IN-SERVICE TEACHER TRAINING PROGRAMMES FOR SECONDARY SCHOOL TEACHERS IN MIZORAM UNDER RMSA:

AN EVALUATIVE STUDY

A THESIS SUBMITTTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATION

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CERTIFICATE

This is to certify that Zairemmawia Renthlei, a Ph. D Scholar of the Department of Education, Mizoram University with the Registration no. MZU/Ph.D/884 of 19.04.2016 has written his thesis titled 'In-service training programmes for secondary school teachers in Mizoram under RMSA: An evaluative study' under my supervision and guidance.

I hereby certify that Zairemmawia Renthlei has complied with all the requirements as laid down by the Ph. D Regulations of Mizoram University and that the thesis is the original work of the scholar and has not been submitted for any degree to any other University.

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DECLARATION

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September 2020

I, Zairemmawia Renthlei, hereby declare that the subject matter of this thesis is the record of original work done by me; that the contents of this thesis did not form the basis of the award of any previous degree to me or to the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other university or institute.

This is being submitted to Mizoram University for the degree of Doctor of Philosophy in Education.

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TABLE OF CONTENTS

Certificate ---------- i

Declaration---------- ii

Acknowledgement---------- iii

Table of Contents---------- iv - x

List of Tables---------- xi - xii

List of Figures---------- xiii- xiv

List of Appendices---------- xv

CHAPTER 1: INTRODUCTION---------- 1 – 37

1.1 Present status of secondary education in India---------- 2 – 3

1.1.1 Number of schools, Enrolment, Gross Enrolment Ratio (GER) and Gender Parity Index---------- 3 - 5

1.1.2 Number of teachers and Pupil-teacher Ratio---------- 5

1.1.3 Examination Results---------- 6

1.1.4 Access---------- 7

1.1.5 Cost---------- 7

1.2 Present status of Secondary Education in Mizoram---------- 8 - 9

1.2.1 Number of schools---------- 9 - 11

1.2.2 Enrolment ---------- 11 - 13

1.2.3 Gross Enrolment Ratio (GER) and Gender Parity Index---- 13 - 14

1.2.4 Number of teachers ---------- 14 - 15

1.2.5 Pupil-teacher Ratio ---------- 16

1.2.6 Examination Results ---------- 17 - 18

1.3 Rashtriya Madhyamik Shiksha Abhiyan at a glance---------- 19 - 20

1.3.1 Updated status of programme---------- 20 - 22

1.4 Key components of RMSA---------- 23 - 26

1.5 Teacher training programmes under RMSA in Mizoram --------- 27

1.5.1 Induction training programmes ---------- 27

1.5.2 Headmaster training programmes ---------- 27 - 28

1.5.3 In-service training programmes for school teachers ------- 28

1.6 Need of the study ---------- 28 - 30

1.7 Statement of the problem ---------- 30

1.8 Operational definition of the terms ---------- 30

1.9 Research questions ---------- 31

1.10 Objectives ---------- 32

References ---------- 33 - 37

CHAPTER 2: REVIEW OF RELATED LITERATURE---------- 38 - 63

2.1 Studies in India ---------- 39 - 44

2.2 Studies of RMSA ---------- 44 – 47

2.3 Studies abroad ---------- 48 – 54

2.4 Conclusion ---------- 54

References ---------- 55 - 63

CHAPTER 3: METHODOLOGY AND RESEARCH PROCEDURE 64 - 73

3.1 Research design ---------- 65

3.2 Population ---------- 66 – 68

3.3 Sample ---------- 69

3.4 Tools and techniques used for data collection ---------- 70– 71

3.4.1 Validity of the Tools ---------- 71 - 72

3.4.2 Reliability of Tools ---------- 72

3.5 Mode of data collection ---------- 72 - 73

3.6 Tabulation and Analysis of data ---------- 73

CHAPTER 4: ANALYSIS AND INTERPRETATION OF DATA-- 74 – 175

4.1. General profile of the sampled teachers ---------- 75 – 79

4.2 Objective No 1. To examine the status of infrastructural and instructional facilities at the training centres of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram. ---------- 80

4.2.1.1 Infrastructural Dimensions ---------- 80 – 84

4.2.1.2 Instructional Dimensions ---------- 85 – 87

4.3 Objective No 2. To examine the transactional modalities of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram**.** ---------- 88 – 91

4.4 Objective no 3: To examine the overall perception of teachers about the effect and utility of the in-service training programmes for secondary school teachers under RMSA. ---------- 92

4.4.1 Opinionnaire: ---------- 92 – 97

4.4.2 Group Discussion ---------- 97 - 98

4.5 Objective No 4: To assess the perception of the participants on the capabilities of the resource persons in terms of training and their preparedness. 99

4.5.1 Opinionnaire: ---------- 99 – 102

4.5.2 Group Discussion ---------- 102 - 103

4.6 Objective No 5: To identify the problems encountered by the trainees during the training programmes. ---------- 103

4.6.1 Opinionnaire ---------- 103 – 106

4.6.2 Group Discussion ---------- 107

4.7 Objective No 6: To compare various districts in terms of teacher perceptions on utility of training programmes, capabilities of resource persons and problems encountered ---------- 108

4.7.1 To compare the various districts in terms of Teacher perceptions on utility of training programmes ---------- 108 – 118

4.7.2 To compare the various districts in terms of capabilities of resource person. ---------- 118 – 122

4.7.3 To compare the various districts in terms of problems encountered by the trainees ---------- 123 – 128

4.8 Objective No 7: To compare the perceptions of different teachers based on their gender, experience and subject taught ---------- 129

4.8.1 Comparision of the perceptions of different teachers based on their gender ---------- 130

4.8.1.1 Gender-wise comparision of the perceptions of teachers regarding the effect and utility of the training programmes ---- 130 – 137

4.8.1.2 Gender-wise comparision of the perceptions of teachers regarding the capabilities of resource person ---------- 137 – 140

4.8.1.3 Gender-wise comparision of the perceptions of teachers regarding problems encountered by them ---------- 141 – 144

4.8.2 Comparision of the perceptions of different teachers based on their teaching experience ---------- 145

4.8.2.1 Comparision of the perceptions of teachers regarding the effect and utility of the training programmes based on their teaching experience ---------- 145 – 152

4.8.2.2 Comparision of the perceptions of teachers regarding the capabilities of resource person based on their teaching experience ---------- 152 – 154

4.8.2.3 Comparision of the perceptions of teachers regarding problems encountered by them based on their teaching experience 155 – 157

4.8.3 Comparision of the perceptions of different teachers based on subjects taught ---------- 158

4.8.3.1 Subject-wise comparision of the perceptions of teachers regarding the effect and utility of the training programmes ---- 158 – 167

4.8.3.2 Subject-wise comparision of the perceptions of teachers regarding the capabilities of resource persons ---------- 167 – 172

4.8.3.3 Subject-wise comparision of the perceptions of teachers regarding problems encountered by them ---------- 172 – 177

CHAPTER 5: MAJOR FINDINGS AND DISCUSSIONS; RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER STUDIES ---------- 178 - 221

5.1. Major Findings and Discussions ---------- 178

5.1.1 Major Findings and Discussions on Status of infrastructural and instructional facilities at the training centres of in-service teacher training programmes---------- 178 - 189

5.1.2 Major Findings and Discussions on Transactional modalities of in-service teacher training programmes ---------- 190 – 196

5.1.3 Major Findings and Discussion on the overall perception of teachers about effect and utility of the in-service training programmes 197 - 201

5.1.4 Major Findings and Discussion on the overall perception of the participants on the capabilities of the resource persons --- 201 – 203

5.1.5 Major Findings and Discussion on the Overall Perception on Problems encountered by the trainees during the training programmes 204 - 206

5.1.6 Major Findings and Discussion on the Comparision of various districts in terms of trainee perceptions on utility of training programmes, capabilities of resource persons and problems encountered 207

5.1.6.1 Major Findings and Discussion on the Comparision of various districts in terms of trainee perceptions on utility of training programmes ---------- 207 -208

5.1.6.2 Major Findings and Discussion on the Comparision of various districts in terms of trainee perceptions on capabilities of resource persons ---------- 208 – 209

5.1.6.3 Major Findings and Discussion on the Comparision of various districts in terms of trainee perceptions on problems encountered - ---------- 210

5.1.7 Major Findings and Discussion on the Comparision of the perceptions of teachers based on their gender, experience and subject taught 211

5.1.7.1 Major Findings and Discussion on the Comparision of the perceptions of different teachers based on their Gender 211

5.1.7.2 Major Findings and Discussion on the Comparision of the perceptions of different teachers based on teaching experience 212

5.1.7.3 Major Findings and Discussion on the Comparision of the perceptions of different teachers based on subjects taught 213

5.2 Recommendations ---------- 214-217

5.3 Suggestions for Further Study ---------- 218

References ---------- 219 – 221

SUMMARY ---------- 222 - 243

BIBLIOGRAPHY---------- 244 - 258

APPENDICES

BRIEF BIO-DATA OF THE CANDIDATE

PARTICULARS OF THE CANDIDATE

LIST OF TABLES

Table No	Name of Table	Page No
1.1	Number of Schools, Enrolment, Gross Enrolment Ration and Gender Parity Index in India	4
1.2	Number of Teachers and Pupil Teacher Ratio in India	5
1.3	All India Examination Results	6
1.4	Number of households per 1000 by distance from secondary school	7
1.5	Cost of education per child	7
1.6	Management-wise Distribution of Schools	10
1.7	District-wise Distribution of Schools	11
1.8	Management-wise Enrolment of Students	11-12
1.9	District-wise Enrolment of Students	12
1.10	Gross Enrolment Ratio and Gender Parity Index in Mizoram	13
1.11	Management-wise Distribution of Teachers of Secondary and Senior Secondary Stages	14
1.12	District-wise Distribution of Teachers of Secondary and Senior Secondary Stages	15
1.13	Pupil-Teacher Ratio of Secondary and Senior Secondary Stages	16
1.14	Overall Results of Class X & XII (2019)	17
1.15	District-wise Results of Class X & XII (2019)	18
1.16	Year-wise budget allocation & releases under RMSA since 2009-10	21
1.17	Major Heads of RMSA intervention	22
3.1	District-wise Distribution of Teachers	67-68
3.2	Sample of Study	69
4.1	General profile of the sampled teachers	75
4.2	Infrastructural Dimensions	80-81
4.3	Instructional Dimensions	85

4.4	Overall Perceptions of Teachers on Utility	93
4.5	Overall Perceptions of Teachers on Capabilities of Resource Persons	99
4.6	Overall Perceptions of Teachers on Problems Encountered	103
4.7	District-wise Comparision of Teacher Perception on Utility of Training Programmes	106-109
4.8	District-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons	116-117
4.9	District-wise Comparision of Teacher Perceptions on Problems Encountered	121-122
4.10	Gender-wise comparision of Teacher Perceptions on Utility of Training Programmes	128-130
4.11	Gender-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons	135-136
4.12	Gender-wise comparision of Teacher Perceptions on Problems Encountered	139-140
4.13	Experience-wise Comparision of Teacher Perceptions on Utility of Training Programmes	143-145
4.14	Experience-wise Comparision of Teacher Perceptions on Teaching Experience	150
4.15	Experience-wise Comparision of Teacher Perceptions on Problems Encountered	153
4.16	Subject-wise Comparision of Teacher Perceptions on Utility of Training Programmes	156-159
4.17	Subject-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons	165-167
4.18	Subject-wise Comparision of Teacher Perceptions on Problems Encountered	170-172

