



UNIVERSITI PUTRA MALAYSIA

**TRAINING DESIGN DEVELOPMENT: THE PRACTICE
OF FOUR DEVELOPMENT AGENCIES IN MALAYSIA**

ASMA BINTI AHMAD

FPP L 1994 7

**TRAINING DESIGN DEVELOPMENT:
THE PRACTICE OF FOUR
DEVELOPMENT AGENCIES IN MALAYSIA**

By

ASMA BINTI AHMAD

Dissertation Submitted in Fulfilment of the
Requirements for the Degree of Doctor of Philosophy in the
Centre for Extension and Continuing Education,
Universiti Pertanian Malaysia.

February 1994



ACKNOWLEDGEMENTS

With humility and faith, I thank Almighty ALLAH for giving me the strength and patience to complete this dissertation.

I wish to acknowledge my sincere gratitude to Associate Professor Dr. Hj. Saidin Teh, Chairman of my committee, for his invaluable guidance throughout my graduate programme, and his thoughtful contribution at every stage of this research. Similar appreciation is also extended to Associate Professor Dr. Hj. Azimi Hj. Hamzah.

Much acknowledgement and grateful thanks to my graduate committee members, Associate Professor Dato' Dr. Hj. Mohd Nasir Ismail and Y.M. Dr. Raja Ahmad Tajuddin Shah for comments and suggestions at different stages of this research.

I would like to thank Universiti Pertanian Malaysia which provided me the opportunity to pursue my graduate study. Thanks is also extended to the Public Services Department, Malaysian Government for the financial support.

I would like to gratefully acknowledge Puan Rashidah Abd. Rahman for her help in data gathering.



To Associate Professor Dr. Hj. Mohd. Fadzilah Kamsah, Dr. Hj. Bahari Yatim and Dr. Hajah Aminah Ahmad for their advice and help in the statistical analysis and also writing of the thesis. I am also particularly grateful to Dr. Bahaman Abu Samah and Encik Mohd Yusof Kadri for their help in computer programming and data analysis of my research. Thank you is also extended to Puan Zaharah Susan Ardis Keeney for editing the thesis.

I am also thankful to Puan Junainah Abdul Manan and Cik Rosmah Awang for their help in typing the thesis. My appreciation is also due to all staff members of the Centre who directly or indirectly provide assistance and support during my later part of thesis completion.

Last but not least, I would like to express my deepest and special appreciation to my husband, Hj. Nordin Hj. Mokhtar, for his continuous morale support, patience, encouragement and love throughout my graduate programme that made this work a success. To my loving sons, Azlee, Afiz, and Aznee, special thanks for being patience with your mum. I am also grateful to my parents, in-laws and also friends for their encouragement and support throughout my graduate programme that made this work a success. May ALLAH bless all of us.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	ii
LIST OF TABLES	ix
LIST OF FIGURES.....	xii
GLOSSARY.....	xiii
ABSTRACT.....	xiv
ABSTRAK.....	xvii

CHAPTER

I	INTRODUCTION.....	1
	The Context of the Study.....	1
	Training in the Malaysian Context.....	2
	Need for Training Design.....	5
	The Agencies Studied.....	8
	The Research Problem.....	11
	Objectives of the Study.....	14
	Significance of the Study.....	15
	General Assumptions of the Study.....	18
	Limitations of the Study.....	19
	Operational Definition of Terms.....	20
II	REVIEW OF LITERATURE.....	22
	Introduction.....	22
	Design Models.....	23
	Designing Operations.....	25
	Type of Design Models.....	28
	Curriculum and Curriculum Development.....	29
	Types of Training.....	32
	Learning Environment.....	36
	Principles of Training.....	40
	Transfer of Training.....	42
	Climate for Transfer.....	43
	Before Training.....	44
	During Training.....	45
	After Training.....	46
	Timing of Training.....	47
	Impact of Training.....	49
	Measuring Impact on the Trainees.....	50
	Measuring Impact on the Organization..	52
	Training Facilities.....	54
	Deterrents to Effective Training.....	55
	Solutions to Improving Training	
	Effectiveness.....	59
	Past Studies on Training Design Models.....	60



