []
(ii) 6-10 years []
(iii) 11-15 years []
(iv) 16-20 years []
(v) Over 21 years []

417

## **SECTION B.**

## AWARENESS AND USE OF LIBRARY SERVICES

**Q8.** Which of the following library and information services are you aware of at your institution and how often do you use the services?

Library and	Awareness		Level of Use				
Information Services	Aware	Not aware	Never used	Once a month	Twice a month	Twice a week	More than three times a week
Book lending							
Literature searches							
Reference assistance (SDI,QAS, CAS,RS)							
Inter-library loan							
Bibliographic control							
Information literacy training							

Advise on information				
sources				
Provision of study				
space				
Internet services				
Photocopy services				

**Q9.** Please indicate how satisfied you are with the following library services.

Please rate your answer on the scale 1-5, where 1 = Very Satisfied, 2 = Satisfied,

3 = Neutral/Not Sure, 4 = Dissatisfied, and 5 = Very Dissatisfied.

Library Services	Level of Satisfaction						
	1	2	3	4	5		
Book lending							
Literature searches							
Reference assistance (SDI,QAS, CAS,RS)							
Inter-library loan							
Bibliographic control							



Information literacy training			
Advise on information sources			
Provision of study space			
Internet services			
Photocopy services			

**Q10.** Which of the following library services influence your academic work (teaching, learning and research) and to what extent does it affect your work?

Please rate the level of influence on a scale 1-5, where 1 - Extremely, 2 = High, 3 = Neutral/NotSure, 4 = Moderate, 5 = No Influence.

Library Services	Influ	ience	Level of Influence					
	Yes	No	Extremely	High	Neutral/	Moderate	No Influence	
					Not Sure			
Book lending								
Literature								
searches								

Reference				
assistance				
(SDI,QAS,				
CAS,RS)				
Inter-library loan				
Bibliographic				
control				
Information				
literacy training				
Advise on				
information				
sources				
Provision of study				
space				
Internet services				
Photocopy				
services				

## **SECTION C.**

## **EFFECTS OF TRAINING & DEVELOPMENT PROGRAMMES ON**

#### **JOB PERFORMANCE**

Q11. Are you aware of the training and development programmes for library staff?

(i) Yes [] (ii) No []

**Q12.** If you answered yes to Q11 above, which of the following T&D programmes below are you aware of? Please tick ( $\checkmark$ ) as many as are applicable.

(i)	Classroom training	[]
(ii)	Job rotation	[]
(iii)	Consultant training	[]
(iv)	Mentorship/Coaching	[]
(v)	Workshops/Seminars/Conferences	[]
(vi)	Long distance learning	[]
(vii)	Case study	[]
(viii)	Study visits	[]
(ix)	Simulation and games	[]
(x)	Publications and Research	[]
(xi)	Professional Association	[]
(xii)	Others( Please specify)	

**Q13a.** How important do you consider training and development programmes for the library staff?

(i)	Extremely important	[]
(ii)	Very important	[]
(iii)	Important	[]
(iv)	Not sure	[]
(v)	Not important	[]

Q13b. Please give reason for your answer to 13a

.....

**Q14a.** Do you think the current Training & Development programmes provide appropriate training content and methods that can assist you to achieve your job performance?

(ii) Yes [ ] (ii) No [ ]

**Q14b.**If you answered yes to Q14a, please indicate the extent to which the T&D programmes have contributed to the job performance of library staff in terms of the following. Please rate your assessment on a scale of 1-5, Where 1 = Extremely, 2 = High, 3 = Neutral/ Not Sure, 4 = Moderate, 5 = No Contribution.

## Level of

## Contribution

Areas of impact	1	2	3	4	5
Understanding the information needs of users					
Understanding information sources					
Acquisition of information based on needs					
Organization of information					
Information search/retrieval					
Evaluation of information					
Timely delivery of information					
Meeting information needs of users					

Q15. What is your assessment of the job performance of the library staff?