LIST OF FIGURES

Figure No	Name of Figure	Page No
3.1	Political Map of Mizoram	66
4.1	Gender-wise Distribution of Sample in Various Districts	77
4.2	Experience-wise Distribution of Sample in Various Districts	78
4.3	Subject-wise Distribution of Sample in Various Districts	79
4.4	Infrastructural Dimensions	84
4.5	Instructional Dimensions	87
4.6	Overall Perception of Teachers on Utility of In-service Training Programmes	96
4.7	Overall Perception of Teachers on Capabilities of Resource Persons	101
4.8	Overall Perception of Teachers on Problems Encountered	105
4.9	District-wise Comparision of Teacher Perceptions on Utility of Training Programmes	112-113
4.10	District-wise Comparision of Teacher Perceptions on Capabilities of Resource Person	119
4.11	District-wise Comparision of Teacher Perceptions on Problems Encountered	124
4.12	Gender-wise comparision of Teacher Perceptions on Utility of Training Programmes	133-134
4.13	Gender-wise comparision of Teacher Perceptions on Capabilities of Resource Persons	138
4.14	Gender-wise comparision of Teacher Perceptions on Problems Encountered	142
4.15	Experience-wise Comparision of Teacher Perceptions on Utility of Training Programmes	148-149
4.16	Experience-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons	152

4.17	Experience-wise Comparision of Teacher Perceptions on Problems Encountered	155
4.18	Subject-wise Comparision of Teacher Perceptions on Utility of Training Programmes	163-164
4.19	Subject-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons	169
4.20	Subject-wise Comparision of Teacher Perceptions on Problems Encountered	174

LIST OF APPENDICES

Appendix i	- Checklist for facilities provided at training centres for in-service training of secondary teachers
Appendix ii	- Questionnaire for in-service teacher trainees regarding RMSA training programmes (English)
Appendix iii	- Questionnaire for in-service teacher trainees regarding RMSA training programmes (Mizo)
Appendix iv	- Interview Schedule for administrators

CHAPTER I

INTRODUCTION

Education is the underpinning of the developmental effort of any nation, and a pivotal point in the transformation of a society or a nation through various stages of its growth. The status – quantitative and qualitative – of the educational sector is most often an indicator of the level of development that has been achieved by the nation. Developed nations most inadvertently boast of comprehensive educational setups of the highest quality and very often devote relatively higher quotas to the education sector from their national budgets. In contrast, we observe poor quality of education in developing and under-developed countries accompanied by low financial outlay in the budgets of such countries. This scenario is an irony because the relationship between education and development is symbiotic in nature. In other words, education contributes to the development of the nation and development similarly leads to progress in education; the two go hand in hand and cannot be isolated from each other. Therefore, every effort must be made to improve the quality and quantity of education in our country so as to promote the overall development of the nation in various areas. The Education Commission (1964-66) has rightly stated that "The destiny of India is now being shaped in the school classroom. In a world based on science and technology, it is education that determines the level of prosperity, welfare and security of the people." (as cited in Zothanzuali, 2007)

In India, education falls under the concurrent list; meaning that it is the combined duties of both the Central and State Governments to legislate intelligently on education, finance it adequately and administer it efficiently. The Central Government's ambit has successively increased over the years from a relatively insignificant one to the present scenario where it has developed pivotal roles in curriculum development, research and development as well as in financing and assessment.

In India, as in many other countries, general education is divided into three main phases – elementary, secondary and higher education. Elementary education

comprises of the first eight (8) years of formal schooling and often includes the pre-schooling period also. The curriculum for most elementary schools is relatively uniform throughout the nation with minor differences from state to state. Elementary education has been made a compulsory and inalienable right for all Indian citizens via the RTE Act 2009, and rightly so. It forms the backbone of all further education and lays the groundwork for all future educational efforts.

Secondary education, often the most neglected area of education, is sandwiched between elementary education and it more illustrious sibling, higher education; and comprises of four (4) years of schooling form classes IX to XII. Classes IX ad X are termed secondary education and presents a common curriculum in most cases. Classes XI and XII are termed higher/senior secondary education and is characterized by differentiation of school subjects where students are segregated into various streams of study. Students may therefore take up Arts, Science, Commerce or Vocational Streams of Study in the Senior Secondary Stage. Tertiary education or Higher Education comprises of all the courses of study that comes after secondary education and transacted in colleges and universities. Higher education is characterized by diversification into a multitude of specialisations. Undergraduate studies usually are of two to four years duration while post-graduate studies cover mostly two years and in some rare cases, a year and may stretch even further.

1.1 PRESENT STATUS OF SECONDARY EDUCATION IN INDIA

India has a glorious history of education dating back to ancient times. From the Gurukuls of the Vedic Age to the post-modern universities of today, education in India has grown from strength to strength. During the ancient times, education was unorganized and was left to the discretion of the preceptors and ascetics although they were often supported by the ruling class. During the middle ages a more formal form of education developed under the Hindu and Muslim rulers who established Pathshaalas, Maktabs and Madrasas. Pathshaalas and Maktabs were institutes of primary education whereas Madrasas were concerned with secondary education. These institutions of learning were mostly funded by the ruling classes but the

administrations and transaction of curriculum were left almost entirely to the hands of the teachers. Further education was dependent solely on the means and merit of the students themselves.

A modern and organized system of education with curricular control by the governments arrived with the British. As soon as the British established political dominance, they realized that they needed a class of educated Indians to help them govern the huge country. So, they started establishing schools and colleges modelled after their own system. However, the education dispensed was not meant for the masses and was confined to a very small percentage of the population. Only after independence was the country blessed with a system of education that was even close to meeting the needs of the population of India. With the decades that have passed, the education system in India has undergone many changes and developments. The situation has improved dramatically all over the country save for a few remote and distant pockets of habitation. Schools have mushroomed all over the country and universalization of elementary education seems an achievable dream.

According to the Educational Statistics at a Glance -2018 published by the Ministry of Human Resource Development, the status of secondary and senior secondary education in India during the year 2015-16 may be summed up as follows:

1.1.1 NUMBER OF SCHOOLS, ENROLMENT, GROSS ENROLMENT RATIO (GER) AND GENDER PARITY INDEX

Schools are the main agencies of education. They represent the primary facility in which the educational system is based upon.

India is one of the most populous countries in the world with a significantly young population. According to the 2011 census, the estimated population in the age group of 14 – 15 years corresponding to the secondary school going age is 4.9 lakhs and that in the age group of 16-17 years is approximately 4.4 lakhs.

The Gross enrolment ratio represents the total number of children in a country or a state therein, enrolled in a specific level of education, irrespective of the

age and is usually expressed as a percentage of the population in that particular age group corresponding to that particular level of education. Sometimes the GER may exceed 100 %; e.g., 100.1. This seemingly anomalous figure arises from the possibility that children form other age groups (younger or older) may be enrolled in that particular level of education.

Discrimination based on gender has been the bane of Indian society for centuries. Indian women have long been denied their fair share of opportunities in many areas of civil society including education. However, the situation has drastically improved over the decades although it still leaves much to be desired. This aspect is assessed using the Gender Parity Index which represents the ratio of GER of females to GER of Males. The ultimate goal is a parity index of 1:1. The following table depicts the following:

- The numbers of secondary and senior secondary schools in India
- The total enrolment of students in secondary and senior secondary schools
- The gross enrolment ratio of students in secondary and senior secondary schools
- The gender parity index of students in secondary and senior secondary schools

Table no 1.1

Number of Schools, Enrolment, GER and Gender Parity Index in India

	Secondary			**Senior Secondary**			**Total**
No of Schools	1,39,539			1,12,637			252176
Enrolment (thousands)	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	
	205.47	185.98	391.45	130.02	117.33	247.35	
Gross Enrolment Ratio	**Male**	**Female**	**Average**	**Male**	**Female**	**Average**	
	79.2	81.0	80.0	56.0	56.4	56.2	
Gender Parity Index	1.02			1.01			

Note. Data sourced from MHRD, Educational Statistics at a Glance -2018

These numbers are hardly satisfactory considering the developments in other areas of our society. The large number about (20 %) of children who do not receive secondary education is an alarming figure and a cause for immediate concern. With RMSA, the government of India is therefore pushing for unversalisation of secondary education with 100 % enrolment by and 100 % retention by 2020.

The case is even worse for senior secondary education with just over half of the school going population attending senior secondary education. This figure speaks volumes about the economic conditions of India where children have to work to help feed their families. Drastic measures are needed to increase enrolment in this sector.

1.1.2 NUMBER OF TEACHERS AND PUPIL TEACHER RATIO

Teachers are the backbone of the educational system. India has one of the largest teaching workforces in the world manning the thousands of schools all over the country. A dedicated and professional teaching faculty is one of the most important resources that a sound educational system needs to day. Sadly, we still see cases of dearth of teachers in some remote locations of our country; which must be remedied at the earliest.

Another important indicator of the quality of an educational system is the Pupil-Teacher Ratio or PTR. Teachers can only effectively teach a certain number of students and stretching teachers beyond their limits only reduces their efficiency, effectiveness and morale.

Table 1.2

Number of Teachers and Pupil Teacher Ratio in India

	Secondary	Senior Secondary	Total
Number of Teachers	14,31,591	20,41,864	34,73,455
Pupil Teacher Ratio	27	37	-

Note. Data sourced from MHRD, Educational Statistics at a Glance -2018

1.1.3 EXAMINATION RESULTS

One of the most common measure of academic achievement is the examination. Although there are other measures of success, the passing or failing of examinations can give us a broad picture of the educational quality prevailing in the country. The consolidated results from all the Central and State Education boards including the National Open School examinations for classes X and XII for the 2016 session are shown in the following tables.

Table 1.3

All India Examination Results

Central and State Board Examination Results for Class X 2016			
	Male (lakhs)	Female (lakhs)	Total/Average (lakhs)
Appeared	104.5	89.5	194.3
Passed	81.2	71.4	152.6
Pass Percentage	77.7	79.8	78.7
Central and State Board Examination Results for Class XII 2016			
Appeared	82.1	67.5	149.6
Passed	61.0	55.5	116.5
Pass Percentage	74.3	82.2	77.9
Open Board Examination Results for Class X 2016			
Appeared	0.37	0.24	0.61
Passed	0.14	0.10	0.25
Pass Percentage	39.7	43.9	41.4
Open Board Examination Results for Class XII 2016			
Appeared	0.25	0.17	0.43
Passed	0.10	0.08	0.19
Pass Percentage	43.1	48.4	45.3

Note. Data sourced from MHRD, Educational Statistics at a Glance -2018

1.1.4 ACCESS

To achieve universalisation of secondary education, which is a dream that most educationists share, access to educational institutions is vital. This aspect is assessed by another index and we represent it by the number of households Per 1000 by distance having secondary school. This value at all India level in 2014 is shown in the table given below.