	Page
Studies in the Malaysian Context.....	65
Conceptual Framework of Training Design....	68
 III METHODOLOGY.....	 75
Introduction.....	75
Population of the Study.....	76
Sample of the Study.....	81
Data Collection Procedure.....	83
Interview Schedule.....	85
Pretesting of the Instrument.....	90
Reliability Test of the Scales.....	92
Measurement of Data.....	93
Measurement of Practised Level of Training Components.....	 93
Measurement of Perceived Level of Importance of Training Components.....	 94
Measurement of Perceived Level of Transfer of Training.....	 95
Measurement of Issues Related to the Transfer of Learning.....	 95
Measurement of Training Factors and Problems Encountered.....	 98
Personal Interview.....	98
Quantitative Data Analysis.....	99
The Level of Significance.....	104
 IV CONTENT ANALYSIS OF TRAINING DESIGNS.....	 106
Introduction.....	106
Aslam (1987).....	107
Atkins (1983).....	108
Boone (1985).....	109
Bramley (1989).....	110
Buckley et al. (1990).....	112
Camp et al. (1986).....	114
Friedman et al. (1985).....	115
Gammuto (1980).....	116
Goad (1982).....	117
Goldstein (1974).....	119
Goldstein (1986,1993).....	119
Murk et al. (1988).....	121
Nadler (1987).....	122
Robinson et al. (1989).....	124
Sork et al. (1986).....	125
Emerging Themes/Patterns of Designs.....	127
Summary of Generic Design.....	128

	Page
V FINDINGS I: THE PROPOSED GENERIC DESIGN....	131
Identifying Training Needs.....	132
Steps of Identifying Training	
Needs.....	134
Sources of Identifying Training	
Needs.....	137
Methods of Identifying Training	
Needs.....	138
Defining Training Objectives.....	139
Levels of Objectives.....	141
Categories of Objectives.....	141
Criteria of Objectives Statement..	143
Conditions in Stating Objectives..	146
Deriving Training Content.....	148
Coverage of Content.....	150
Selection Criteria of Training	
Content.....	151
Classifying Training Content.....	153
Organizing Training Content.....	155
Sequencing of Training Content....	156
Developing Criterion Measures.....	158
Levels of Criteria.....	159
Types of Criteria.....	161
Designing Methods and Training Materials...	162
Steps in Curriculum Planning	
and Development.....	162
Selection of Training Methods	
Based on Purposes.....	164
Selection of Training Methods	
Based on General Objectives.....	167
Training Techniques	
Classification.....	169
Conducting Training.....	170
Roles and Responsibilities	
of Trainers.....	171
Techniques to be Used.....	174
Teaching Aids to be Used.....	176
Selection of Trainer.....	176
Monitoring and Evaluating Training.....	179
Monitoring and Evaluating	
Technique According to the Time...	180
Types of Evaluation According to	
Content.....	183
Levels of Evaluation.....	185
Evaluation Techniques and	
Instruments.....	187
Following-Up and Revising Training.....	188
Conclusion.....	190