- (i) Excellent [ ]
- (ii) Above Average [ ]
- (iii) Satisfactory [ ]
- (iv) Not Satisfactory [ ]
- (v) No Opinion [ ]

**Q16**. Has the current job performance of library staff benefited you in terms of the following? If yes please rate the extent of the benefit on the scale 1-5, where 1 = Extremely, 2 = High,

3 = Neutral/Not Sure, 4 = Moderate, 5 = No benefit

Job Performance	А	ny	Level of benefit							
	ben	efit?								
	Yes	No	Extremely	High	Neutral/ Not Sure	Moderate	No Effect			
Assisted in										
preparation of lecture notes										
Expedited my research activities										
Enhanced										
preparation for exams										
Enhanced my										
information literacy skills										

#### **SECTION D**

#### **MEASURING RETURNS ON INVESTMENT**

Q17a. Do you consider training of library staff a good investment? (i) Yes [] (ii) No []

Q17b. Please give reasons for your answer to Q17a

.....

**Q18.** Do you think your institution is getting good returns on the investment in training library staff?

(i) Yes [] (ii) No []

**Q19.** In your estimation how would you rate the current performance of library staff to the total cost of investment in training them?

(i)	Above the investment	[]
(ii)	Equal to investment	[]
(iii)	Below investment	[]
(iv)	Not Sure	[]

**Q20.** What are the problems? Please provide suggestions and recommendations that can help improve upon training and development programmes and future job performance of library staff?

20(a) Problems

.....

20(b) Suggestions/Recommendations

## THANK YOU VERY MUCH FOR YOUR TIME

# AN INVESTIGATION OF THE CONTRIBUTION OF STAFF DEVELOPMENT PROGRAMMES TO EFFECTIVE LIBRARY AND INFORMATION SERVICES IN THE UNIVERSITY LIBRARIES OF GHANA

#### **QUESTIONNAIRE FOR STUDENTS**

#### Introduction

I am a PhD Student in Information Science at the Department of Information Science, University of South Africa (UNISA).

This questionnaire is being administered to selected participants to solicit information on the above mentioned study, I would be very grateful if you could respond to all the questions providing as much detail as required and return the questionnaire as soon as possible.

The answers given will be used for academic purpose only.

Please be assured that information provided will be treated with absolute confidentiality.

Many thanks for your cooperation.

Mac-Anthony Cobblah

(PhD Candidate)

#### **SECTION A**

#### **BACKGROUND INFORMATION**

#### INSTRUCTIONS FOR COMPUTING THE QUESTIONNAIRE

- (i). Please read each question carefully and tick the appropriate box (es) to indicate your answer.
- (ii). Use spaces provided to write your answers to the questions.
- (iii). If you use additional sheets of paper where necessary for detailed answers. Kindly indicate in all cases the question number you are referring to.
- (v). The following abbreviations are used for institutions;
  - Methodist University College Ghana (MUCG)
  - University of Ghana (UG)
  - University of Cape Coast (UCC)
  - University of Education (UEW)
  - Central University College (CUC)
  - Training and Development (T&D)
  - Return On Investment (ROI)

Q1. Please indicate the name of your institution.

- (i) MUCG [ ]
- (ii) UG [ ]
- (iii) UCC [ ]



(iv)	UEW	[]
(v)	CUC	[]

Q2. Name of your Library.....

Q 3. Please tick your course of study

	(i)	BA	[]
	(ii)	BSc	[]
	(iii)	BBA	[]
	(iv)	MA	[]
	(v)	Msc	[]
	(vi)	M.Phil	[]
	(vii)	PhD	[]
	(viii)	Others, please sp	ecify
Q	4. Pleas	se indicate the subj	ect area;
	(i)	Humanities	[ ]
	(ii)	Business Admini	stration []
	(iii)	Social Sciences	[ ]
	(iv)	Sciences	[ ]
	(v)	Arts	[ ]
	(vi)	Other, please spe	cify
Q	5. Gend	er: Male [ ]	Female []

## **Q6.** Age:

(i)	21 - 30 years	[ ]
(ii)	31-40 years	[]
(iii)	41-50 years	[]
(iv)	51 years and above	[]

## **SECTION B.**

## AWARENESS AND USE OF LIBRARY SERVICES

**Q7.** Which of the following library and information services are you aware of at your institution and how often do you use these services?