Table 1.4

Number of households per 1000 by distance from secondary school

Distance	Rural	Urban
d<1km	367	727
1km<d<2km	236	187
2km<d<5km	275	80
d>5km	122	7

Note. Data sourced from MHRD, Educational Statistics at a Glance -2018

1.1.5 COST

Education is often a costly affair. Admission fees, tuition fees, uniforms, textbooks and other study materials, transportation, fooding, etc. often create heavy burdens on the society. This effect is most severely felt among the weaker sections of society who although aspiring for a decent education often are unable to meet the economic requirements.

Table 1.5

Cost of education per child

Secondary	Rs. 7459
Senior Secondary	Rs. 12619

Note. Data sourced from MHRD, Educational Statistics at a Glance -2018

1.2 PRESENT STATUS OF SECONDARY EDUCATION IN MIZORAM

Education arrived in Mizoram with the Christian Missionaries. Although Mizoram was a part of the British Empire, there was no provision for any formal education in the Lushai Hills before the advent of the Christian Missionaries in 1894. These missionaries started the first school in 1898 and the first High School was established in 1944. The Welsh Mission dispatched three people to inspect the education scenario of Mizoram in 1936 and formed the 'Education Management Committee'. One of the Missionaries usually functioned as the Inspector of Schools and appointed other Sub-inspectors of Schools to work under his supervision.

During these times, 'The British Government administered the Lushai Hills nominally and no attempt was made for the all-round development of the Hills and maintenance of Law and order was their primary concern. The administration paid little attention to the education of the people but left the matter to the Christian Missionaries and assured them official help and financial support as far as practicable.' (Zote, 1984). However, despite the shortcomings of the education system under colonial British rule, a firm foundation for future development was laid and a small percentage of the population received some form of education. The general population was also not enthusiastic about getting an education as it had almost nothing to do with their daily activities and the economic costs far outweighed the benefits. In an attempt to encourage education, the colonial government took some measures such as exempting those who passed the fourth standard from forced manual labour which to a certain degree made a favourable impact upon education.

After independence, Mizoram came under the control of India and was part of the state of Assam gaining District Council Status in 1952, Union Territory in 1972 and becoming a full-fledged State only in 1986. As the government took over the task of managing education, it slowly developed the administrative structure and appointed various officials to look after the welfare of education. The number of schools also increased steadily over the years with a corresponding increase in literacy. In 1961, there was only one higher secondary school and 17 high schools or secondary schools in all of Mizoram. By the time Mizoram attained Union Territory

Status in 1972, there were 9 secondary schools in Mizoram with approximately 600 teachers, most of them untrained manning these schools. The situation for secondary education improved slowly but steadily till 1966-67 when the state was thrown into a political turmoil and all forms of development including educational development slowed down considerably. In 1986, the Mizoram Peace Accord was signed, and Mizoram attained Statehood in 1987. With political peace, came rapid development in all spheres of life including education. All sectors of society contributed to their fullest potential with Churches, NGOs and Private individuals pitching in; producing a large number of schools – elementary as well as secondary in all the towns of Mizoram. Special mention must be made to the contribution of the various churches, in particular the Presbyterian and Baptist churches who have made significant contributions in the field of secondary education by establishing schools in different areas. Thus, a period of educational progress and resurgence flourished in Mizoram and great strides were achieved in the next few decades. Today the scenario has improved greatly with Mizoram featuring at the highest level of educational indicators within the country such as literacy rate although there is still much scope for improvement.

According to the Annual Publication 2017-18 published by the Department of School Education, Government of Mizoram, the latest statistics of secondary education in Mizoram are as follows.

1.2.1 NUMBER OF SCHOOLS

At present there are 669 high schools and 175 higher secondary schools in Mizoram, which is quite a good number taken the low population of Mizoram. However, there are still isolated and remote areas which do not have high schools in the nearby vicinity.

The schools are classified in various categories namely, Government (Central, State & RMSA), Deficit, Ad-hoc aided, Lump sum Aided and Purely Private. The distribution of schools according to the type management is as show in the following table.

Table 1.6

Management-wise Distribution of Schools

Management	Secondary	Senior secondary
Central Govt	11	5
State govt	198	20
RMSA	92	
Deficit	9	7
Ad-hoc Aided	129	13
Lump-sum Aided	27	11
Private	203	119
Total	669	175

Note. Data sourced from Annual Publication 2017-2018, Department of School Education, Government of Mizoram.

The ratio of senior secondary schools to secondary schools is 1:3.8 while the national ratio is 1:1.22. The huge disparity needs to be quickly addressed. It is also notable that almost a third of secondary schools are privately owned and a huge majority almost two-thirds of Senior secondary schools are privately owned. The State and Central Governments need to quickly address these issues. Many of these schools urgently require assistance in the form of infrastructural and manpower supports from the government or other funding agencies. The vast proliferation of private schools also entails that supervision and assessments by the government agencies are urgently needed in order to maintain the quality of secondary education in the state and to prevent mis-management of the schools and exploitation of the students.

At the time of data collection, there were eight (8) administrative districts in Mizoram and the district-wise distribution of secondary and senior secondary schools is as shown in the table presented in the following lines.

Table 1.7

District-wise Distribution of Schools

District	Secondary	Senior secondary
Aizawl	223	79
Champhai	93	16
Kolasib	45	8
Lawngtlai	60	16
Lunglei	118	32
Mamit	45	4
Serchhip	45	11
Siaha	40	9

Note. Data sourced from Annual Publication 2017-2018, DSE

1.2.2 ENROLMENT

Mizoram is a very sparsely populated state with just over a million people living in it. Consequently, the enrolment figures are very less compared to other states.

Table 1.8

Management-wise Enrolment of Students

	Secondary			Senior secondary		
Management	Male	Female	Total	Male	Female	Total
Central Govt	377	306	683	255	197	452
State govt	6569	6997	13566	3439	3992	7431
RMSA	1301	1214	2515	-	-	-
Deficit	1213	1581	2794	1541	1850	3391

Ad-hoc Aided	2906	3163	6069	653	766	1419
Lump-sum Aided	554	575	1129	365	446	811
Private	5582	5069	10651	4258	4101	8359
Total	18502	18905	**37407**	10511	11352	**21863**

Note. Data sourced from Annual Publication 2017-2018, DSE

It is seen that majority of the enrolment is in state run schools and private schools while the contribution of Central Government institutions in marginal. It is, therefore, evident that the Governments, State as well as Central needs to improve enrolment in their schools. The propensity of the monied portion of the population to enroll their children in private schools could lead to social stratification in an undesirable way, promoting elitism among the children. Also, lack of Governmental control and assessment in these schools have led to overpopulation of these schools beyond the desirable limits.

Table 1.9

District-wise Enrolment of Students

	Secondary			Senior secondary		
District	Male	Female	Total	Male	Female	Total
Aizawl	7091	7831	14922	6053	6575	12628
Champhai	2236	2305	4541	741	898	1639
Kolasib	1309	1372	2681	590	580	1170
Lawngtlai	1877	1456	3333	703	474	1177
Lunglei	2716	2596	5312	1174	1399	2573
Mamit	1131	1015	2146	161	181	342
Serchhip	1178	1233	2411	497	601	1098
Siaha	964	1097	2061	592	644	1236

Note. Data sourced from Annual Publication 2017-2018, DSE

The population of Mizoram is concentrated in the cities with Aizawl bearing the brunt as nearly a quarter of the State's population lives in the city of Aizawl and

its surrounding localities. As expected, a significant concentration of the school going population in a few districts is observed, with the situation more pronounced in the senior secondary section. Nearly half of the secondary school enrolment is concentrated in Aizawl and Lunglei Districts with Aizawl accounting for more than a third. In the Senior Secondary section, Aizawl alone accounts for more than half of the total enrolment. Such an uneven distribution of enrolment may have adverse effects on the educational development of the state as a whole and reflects poorly on the developmental efforts of the state. Measures may be taken up to reduce this disparity in enrolment among the districts.

1.2.3 GROSS ENROLMENT RATIO (GER) AND GENDER PARITY INDEX

The Gross Enrolment Ratio is the ratio of the actual number of enrollment of students to the number of children in that age group. The Gender Parity Index represents the ratio of GER of females to GER of males and is indicative of the social structure and development of the population.

Table 1.10

Gross Enrolment Ratio and Gender Parity Index in Mizoram

	Gross Enrolment Ratio			**Gender Parity Index**
	1.08 (1.01)			
Secondary	107.26 (79.2)	110.85 (81.0)	109.02 (80.0)	1.03 (1.02)
Senior Secondary	53.57 (56.0)	57.86 (56.4)	55.68 (56.2)	1.08 (1.01)

Note. Data sourced from Educational Statistics at a Glance -2018, MHRD

* Figures in parentheses indicate National averages

Mizoram has a very high GER figures in secondary education as compared to the national GER with figures exceeding 100 while the national level GER are still at

about 80. The values of GER exceeding 100 indicates that children from other age groups are attending the secondary level of schooling.

However, a very low transition rate from secondary to Senior secondary level is observed where the GER values for Mizoram fall below the National averages.

1.2.4 NUMBER OF TEACHERS

Mizoram boasts of a large number of teachers compared to the rest of the nation. Most of the teachers in the secondary and senior secondary stages are well-educated although quite a few of them are untrained resulting in a substantial backlog in teacher training. The government of Mizoram has initiated the B Ed multimode programme at IASE, Aizawl to solve this problem of untrained teachers with immense success in the last few years. The distribution of teacher in the various districts and in the various types of institutions are shown in the following tables.

Table 1.11

Management-wise Distribution of Teachers of Secondary and Senior Secondary Stages

	Secondary			Senior secondary		
Management	Male	Female	Total	Male	Female	Total
Central Govt	60	18	78	20	13	33
State govt	895	384	1279	213	258	471
RMSA	378	223	601	-	-	-
Deficit	73	53	126	103	72	175
Ad-hoc Aided	615	237	852	101	78	179
Lump-sum Aided	85	42	127	41	33	74
Private	789	422	1211	449	333	782
Total	2895	1379	4274	927	787	1714

Note. Data sourced from Annual Publication 2017-2018, DSE

Table 1.12

District-wise Distribution of Teachers of Secondary and Senior Secondary Stages

	Secondary			Senior secondary		
District	Male	Female	Total	Male	Female	Total
Aizawl	1028	593	1621	447	421	868
Champhai	385	142	527	87	67	154
Kolasib	203	94	297	47	33	80
Lawngtlai	251	95	346	69	39	108
Lunglei	494	217	711	142	122	264
Mamit	187	71	258	23	14	37
Serchhip	186	94	280	76	47	123
Siaha	161	73	234	36	44	80

Note. Data sourced from Annual Publication 2017-2018, DSE

It is easily observed that a majority of teachers are located in a few districts. This has resulted in the problem of inequitable distribution of teachers with schools in the remote areas suffering from a serious dearth of teachers while schools in the cities and major towns are over-staffed. Also, the differences in number of male and female teachers may be noted and recruitment rules may be modified to ensure that the differences in gender may be reduced. It is also evident that a large majority of teachers are employed by the private sector. These privately employed teachers do not receive adequate facilities and emoluments that are in accordance with their qualifications and service rendered. These teachers receive salaries that are fractions of that received by government employees while doing the same amount and nature of work. The plight of teachers in Mizoram is deplorable and remedial measures are drastically needed to improve their condition.

