



UNIVERSITI PUTRA MALAYSIA

**COMPONENTS OF TRAINING DESIGN MODELS:
THE EXTENT OF PRACTICE BY SELECTED
TRAINING INSTITUTIONS IN MALAYSIA**

FARIDAH MOHAMMED

FPP L 1995 5

**COMPONENTS OF TRAINING DESIGN MODELS :
THE EXTENT OF PRACTICE BY SELECTED TRAINING INSTITUTIONS
IN MALAYSIA**

FARIDAH MOHAMMED

**MASTERS OF SCIENCE
UNIVERSITI PERTANIAN MALAYSIA
1995**



**COMPONENTS OF TRAINING DESIGN MODELS ;
THE EXTENT OF PRACTICE BY SELECTED TRAINING INSTITUTIONS
IN MALAYSIA**

By

FARIDAH MOHAMMED

**Project Submitted In Partial Fulfilment Of The Requirements
For The Degree Of Masters Of Science In The
Centre For Extension And Continuing Education,
Universiti Pertanian Malaysia**

November 1995



ACKNOWLEDGEMENT

Indeed I have Allah (swt) to thank for all the opportunities He has given in paving the way towards achieving this masters programme. If not for the patience, the courage and the perseverance bestowed upon me, I may have given up half the way because indeed the challenges have been many; at many a times along the way, the burden was sometimes just too much for me to bear. Alhamdulillah and Subhanallah !

May I also take this opportunity to put on record and express my sincere and utmost gratitude and appreciations to the following whose assistance, encouragement and advise had kept me going and were especially of immeasurable value towards my educational pursuit. Thank you.

(a) Dr. Hj. Turiman Bin Suandi, my supervisor, who is also Head of Extension Services Unit, Center of Extension and Continuing Education (PPPL), Universiti Pertanian Malaysia (UPM). He has been exceptionally understanding especially towards the way I managed my project. He was particularly patient during the times when I was 'silent' about the progress of my project. But above all, I knew he would be there when I needed him to advise me about my project. And indeed, I am very grateful that he did not give up on me as his student. Thank you Dr. and I do not have enough of the right words to say to you for standing by me. May Allah bless you for all the good things that you have done and may He give you success all the way. Amin.



- (b) Dr. Hj. Ezhar Bin Tamam, my second supervisor. He was there to help out especially with critical comments. Thank you.
- (c) Dr. Hjh. Asma Binti Ahmad, my examiner, who had painstakingly read my project and given critical comments for further improvements. Thank you.
- (c) The Panel of Experts for my instrument :-
- i) Professor Madya Dato Dr. Mohd Nasir Ismail
- Director of PPPL
 - ii) Professor Madya Dr. Abu Daud Silong
- Deputy Director of PPPL
 - iii) Professor Madya Dr. Hj. Azahari Ismail
- Lecturer, PPPL
 - iv) Razaob Bin Hamat
- Currently, District Valuer of the Valuation and Property Services Department, Bangi. He did his Masters in Training Management at PPPL in 1991.
- Thank you for your time in going through the research instrument and giving critical comments on it. It had been very useful indeed.
- (d) All my lecturers at PPPL and Fakulti Ekonomi, UPM, right through all my four semesters. Thank you for sharing your knowledge, experiences and advice.
- (e) En. Azmi Bin Mohd Noordin, 'Kak Jun', and all staff at the administration section of PPPL. Thank you for much assistance given. Thank you for the study room, En. Azmi. It had been handy to have one.
- (f) My colleagues whom I have met and have got acquainted with at PPPL while pursuing the programme. Glad to have met you all and to have you all as my friends. Special



thanks to my group study mates, Sohime and Zabidi. Get in touch. A special note of thanks also to 'Nunik' for being a constant girlfriend throughout and who has helped me much in my analysis.

(g) The Public Services Department and the Department of Valuation and Property Services, Ministry of Finance.

Thank you for the scholarship and the study leave granted.

(h) My office colleague at INSPEN who had also lend me a helping hand with my analysis, Nasir Daud. I wish you success for your forthcoming Doctoral studies.

(i) All others whom I may have not mentioned but who have helped me in one way or another, in some small or big way.

Thank you.