Library and	Awa	reness	Level of use					
Information Services	Aware	Not aware	Never used	Once a month	Twice a month	Twice a week	More than three times a week	
Book lending								
Literature searches								
Reference assistance (SDI,QAS, CAS,RS)								

Inter-library loan				
Bibliographic control				
Information literacy training				
Advise on information sources				
Provision of study space				
Internet services				
Photocopy services				

**Q8.** Please indicate how satisfied you are with the following library services.

Rate your answer on the scale 1-5, where 1 = Very Satisfied, 2 = Satisfied, 3 = Neutral/Not Sure,

4 = Dissatisfied, and 5 = Very Dissatisfied.

Library Services	Level of Satisfaction						
	1	2	3	4	5		
Book lending							
Literature searches							

Reference assistance			
(SDI,QAS, CAS,RS)			
Inter-library loan			
Bibliographic control			
Information literacy training			
Advise on information sources			
Provision of study space			
Internet services			
Photocopy services			

**Q9.** Which of the following library services influence your academic work (learning and research) and to what extent does it affect your work?

Please rate your level of influence on the scale 1-5, where 1 - Extremely, 2 = High,

3 = Neutral/Not Sure, 4 = Moderate, 5 = No Influence.

Library	Influ	ience	Level of Influence					
Services	Influence	Not	Extremely	High	Neutral/Not	Moderate	No	
		Influence	-		Sure		Influence	

Book lending							
Literature searches							
Reference							
assistance							
(SDI,QAS,	_	_		_	_	_	
CAS,RS)							
Inter-library							
loan							
Bibliographic							
control							
Information							
literacy training							
Advise on							
information		_	_	_		_	_
sources							
Provision of							
study space							
Internet							
services							
Photocopy							
services							

## **SECTION C.**

## EFFECTS OF TRAINING AND DEVELOPMENT PROGRAMMES ON

#### **JOB PERFORMANCE**

Q10. Are you aware of the training and development programmes/policy for library staff?

(i) Yes [] (ii) No []

**Q11.** If you answered (yes) to Q10 above, please tick ( $\checkmark$ ) as many as are applicable.

(i)	Classroom training	[]
(ii)	Job rotation	[]
(iii)	Consultant training	[]
(iv)	Mentorship/Coaching	[ ]
(v)	Workshops/Seminars/Conference	es[ ]
(vi)	Long distance learning	[ ]
(vii)	Case study	[]
(viii)	Study visits	[ ]
(ix)	Simulation and games	[]
(x)	Publications and Research	[]
(xi)	Professional Association	[]
(xii)	Others, Please specify	

**Q12a.** How important do you think training and development programmes are to the library staff?

(i)	Extremely important	[]
(ii)	Very important	[]
(iii)	Important	[]
(iv)	Not sure	[]
(v)	Not important	[]

Q12b. Please give reason(s) for your answer to question 12a

.....

Q13. How has the performance of library staff benefited you in terms of the following; Please

rate the extent of the effect on the scale 1-5, where 1 = Extremely, 2 = High, 3 =

Neutral/Not Sure, 4 =High, 5 =No Influence.

Benefits of	Eff	ect	Level of effect						
improved job	<b>T</b> 7								
	Yes	No	Extremely	High	Neutral/Not	Moderate	No Influence		
performance					Sure				

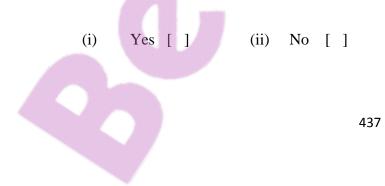
Provided wide range				
of resources on my				
course				
Expedited my				
research activities				
Enhanced				
preparation for				
exams				
Enhanced my				
information literacy				
skills				

Q14. How will you rate the performance of the library staff?

[]

- (i) Excellent
- (ii) Above Average [ ]
- (iii) Satisfactory [ ]
- (iv) Not Satisfactory [ ]
- (v) No Opinion []

**Q15.** Do you think the current T&D programmes provide appropriate training content and methods that can assist library staff to improve upon their job performance?



**Q16.** If yes to Q15, please indicate the extent to which the T&D programmes have contributed to the performance of the library staff in the following ways; Please rate your assessment on a scale of 1-5, Where 1 = Extremely, 2 = High, 3 = Neutral/ Not Sure, 4 = Moderate, 5 = No Influence.