1.2.5 PUPIL TEACHER RATIO

A low pupil-teacher ratio is essential for a modern and emancipated learning environment that is able to cater to the individual needs of all the students irrespective of their backgrounds. A low PTR is indicative of a high level of educational development and is desirable at all stages of learning.

Table 1.13

Pupil-Teacher Ratio of Secondary and Senior Secondary Stages

Secondary	Senior Secondary
9 (27)	13 (37)

Note. Data sourced from Annual Publication 2017-2018, DSE

* Figures in parentheses indicate National averages

Mizoram boasts of a very good Pupil-Teacher Ratio compared to national averages. The PTR in Mizoram is only one third of the national average in the secondary sector as well as the senior secondary sector. Although low PTRs are indicative of a strong educational setup, a more complete and detailed study could only reveal the real picture.

On the other hand, these values could indicate a drastic mismanagement of the system through a minimal utilization or under-utilisation of available resources including the teachers. Therefore, a more thorough analysis of the data may be done to see if these values are uniformly distributed all over the whole state and if the human resources are truly under-utilised.

1.2.6 EXAMINATION RESULTS

Table 1.14

Overall Results of Class X & XII (2019)

	Class X			Class XII		
	Male	Female	Total/ Average	Male	Female	Total/ Average
Appeared	8328	9018	17346	5067	5549	10616
Passed	5778	6005	11783	3921	4459	8380
Pass %	69.38	66.59	67.93	77.38	80.36	78.94

Note. Data sourced from Results of the High School leaving Certificate Examinations 2019, Mizoram Board of School Education.

* Results include regular as well as private candidates

* Arts + Science + Commerce

The pass percentages of the Class X examinations 2019 stand at approximately 68 % (about 10% below the national average) and fall far below the desired values.

It is easily observed that the pass percentages vary greatly between the different districts. The pass percentage of Aizawl district is comparable with national averages but could improve further in today's competitive world. Other districts fall below the national average with three districts hovering at about 50%. This in indicative of the quality of education in the some of the districts. Pass percentages of about 50 % is unusually low by any standard and drastic measure are called for to remedy the situation.

Table 1.15

District-wise Results of Class X & XII (2019)

	Class X			Class XII		
District	Appeared	Passed	Pass %	Appeared	Passed	Pass %
Aizawl	7259	5844	80.50	6179	5325	86.17
Champhai	1887	1273	67.46	720	562	78.05
Kolasib	1138	710	62.39	416	361	86.78
Lawngtlai	1955	949	48.54	722	304	42.10
Lunglei	2288	1445	63.15	1311	1016	77.49
Mamit	741	378	51.08	160	141	88.13
Serchhip	978	688	70.34	448	398	88.84
Siaha	1100	496	45.09	660	273	41.36

Note. Data sourced from Results of the High School leaving Certificate Examinations 2019, Mizoram Board of School Education

* Results include regular as well as private candidates

* Arts + Science + Commerce

The pass percentage for the senior secondary section is much better than the secondary level and it is heartening to see that certain districts exceed the national averages by nearly 10%. However, two districts namely, Lawngtlai and Siaha are performing dismally at the senior secondary level with pass percentages at about 40%. Such values are unacceptable by any standard of measurement and all efforts must be made to improve the situation.

1.3 RASHTRIYA MADHYAMIK SHIKSHA ABHIYAN AT A GLANCE

The Rashtriya Madhyamik Shiksha Abhiyan or RMSA in short was launched in March 2009, following the immense success of its sister programme The Sarva Shiksha Abhiyan (SSA) in its efforts towards achieving Universalisation of Elementary Education in India. Although universalisation of elementary education is yet to be achieved, the progress and achievements of SSA has encouraged the Government to extend the dream of Universalisation to secondary education; thereby giving birth to Rashtriya Madhyamik Shiksha Abhiyan.

The goal of RMSA is to ensure Universal Access, Equality and Social Justice, Relevance and Development of Curricular and Structural Aspects. These goals of the Rashtriya Madhyamik Shiksha Abhiyan can be summarized in the following objectives:

1. To affect a substantial improvement in the quality of secondary education by prescribing norms and ensuring that all schools achieve these norms.

2. To remove all barriers and hindrances to such quality education by providing support to economically weaker sections of the society, the educationally backward, the girls and the disabled children residing in rural areas and other marginalized categories like SC, ST, OBC and Educationally Backward Minorities (EBM).

3. To ensure universal access of secondary education by 2017 (GER of 100%) by providing a secondary school within a reasonable distance of any habitation, which should be 5 kilometers for secondary schools and 7-10 kilometers for higher secondary schools.

4. To achieve universal retention (0% dropout rate) by 2020.

The Rashtriya Madhyamik Shiksha Abhiyan has made great inroads into improving secondary education in India. Although the ultimate dream of universalization of secondary education still remains a distant dream, much progress has been made in regard to development of infrastructure such as buildings, classrooms, libraries, laboratories, culture rooms, toilets, etc.

A large number of teachers have also been recruited under the RMSA umbrella giving a much-needed boost to the meager human resources available at the ground and affecting an improved Pupil-Teacher Ratio all over India. RMSA has also initiated a routine in-service teacher training programme for the secondary teachers, which will be the focus of this study. In addition, other programmes such as Leadership and Professional Development Programmes for Headmasters, Induction and sensitization programmes, Excursions for teachers and students are also organized through RMSA. Children are also provided with facilities for Remedial teaching as well as bridge courses for enhancement of learning.

RMSA also prioritizes the educational development of children coming from educationally weaker sections of society such as Minorities, Scheduled Castes and Scheduled Tribes. It aims at removing education inequality at all levels and contexts by organizing enrolment drives, special study camps and bridge courses in addition to facilities for open and distance learning. Construction of Hostels for Girls as well as living quarters for teachers with special preference to female teachers have also been a part of the RMSA plan of action. The scheme also recognizes the need for extending specific interventions and resource support, including providing textbook, workbook, stationery, uniform, footwear, bicycles, boarding and lodging for each child and stipend for day scholars, to the children belonging to SCs/STs including differently abled children and secondary and higher secondary stage.

1.3.1 UPDATED STATUS OF PROGRAMME

The Rashtriya Madhyamik Shiksha Abhiyan Scheme has been hailed as a worthy sibling of the Sarva Shiksha Abhiyan and has led to the overhauling of the secondary education in India in so many ways. The targeted sector i.e. secondary education has received a fresh fillip through the influx of additional funds for construction works, acquisition of new materials, hiring of additional teachers and other equity and intervention programmes.

The impact of RMSA has exceeded expectations in many states and has given a much-needed boost to the state education machinery in more ways than one. The thrust for qualitative as well as quantitative improvement in secondary education must be continued without slack in all areas and

A huge amount of monies was set aside by the Central Government to finance the immense scheme in all the states and union territories. An amount of Rs. 3,123 Crore was approved for the scheme at RE Stage out of which an amount of Rs. 3045.87 Crore has been released during 2013-14.

Table 1.16

Year-wise budget allocation & releases under RMSA since 2009-10

Year	Budget Allocation (Rs. in crore)	Releases (Rs. in crore)
2009-10	550.00	549.13
2010-11	1500.00	1481.95
2011-12	2512.45	2499.81
2012-13	3172.63	3171.62
2013-14	3123.00	3045.87
2014-15	5000	1270 (as of 31st July 2014)

Note. Data sourced from Ministry of Human Resource Development, RMSA Status (2016)

The majority of these funds have been utilized in the various programmes undertaken by the RMSA in all the states of India. Some of the major heads in which these funds were utilized were in construction of infrastructure and hiring of new teachers. The quantitative improvements seen as a result of the RMSA intervention may be summarized as follows:

Table 1.17

Major Heads of RMSA intervention

	Approved	Completed
New Schools	10513	9239
Strengthening of existing schools	35539	-
New Science Labs	24581	7315
Computer Rooms	-	5324
Libraries	-	7406
Art/Craft/Culture Rooms	30761	7959
Toilet Blocks	19510	5975
Drinking Water Facilities	12275	4255
Residential Quarters	2130	441
Additional Classrooms	51750	14644 + 12562 (in progress)
	Sanctioned	Appointed
Teachers	107480 (incl. 41507 addl. teachers)	59353

Note. Data sourced from Ministry of Human Resource Development, RMSA Status (2016)

* Data last updated on Wednesday, 9th March 2016 – 12:05pm

It is seen from the above table that huge inroads have been made in strengthening secondary education through the RMSA initiative. Schools have received additional and much needed infrastructures such as classrooms, libraries, laboratories furniture, etc. In addition, RMSA has helped to increase the pupil-teacher ratios to reasonable levels through the recruitment of over a lakh teacher all over India. This trend if continued with renewed vigor will without doubt prove a boon to secondary education.

1.4 KEY COMPONENTS OF RMSA

In order to achieve the objective of universalization of secondary education, the Rashtriya Madhyamik Shiksha Abhiyan has made great inroads in several areas through concerted efforts. These efforts of the RMSA can be seen in almost all aspect of secondary education and their implications have been felt in every nook and cranny of secondary education. Although certain aspects of the RMSA scheme are more visible than others, and their implications and results instantly observable; there are other areas of the RMSA drive which go deeper into the system, and their ramifications are felt as aftershocks. The interventions that are conducted through RMSA are therefore varied and diverse but for the sake of simplicity and ease of study, we shall categorize them into three main components – development of physical infrastructure, interventions to increase quality of education and initiatives to ensure equity among all the children involved. These components are often not watertight and overlap at times, but the distinction may be made to ease the study. Some components are easy to assess for implementation while others are more abstract and difficult to assess.

Physical Facilities for improving Access

One of the major challenges of universalization of secondary education is to provide universal access to all children of school going age. In order to universalise access secondary education all over the country it is desirable that certain norms and standards comparable to Kendriya Vidhyalayas be developed at the central level for implementation through the country. However, such norms and standards may be adapted and modified at the state or district level keeping in mind the needs and conditions of that particular state or district. Hence, the improvement of the infrastructure facilities will be facilitated in the following manner:

- Opening of new secondary/senior secondary schools in areas where there is a serious lack of access to secondary education
- Provision of additional classrooms in existing schools to accommodate more all the students willing to enrol in secondary education

- Setting up Science as well as ICT Laboratories in new as well as existing schools to reduce the gap between theory and practice.
- Preparation of well-equipped libraries in new and existing schools to provide a wider range of reading and learning materials for students
- Introduction of Art and crafts room in all new and existing schools to ensure the development of the finer senses of the students
- Construction of hygienic and modern Toilet blocks in all new and existing schools with separate toilets for girls
- Provision of clean and safe Drinking water in adequate quantities in all new and existing schools
- Construction of Residential Hostels for Teachers in remote areas with preferences to female teachers.

