

**THE IN-SERVICE EDUCATION AND TRAINING (INSET)
NEEDS OF EDUCATORS OF
PRIMARY SCHOOL MATHEMATICS**

BY

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JANUARY 2003



DECLARATION

I hereby declare that this dissertation is my own work and that all the sources I have used or quoted have been indicated by means of complete references.

RANJINI NAIDOO

January 2003

DEDICATION

This dissertation is dedicated to:

My husband and daughter who have been a source of inspiration and encouragement to me.

All the senior primary mathematics educators who feel the need for professional growth in our rapidly changing world.

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ACRONYMS/ABBREVIATIONS USED IN THIS STUDY

- AMESA** - Association of Mathematics Education of South Africa
- B.A.** - Bachelor of Arts
- B.Ed.** - Bachelor of Education
- B.Sc.** - Bachelor of Science
- CASME** - Centre for the Advancement of Science and Mathematics Education
- C2005** - Curriculum 2005
- DET** - Department of Education and Training
- ERIC** - Education Resources Information Centre
- HOD** - House of Delegates
- HOR** - House of Representatives
- HSRC** - Human Sciences Research Council
- INSET** - In-Service Education and Training
- KZDEC** - KwaZulu Department of Education and Culture
- KZN** - KwaZulu-Natal
- KZNDEC** - Department of Education and Culture: KZN
- LACs** - Learning Area Committees
- LEAs** - Local Education Authorities
- M.Ed.** - Master of Education
- MCPT** - Maths Centre for Primary Teachers
- NED** - Natal Education Department
- NFER** - National Foundation for Educational Research
- NGOs** - Non-Governmental Organisations
- NQF** - National Qualifications Framework
- OBE** - Outcomes Based Education
- PGCE** - Postgraduate Certificate of Education
- PRESET** - Pre-Service Education and Training
- RADMASTE** – Research and Development in Mathematics, Science and Technology
- RDP** - Reconstruction and Development Programme
- SABINET** - South African Bibliographic Information Network
- SAQA** - South African Qualifications Authority

TOPS - Teacher Opportunity Programmes
USSR - Union of Soviet Socialist Republics

PAGE

Declaration	i
Dedication	ii
Acknowledgements	iii
Acronyms/Abbreviations used in this study	v
List of tables	viii
List of figures	xv
List of appendices	xvii
Maps of research sites	xviii
List of key words	xx
Abstract	xxii
Chapter One	
1.1 Introduction	1
1.2 Theoretical framework	1
1.3 The research context	1
1.4 The research objectives	1
1.5 Research design	1
1.5.1 Descriptive research	1
1.5.2 Research design	1
1.6 Assumptions and limitations	1
1.7 Significance	1
1.8 Definitions	1
1.9 Ethical clearance	1
1.10 Ethical approval	1
1.11 The structure of the research	1
1.12 Conclusion	1
Chapter two	
2.1 Conceptual and Theoretical Framework	1
2.1.1 Introduction	1
2.2 The relevance of theory	1
2.3 The importance of the study	1
2.4 Introduction	1

CONTENTS	PAGE
Declaration	i
Dedication	ii
Acknowledgements	iii
Acronyms/Abbreviations used in this study	iv
List of tables	xiii
List of figures	xiv
List of appendices	xv
Maps of research area	xv
List of key words	xvi
Abstract	xvii
Chapter One	
Orientation	
1.1 Introduction	1
1.2 Factors leading to the research	2
1.3 Statement of the problem	3
1.4 The purpose of the research	4
1.5 Research methodology	4
1.5.1 Documentary study	5
1.5.2 Research by questionnaire	5
1.6 Assumptions and limitations of the research	6
1.6.1 Assumptions	6
1.6.2 Limitations	7
1.7 Research location	7
1.8 The potential significance of the study	7
1.9 The structure of the research	8
1.10 Conclusion	9
Chapter Two	
Conceptual and Theoretical Framework	
2.1 Introduction	10
2.2 The relevance of theory	10
2.3 Theories relevant to INSET	11
2.3.1 Introduction	11