	Page
VI FINDINGS II: ANALYSIS FROM INTERVIEWS.....	192
Personal Characteristics of Respondents.....	193
Staff Position.....	193
Age of Respondents.....	196
Working Experiences.....	196
Training Experiences.....	198
Gender of Respondents.....	200
Educational Background.....	201
Practices and Importance of Training Components in Designing the Training Programme.....	205
Preliminary Findings.....	205
Summated Findings.....	210
Eliminated or Retained Findings.....	213
Summary Findings.....	215
The Training Components.....	217
Tasks Related to Identifying Training Needs.....	217
Tasks Related to Defining Training Objectives.....	221
Tasks Related to Deriving Training Content.....	228
Tasks Related to Developing Criterion Measures.....	233
Tasks Related to Designing Methods and Training Materials.....	236
Tasks Related to Conducting Training..	253
Tasks Related to Monitoring and Evaluating Training.....	259
Tasks Related to Following-Up and Revising Training.....	265
Perception on Issues Related to Transfer of Learning.....	268
Timing of Training.....	268
Methods/Approaches.....	272
Essential Elements.....	272
Integration Processes.....	273
Ways of Producing Transfer to New Learning.....	275
Perception on Issues Related to the Impact of Training.....	276
Impact on the Participants After Training.....	280
Impact of Training on the Organization.....	283
Training Facilities that Contribute and Support the Training Programme.....	288
Training Factors Considered in Designing a Training Programme.....	290
Problems Faced and Solutions Considered in the Process of Designing the Training Programme.....	291

	Page
VII SUMMARY, CONCLUSIONS AND RECOMMENDATIONS...	296
Objectives.....	296
Methodology.....	298
Findings.....	300
Content Analysis.....	300
Statistical Analysis.....	301
Conclusions.....	306
Staffing of the Training	
Institutions.....	307
The Tasks of the Practised	
Training Components.....	307
Issues Related to Transfer	
of Learning.....	316
Training Factors Considered	
in Designing a Training Programme.....	321
Constraints in the Process of	
Designing the Training Programmes.....	322
Recommendations.....	323
Training Design.....	323
Components of the Training Design.....	324
Staffing of the Training	
Institutions.....	327
Planning a Training Programme.....	327
Selecting the Training Needs.....	328
Development of Curriculum.....	328
Training Materials.....	329
Training Techniques.....	329
Evaluating, Monitoring and	
Following-Up.....	330
Summary.....	331
Suggestions for Further Research.....	333
BIBLIOGRAPHY.....	336
APPENDIX	
A Interview Schedule.....	351
B Supplementary Tables.....	382
VITA.....	423



LIST OF TABLES

Table	Page
1. Distribution of Respondents According to Location of Agencies.....	82
2. Distribution of Respondents According to Position.....	195
3. Distribution of Respondents by Age.....	197
4. Distribution of Respondents by Working Experiences.....	198
5. Distribution of Respondents by Training Experiences.....	199
6. Distribution of Respondents by Gender.....	200
7. Distribution of Respondents by Level of Education.....	203
8. Distribution of Respondents by Major Area of Study.....	204
9. Training Components: Preliminary Ranking on Items Related to Training Design in Selected Development Agencies.....	206
10. Training Components: Ranking on Summated Tasks and Subtasks Related to Training Design.....	212
11. Training Components: Ranking on Tasks and Selected Subtasks Related to Training Design.....	213
12. Summary on the Ranking Order of Practised Training Components: Preliminary, Summated, Selected and Mean.....	216
13. Sources, Methods and Steps of Identifying Training Needs in Selected Development Agencies.....	218
14. Levels and Categories of Objectives in Selected Development Agencies.....	222
15. Criteria and Conditions in Objective Statement in Selected Development Agencies.....	227



Table	Page
16. Coverage, Criteria, Classification, Organization and Sequencing of Training Content in Selected Development Agencies...	230
17. Levels and Criteria of Criterion Measures in Selected Development Agencies.....	235
18. Steps in Curriculum Planning and Development in Selected Development Agencies.....	238
19. Training Technique : Purposes in Selected Development Agencies.....	240
20. Training Technique: Objective and Other Considerations in Selected Development Agencies.....	243
21. Classroom and Group Classification in Selected Development Agencies.....	248
22. Job Instruction, Self-Learning and Observational Classification in Selected Development Agencies.....	251
23. Selection, Roles and Responsibilities of Trainers in Selected Development Agencies..	253
24. Methods and Teaching Aids Used in Selected Development Agencies.....	257
25. Techniques, Types, Levels and Instrument of Monitoring and Evaluation in Selected Development Agencies.....	261
26. Indirect and Direct Follow-Up and Revision in Selected Development Agencies.....	266
27. Perception of Respondents on Issues Related to Transfer of Learning in Selected Development Agencies.....	269
28. Perception of Respondents on Issues Related to the Impact of Training on Individual in Selected Development Agencies.....	277