Quality Interventions

Quality is another important area where our focus needs to be trained upon. In addition to providing access to everyone, it must be ensured that the quality of education imparted to these students be of the requisite standard. The government must, therefore, provide secondary education that will help the students to develop skills compatible with actual realities of life and help them to adjust to a constantly changing society. Also, the education that is imparted in our secondary schools must be compatible and comparable with the best form around the world. In today's world, knowledge is power, and we must empower our children through quality education thereby enabling them to take charge of their own lives and make a positive impact upon society. Some of the measures through which the quality of secondary education is currently being improved ad upgraded via RMSA are:

- Appointment of a large number of additional teachers to reduce the Pupil-Teacher Ratio to an acceptable figure of 30:1
- A strengthened and renewed focus on Science, Mathematics and English education at par with international standards
- In-service training of teachers of the highest quality to keep the workforce abreast of the latest developments in subject content and pedagogical

knowledge in order to maintain their relevance in the ever-changing educational scenario

- Equipping schools with well-stocked Science laboratories to enable the learning of science with a practical and hands-n approach to reduce the gap between theory and practical reality
- To ensure an ICT enabled education by providing appropriate hardware, software and manpower resources
- To undertake curriculum reforms of secondary education by reviewing the present curriculum to meet the NCF, 2005 norms
- Reforms in the Teaching-learning processes by organising appropriate programmes.
- Organising Bridge courses for enhancing learning ability for students passing out of class VIII.

Equity Interventions

India is a land of diversity which literally translates into inequalities of various forms. Social inequality, ethnic differences and economic distance as well as gender bias have plagued Indian society and education is not free from the effect of such inequalities. Hence, all efforts must be made to reduce the gap between the various sections of society if we are to truly produce an egalitarian society through education. Education is the most common and effective means of social mobility and children can improve their social standing and position through education. Therefore, equity interventions form a major part of the RMSA spearhead and will hopefully pave the way for an equitable school environment free from all inequalities. Some of the equity initiatives take up under RMSA may be outlined as follows:

- High Quality Government Schools should be set up in all areas of Educationally Backward Minorities concentration with preference to areas with concentration of SC/ST/Minority for opening of schools
- Special enrolment drives for the weaker section with free lodging/ boarding facilities for students belonging to SC, ST, OBC and minority communities

- Recruitment of more female teachers in schools to ensure that the girl child has adequate support and representation of her needs.
- Hostels/ residential schools, cash incentive, uniform, books, separate toilets for girls. Exclusive Secondary and Higher Secondary schools for Girls should be set up. This would facilitate higher participation of girls from minority community in school education
- Providing textbooks, uniforms & scholarships to meritorious/needy students at secondary level.
- Inclusive education should be there and all the necessary facilities should be provided for the differently abled children in all the schools including provision of wheelchairs, bicycles, etc.
- Expansion of Open and Distance Learning needs to be undertaken, especially for those who cannot pursue full time secondary education to enable them to complete or continue their education
- State Governments are expected to ensure that a certain percentage of schools/upgraded upper primary schools are set up in areas of Minority concentration. Special camps and bridge courses should be conducted for students from such schools.
- For better attendance from weaker sections of society such as the economically challenged, there should be provision of some token awards, grades or incentives.
- Community involvement in mobilizing parents for regular attendance of their children should be made a part of the RMSA initiatives as they represent a large section of the shareholders.
- Special coaching classes/remedial classes especially for Educationally Backward Minority girls and the children who are not doing academically well
- Focus on Micro planning at the district and school level to reduce inequalities which may have trickled down from the upper levels of planning.

1.5 TEACHER TRAINING PROGRAMMES UNDER RMSA IN MIZORAM

There is a sad and shocking absence of a comprehensive and integrated in-service training programme in Mizoram which is most likely the case in other states also. Ramachandran, V. et al. (2015) have observed "…none of the states in this study have an effective policy for in-service training of teachers; training is carried out in an ad-hoc manner, almost exclusively funded by two centrally sponsored schemes (SSA and RMSA) and is therefore subject to availability of these funds and the associated modalities and priorities." In spite of the efforts of agencies and institutions like SCERT, Mizoram University, IASE, etc. to facilitate the professional development of secondary school teachers through the decades, it was only after the implementation of the Rashtriya Madhyamik Shiksha Abhiyan that a semblance of order and purpose has entered this particular arena. RMSA has thus been given the responsibility of conducting comprehensive in-service training programmes for teachers and other functionaries such as headmasters on a timely basis.

1.5.1 Induction Training Programmes

When new teachers are recruited, they require sensitization and orientation on various aspects of the teaching profession as many of the new recruits have just entered the profession fresh from academic institutions. In this light, RMSA conducts Induction Training Programmes for such newly recruited teachers of varying durations as per requirements. Resource persons are invited from within the department as well as from outside sources such as Teacher Education Institutes (TEIs), Mizoram University, Degree Colleges, etc.

1.5.2 Headmaster Training Programmes

RMSA also conducts training programmes and packages for Headmasters from time to time. Such training programmes are usually conducted by the state project office and not the district offices. Training programmes for headmasters usually last about five (5) days and are usually conducted in Aizawl, the capital city of Mizoram. Eminent scholars and senior officials are usually solicited to present papers and give talks on specific topics in these training programmes.

1.5.3 In-service Training Programmes for School Teachers

The main component of professional development activities undertaken by the RMSA is the in-service training programmes for school teachers. These training programmes were initially designed to last a duration of 5-days, although they were later increased to 10 days; with separate programmes organised for different school subjects. In Mizoram, the training programmes are not coordinated from the state office but are conducted by each district office separately. Resource persons from within and outside RMSA are invited; with personnel being outsourced from IASEs, DIETs, Degree Colleges, Mizoram University to name a few. The programmes are conducted in various locations including IASE, DIETs, BRCs, Halls, Schools, etc. as per convenience. Teachers are given TA/DA as per RMSA norms for attending these programmes which may be changed from time to time according to government regulations.

1.6 NEED OF THE STUDY

We cannot compromise on the quality of the education of our children as they are the future. This implies that the teachers, the very ones who are responsible for the education of our children, must possess the highest calibers and qualities according to Matthew (1980), Shukla (1981) and Kumar (1982). Since that is not always the case as shown in past studies such as Agrawal (1969), Maheshwari & Raina (1998), Diem, et al. (1981), etc. we must ensure that it becomes so. The professional development of school teachers, especially secondary teachers is a very important aspect of education in general and teacher education in particular and these training programmes are the best means to do so as were confirmed by Bailakeri (1983), Kalyanpurkar (1986), Bettencourt, et al. (1983), Swackhamer, et al. (2009), Hamre et al. (2012). The in-service training programmes conducted by the RMSA (Rashtriya Madhyamik Shiksha Abhiyan) are perhaps the only in-service training programmes organised with regularity in Mizoram. Although other agencies like the State Council for Educational Research and Training, Institute of Advanced Study in Education, Mizoram University, etc. may conduct training programmes from time to

time, the logistics involved ensure that participation is minimal and that the programmes are few and far in between. The in-service training programmes for secondary teachers therefore rest largely on the hands of the RMSA and the quality of their training programmes with regards to facilities and resources gain due significance. Therefore, this study will try to ascertain the adequacy and quality of the RMSA in-service training programmes and make suggestions and recommendations whenever and wherever needed.

Mizoram is a remote state located in the farthest reaches of the country; yet it must be ensured that national norms and recommendations are met in these training programmes and that the teachers in Mizoram are not lacking behind the rest of the country in any aspect of importance. It is also necessary to ensure that the geographical isolation and remoteness does not reflect in the quality of the State's educational system, specifically in teacher education. Thus, a study of the status and transactional modalities is urgently required if conformity to national standards is to be realised as well as to remain relevant in changing educational scenarios (Goyal & Chopra, 1979). Studies by Gadgil (1981), Franke et al. (2001), Akiba and Liang (2016), and De Naeghel et al. (2016) have also found that teachers welcome these training programmes as a means to their continuing professional development.

The effectiveness of any training programme depends to a large extent on the transactional modalities employed during the training programme. A detailed study of the transactional modalities - process and procedure, incorporation of ICT, etc. of the RMSA in-service training programmes needs to be made and necessary recommendations voiced to ensure that the training programme meets national standards in various aspects of the programme.

At the time of data collection, there are eight (8) districts in Mizoram, namely, Aizawl, Lunglei, Kolasib, Serchhip, Mamit, Lawngtlai, Siaha and Champhai. Each district has conditions, peculiarities and circumstances that differentiate it from the rest of the state. Aizawl and Lunglei are major hubs of education and many resources are available in these districts while the rest suffers from a deep lack of resources, manpower and otherwise as has been found to be the

case in other states (Thakur, 1973). It would also be necessary to make a district wise study and comparision of the training programmes on different areas.

It would be advisable to also compare the perceptions of various groups of teachers which has been found effective (Von Eschenbach, 1980 & Patton and Anglin, 1982). The categorization may be done in a variety of ways such as age, gender, level of professional education, experience, etc. Such a comparision may unearth answers to questions about the efficacy of the training programmes (Marso & Pigge, 1988). The study may, therefore, yield suggestions and guidelines on the manner in which future training programmes may be structured and implemented leading to an efficient utilisation of resources.

1.7 STATEMENT OF THE PROBLEM

The study is titled "**In-service teacher training programmes for secondary school teachers in Mizoram under RMSA: An evaluative study**".

1.8 OPERATIONAL DEFINITION OF THE TERMS

1. RMSA - Rashtriya Madhyamik Shiksha Abhiyan, a scheme of Government of India, launched in March 2009, with the objective to enhance access to secondary education and to improve its quality

2. Teacher - Any person employed/attached/deputed by the Government of Mizoram on Regular/Contract/Part-time basis for active teaching duties in a school.

3. In-service training programme - The 5 days (later extended to 10 days) training programmes organised by the State Education Department under RMSA in every district headquarters for teachers currently teaching in schools.

4. Secondary School - Any school within Mizoram where classes IX and X are taught.

1.9 RESEARCH QUESTIONS

1. Do the training programmes have adequate and modern facilities necessary for effective impartation of knowledge?

2. How are the training programmes organised and what are the issues involved in the organisation and management of the training programmes?

3. What is the perception of the secondary school teachers about the effect and utility of the in-service training programmes?

4. What is the perception of the secondary school teachers about the capabilities of the resource persons in terms of training and their preparedness?

5. What are the problems encountered by the trainees in making use of training inputs in classroom transactions?

6. What are the differences between various districts in terms of training modalities, trainee perceptions and problems encountered?

7. Do different teachers classified in various ways such as gender, experience or teaching subjects differ in their perceptions?

1.10 OBJECTIVES

1. To examine the status of infrastructural and instructional facilities at the training centres of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram.