	PAGE
2.3.2 Definition of INSET and concepts relevant to INSET	12
2.3.2.1 Definition of INSET	12
2.3.2.2 Concepts related to INSET	14
2.3.2.2.1 Continuing education	15
2.3.2.2.2 Staff development	15
2.3.2.2.3 Recurrent education	16
2.3.2.2.4 Professional growth/development	16
2.3.2.2.5 On-the-job training	16
2.4 Objectives of INSET	17
2.4.1 Introduction	17
2.4.2 General objectives	17
2.4.3 Specific objectives	17
2.5 Models of INSET	18
2.5.1 Introduction	18
2.5.2 The Traditional INSET Model	19
2.5.3 The Life-Long Learning/Continuing Education INSET Model	20
2.6 Theories of change	21
2.7 Summation	22
2.8 Theoretical and conceptual framework for mathematics at the senior primary level	23
2.8.1 Introduction	23
2.8.2 Mathematics education as a discipline	23
2.8.2.1 Phenix's acquisition of understanding	23
2.8.2.2 Hirst's form of knowledge	24
2.8.2.3 David P. Ausubel's strategies for meaningful verbal learning	25
2.8.2.4 Nature of mathematics	26
2.8.2.5 Conceptions about mathematics	27
2.9 Aims and objectives of mathematics education	28
2.9.1 The aims of mathematics education	29
2.9.1.1 Specific aims of mathematics education	30
2.9.2 The objectives of mathematics education	31
2.10 The case for mathematics education in the senior primary phase	32
2.11 Development in the field of learning psychology that contributes to mathematics education	33

	PAGE
2.11.1 Learning theories	33
2.11.1.1 Behaviourism	34
2.11.1.2 Constructivism	34
2.11.2 Psychologists that contributed to mathematics education	36
2.11.2.1 B.F.Skinner	36
2.11.2.2 Robert Gagne'	39
2.11.2.3 Jean Piaget	43
2.11.2.4 Jerome Bruner	47
2.12 Didactics with particular reference to mathematics teaching at the senior primary level	49
2.12.1 The Perennial Curriculum Model	49
2.12.2 Outcomes Based Education (OBE)	52
2.12.3 Teaching methods of mathematics at the senior primary level	57
2.12.3.1 Deductive and Expository Method	58
2.12.3.2 Inductive and Discovery Method	59
2.13 Teaching strategies associated with mathematics	62
2.13.1 The use of games	62
2.13.2 Problem solving strategies	66
2.13.3 Groupwork	70
2.13.3.1 Summation	72
2.13.4 Computers and calculators in the primary school	72
2.14 Conclusion	73

Chapter Three

Historico-Comparative study of the INSET provision of mathematics educators at the senior primary level in a selected developed country

3.1 Introduction	75
3.2 History of mathematics	75
3.3 The INSET provision of mathematics educators at the senior primary level in England	77
3.3.1 Historical background	77
3.3.2 INSET provision of mathematics educators in England 1930 – 1950	78

	PAGE
3.3.2.1 The Hadow Report (1931)	79
3.3.2.2 The 1944 Education Act	80
3.3.3 INSET provision of mathematics educators in England 1950 – 1970	81
3.3.3.1 The Nuffield Project	81
3.3.4 Mathematics teaching and INSET provision in England 1970 – present	85
3.4 Conclusion	94

