Contents

List of figures	i
List of tables	xi
Preface	xii
PART I THE ROLE OF EVALUATION	
1 Introduction	3
2 The strategic context	ć
What is not a training need?	13
Conclusion	19
3 A framework for evaluation	22
Concepts	22
Evaluation context, emphasis, criteria and techniques	24
Techniques overview	26
The benefits of evaluation	33
Neglect of evaluation	34
4 Getting it right first time	37
The marketing approach to training needs	37
Determining priorities	36
Setting learning objectives	39
Content design	42
Implementation of training	43
The training infrastructure	44
Manager-trainer partnership - what goes wrong?	44
Evaluation	45
Creating the organizational framework for evaluation	46
From vicious circle to benign circle	48
Starting to evaluate	49

Learning evaluation skills	50
Appraisal systems	52
Conclusion	52
PART II EVALUATION TECHNIQUES	
5 Designing the evaluation project	57
Is evaluation really necessary?	57
Where to begin?	58
How much evaluation do you need?	58
The politics of evaluation	59
Starting to design an evaluation project	60
Planning the evaluation project	60
Choosing evaluation techniques	70
Analysing the data	72
Descriptive statistics	75
The evaluation report	75
6 The questionnaire	78
When to use questionnaires	78
What do you want to know?	81
Drafting the questionnaire	82
Piloting the questionnaire	89
Full-scale implementation	90
Analysis of data and reporting the findings	91
Specimen questions	92
7 The interview	96
What kinds of information do you require?	97
Drafting the interview schedule	97
Piloting the draft schedule	101
Full-scale implementation	106
Data analysis and reporting your findings	109
8 Critical incident review	120
Implementing critical incident analysis	120
Conclusion	127
9 Repertory grid	128
Using repertory grid	129
0 Action planning	137
Using the action planning technique	137
Action planning and evaluation	140
1 Reactionnaires	140
Commitment and cooperation	143

The limitations of reactionnaires	145
For what are reactionnaires useful?	145
The design of reactionnaires	147
Question design: some common problems	151
Administration of reactionnaires	159
Analysing the data	161
Conclusion	163
12 Written tests	166
Types of test	167
Test construction: an overview	167
Recall/supply items	170
Recognition items	174
13 Practical tests	180
Design of practical tests	183
Examples of test items	187
14 Behaviour analysis	195
When to use behaviour analysis	195
What is being assessed?	196
What is involved in behaviour observation?	196
Designing the observation instrument	199
15 Cost-benefit analysis	217
Costing methods	218
Costable inputs and priceable outputs of training	
systems	222
The cost identification matrix	226
Cash-flow budgets	226
Cost-benefit and cost-effectiveness analysis	229
Appendix I: Scientific method and evaluation	237
Control groups	237
Sampling	240
Appendix II: Statistical issues in testing	245
Scoring tests: raw scores, criterion referencing,	
norm referencing	245
Comparing groups	246
Comparing frequencies	250
The guessing correction	252
Reliability	253
Validity	256
Item analysis	258

PART III CASE STUDIES

Introduction to Part III	263
16 Personal development of computer engineers	269
Evaluation – the key questions	265
Selective summary of findings and implications	267
General conclusions	270
17 Training trainers	271
Evaluation – the key questions	271
Conclusions and commentary	273
18 Job procedures	275
Evaluation – the key questions	275
Selective summary of findings and implications	278
General conclusions	279
19 Customer service	281
Evaluation – the key questions	281
Evamples of test arrest	282
General conclusions	286
20 New entrants	287
Evaluation the least success	287 287
Summary of findings	288 288
21 Outdoor dovolonment	200 291
Evaluation the least and the	291 291
Selective summary of faulti-	291 292
General conclusions	294 294
22 The manager's male in the control of the control	294 296
Evaluation the least accept	296 296
Selective summers of C 1:	290 297
General conclusions	291 299
23 Siv mini gasas	300
Practical testing	300
Keactionnaire	300 300
(hiectionnoise	00 01
Lest reliability	01 102
Cost honofit analysis	
Critical incident diams	02 03
Index	