2. To examine the transactional modalities of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram.

3. To examine the perception of teachers about the effect and utility of the in-service training programmes for secondary school teachers under RMSA.

4. To assess the perception of the participants on the capabilities of the resource persons in terms of training and their preparedness.

5. To identify the problems encountered by the trainees during the training programmes.

6. To compare various districts in terms of trainee perceptions on utility of training programmes, capabilities of resource persons and problems encountered.

7. To compare the perceptions of different teachers based on their gender, experience and subject taught.

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CHAPTER 2

REVIEW OF RELATED LITERATURE

One of the fundamental components of any research endeavour in education in the review of related literature. It is the spark that lights the fire of scientific enquiry; the catalyst to the research project. It gives meaning and impetus to the academic exercise and often serves as the light at the end of the tunnel towards which the researcher gropes through the murky waters.

A review of literature or a literature review or a review in short, “is a written summary of journal articles, books, and other documents that describes the past and current state of information on the topic of your research study” (Creswell, 2012, p.80). It may be unitary in form or divided into sub-themes or sub-topics. For example, reviews may be classified as national and international.

A good review draws from a variety of sources. Although in academic research, reviews are mainly taken from books and print/online journals, in many cases, others sources such as newspapers, films, magazines, government documents, etc. are included in the review of literature. The nature of the sources greatly depends on the subject of study as certain topics may be found predominantly in a particular type of review source.

For the purpose of this study, the review of related literature has been broadly divided into three sections. The first comprises of Studies in India that are not explicitly related to RMSA. The second section contains studies in India that are specifically targeted at the RMSA programme. The third section is devoted to studies that have been conducted abroad.

2.1 STUDIES IN INDIA

Agrawal (1969) in his doctoral dissertation titled Measurement and Competence of Teachers of Primary Schools has conducted a study among the primary school teachers of Madhya Pradesh with the objectives of assessing teachers' classroom competence in various areas and found that a majority of the teachers under study lacked intelligence as well as desirable attitudes and competencies.

Thakur (1973) in his doctoral thesis titled A Critical Study of Superior Teachers at Secondary School level and their Problems has attempted to identify superior teachers, and the factors helpful to teachers as well as identifying the problems faced specifically by superior teachers. The study has found that superior teachers were characterised by academic and professional proficiency, leadership in co-curricular activities, participation in other peripheral activities and organisations, interest in professional development and selection for management placements. The study identified the teachers as having problems in various areas such as lack of resources, inadequate incentives and poor management.

Goyal and Chopra (1979) in their study titled A Study of the Problems Bearing on Teacher Education in the Context of the 10 + 2 Pattern has found that revisions in school structure and syllabi requires frequent in-service training programmes in nearly all areas with specific emphasis on certain areas as per requirement.

Kumar and Lal (1980) headed a Haryana SCERT study titled Use of Micro-teaching in Improving General Teaching Competence of In-service Teachers with the aim of studying the effectiveness of microteaching in the improvement of general teaching competence and developing various teaching skills as well as the effectiveness of microteaching in assessment in in-service teachers of secondary schools in Gurgaon sun-division. The study found that Microteaching helped in the development of general teaching competence as well as specific teaching skills and also developed teachers' skills in assessment.

Mathew (1980) in his doctoral thesis titled Factorial Structure of Teaching Competencies among Secondary School Teachers has endeavoured to identify desirable teaching competencies of a physics teacher in the context of certain presage, process and product variables. He was able to identify fourteen factors including professional perception, using audio-visual aids, concern for students, classroom management and achieving closure among others.

Mama (1980) in his doctoral thesis submitted to Bombay University titled A study of the impact of In-service Education on Teachers in the State of Maharashtra has studied the status of in-service education of secondary school teachers in the state of Maharashtra and has found that in-service education was not allotted its due importance and has been pushed to the side-lines. Only half the Teacher Education Institutes (TEIs) in Maharashtra were found to offer extension services albeit in a non-comprehensive manner. There was lack of communication between stakeholders and the facilities provided were usually very poor.

Shukla (1981) in his doctoral dissertation titled Identification of Major Skills involved in Mathematics Teaching at Secondary School Stage has sought to and identified major skills involved in teaching mathematics as well as the behavioural components of these skills. Some of the skills identified in the study were skill of developing concepts and principles, skill of applying inductive approach, deductive approach and problem-solving approach among others.

Gadgil (1981) in his study titled Expectations of Primary School Teachers in Pune regarding Further Training, Orientation and Continuing Education has found that most of the teachers included in the study desired to have continuing education/orientation in school subjects to get mastery and a significant number even subscribed to magazines leading to professional growth although a significant percentage did not see any advantage in orientation programmes.

Massey (1981) in his doctoral dissertation titled A study of the Effects of Training in the Formulation and Usage of Behavioural Objectives on the Classroom Verbal Behaviour of In-service Teachers has investigated the effects of training in

the formulation and usage of behavioural objectives on the classroom verbal behaviour of in-service teachers by comparing their pre-test and post-test behaviour and came to the conclusion that the subjects exhibited significant gains in various areas including interaction style, questioning pattern, classroom management among others.

State Council for Educational Research and Training, Andhra Pradesh (1981) has conducted a study titled Evaluation of In-service Training Programme for Primary Teachers in Selected Government and Aided Training Institutions with the objectives of evaluating the administrative and academic aspects as well as the relevance of the course content of the in-service training programme and found that the training programmes needed more staff, science consultants and resources such as books. The study found that administrative reforms needed to be put into place and the focus of the training programmes needs to shift to a more practical approach.

Nagaraju (1982) in his project Evaluation of Radio Correspondence cum Contact In-service Teacher Training Programme in Kerala for the Institute for Social and Economic Change, Bangalore financed by the Ministry of Education, Government of India has investigated into the various aspects of the Radio Correspondence cum Contact In-service Teacher Training Programme in Kerala with special focus on the planning process, coordination, bottlenecks present, trends in utilisation, feedback, etc. and has found that the training lacked in various areas such as proper planning, inadequate duration, faulty evaluation schemes and remedial procedures.

Kumar (1982) has conducted a doctoral study titled Job Analysis of Secondary School Teachers in Varanasi City with the objectives of identifying the different jobs performed by secondary school teachers as well as the competencies required for such jobs. The study identified various jobs related to secondary school teachers and identified five major competencies including competencies in dealing with children and the community, competency in evaluation and organising learning materials.

Bailakeri (1983) has conducted a study titled Effect of Remedial Self-Instructional Microteaching Course on the Instructional Competence of In-service Secondary School Mathematics Teachers with the objectives of preparing Remedial Self-Instructional Microteaching Course (RSIMC) materials, training teachers in RSIMC and evaluating the effectiveness of RISMC in improving mathematics instructional competence. The training was conducted among fourteen teachers and it was found that the RISMC was effective in improving mathematics general instructional competence which was sustained even after two months and that the participants held a favourable attitude towards the RSIMC.

Kalyanpurkar (1986) in his doctoral thesis titled The effect of Microteaching on the Teaching Competence of In-service teachers and its Impact on Pupils' Attainment and Pupils' Liking has studied the effect of microteaching training in selected skills in 36 in-service teachers and 720 students of Nagpur on the development of general teaching competence in teachers and also on the pupils' attainment and retention as well as pupils' liking towards teachers. He found that training in micro-teaching had a positive significant effect on the development of skills on teachers and also positively impacted student's attainment and retention as well as promoting students liking for their teachers.

Butala (1987) in his study entitled A Critical Inquiry into In-service Educational Programmes Conducted by Secondary Teachers Training Colleges of Gujarat State has looked into the matter of the in-service educational programmes in terms of current position, usefulness and opinion of stakeholders. It was found that the in-service training programmes conducted were grossly inadequate and that certain areas were not covered at all. The training programmes were found to have utilised only traditional methods and that the colleges were ill-equipped for conducting the trainings. However, the training programmes received favourable review from the participants although the coordinators opined that certain changes were needed to enhance the effectiveness of such training programmes.

Sharma (1982) conducted a critical study of the impact of in-service education on the professional efficiency of teachers of PGT scale working in Kendriya Vidhyalayas of Lucknow region and found that majority of the teachers reported an improvement in their confidence, competence and attitudes although some participants complained of unsuitability of timing, lack of incentives, lack of materials, lack of expertise and lack of follow up actions.

Maheshwari and Raina (1998) in their study 'In-service Training of Primary Teachers through Interactive Video Technology: An Indian Experience' have documented the outcomes of a seven-day training courses for primary school teachers in 20 centres in Karnataka State which was experimentally conducted using Interactive Video Technology involving the Indira Gandhi Open University and the Indian Space Research Organisation in providing one-way video transmissions and telephone feedback to experts from the centres. The responses from teachers and their trainers indicate considerable potential for the exploitation of new technology where large numbers of teachers require training.

Eswaran and Singh (2009) have examined the effectiveness of in-service education of teachers in Tamil Nadu and have found that majority of the teachers reported the content of the training programmes to be relevant to their professional learning needs and also that the training programmes can be implemented in their classrooms at least to some extent.

Soni (2011) investigated into the in-service training programme and its effects on classroom practices by examining the perceptions of Scheduled Caste teachers in Pali and Nagaur Districts of Rajasthan. It was found that 1) In-service training needed improvements both in terms of content and selection of resource persons. 2) The trainees claimed usefulness of training programmes. 3) No observable difference between male and female teachers.

Gairola (2013) conducted a study on 'Management of training and skill development activities of Sarva Shiksha Abhiyan (SSA) for elementary school teachers of Raipur and Doiwala Blocks of Dehradun District and came up with the following observations: 1) Majority of teachers rated the training programmes to be of good quality but not excellent. 2) DIET & CRC personnel as well as a significant number of teachers found facilities as inadequate.

Davis, et al. (2014) have conducted a study titled Teacher Training Workshops: a capacity building strategy for mainstreaming Human Immunodeficiency Virus (HIV)/Acquired Immunodeficiency Deficiency Syndrome (AIDS) prevention education among adolescents under the aegis of the Action Service Hope for Aids (ASHA) foundation, Bangalore, India. They have tried to determine the effectiveness of teaching training workshops as an in-service program for teachers to implement a character and life skills strategy in schools for prevention of HIV among adolescents and have found that the 3-day workshop was including both process and product aspects did indeed make a difference in the growth of knowledge, attitude and professional skills of teachers. It may be noted here that the training was conducted by certified master trainers.

2.2 STUDIES OF RMSA

Mahiwal and Kumar (2017) in their paper titled 'Difficulties being faced by secondary school teachers during implementation of Rashtriya Madhyamik Shiksha Abhiyan (RMSA) in Jammu Division' has attempted to uncover the difficulties faced by teachers during the implementation of RMSA from a sample of 150 teachers of 30 Government secondary schools of three districts-Jammu, Kathua and Samba. The findings revealed that the difficulties considered as most important by teachers were- (1) delay in receiving the School grants; (2) inadequate duration of teacher training; (3) non-teaching work hampering the teaching responsibilities; (4) lack of health services and first aids facility in school; (4) no proper monitoring of In-service teacher training programmes.