Chapter Four

The INSET of mathematics educators of primary schools in KwaZulu-Natal

4.1 Introduction	97
4.2 A general overview of the INSET of educators in KwaZulu-Natal prior to 1994	97
4.2.1 INSET in the KwaZulu Department of Education and Culture (KZDEC)	98
4.2.2 INSET in the Department of Education and Training (DET)	99
4.2.3 INSET in the Natal Education Department (NED)	100
4.2.4 INSET in the Department of Education and Culture: House of Representatives (HOR)	101
4.2.5 INSET in the Department of Education and Culture: House of Delegates (HOD)	102
4.2.6 Summation	103
4.3 The contributions of Non-Governmental Organisations (NGOs) towards INSET prior to 1994 in KwaZulu-Natal	104
4.4 Mathematics in the primary school prior to 1994	105
4.5 Mathematics in the primary school in the post 1994 period	107
4.5.1 Curriculum 2005's key changes and its impact on mathematics in the primary school	107
4.6 The needs and requirements for INSET implementation in South Africa	112
4.7 The INSET of primary school mathematics educators in the Department of Education and Culture: KwaZulu-Natal	113

	PAGE
4.7.1 Formal INSET	114
4.7.2 Non-Formal INSET	115
4.7.3 Non-Departmental INSET	116
4.8 A review of the INSET of mathematics educators in the primary schools in KwaZulu-Natal in the post 1994 period	116
4.9 The contributions of Non-Governmental Organisations (NGOs) towards the INSET of mathematics educators of primary schools in KwaZulu-Natal	118
4.9.1 The Toyota Teach Primary Schools Project	118
4.9.2 The Maths Centre for Primary Schools (MCPT)	120
4.10 Conclusion	121

Chapter Five

Empirical investigation of the INSET of educators of primary school mathematics in KwaZulu-Natal

5.1 Introduction	122
5.2 Development of the questionnaire	122
5.3 Choice of locale	122
5.4 Structure of the questionnaire	123
5.5 Sampling procedure	125
5.6 Control of questionnaire, dispatch and return	125
5.7 Analysis and interpretation of data	126
5.7.1 Personal particulars of respondents	126
5.7.1.1 Gender of respondents (Q.1)	126
5.7.1.2 Age of respondents (Q.2)	128
5.7.1.3 Experience as a senior primary mathematics educator (Q.3)	129
5.7.1.4 Specialisation in mathematics (Q.4)	131
5.7.1.5 Qualifications in mathematics as specialisation (Q.5)	131
5.7.1.6 Location of respondent's school (Q.6)	133
5.7.2 School focused INSET	134
5.7.2.1 Persons responsible for supervising mathematics in the senior primary phase in schools (Q.7)	134
5.7.2.2 Frequency of mathematics committee meetings (Q.8)	135
5.7.3 Scope, nature and needs for INSET	137
5.7.3.1 Reasons for INSET (Q.9)	137

	PAGE
5.7.3.2 Attendance at INSET courses, seminars, workshops for senior primary mathematics educators at Circuit/District level (Q.10)	138
5.7.3.3 Reasons for non-attendance at INSET courses, workshops and seminars (Q.11)	139
5.7.3.4 Relevance of INSET courses, seminars and workshops attended (Q.12)	141
5.7.3.5 Time when INSET courses, seminars and workshops should be conducted (Q.13)	142
5.7.3.6 Teaching methods used by senior primary mathematics educators (Q.14)	143
5.7.3.7 Use of teaching aids in mathematics (Q.15)	145
5.7.3.8 Teaching strategies used by senior primary mathematics educators (Q.16)	146
5.8 Conclusion	147

Chapter Six

Findings, Recommendations and Conclusion

6.1 Introduction	149
6.2 Summary of the structure of the study	149
6.3 Summary of major findings	149
6.3.1 Findings pertaining to personal particulars of senior primary mathematics educators	150
6.3.2 Findings pertaining to school focused INSET	150
6.3.3 Findings pertaining to the scope, nature and needs for INSET	150
6.4 Recommendations	152
6.4.1 INSET policy	152
6.4.2 Incentives for the INSET of senior primary mathematics educators	153
6.4.3 School focused INSET for senior primary mathematics educators	153
6.4.4 Methods of INSET courses for senior primary mathematics educators	154
6.4.5 The value of teachers' centres to the INSET of senior primary mathematics educators	155
6.4.6 Updating of senior primary mathematics educators	156