## Level of Contribution

Areas of impact	1	2	3	4	5
Understanding the information needs of users					
Understanding information sources					
Acquisition of information based on needs					
Organization of information					
Information search and retrieval					
Evaluation of information					
Timely delivery of information					
Meeting information needs of users					

## **SECTION D**

#### MEASURING RETURN ON INVESTMENT

Q17a. Do you consider training of library staff a good investment?

(i) Yes [] (ii) No []

Q17b. Please give reason(s) for your answer

.....

**Q18.** Do you think your institution is getting good returns on the investment in training library staff?

(i) Yes [ ] (ii) No [ ]

**Q19.** In your estimation how would you rate the current performance of library staff to the total cost of investment in training them?

(i)	Above the investment	[]
(ii)	Equal to investment	[]
(iii)	Below investment	[]
(iv)	Not Sure	[]

**Q20.** What are the problems and please provide suggestions and recommendations that can help improve training and development programmes and future job performance of library staff?

## 20(a) Problems

.....



20(b) Suggestions/ Recommendations

.....

THANK YOU VERY MUCH FOR YOUR TIME

#### **APPENDIX IV**

# AN INVESTIGATION OF THE CONTRIBUTION OF STAFF DEVELOPMENT PROGRAMMES TO EFFECTIVE LIBRARY AND INFORMATION SERVICES IN THE UNIVERSITY LIBRARIES OF GHANA

## SCHEDULED INTERVIEW QUESTIONS FOR UNIVERSITY LIBRARIANS/HEADS OF DEPARTMENT

#### Introduction

I am a PhD Student in Information Science at the Department of Information Science, University of South Africa (UNISA).

This interview will be conducted with some selected University Librarians and Heads of departments to solicit information on the above mentioned study. I would be very grateful if you could make time to answer the questions below providing as much detail as required.

The answers given will be used for academic purpose only.

Please be assured that information provided will be treated with absolute confidentiality.

Many thanks for your cooperation.

Mac-Anthony Cobblah

(PhD Candidate)

#### SECTION A

#### **BACKGROUND INFORMATION**

#### **INSTRUCTIONS FOR INTERVIEW**

- (i). Please read all the questions carefully and prepare the appropriate answers before the interview date.
- (ii). The interview will be tape recorded and transcribed.
- (iii). Please feel free to call me on 0244616950 in case you need clarification on any of the questions.
- (iv). The following abbreviations will be used for the institutions;
  - Methodist University College Ghana (MUCG)
  - University of Ghana (UG)
  - University of Cape Coast (UCC)
  - University of Education Winneba (UEW)
  - Central University College (CUC)
  - Training and Development (T&D)
  - Return on Investment (ROI)
- Q1 What is the name of your Institution?
- **Q2** Name of your Library?
- Q3 What is your current position?

- **Q4** How long have you been in this position?
- **Q5** How long have you been working with the Library?
- **Q6.** Which of the following is your age group?
  - (v) Under 30 years
  - (vi) 31-40 years
  - (vii) 41-50 years
  - (viii) 51 years and above
- **Q7.** What is your current qualification?
- **Q8.** What is the total number of Library staff?

Please give the breakdown:

- (i) No. of Professionals?
- (ii) No. of Para professionals?
- (iii) No. of other support staff?
- **Q9**. What is the total number of library users in your institution?

Please give the breakdown:

Senior Members?

Students?

Other Staff?

**Q10.** What is the total number of the following information resources/equipment in your library?

- (i) Books
- (ii) Journals
- (iii) Online databases
- (iv) Photocopiers
- (v) Computers
- **Q11.** What is the average total annual budget of your library for the past 3 years?

#### **SECTION B.**

#### TRAINING AND DEVELOPMENT POLICY/TRAINING NEEDS ANALYSIS

- Q12a. Does your University have a training and development policy for library staff?
- **Q12b.** If you answered (yes) to Q12a, please answer the following questions with regard to the training and development policy for library staff.
  - (i) Is the training and development policy documented?
  - (ii) Does it cover all aspects of the training and development activities?
  - (iii) Were you involved in the formulation of the policy?
  - (iv) Are you involved in the implementation of the policy?
  - (v) Are the library staff aware of the training policy?
  - (vi) Have you identified any weakness (es) in the training policy?
- **Q12c.** If you answered (yes) to Q12b (vi), please state the weakness (es)

- Q13a. Do you have any process for assessing the individual and the organizational training needs?
- Q13b. Who is responsible for training needs assessment?
- 14. How often is the training needs assessment carried out?
- Q15. Which methods are used to identify the training needs in your organization?