Table	Page
29. Perception of Respondents on Issues Related to the Impact of Training on Organization in Selected Development Agencies.....	284
30. Distribution of Respondents by the Availability of Training Facilities in Selected Development Agencies.....	289
31. Problems Faced and Solutions Considered in the Process of Designing the Training Programme in the Selected Development Agencies.....	291

LIST OF FIGURES

Figure	Page
1. Conceptual Framework of Training Design.....	69
2. The Proposed Generic Training Design.....	70
3. Map of Peninsular Malaysia showing the Locations of Selected Development Agencies	80
4. Matrix of Model by Component.....	130
5. The Practised Training Design of Four Development Agencies in Malaysia.....	305

GLOSSARY

ILR:	Institut Latihan RISDA (RISDA Training Institute)
INPUT:	Institute of Land Development, Trolak
FELDA:	Federal Land Development Authority
KEMAS:	The Community Development Division
PPSTM:	Pusat Pembangunan Sumber dan Teknologi Manusia (Centre for Human Development and Technology Resources)
MARDI:	Malaysian Agricultural Research and Development Institute
RISDA:	Rubber Industry Smallholders Development Authority

Abstract of thesis submitted to the Senate of Universiti Pertanian Malaysia in fulfilment of the requirements for the degree of Doctor of Philosophy.

**TRAINING DESIGN DEVELOPMENT:
THE PRACTICE OF FOUR
DEVELOPMENT AGENCIES IN MALAYSIA**

By

ASMA BINTI AHMAD

FEBRUARY 1994

Chairman: Associate Profesor Hj. Saidin Teh, Ph.D.

Faculty : Centre for Extension and Continuing Education

Efficient and effective training programmes are needed to produce competent workers in order to achieve the development goals of a country. Therefore, strategy-oriented, coordinated training designs are important to maximize the impact of the training activities.

This study was conducted to identify the training design(s) and components employed by the training personnel of Malaysian Agricultural Research and Development Institute (MARDI), the Federal Land Development Authority (FELDA), the Rubber Industry



Smallholders Development Authority (RISDA), and the Community Development Division, Ministry of Rural Development (KEMAS). It also sought to determine the processes of developing the components of training design as practised by the respondents. Finally, it attempted to determine problems encountered during the process of developing the training designs and also issues related to the transfer of training to the working environment as perceived by the training personnel.

A proposed generic training design, which formed the basis of the instrumentation, was first derived by using content analysis procedure. Fifteen training designs or programme development models were reviewed to synthesize a proposed generic training system approach design. Personal interviews were conducted from 78 selected training personnel of four respective development agencies. Quantitative data analysis was employed to analyze the data from interviews.

The results of the statistical analyses showed that the four development agencies followed a similar trend of practices, incorporating only five training components out of the proposed eight components. The components were : 1) Deriving training content;

2) Conducting training ; 3) Defining training objectives; 4) Monitoring and evaluating training; and 5) Following-up and Revising training . This indicated a need for its further improvement by explicitly or implicitly including the other three components as they are critical in determining the effectiveness of the training programmes. The findings also showed that the training personnel perceived all the training components and its related tasks were important to be included in the training. The data further indicated that the training personnel perceived all the issues of transfer of training to be important and that the training related and non-training related factors were the major concerns which initiated the conduct of training programmes.

The study therefore recommends that all training personnel or those who are responsible for training to have a thorough understanding of a systematic and organized process of training programmes. Also, it is highly recommended for all categories of personnel in the organization to have a high-level commitment to training which must be reflected in their administrative and management actions.