LIST OF TABLES

	PAGE
6.5 Recommendations for further research in the INSET of senior primary mathematics educators	157
6.6 Conclusion	157
Bibliography	159
Appendices	167
Table 2.1	Outline of Piaget's stages of intellectual development in children
Table 2.2	National Qualifications Framework
Table 2.3	Difference between the traditional and the 21st century learning systems
Table 2.4	The Eight Learning Areas
Table 2.5	Appointment of Subject Specialists in the Department of Education
Table 2.6	Response rate to questionnaires
Table 2.7	Results of respondents
Table 2.8	Age category of senior primary mathematics educators
Table 2.9	Experience as a senior primary mathematics educator
Table 2.10	Qualification as a Specialist
Table 2.11	Employment in mathematics education
Table 2.12	Employment independent of school
Table 2.13	Persons responsible for supervising senior primary mathematics
Table 2.14	Frequency of mathematics committee meetings
Table 2.15	Rank of the reference of reasons for INSET participation
Table 2.16	Frequency of mathematics committee meetings
Table 2.17	Frequency of INSET participation
Table 2.18	Rank of reference of reasons for INSET participation
Table 2.19	Frequency of INSET participation
Table 2.20	Rank of reference of reasons for INSET participation
Table 2.21	Frequency of INSET participation
Table 2.22	Rank of reference of reasons for INSET participation
Table 2.23	Frequency of INSET participation
Table 2.24	Rank of reference of reasons for INSET participation
Table 2.25	Frequency of INSET participation
Table 2.26	Rank of reference of reasons for INSET participation
Table 2.27	Frequency of INSET participation
Table 2.28	Rank of reference of reasons for INSET participation
Table 2.29	Frequency of INSET participation
Table 2.30	Rank of reference of reasons for INSET participation
Table 2.31	Frequency of INSET participation
Table 2.32	Rank of reference of reasons for INSET participation
Table 2.33	Frequency of INSET participation
Table 2.34	Rank of reference of reasons for INSET participation
Table 2.35	Frequency of INSET participation
Table 2.36	Rank of reference of reasons for INSET participation
Table 2.37	Frequency of INSET participation
Table 2.38	Rank of reference of reasons for INSET participation
Table 2.39	Frequency of INSET participation
Table 2.40	Rank of reference of reasons for INSET participation
Table 2.41	Frequency of INSET participation
Table 2.42	Rank of reference of reasons for INSET participation
Table 2.43	Frequency of INSET participation
Table 2.44	Rank of reference of reasons for INSET participation
Table 2.45	Frequency of INSET participation
Table 2.46	Rank of reference of reasons for INSET participation
Table 2.47	Frequency of INSET participation
Table 2.48	Rank of reference of reasons for INSET participation
Table 2.49	Frequency of INSET participation
Table 2.50	Rank of reference of reasons for INSET participation
Table 2.51	Frequency of INSET participation
Table 2.52	Rank of reference of reasons for INSET participation
Table 2.53	Frequency of INSET participation
Table 2.54	Rank of reference of reasons for INSET participation
Table 2.55	Frequency of INSET participation
Table 2.56	Rank of reference of reasons for INSET participation
Table 2.57	Frequency of INSET participation
Table 2.58	Rank of reference of reasons for INSET participation
Table 2.59	Frequency of INSET participation
Table 2.60	Rank of reference of reasons for INSET participation
Table 2.61	Frequency of INSET participation
Table 2.62	Rank of reference of reasons for INSET participation
Table 2.63	Frequency of INSET participation
Table 2.64	Rank of reference of reasons for INSET participation
Table 2.65	Frequency of INSET participation
Table 2.66	Rank of reference of reasons for INSET participation
Table 2.67	Frequency of INSET participation
Table 2.68	Rank of reference of reasons for INSET participation
Table 2.69	Frequency of INSET participation
Table 2.70	Rank of reference of reasons for INSET participation
Table 2.71	Frequency of INSET participation
Table 2.72	Rank of reference of reasons for INSET participation
Table 2.73	Frequency of INSET participation
Table 2.74	Rank of reference of reasons for INSET participation
Table 2.75	Frequency of INSET participation
Table 2.76	Rank of reference of reasons for INSET participation
Table 2.77	Frequency of INSET participation
Table 2.78	Rank of reference of reasons for INSET participation
Table 2.79	Frequency of INSET participation
Table 2.80	Rank of reference of reasons for INSET participation
Table 2.81	Frequency of INSET participation
Table 2.82	Rank of reference of reasons for INSET participation
Table 2.83	Frequency of INSET participation
Table 2.84	Rank of reference of reasons for INSET participation
Table 2.85	Frequency of INSET participation
Table 2.86	Rank of reference of reasons for INSET participation
Table 2.87	Frequency of INSET participation
Table 2.88	Rank of reference of reasons for INSET participation
Table 2.89	Frequency of INSET participation
Table 2.90	Rank of reference of reasons for INSET participation
Table 2.91	Frequency of INSET participation
Table 2.92	Rank of reference of reasons for INSET participation
Table 2.93	Frequency of INSET participation
Table 2.94	Rank of reference of reasons for INSET participation
Table 2.95	Frequency of INSET participation
Table 2.96	Rank of reference of reasons for INSET participation
Table 2.97	Frequency of INSET participation
Table 2.98	Rank of reference of reasons for INSET participation
Table 2.99	Frequency of INSET participation
Table 2.100	Rank of reference of reasons for INSET participation