And last but not the least, thank you Mak, Fuzie, Abang, Faisal, Fatehah, Fareez and Imah for being there when I needed you most. Allah bless us all. Amin.



TABLE OF CONTENTS

	PAGE
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	x
ABSTRACT	xi
ABSTRAK	xiv
 CHAPTER	
I INTRODUCTION	
Background to the Problem	1
Challenges facing Malaysia	1
Strategy Shift in HRD of Organisations.	3
Designing Training Programmes.....	5
Effective Training Programmes.....	7
The Agencies Studied	9
Institut Penilaian Negara	9
Institut Kerja Raya Malaysia	10
Institut Tadbiran Awam Negara	10
Institut Diplomasi dan Hubungan Luar Negara	11
Petronas Management Training Sdn Bhd ..	11
Institut Kejuruteraan Teknologi Tenaga Nasional	12
Pusat Latihan Bank Bumiputra	13
Statement of Problem	13
Objectives of the Study	15
Significance of the Study	16
Assumptions Underlying the Study	17



	Scope and Limitations of the Study	18
	Definition of Terms	19
II	LITERATURE REVIEW	
	Education, Training, and Development : The Dividing Line	23
	Concept of Education, Training and Development	24
	Concept of Design	30
	What is Design	30
	Characteristics of Design	31
	What Makes an Effective Design	32
	Key Features of a training Design	32
	Theories For Design	35
	Pre-requisites for Learning Design	42
	Training Models or Designs	43
	Definition	44
	Types of Training Models	44
	Benefits of Using Training Models	45
	Variables in the Application of Training Models	46
	Analysis of Selected Training Models ..	47
	Common Components in Training Design Models	55
	Concluding Observations and Remarks	67
III	METHODOLOGY	
	Population	70
	Sampling	70



	Data Collection	72
	Written Instrument	73
	Pre-testing of Written Instrument	75
	Analysis	75
IV	FINDINGS AND DISCUSSION	
	General Profile of the Training Institutions	76
	Organisational Structure/ Establishment	76
	Qualification of Training Personnel ...	77
	Training Policy	77
	Annual Training Plan	77
	Financial Support	78
	In-house Training	78
	Extent of Practices of the Coponents of Instructional Designs by by Selected Training Institutions	79
	Training or Situation Analysis	79
	Identification of Training Needs	81
	Assessment of Training Needs	85
	Determination or Formulation of Training Objectives	86
	Curriculum Development	88
	Instructional Strategies	89
	Instructional Resources	92
	Evaluation and feedback	95
	Transfer of Training	98
	Cost-benefit Analysis of Training Programmes	99



	Implementation or Management of Training Programmes	101
	Degree of Difficulty in the Practices of the Training Model Components	103
	The First Approach	104
	The Second Approach	105
V	SUMMARY, CONCLUSION, AND RECOMMENDATIONS	
	Statement of Problem	107
	Objectives of the Study	109
	Methodology	110
	Summary of Findings	112
	Training Analysis	112
	Identification of Training Needs	113
	Assessment of Training Needs	114
	Formulation of Training Objectives	115
	Curriculum Development	115
	Instructional Strategies	116
	Instructional Resources	117
	Evaluation and Feedback	118
	Transfer of Training	119
	Cost-benefit Analysis of Training Programmes	119
	Implementation and Management of the Training Programmes	120
	Degree of Difficulty in the Practices of the Training Model Components	121
	Conclusions from Findings	122
	Recommendations	133



BIBLIOGRAPHY	136
ADDITIONAL REFERENCES	140
APPENDIX	143
Cover Letter and Questionnaire	140



LIST OF TABLES

Table		Page
1	Training or Situational Analysis	80
2	Identification of Training Needs	82
3	Assessment of Training Needs	85
4	Determination/Formulation of Training Objectives	87
5	Curriculum Development	88
6a	Considerations in Determining Training Methods	90
6b	Other Considerations in Determining Training Methods	90
6c	Training Methods	91
7a	Sources of Input	93
7b	Determining Instructional Resources	94
7c	Resources Provided by Institutions	95
8	Evaluation and Feedback	96
9	Transfer of Training	98
10	Cost-benefit Analysis of Training Programme	100
11	Implementation/management of Training Programme	102
12	Level of Difficulty for the Practice of the Components Independent of Each Other	104
13	Level of Difficulty for the Practice of the Components Dependent of Each Other	106