Abstrak tesis yang dikemukakan kepada Senat
Universiti Pertanian Malaysia sebagai memenuhi syarat
untuk Ijazah Doktor Falsafah.

**PEMBENTUKAN REKABENTUK LATIHAN:
PENGAMALAN EMPAT AGENSI
PEMBANGUNAN DI MALAYSIA**

Oleh

ASMA BINTI AHMAD

FEBRUARI 1994

Pengerusi: Professor Madya Hj. Saidin Teh, Ph.D.

Fakulti : Pusat Pengembangan dan Pendidikan Lanjutan

Program latihan yang efisien dan efektif
menghasilkan kakitangan yang cekap dalam mencapai
matlamat pembangunan sesebuah negara. Oleh itu,
rekabentuk latihan yang strategik dan koordinasi adalah
penting untuk mendapatkan kesan latihan yang maksimum.

Kajian ini dijalankan untuk mengenalpasti
komponen-komponen rekabentuk latihan yang dipraktikkan
oleh kakitangan Latihan Institut Penyelidikan Pertanian

Malaysia (MARDI), Lembaga Kemajuan Tanah Persekutuan (FELDA), Lembaga Kemajuan Pekebun Kecil Perusahaan Getah (RISDA) dan Bahagian Kemajuan Masyarakat (KEMAS). Ia juga cuba mengenalpasti beberapa proses pembentukan rekabentuk latihan yang dipraktikkan oleh responden. Akhir sekali, ia cuba menentukan masalah-masalah yang dihadapi semasa proses pembentukan rekabentuk latihan dan juga persepsi kakitangan tentang isu-isu berkaitan dengan pemindahan latihan.

Rekabentuk generik latihan yang dicadangkan menjadi asas instrumentasi yang dibentuk dengan menggunakan prosedur "content analysis". Lima belas rekabentuk latihan atau model pembentukan program telah ditinjau untuk mensintesis satu cadangan rekabentuk generik kaedah sistem latihan. Kaedah temubual individu digunakan untuk mengumpul data daripada 78 kakitangan latihan terpilih di kalangan empat agensi pembangunan. Kaedah kuantitatif digunakan untuk menganalisis data daripada temubual.

Penemuan kajian menunjukkan persamaan pengamalan rekabentuk latihan di kalangan responden dengan mempraktikkan lima daripada lapan komponen latihan yang dicadangkan. Komponen-komponennya ialah : 1)

Menyediakan kandungan latihan; 2) Melaksanakan latihan; 3) Mendefinisikan objektif latihan; 4) Mengawasi dan menilai latihan; dan 5) Membuat susulan dan semakan latihan. Ini menunjukkan yang rekabentuk latihan perlu peningkatan secara nyata atau tersirat dengan menambah tiga komponen lain yang kritikal dalam menentukan keberkesanan sesuatu program latihan. Keputusan juga menunjukkan kakitangan latihan menganggap kesemua komponen latihan dan tugas berkaitan dengannya penting dalam merekabentuk sesuatu program latihan. Seterusnya, data menunjukkan persepsi kakitangan latihan tentang kesemua isu pemindahan latihan adalah penting dan faktor-faktor berkaitan dengan latihan atau bukan latihan adalah perkara utama yang menentukan sesuatu program latihan dijalankan.

Kajian mencadangkan supaya kesemua kakitangan latihan dan juga mereka yang bertanggungjawab tentang latihan perlu mendapat kefahaman yang menyeluruh tentang proses merekabentuk program latihan yang sistematik dan tersusun. Adalah juga dicadangkan supaya setiap kategori kakitangan dalam organisasi mempunyai komitmen yang tinggi terhadap latihan melalui tindakan pentadbiran dan pengurusannya.