305

List of figures

1.1	Reviewing the true costs of training	6
1.2	Identifying where lack of competence may exact bottom-line penalties	7
1.3	Common training situations	8
2.1	Training goals and organizational purposes	11
2.2	Review of the diagnostic activity within an organization	14
2.3	The competence/motivation loop	18
2.4	Training activity probe	20
3.1	Simplified model of the training cycle	24
3.2	The systematic cycle in training	25
4.1	The manager-training partnership: getting it right	45
4.2	The systematic cycle in training	47
4.3	The vicious circle and the benign circle	48
4.4	Corporate commitment to training	51
4.5	Introducing evaluation into an organization	52
5.1	Planning the introduction of evaluation into an organization	61
5.2	Evaluation projects – design issues	62
5.3	Planning the evaluation project	63
5.4	Simple frequency analysis (I)	73
5.5	Simple frequency analysis (II)	73
5.6	Simple frequency analysis (III)	74
5.7	More complex analysis (combining II and III)	74
5.8	Summary of descriptive statistics	76
6.1	Specimen covering letter for a questionnaire	90
7.1	Specimen interview schedule questions: to ex-participants	102
7.2	Specimen interview schedule questions: to nominating managers	102
7.3	Hearing what you don't want to hear	103
7.4	Interview practice	105
7.5	Data matrix	110
7.6	Ratings of course presentation	111
7.7	Analysis of nominal scale to illustrate the mode	112
7.8	Evaluation report summary statement	119

6

8

8	3.1 Critical incident interview schedule	100
8	3.2 Critical incident questionnaire	122
8	3.3 Critical incident diary form	123
8	Appraisal interview: form for analysis of job tasks/training topics	124
ç	9.1 Repgrid form	125
10	Personal action planning form	130
10	2.2 Follow-up schedule	141
11		142
11	.2 General information	148
11	.3 Sessional short reactionnaire	149
11		150
11.	5 Distance learning reactionnaire	151
11.	6 Detailed end of event reactionnaire	152
11.		153
11.		154
11.	9 Assessment of formal course objectives	155
11.	10 Future activities	155
11.	11 Covering letter for a reactionnaire	156
11.	12 Summary of responses to a scaled question	161
11.	13 Graph showing pattern of responses	162
11.	14 Histogram showing pattern of responses	162
11.1	Responses to open questions: categorization and summary	163
12.7	Short-answer items	164
12.2	- as affect of of transwel field	171
12.3	Range of valid answers to a short-answer item	172
12.4	Completion item	173
12.5		174
12.6	s rems. names and words	176
12.7	Matching items: picture and words	178
13.1	Recall/identification item	178
13.2		187
13.3	objectives to be tested	188
13.4	Monitoring of preparatory work	189
13.5	Monitoring of sales call	190 191
14.1	Checklist for a listening skills exercise	200
14.2	Checklist for analysis of new sales staff	200
14.3	Analysis of individual frequency of contributions	201
14.4	wall ix snowing who speaks to whom and how frequently	202
14.5	Differential contribution rates over time	202
14.6	Blank master page of behavioural descriptions	205
14.7	Training objectives of session	203
14.8	Assessment checklist	208
14.9	Individual feedback summary form	215
		410

15.1	A five-day supervisory skills programme: break-even analysis	221
15.2	The cost identification matrix	227
15.3	Conventional training programme with steady throughput	228
15.4	Conventional training programme with high short-term throughput	229
15.5	CBT programme with high initial development costs	230
AI.1	Control group designs	239
AII.1	Norm-referenced scores	247
AII.2	Criterion-referenced scores	248
AII.3	Gain ratios calculation form	251
AII.4	Facility values	258
16.1	Interview schedule – participants	266
16.2	Interview schedule – managers	267
17.1	Training trainers interview schedule	273
18.1	Interview schedule – supervisors, till operators, cash office staff	277
18.2	Interview schedule - store managers, departmental managers	278
20.1	New entrant questionnaire	289
21.1	Outdoor development interview schedule	293
22.1	Manager's interview schedule	298

List of tables

3.1	Criteria for judging the worth of training	
3.2	Criteria of worth in evaluation	27
3.3	Evaluation techniques	28
5.1	Component elements of evaluation and techniques	29
5.2	Types of training subject and evaluation technique	69
6.1	Comparison of strengths of annual control technique	71
6.2	Comparison of strengths of questionnaire and interview Limitations of questionnaire and interview	79
13.1	Extract from master list of but	80
14.1	Extract from master list of behavioural descriptions Behavioural descriptions	192
14.2	Behavioural descriptions	204
15.1	Development times for different to	209
15.2	Development times for different training methods	231
AI.1	Performance records: some examples Sample size and population size	233
AI.2	Sample sizes	242
AI.3		243
AII.1	Evaluation techniques and sample sizes Gain ratios	244
AII.2	Split-half method	250
AII.3	Examples of planning matrix	254
AII.4	Index of discrimination	257
17.1	Behaviour checklist	259
	- Startout encekiist	272