Abstract of project paper submitted to the Senate
of Universiti Pertanian Malaysia in partial fulfilment
of the requirements for the degree of Master of Science

**COMPONENTS OF TRAINING DESIGN MODELS :
THE EXTENT OF PRACTICE BY SELECTED TRAINING INSTITUTIONS
IN MALAYSIA**

by

FARIDAH BINTI MOHAMMED

November 1995

First Supervisor : Dr. Hj. Turiman Bin Suandi
Second Supervisor : Dr. Hj. Ezhar Bin Tamam
Faculty : Centre for Extension and Continuing Education

An organisation can be defined as a group of people who work together to achieve a set of common goals. This brings us to the fact that organisations cannot exist without people: if they are not at executive or managerial positions, they are definitely down there lower the line and further. These people are employed to be efficient and effective and are expected to contribute significantly towards productivity and quality of the products or services offered by their organisations. Perhaps the most significant investment made by any employer in the present scenario is in training. Therefore it is essential that a systematic approach to training design be emphasized.

The broad objective of this study was to explore the instructional designs practiced by selected training institutions in Malaysia. More specifically, the study



entails to determine : (a) the general profile of the training institutions under study, (b) the current practices of components of training design models by selected training institutions in Malaysia, and, (c) the degree of difficulty experienced by the institutions with regards to the practice of the identified components. The study focused on the following identified components: (i) training or situation analysis, (ii) identification of training needs, (iii) assessment of training needs, (iv) formulation of training objectives, (v) curriculum development, (vi) determination of instructional strategies, (vii) determination of the instructional resources, (viii) evaluation and feedback, (ix) 'transfer of training, (x) cost-benefit analysis, and, (xi) the implementation or management of programmes.

The initial stage of this study involved a review of selected instructional designs or training models for purposes of identifying the common components of the models. These components were subsequently incorporated into the questionnaire which were then put forward to seven respondent organisations comprising selected training institutions in Malaysia. Data collected were analysed using a Statistical Package for Social Sciences, the SPSS-PC+.

The findings revealed that all the selected training institutions practised all the above eleven common components to instructional design models. They differed only in the depth of practice. Little emphasis was given to the components 'Transfer of Training' and 'Cost-benefit



Analysis'. It also revealed the three components which were ranked at a higher level of difficulty in its implementation and they are : (1) assessment of training needs, (2) transfer of training and, (3) cost-benefit analysis. The rest of the components were at a lower level of difficulty. Another approach resulted in findings whereby the same components, that is, (1) assessment of training needs, (2) transfer of training and, (3) cost-benefit analysis, achieved the same perfect ranking placed also at the higher level of difficulty.



Abstrak projek penyelidikan yang dikemukakan kepada
Senat Universiti Pertanian Malaysia
sebagai memenuhi sebahagian daripada keperluan untuk
mendapatkan Ijazah Sarjana Sains

**KOMPONEN REKABENTUK LATIHAN :
SEJAUH MANA AMALAN OLEH INSTITUSI LATIHAN TERPILIH
DI MALAYSIA**

oleh

FARIDAH BINTI MOHAMMED

November 1995

Penyelia Utama : Dr. Hj. Turiman Bin Suandi
Penyelia Kedua : Dr. Hj. Ezhar Bin Tamam
Fakulti : Pusat Pengembangan dan Pendidikan Lanjutan

Sebuah organisasi boleh ditakrifkan sebagai sekumpulan individu yang berusaha bersama-sama ke arah pencapaian matlamat organisasi. Ini bermakna bahawa organisasi tidak dapat wujud tanpa sumber manusia. Jika mereka tidak memegang jawatan eksekutif atau pengurusan, maka mereka mungkin memegang jawatan di peringkat bawahan. Mereka di ambil bekerja supaya dapat bekerja dengan lebih efisien dan berkesan serta diharap dapat memberikan sumbangan yang signifikan ke arah produktiviti dan kualiti produk dan perkhidmatan yang di tawarkan oleh organisasi. Mungkin, pelaburan yang terbesar yang dibuat oleh sesebuah organisasi masa kini ialah terhadap latihan kakitangan. Oleh yang demikian, adalah penting supaya penekanan diberikan terhadap satu pendekatan yang lebih sistematik dalam usaha-usaha merekabentuk program-program latihan.