CHAPTER I

INTRODUCTION

The Context of the Study

Many development strategies have been developed and implemented to accelerate the pace of development. However, the outcome of these development efforts failed to produce the intended impact and it is now of great concern to all those who are involved in enhancing the development process. It was noted that the management problems (Reilly, 1979) and administrative inadequacies (Mathur, 1983) were found to be the main obstacle to the successful implementation of these development projects. Mathur (1983) further claims that if public administration is effective, and other requirements for development are available, progress then can be expected. This realization has led to several efforts to improve the administrative capability for development, one of which is training.

Training through a more organized purposive development-oriented activity contributes towards improving the performance of development programmes (Camp et al., 1986). Experts from Food and Agriculture Organization who are familiar with development projects

in some developing countries shared the same have noted that training had created the development opportunities not only on improving individual performance but also had great potential for enhancing organizational growth (Mathur, 1983). The processes of education and training are of vital importance in the development of manpower within a system or an organization. This was supported by Poltecher (1987) who viewed education and training as the key factor that will unlock the full potential of human resources.

Many authorities have already recognized that training is an important component and a critical factor in the development process (Aslam, 1986; Pepper, 1987; Poltecher, 1987). It facilitates development by increasing awareness, improving skills and bringing about attitudinal changes. It is anticipated that an innovative and creative personality triggers development activities.

Training in the Malaysian Context

A highly productive, effective and efficient public administration has been one of the goals as well as a strategy of the Malaysian Government in achieving the nation's economic growth and development. The developmental tasks of the government require an

efficient and effective administrative system (Ahmad Sarji, 1991). Significant budgetary allocations have also been devoted for the government's manpower training (Government of Malaysia, 1976, 1984, 1986). The government has also introduced a number of policies to speed up this developmental process (Ambrin, 1990). Institutional measures need to be taken to supplement them. With adequate trained personnel, development can proceed smoothly on its course.

In realizing this fact, the government has established training units or divisions in most of departments, and some even have their own training institutes to cater for the training needs of their employees. This training need has been well recognized and emphasized that one can observe the mushrooming of numerous training institutions for various levels of personnel by either specialized training institutions or the development agencies (Alang, 1980; Abu Daud, 1986).

Two strategies of training are normally being practised by these development agencies. Those agencies with their own training facilities conduct "in-house" training programmes. The training personnel of the respective development agencies will develop the training programmes in consultation with officers from

other divisions. Sometimes they also seek external assistance from other organizations to develop those programmes.

As for the second approach, the development agencies would request the training institutions to conduct tailor-made programmes for their personnel. Background information of the prospective course participants will be given to the training institutions. If there is a readily-made programme package to match, this is used to conduct the training. If unavailable, a new programme will be developed by the training institution. Through experience and observations made by the researcher, normally the development of the training programmes was based merely on a little information received by the training institution. This is inadequate, resulting in the training course developed not meeting the training needs of the participants (Camp et al., 1986). The course thus became irrelevant and impractical in the working places.

It has been observed that most training programmes conducted are based more on the concept of satisfying the organizational needs, and are inadequate (Camp et al., 1986; Nadler, 1986, 1993). A more practical, coordinated and systematic approach to training is

needed for an effective result at minimum cost. The effectiveness of training programmes depends on the concerted efforts of all those who are directly or indirectly responsible to the training functions.

Need for Training Design

Efficient and effective training programmes are needed to produce competent workers in order to achieve the national development goals of the country. Mathur (1983) argues that training can play a decisive role in development affairs if only the trainers and development experts work closely together in developing training programmes for development workers. Collaboration is essential between these personnel to produce efficient and effective programmes.

Training aims to produce positive changes such as improved capabilities of the individuals at work, more efficient performance of activities and also in preparing the individuals to assume more or new responsibilities (Economic Development Institute of the World Bank, 1982). Strategy-oriented, coordinated training programmes are needed to maximize the impact of training activities (Camp et al., 1986).