

Contents

List of figures	<i>page</i> ix
List of tables	x
List of boxes	xi
Preface	xiii

PART I FUNDAMENTALS

1 Scope and nature of this handbook	3
1.1 Objectives and target audiences	3
1.2 Design-oriented and theory-informed problem solving in organizations	5
1.3 How to use this handbook	8
2 Student projects	9
2.1 Introduction	9
2.2 Two basic process structures	10
2.3 Three knowledge-generating research processes	13
2.4 Problems caused by mixing different process structures	18
2.5 Concluding remarks	22
3 Problem solving projects	24
3.1 Introduction	24
3.2 Rational problem solving	24
3.3 Problem solving strategies	26
3.4 Theory-informed field problem solving	28
3.5 The application domain of design-oriented and theory-informed problem solving	30
3.6 The nature of field problem solving projects	31
3.7 The basic set-up of a field problem solving project	37
3.8 Characteristics of good field problem solving projects	39
4 Designs and designing	42
4.1 Introduction	42
4.2 Designing material entities	42

4.3	Social system design	52
4.4	Paradigmatic starting points in social system design	56
5	Problem solving projects to develop generic theory	59
5.1	Introduction	59
5.2	Research paradigms	60
5.3	Developing generic theory on the basis of problem solving projects	62

PART II

THE PROBLEM SOLVING PROJECT

6	Intake and orientation	71
6.1	Introduction	71
6.2	Intake	71
6.3	Orientation	76
6.4	Problem context	78
6.5	Problem definition	78
6.6	Assignment and deliverables	82
6.7	Project approach	83
6.8	Project costs and organization	87
6.9	Problem solving projects in different formats	88
6.10	Example	92
7	Theory-informed diagnosis of business problems	99
7.1	Introduction	99
7.2	Empirical exploration and validation of the business problem and its causes	100
7.3	Theoretical analysis	107
7.4	Process-oriented analysis	113
7.5	The diagnostic story	116
7.6	Alternative approaches: quick scan	117
7.7	Concluding remarks	118
8	Solution design	119
8.1	Introduction	119
8.2	The deliverables of the field problem solving project	119
8.3	The design process	121
8.4	Solution design	123
8.5	Solution justification	128
8.6	Solution design: the IIS case	130

9 Change plan design and the actual change process	137
9.1 The timing of change plan design	137
9.2 Change plan design	138
9.3 The change process	144
9.4 Change plan design: the IIS case	145
9.5 Change plan design: the importance of developing organizational support	150
10 Evaluation, learning and termination	153
10.1 Introduction	153
10.2 Project-oriented evaluation	154
10.3 Learning for the future	159
10.4 Scientific reflection	162
10.5 Personal and professional development	165
10.6 Project termination and reporting	166

PART III

METHODS

11 Qualitative research methods	171
11.1 Qualitative versus quantitative	171
11.2 Unit of analysis	173
11.3 Sampling and case selection	176
11.4 Qualitative data collection methods	178
11.5 Qualitative methods of analysis	182
11.6 Selecting a method	186
12 Searching and using scholarly literature	188
12.1 Introduction	188
12.2 Types of publication	189
12.3 Focusing a literature review	193
12.4 Searching the literature	194
12.5 Integrating ideas and findings	197
13 Quality criteria for research	201
13.1 Introduction	201
13.2 Controllability	203
13.3 Reliability	204
13.4 Validity	209
13.5 Recognition of results	212
13.6 Concluding remarks	213

PART IV

CASE MATERIAL

14 Cases	217
14.1 Introduction	217
14.2 The assignment: make a project proposal	217
14.3 Four cases	219
References	230
Author index	239
Index	240