Kumar (2017) has conducted a study titled ‘Rashtriya Madhyamik Shiksha Abhiyan in Kullu district of Himachal Pradesh: A case study wherein amongst many observations, he has made the following comments about the in-service programme organised by RMSA as: (1) having brought change in the opinion of teachers about different aspect of teaching- learning process and hence should be made integral part of all educational programmes for secondary teachers (2) the module of the training programme is sometimes decided by the state project office and not specific as per the need of in-service teachers in the district so there should be autonomy/flexibility to make change in the module as per the need of in-service teachers (3) quite effective but observed that there was no considerable difference in the class room practices between trained and untrained teachers (4) needing to be experience-based, after identify needs of Secondary school teachers in scientific way.

In the minutes of the Project Approval Board (PAB) meeting held on 14th March, 2016 for approval of the Annual Work Plan & Budget 2010-11 of Mizoram under the Rashtriya Madhyamik Shiksha Abhiyan (RMSA), the chairperson Smt. Anshu Vaish, Secretary, Department of School Education and Literacy, MHRD has approved the following provisions regarding in-service training of teachers: (1) In-service training of 2613 Teachers @Rs. 200 per day for 5 days (2) Induction Training for 184 New 'Teachers @ Rs. 200 per day.

In the minutes of the Project Approval Board (PAB) meeting held on 25th May, 2011 to consider the RMSA Annual Work Plan proposals for 2011-12 for the State of Mizoram the chairperson Smt. Anshu Vaish, Secretary, Department of School Education and Literacy, Ministry of Human Resource Development (MHRD) has approved the following provisions regarding in-service training of teachers: (1) In-service training of 1587 Teachers of Rs 1500/- @Rs. 300 per day (2) Induction Training for 576 New 'Teachers of Rs 3000/- @ Rs. 300 per day for 10 days. (3) In-service training of 199 Headmasters of Rs 1500/- @Rs. 300 per day.

In the minutes of the Project Approval Board (PAB) meeting held on 7th May, 2013 for approval of the Annual Work Plan & Budget 2013-14 of Mizoram under the Centrally Sponsored Scheme of the Rashtriya Madhyamik Shiksha Abhiyan (RMSA), the chairperson Shri R. Bhattacharya, Secretary, Department of School Education and Literacy, Ministry of Human Resource Development (MHRD) has approved the following provisions regarding in-service training of teachers: (1) In-service training of 2866 Teachers @Rs. 300 per day for 5 days (2) Induction Training for 30 New 'Teachers and 8 Headmasters @ Rs. 300 per day (3) Training for 411 Headmasters @ Rs. 4800 per HM.

In the minutes of the Project Approval Board (PAB) meeting held on 27th September, 2014 to consider the RMSA Annual Work Plan & Budget for 2014-15 for the State of Mizoram the chairperson Shri R. Bhattacharya, Secretary, Department of School Education and Literacy, Ministry of Human Resource Development (MHRD) has approved the following provisions regarding in-service training of teachers: (1) 5 days in-service training @Rs 300 per day of 2336 teachers in government and government aided schools including 8 headmasters in teaching position (2)training to Headmasters in School Leadership Development Programme through National Institute of Educational Planning and Administration (NEUPA) for training of 50 State Resource Persons for 10 days @ Rs 300 per day and 50 Headmasters for 16 days @ Rs 300 per day.

In the minutes of the Project Approval Board (PAB) meeting held on 26th February, 2015 for approval of the Annual Work Plan & Budget 2015-16 of Mizoram under the Centrally Sponsored Scheme of the Rashtriya Madhyamik Shiksha Abhiyan (RMSA), the chairperson Ms. Vrinda Sarup, Secretary, Department of School Education and Literacy, Ministry of Human Resource Development (MHRD) has commented on the necessity to focus on Science and Mathematics. She also informed the members of the efforts of the National Council for Educational Research and Training (NCERT) in preparing modules for teacher training in Science and Mathematics and requested the States to utilise these in-service resources to train its teachers.

In the minutes of the Project Approval Board (PAB) meeting held on 14th March, 2016 for approval of the Annual Work Plan & Budget 2016-17 of Mizoram under the Centrally Sponsored Scheme of the Rashtriya Madhyamik Shiksha Abhiyan (RMSA), the chairperson Dr. S. C. Khuntia, Secretary, Department of School Education and Literacy, Ministry of Human Resource Development (MHRD) has approved the following provisions regarding in-service training of teachers: (1) In-service training of 1615 Teachers including HMs in Teaching under RMSA @Rs. 300 per day for l0 days with total outlay of Rs. 48.45 lakh. (2) Induction Training for 36 New 'Teachers @ Rs. 300 per day for l0 days Teacher with total outlay of Rs. 1.08 lakh. (3) Management Training for 100 HMs @ Rs. 4800 per HM with total outlay of Rs. 4-8 lakh. (4) In Service Training fro 713 Science & Maths Teachers @ Rs. 3000 per Teacher for 10 days training with total outlay of Rs. 21.39 lakh.

In the minutes of the Project Approval Board (PAB) meeting held on 23rd February, 2017 for approval of the Annual Work Plan & Budget 2017-18 of Mizoram under the Centrally Sponsored Scheme of the Rashtriya Madhyamik Shiksha Abhiyan (RMSA), the chairperson Shri Maneesh Garg, Joint Secretary, Department of School Education and Literacy, MHRD has approved the following provisions regarding in-service training of teachers: (1) In-service training of teachers including HMs Was approved for 1118 secondary schoolteachers @Rs. 300/- per day for 10 days with an outlay of Rs. 33.54 lakhs. (2) Induction training for New Teacher was approved for 24 nos. @Rs. 300/- per day for 10 days i.e. at a total outlay of Rs. 0.72 lakhs. (3) Training for Educational officers (DEOs) was approved for 50 educational officers @ Rs. 300 per day for 3 days with an outlay of Rs. 0.45 lakhs. (4) Training for Head Masters (HM) {SLDP} was approved for 100 secondary school HMs @ Rs. 300 per day for 16 days with an outlay of Rs. 4.80 lakhs.

2.3 STUDIES ABROAD

Felton, et al. (1974) in their study titled ‘A Comparison of Two Methods of In-service Training Preparing Teachers to Use the "New Design" for High School Education’ have to attempted to determine whether conventional or learning package instruction resulted in greater student achievement on post-tests dealing with eight New Design concepts (philosophy and attitudes, behavioural objectives, team teaching, large and small group instruction, independent study, auxiliary personnel and learning packages). They organised five workshops with 40 students and 52 teachers and administrators and concluded that a conventional instruction probably resulted in more cognitive learning and was suitable for long term learning while learning package instruction was more suitable for short-term learning. They have advised a strategy which utilises both conventional and learning package instruction.

Van Fleet (1975) in his paper ‘A Greater Involvement in Staff Development: The Florida Model of Teacher Education Centres’ has conducted an analytic study of the Teacher Education Centres of Florida State. He has identified the necessity of staff involvement in planning and organising in-service education for teachers. He argues that staff involvement has the added advantages of leading to the tapping of undiscovered potential from amongst the teachers as well as in the evaluation of the Teacher Education Centres themselves.

Agne and Ducharme (1978) in their paper titled ‘In-service and Continuing Education: The Need for a Better Mousetrap’ have discussed various issues central to the conduct of in-service and continuing teacher education. They have brought to light higher education’s long history of responding in haphazard ways to calls for in-service education and its failure to set performance standards for faculty involvement in this process. They have outlined the demands of education professionals which mandate a calculated integration of field and campus-based continuing education which will most likely result from recognition of inadequacies of prior exploitative models of in-service work and from capitalizing on the academy's unique capabilities.

Mehnert (1978) in his paper titled ‘Designing and Implementing In-service Counselling Skills Programs for Teachers’ has stressed the need of a comprehensive and effective in-service program in developing the interactional skills of teachers. In this paper he has made the following suggestions regarding such a programme as 1) participant centred and not material-centred 2) flexible to account for individual differences 3) selection of activities based on the likelihood of participants engaging in these activities. 4) include activities which enable participants to decode various counselling response modes. 5) provide frequent practice and feedback to teachers regarding their acquisition of helpful responses. 6) a substantial time period designated training process. 7) Caution in selecting trainers to ensure that these individuals have a positive attitude toward teachers. 8) include experiences which not only help teachers learn interpersonal skills (self to others) but also help teachers develop their intrapersonal communication (self to self). 9) designed to include a variety of measures aimed at assessing the effectiveness of the program.

Arends, et al. (1978) in their paper titled ‘In-service Education and the Six O’clock News’ have highlighted the various challenges to in-service teacher education including the assumptions made by education professionals and have also highlighted various suggestions to improve in-service teacher education such as paying more attention to characteristics of professionals, embracing new models of delivery, increasing the human interaction and new frameworks for in-service education.

Von Eschenbach (1980) in his study titled ‘Effects of a Collaborative In-Service Model on Middle School Teachers' Perceptions of Their Professional Competence’ has attempted to investigate the effects of a collaborative in-service model on middle school teachers' perceptions of their professional competence. In this study, the teachers at this rural middle school were given the opportunity to assess their professional strengths and weaknesses on teaching functions which they perceived to be important. The examination of the results reveals that there was a change in teachers' perceptions of their professional competence for each of the 24 teaching functions.

Diem, et al. (1981) in their paper titled ‘A Reading Program for Secondary Teachers: An Evaluation of an In-service Model’ have documented the efficacy and viability of a three-year project among social studies teachers of San Antonio in solving students' difficulty in handling textbook and supplementary reading assignments. The outcomes of this project would seem to indicate: (1) that student performance in functional reading comprehension and, hence, performance can be increased by training teachers in functional reading techniques; (2) that a developmental model of in-service training provides a successful design in which teachers can work; (3) that intensive content methodology instruction was needed for many of the middle and secondary teachers beyond the methods courses that they had encountered, whether at the graduate or under- graduate level.

Alvermann (1981) in her two-phase study into the efficacy of using teachers as peer trainers titled ‘A Collaborative In-service Model: Levels of Use of an Innovation Before and After Peer Training’ has studied twenty-two secondary school teachers representing five school districts in New York, USA and has positively identified a majority of the teachers to be innovative peer trainers with positive inputs on curricular content and varying strategies. She concludes that a collaboration between teachers and administrators was crucial to the in-service education.

Patton and Anglin (1982) in their research report titled ‘Characteristics of Success in High School In-service Education’ have minutely documented the findings from a series of in-service activities conducted among 100 teachers of an urban school complex. Their findings indicated that 1. A difference was observed when presenters carefully discussing the purpose of each in-service session and how the session relates to the overall goals. 2. When activities were viewed as successful, secondary teachers reported that they felt the in-service time was used wisely and had less complaints about the learning environment. 3. In-service sessions had a much greater probability of being successful if the teachers perceived that the activities related to their own needs.

Bettencourt, et al. (1983) have documented the findings of their experiment to determine the efficacy of training on teacher enthusiasm and subsequently student performance in their report titled ‘Effects of Teacher Enthusiasm Training on Student on-Task Behaviour and Achievement’. Their findings indicate that training does significant rise in enthusiasm levels of the teachers. This has also resulted in more on-task behaviour among the students.