LIST OF TABLES

TABLE	DESCRIPTION	PAGE
Table 2.1	Outline of Piaget's stages of intellectual development in children	44
Table 2.2	National Qualifications Framework	53
Table 2.3	Difference between the traditional and the outcomes based learning systems	57
Table 4.1	The Eight Learning Areas	109
Table 4.2	Appointment of Subject Advisors of Mathematics in KZN	115
Table 5.1	Response rate to questionnaire	126
Table 5.2	Gender of respondents	126
Table 5.3	Age category of senior primary mathematics educators	128
Table 5.4	Experience as a senior primary mathematics educator	129
Table 5.5	Mathematics Specialist	131
Table 5.6	Qualifications in mathematics as specialisation	132
Table 5.7	Location of respondent's school	133
Table 5.8	Persons responsible for supervising senior primary mathematics	134
Table 5.9	Frequency of mathematics committee meetings	135
Table 5.10	Rank order of preference of reasons for INSET for senior primary mathematics educators	137
Table 5.11	Table summarising the respondents attendance at INSET courses, seminars or workshops	138
Table 5.12	Rank order of preference of reasons for not attending INSET courses, seminars and workshops	139
Table 5.13	Rate of relevance of INSET courses, seminars and workshops attended	141
Table 5.14	Time when INSET courses, seminars and workshops should be conducted	142
Table 5.15	Frequency distribution table of mathematics teaching methods	143
Table 5.16	Frequency of use of teaching aids in mathematics	145
Table 5.17	Frequency distribution table of mathematics teaching strategies	146

LIST OF FIGURES

FIGURE	DESCRIPTION	PAGE
Figure 2.1	Development process from Tyler's Rationale to the Perennial Curriculum Model	50
Figure 2.2	Model of OBE Curriculum Design	54
Figure 2.3	Partially completed table	60
Figure 5.1	Gender of senior primary mathematics educators	127
Figure 5.2	Age category of senior primary mathematics educators	128
Figure 5.3	Continuum of mid-career types	129
Figure 5.4	Experience as a senior primary mathematics educator	130
Figure 5.5	Mathematics Specialist	131
Figure 5.6	Qualifications in mathematics as specialisation	132
Figure 5.7	Location of respondent's school	133
Figure 5.8	Persons responsible for supervising senior primary mathematics	134
Figure 5.9	Frequency of mathematics committee meetings	136
Figure 5.10	Respondents' attendance at INSET seminars, workshops and courses	138
Figure 5.11	Rate of relevance of INSET courses, seminars and workshops attended	141
Figure 5.12	Time when INSET courses, seminars and workshops should be conducted	142
Figure 5.13	Teaching methods used by senior primary mathematics educators	144
Figure 5.14	Frequency of use of teaching aids in mathematics	145
Figure 5.15	Frequency distribution of mathematics teaching strategies	146