Objektif umum kajian ini ialah untuk meninjau rekabentuk program latihan yang di amalkan oleh institusi-institusi latihan di Malaysia. Secara terperinci, kajian ini berusaha untuk mengkaji : (a) profil am institusi-institusi latihan dalam kajian, (b) sejauh mana amalan institusi-institusi latihan dalam mempraktikkan komponen-komponen rekabentuk latihan, dan (c) darjah kesukaran pengamalan komponen-komponen berkenaan. Fokas kajian ini tertumpu kepada :-

(i) analisis persekitaran atau analisis latihan, (ii) kajian keperluan latihan, (iii) analisis kajian keperluan latihan, (iv) pembentukan objektif latihan, (v) pembangunan kurikulum, (vi) penentuan strategi pembelajaran, (vii) penentuan sumber-sumber pembelajaran, (viii) penilaian dan maklumbalas, (ix) pemindahan latihan, (x) analisis kos-faedah program latihan, dan (xi) pengurusan program latihan;

Di peringkat awal kajian ini, satu kajian semula penulisan telah dijalankan bagi maksud mengenalpasti komponen-komponen bersama dari beberapa rekabentuk latihan yang dikaji. Komponen-komponen ini kemudiannya dimasukkan ke dalam soal selidik, yang selepas itu diberikan kepada tujuh responden terdiri daripada institusi-institusi latihan di Malaysia. Data yang diperolehi diproses dengan menggunakan Pakej Statistik untuk Sosial Sains, SPSS-PC+.

Penemuan kajian menunjukkan bahawa kesemua sebelas komponen rekebentuk latihan adalah diamalkan oleh institusi-institusi latihan walaupun tahap amalan terhadap tiap

komponen berbeza antara satu sama lain. Adalah didapati bahawa kurang penekanan diberikan kepada komponen atau amalan 'pemindahan latihan' dan 'analisis kos-faedah'. Penemuan selanjutnya menunjukkan terdapat tiga komponen berada pada tahap amalan yang sukar iaitu : (1) analisis keperluan latihan (2) pemindahan latihan dan (3) analisis kos-faedah. Pendekatan kedua juga menunjukkan ketiga-tiga komponen yang sama seperti di atas berada di ranking yang sama pada paras amalan yang sukar.



CHAPTER 1

INTRODUCTION

Background To The Problem

Challenges facing Malaysia

Development in Malaysia, has reached a stage where it has become more critical for organisations to continuously deploy and manage, not only their capital but also their human resources with greater efficiency to increase productivity and to ensure sustainable economic growth (NST,21/9/94).

In facing this situation, the article reported six serious challenges facing Malaysia today, primarily:-

- i] a tight labour market situation and consequent over-dependence on foreign workers,
- ii] insufficient skilled workers and a gap in the skill delivery system accompanied by a general reluctance to undertake retraining and skills upgrading of the existing workforce,
- iii] rising labour costs and lower levels of productivity,
- iv] inflationary pressure,
- v] slow shift to automation, robotics and capital-intensive production processes, and,
- vi] infrastructure bottlenecks which are being addressed, example, power supply, new roads, industrial sites.



The underlying message here then evolves around the vital and urgent need for organisations, to have not only a systematic, but also a strategic long-term Human Resource Development Plan (HRD Plan) to ultimately produce a workforce that is highly skilled and knowledgeable, and possessing positive attitudes, right values and commitment.

The Government, realising the challenges and more so, of the reluctance of organisations to retrain their human resource, have instituted a ruling under Bank Negara, requiring the financial and services sector, that is, the banks and insurance companies, to spend 2.5 percent of their annual payroll on training. A bolder step has led the Government to embark on creating a Human Resource Development Fund (HRDF) under the Human Resource Development Fund Act, 1993. This Act requires manufacturing companies to contribute one percent of their annual payroll to the Fund; the Fund in turn reimburses the companies for money spent on training. As of today, a total of 3,294 manufacturers have contributed a total of RM61.1 million to the Fund (NST, 17.7.1994). Tenaga Nasional Bhd. alone in 1994 had spent RM43.6 million on training, which according to its Executive Chairman, Tan Sri Dr Ani Arope, is equivalent to one per cent of its capital expenditure. This has actually created a huge interest in training activities especially with companies which previously did not bother to train their staff. This move has consequently led a new trend in training where companies are becoming more training-driven because, with shorter product

life-cycles and businesses changing rapidly, companies find themselves needing a continuous training cycle (BT, 25.8.94).