#### **SECTION C**

#### TRAINING AND DEVELOPMENT PROGRAMMES

- Q16. Which training and development programmes/methods are available to library staff?
- **Q17.** Which target group undergoes most of the training and development programmes in institutions?
  - Q19. What are the important considerations in selecting trainers/training institutions?
  - **Q20.** What are your institutional objectives for training and development programmes for staff?

#### **SECTION D**

## EVALUATION AND MONITORING OF TRAINING AND DEVELOPMENT PROGRAMMES

**Q21a.** Does your organization monitor and evaluate training and development programmes for library staff

Q21b. If you answered (yes) to Q21a, which method(s) of evaluation are used?

**Q21c.** How is data collected on library staff for monitoring and evaluation purposes?

**Q22.** Who is responsible for the monitoring and evaluation of training and development programmes?

**Q23.** When is the monitoring and evaluation done?

**Q24.** What does the monitoring and evaluation cover?

#### **SECTION E**

## EFFECTS OF TRAINING AND DEVELOPMENT PROGRAMMES ON STAFF WORK PERFORMANCE

- **Q25.** In your estimation how will you assess the performance of library staff after training in terms of effectiveness and productivity in the provision of library and information services?
  - **Q26.** Please indicate the extent to which training and development programmes has contributed to library staff performance?

#### **SECTION F**

#### **MEASURING RETURN ON INVESTMENT**

Q27a. Is there any method of calculating Return on Investment (ROI) in training in your institution?

- Q27b. If you answered yes to Q27a, please specify how you calculate return on investment (ROI)
- **Q28.** In your estimation how would you rate the current job performance of staff who have benefited from training against the total cost of investment in training?
- **Q29.** What problems do your staff encounter in training and development activities? (Please provide suggestions/ recommendations that can help improve training and development programmes and performance of staff)

(a) Problems

(b) Suggestions/ Recommendations

## THANK YOU VERY MUCH FOR YOUR VALUABLE TIME

#### **APPENDIX V**

## Methodist University College Ghana P O Box DC40 Dansoman – Accra 15<sup>th</sup> June, 2013

#### Dear University Librarian,

## PERMISSION TO CONDUCT PhD RESEARCH WORK AT YOUR

#### LIBRARY/INSTITUTION

I am a PhD candidate at the University of South Africa (UNISA) conducting research on the topic "An investigation of the contribution of staff training and development programmes to effective library and information in the university libraries in Ghana.

The purpose of the study is to establish the relationship between training and development of library staff and work performance of both library staff and the university libraries in the provision of library and information services to the university community.

Participation in the study is voluntary and participants can disengage from the research at any time if they feel uncomfortable.

Information provided by the participants will be treated with outmost confidentiality. All the participants will be required to complete and signed the attached consent form. The five selected

institutions are University of Ghana, University of Cape Coast, University of Education Winneba, Central University College and Methodist University College Ghana.

Yours faithfully

Mac-Anthony Cobblah

(PhD Candidate)



#### **APPENDIX VI**

#### **CONSENT FORM**

Dear Prof/Dr/Mr/Mrs/Miss/Ms.

Date...../..../...../

#### **RESEARCH TOPIC**

An investigation of the contribution of staff training and development programmes to effective library and information services in the university libraries in Ghana.

#### PURPOSE OF THE STUDY

The purpose of the study is to establish the relationship between training and development of library staff and work performance of both library staff and the university libraries in the provision of library and information services to the university community.

- 1. The study requires your participation either through completing a questionnaire, interview or observation.
- 2. You are kindly required to express your opinion on the training and development programme for the library staff of your institution and how it contributes to work performance.
- 3. There are no right or wrong answers and all opinions will be respected.
- 4. All participants will be given the opportunity to express their opinion and view.

5. Your attention is drawn to the fact that the interview and observation will be recorded and transcribed. You may peruse the transcription of the recordings in which you participated if you so wish.

## CONFIDENTIALITY

The opinion and view of the participants are strictly confidential. No data publish in the thesis and/or journals will contain any information that will help to identify the participants.

Thank you.

Signed	
Name	
Date	
Witness by	
Date	