LIST OF APPENDICES

APPENDIX	DESCRIPTION	PAGE
Appendix A	Letter to the Kenyan Education Department seeking information on the INSET of senior primary mathematics educators in Kenya	167
Appendix B	Letter to Ghana's Education Ministries Office seeking information on the INSET of senior primary mathematics educators in Ghana	169
Appendix C	Letter to the Nigerian Education Department seeking information on the INSET of senior primary mathematics educators in Nigeria	171
Appendix D	Request to circulate questionnaires to senior primary mathematics educators in KwaZulu-Natal	173
Appendix E	Letter from D.M.Moodley (Acting Director: Education and Support Services), granting permission to conduct research	174
Appendix F	Letter to respondents	175
Appendix G	Glossary of terms used in questionnaire	177
Appendix H	Questionnaire to senior primary mathematics educators	178

MAPS OF RESEARCH AREA

MAP	DESCRIPTION	PAGE
Map A	Map of KwaZulu-Natal showing the eight KZNDEC regions	124

LIST OF KEY WORDS

Curriculum 2005

In-Service Education and Training (INSET)

KwaZulu-Natal (KZN)

Mathematics education

Mathematics educators

Mathematics teaching

Outcomes Based Education (OBE)

Pre-Service Education and Training (PRESET)

Primary schools

Senior primary phase

ABSTRACT

This investigation is primarily concerned with the In-Service Education and Training (INSET) needs of primary school mathematics educators. The research is grounded in the proposition that in order for senior primary mathematics educators to keep abreast with the current knowledge explosion and rapid rate of technological growth, they are under serious obligation to improve their expertise, knowledge and skills in mathematics teaching and learning through INSET. Pre-Service Education and Training (PRESET) serves only as preparation for entry into the teaching profession and cannot last the whole teaching career. INSET is thus necessary for the senior primary mathematics educator's continuing education.

In this investigation an attempt is made at establishing a framework for INSET and mathematics educators. It is hoped that these theoretical frameworks will enable mathematics educators to cope with the changing needs of senior primary mathematics education.

There is no doubt that the developments of senior primary mathematics education and INSET in the United Kingdom can have a profound effect on the senior primary mathematics education in South Africa. The extent to which the developments in the United Kingdom influences the educational initiatives presently being undertaken in South Africa will depend upon those who teach senior primary mathematics and those who are responsible for the provision of INSET of senior primary mathematics educators.

The past South African discriminatory policies led to numerous iniquities in the provision of mathematics materials and development of mathematical human resources. Consequently, there is a large number of unqualified and under-qualified mathematics educators especially amongst Blacks in South Africa. It is through INSET that this condition can be rectified.

A questionnaire survey revealed that senior primary mathematics educators are fully conscious of the importance and significance of

INSET. The recommendations made for the INSET of primary school mathematics educators based on the literature survey and the empirical investigation are: the need to establish a national and provincial policy for the INSET of primary school mathematics educators; there must be a concerted effort to establish school focused INSET; many of the methods of INSET courses emphasising the participative approach needs to be explored; the value of teachers' centres as exciting brokers for new ideas and as networks for personnel proves invaluable and finally, pivotal to the INSET of primary school mathematics educators is the need for them to update their in-depth knowledge of mathematics.

There is no doubt that the INSET of primary school mathematics educators is a crucial factor in KwaZulu-Natal (KZN). It is clear from this research that INSET for both academic and professional upgrading of the senior primary mathematics educators and the improvement of mathematics teaching and learning in the primary school is only limited by one's imagination.