Looking at the 1994 figures, the United States of America showed a spending of US\$4 billion (about RM10.4 billion) on human resources development (NST, 9.4.94). In Malaysia, the Chairman for the Cabinet Committee on Training, the honourable Dato' Seri Anwar Ibrahim quoted a RM20 billion investment in training, a 1990 figure said over the TV3 programme on " Money Matters ". The 1993 spending was in the region of RM16.3 million, with RM79.3 million in 1994 and as high as RM10.031 billion allocated for the year 1995 (Jabatan Penerangan, 1993, 1994, 1995). It is thus interesting to note that the figures have multiplied over the years in a short space of time. In other words, Malaysia too have joined the circle of investors in HRD; thereby integrating training and development as part and parcel of the business of the organisations.

Strategy Shift in HRD of Organisations

The legislation on the HRD Fund and Bank Negara's ruling offers much incentive for organisations to continuously train and retrain their staff. This will slowly but gradually and ultimately put organisations in a position to strategically plan their HRD either on a short-term or long-term basis. On one hand, this shift in the HRD strategy of many organisations seems a healthy effort as it will fulfill the

Government's objective of reducing foreign labour, bridging the knowledge and skills gap, as well as bringing about positive attitudes, right values, and commitments among workers. On the other hand, there lies a feeling of apprehension with regards to the quality of training. Following are statements reported which reflected this internal fear :-

- i) NST of July 17, 1994 reported that much money had been wasted on training that was not needs-based; that there were more of 'needless' training rather than 'needed training';
- ii) NST of April 4, 1994 mentioned of some companies which pursued an ad-hoc approach to training which is purely reactive rather than proactive or needs-based. Employees were either sent for overseas training programme on grounds that their sales have declined; or a safety training programme was conducted due to an accident in the plant; or they have a course because the general manager wanted it;
- iii) NST of April 4, 1994 reported an organisation which sent ten thousand people on courses in 1994 with the next target being increased to 120,000;
- iv) NST of April 4, 1994 reported a local organisation which boasted of its packaged American training programme. This organisation only found that after spending RM2 million, the programme was a failure.

Thus, grasping the underlying problem of none-quality programmes that may appear when training programmes are being implemented by organisations, the training designers now need to carefully design training programmes which will match or meet as close as possible to the organisational goals and objectives which in turn, will have effect on the national and global output.

Designing Training Programmes

The pace for technological changes have been very rapid in the market. This is why the process of designing training programmes is never static, and is always dynamic in its design. It is an on-going process in which things are tried out, perhaps even making revisions as feedbacks are obtained from participants and performance evaluations carried out (Silberman, 1990).

This had, in fact, earlier been emphasized by Sedlik, Magnus and Rakow (1980: 11-12) who believed that corporate training is a dynamic process designed to achieve specific business objectives. Any training programme should not be considered successful if the objectives were accomplished only in training and not in the real world. The key to effective training then is, implementation. They further believed that there are many approaches to developing training programmes, where even among systematic approaches to training development, there are many models to choose. If

the task of developing training programmes were left to competent and experienced instructional developers, each of these models is capable of producing a quality instructional programme.

Thus, training designs or models, adopted and adapted with care to suit to the practical world and matching organisational goals and objectives, are and can be a useful tool in helping any organisation design effective training programmes which can churn results the way they want to.

As adult training and continuing education programmes become more popular, their bottom-line success in the future may not depend on their content alone but on how well-planned and well-designed they are. Whether it is a retraining workshop or a professional conference, a training programme for adult learners and professionals must be meaningful for the respective individuals and have the flexibility to accommodate changing conditions and needs. As a programme planner or training coordinator, one must have a clear, systematic planning model to develop and conduct programmes that result in real participation and measurable learning (Murk & Wells, 1988: 45-47).

Therefore, based on the foregoing, it is observed that content alone may not do justice to learning; in fact, the initial groundwork of planning can make the training more practical in considering the varied and complex needs of the individual learners or group. For this, a training model is