Sparks (1986) in her paper titled ‘The Effectiveness of Alternative Training Activities in Changing Teaching Practices’ has documented the results of an experimental study on 19 junior high teachers from the San Francisco Bay Area who were administered different types of in-service training wherein one group participated in peer observation and another was subjected to coaching by a trainer. The author observed a marked difference in the group which was subjected to peer observation.

Marso & Pigge (1988) have conducted a study titled ‘Ohio Secondary Teachers' Testing Needs and Proficiencies: Assessments by Teachers, Supervisors, and Principals’ with the primary purpose of developing a list of classroom testing then to submit these competencies most needing to be addressed or remediated by in-service training by utilising the inputs from teachers, supervisors and principals. The study found that although there were slight differences in the opinions of the various groups, the assessment of teacher training needs was a fillip to the in-service programme and a necessary prelude.

Halpin, et al. (1990) in their study ‘Teachers' Perceptions of the Effects of In-Service Education’ have reviewed and analysed data on teacher ratings of the impact of higher education in-service courses on aspects of their professional development and professional practice. A majority of the sample reported that their In-service Education of Teachers (INSET) had impacted positively on their teaching and, relatedly, about half reported improved levels of pupil attainment. The impact of higher education in-service courses was greatest of all in the area of teachers' attitudes and knowledge levels, but much lower levels of effect were reported on school organisation and policy.

Saeed, (1999) in his study titled ‘The in-service training of primary school teachers in Greece: Views of directors and vice directors of ``regional in-service training centres'' (PEK) has investigated into the views of directors and vice directors of PEK about the different aspects of in-service training of primary school teachers. These include: the objectives and curricula; the methodology; the assessment criteria; the criteria for the selection of trainees and trainers; the provision of daily allowance for trainees and trainers; the organizational set-up; the financing and nature, duration and management and control of different training programmes. His conclusion was that although the in-service teacher education in Greece was showing signs of improvement, there was a lot of areas that needed improvement and recognised the importance of a distance learning mode to supplement the contact programmes.

Franke et al. (2001) in their study titled ‘Capturing Teachers' Generative Change: A Follow-up Study of Professional Development in Mathematics’ have documented the progress of 22 teachers who participated in a professional development program on understanding the development of students' mathematical thinking continued to implement the principles of the program 4 years after it ended. They observed that all the Twenty-two teachers maintained some use of children's thinking and 10 teachers continued learning in noticeable ways. They noticed that the 10 teachers engaged in generative growth (a) viewed children's thinking as central, (b) possessed detailed knowledge about children's thinking, (c) discussed frameworks for characterizing the development of children's mathematical thinking, (d) perceived themselves as creating and elaborating their own knowledge about children's thinking, and (e) sought colleagues who also possessed knowledge about children's thinking for support.

Zhao and Frank (2003) in their paper titled ‘Factors Affecting Technology Uses in Schools: An Ecological Perspective’ have investigated into the reasons for slow integration of technology in schools. The attitude of teachers towards technology has been found to have a profound impact. Another important aspect has been the proficiency level of teachers in technology issues which has sometimes hindered the integration of technology in schools.

Swackhamer, et al. (2009) in their report titled 'Increasing the Self-Efficacy of In-service Teachers through Content Knowledge' of the National Science Foundation-funded 5-year project called Rocky Mountain Middle high levels of efficacy have demonstrated different School Math and Science characteristics related to work ethic and pedagogical Partnership that targets middle school teachers and students in seven Denver-area have reported on the necessity of including content knowledge in in-service teacher education programmes. This study was designed to explore the impact of content courses that also emphasize pedagogy on the self-efficacy levels of in-service teachers with lower levels of content knowledge in math or science and have found that outcome efficacy was higher in teachers who have taken four or more math or science content courses although the same could not be said for personal efficacy.

Hamre et al. (2012) have attempted to study the efficacy of the 14-week long course titled Support of Language and Literacy Development in Preschool Classrooms through Effective Teacher-Child Interactions and Relationships and have published their findings in the report titled A Course on Effective Teacher-Child Interactions: Effects on Teacher Beliefs, Knowledge, and Observed Practice. Their findings indicate that compared to teachers in a control situation, those exposed to the course reported more intentional teaching beliefs and demonstrated greater knowledge of and skills in detecting effective interactions. Also, teachers who took the course were observed to demonstrate more effective emotional and instructional interactions.

Akiba and Liang (2016) of the Educational Leadership and Policy Studies, Florida State University, in their study titled "Effects of Teacher Professional Learning Activities on Student Achievement Growth" have examined the effects of six types of teacher professional learning activities on student achievement growth over four years using state-wise longitudinal survey data. They have concluded that teacher-centred collaborative learning activities and teacher-driven research activities were found to be associated with student achievement growth.

De Naeghel et al. (2016) have attempted to evaluate the influence of a teacher professional development grounded in self-determination theory on children's autonomous motivation for in-school and leisure-time reading in their study titled "Promoting Elementary School Students' Autonomous Reading Motivation: Effects of a Teacher Professional Development Workshop". A multi-level piece-wise analysis revealed that students in the experimental group reported increased recreational autonomous reading motivation.

2.4 CONCLUSION

The researcher has conducted an extensive study of the available literature from books, journals, research papers and reviews from various sources such as IASE library, Mizoram University Central Library as well as internet sources. This has resulted in the collection of several relevant and pertinent literature related to the subject under study.

Since RMSA is a relatively new scheme, there are very few specific literatures that have undertaken the study of the RMSA scheme and it various components. The current study focusing on the in-service training programme and its various aspects is the first of its kind in Mizoram and most possibly the whole of India. Thus there is a huge research gap in this area of educational management and more research studies of this nature are urgently needed to improve the efficacy of these programmes.

Other studies have however been conducted on the various factors that have contributed to the efficacy of teachers as functions of teacher development programmes. Use of effective techniques, greater involvement of shareholders, use of innovative strategies and incorporation of technological developments have been identified as useful in improving teacher effectiveness.

Some critical issues identified through this review are the nature and quality of the resource persons and availability of infrastructure and other facilities.

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CHAPTER 3

METHODOLOGY AND RESEARCH PROCEDURE

The manner in which a research study is conducted speaks volumes about the researcher and ultimately validates (or otherwise) the entire research enterprise. It is therefore vital that processes and procedures that have been approved by a majority of the academic community be employed in the collection and analysis of research data. However, it may be noted that every research project is a unique endeavour with its specific context and will more often than not, require adaptations of trends and practices that may deviate from textbook procedures and practices.

This chapter will present an outline of the methodology and procedures of research that have been utilised in the present study titled "In-service Teacher Training Programmes for Secondary School Teachers in Mizoram under RMSA: An Evaluative Study". It will contain research design, population under study, the sample taken, the tools used for data collection and the methods of tabulation and analysis of the data hence collected. The chapter will be organised as follows:

3.1 Research design

3.2 Population

3.3 Sample

3.4 Tools and techniques used for data collection

3.5 Mode of data collection

3.6 Tabulation of data

3.7 Analysis of data

3.1 RESEARCH DESIGN

A research design answers the questions as to how one should proceed to answer his research questions and test his hypothesis. In the words of Kerlinger

"Research design is a plan, structure and strategy of investigations so conceived as to obtained answers and to research questions or problem".

The present study was intended to examine the status and transactional modalities of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram. It purported to study three things. Firstly, to examine the perception of teachers about the effect and utility of the in-service training programmes for secondary school teachers under RMSA. Secondly, assess the perception of the participants on the capabilities of the resource persons in terms of training and their preparedness. Thirdly, this study has also attempted to identify the problems encountered by the trainees during the training programmes.

On top of that, this study has compared the perceptions of teachers from the eight districts in terms of trainee perceptions on utility of training programmes, capabilities of resource persons and problems encountered. It has also compared the perceptions of different teachers based on their gender, teaching experience and subjects taught in schools. Further, this study has suggested measures for improving training programmes and ensuring greater utilisation of training outcomes by teachers in classroom transaction. Thus, to attain the objectives, descriptive survey approach was followed in the present study. The study wase conducted through mixed methods of research and will include both qualitative and quantitative aspects. The researcher employed quantitative methods of data collection such as opinionnaire as well as qualitative methods such as interviews, observations and group discussions. Data analysis was done using simple statistical methods such as percentages and chi-square tests.

3.2 POPULATION

Mizoram is one of the states in the north eastern region of India shares borders with Tripura, Assam and Manipur. It also shares international boundaries with Bangladesh and Myanmar. Mizoram was granted statehood in the year 1987 and Aizawl is its state capital. The total area of Mizoram covers 21,087 square kilometers (8,142 sq mi) and its total population according to 2011 census is 1,091,014. Out of this, 839,310 persons are classified as Scheduled Tribe (ST) constituting 94.5 per cent of the total population.

Figure: 3.1

Political Map of Mizoram

As per census 2011, Mizoram has 8 districts namely Aizawl, Kolasib, Lawngtlai, Lunglei, Mamit, Siaha, Serchhip, Champhai, with 22 towns and 817 villages. Mizoram boasts of a formal system of education which ranges from elementary to university education as well as training to technical courses. The state has third highest literacy rate in the country i.e. 92%. The population of the study comprises of all the secondary school teachers of Mizoram who attended the in-service training programmes conducted by the RMSA. Teachers from Government schools, Deficit schools, Ad-hoc Aided and RMSA schools attend these training programmes. At the time of data collection, there were eight (8) districts in Mizoram with a total number of 3276 teachers. The district -wise distribution of teachers is as shown in the following table no. 3.1.

Table 3.1

District-wise Distribution of Teachers

Sl no	District	Male/Female	Government		Deficit	Ad-hoc Aided	New H/S (Managed by RMSA)	Total
			Central	State				
1	Aizawl	M	3	358	43	163	74	641
		F	3	200	35	86	45	368
		T	5	558	78	249	119	1009
2	Champhai	M	14	104	0	136	34	288
		F	3	43	0	33	12	91
		T	17	147	0	169	46	379
3	Kolasib	M	8	58	8	45	51	170
		F	1	17	6	18	33	75
		T	9	75	14	63	84	245
4	Lawngtlai	M	5	68	0	24	44	141

		F	1	23	0	9	20	53
		T	6	91	0	33	64	194
5	Lunglei	M	20	145	10	110	82	367
		F	4	54	6	34	54	152
		T	24	199	16	144	136	519
6	Mamit	M	4	59	0	50	46	159
		F	2	12	0	13	26	53
		T	6	71	0	63	72	222
7	Siaha	M	0	32	7	38	30	107
		F	0	8	2	19	16	45
		T	0	40	9	57	46	152
8	Serchhip	M	6	71	5	49	17	148
		F	5	27	4	25	17	78
		T	11	98	9	74	34	226
	Total	M	60	895	73	615	378	2021
		F	18	384	53	237	223	915
		T	78	1279	126	852	601	2936

Note. Data sourced from DSE Annual Publication 2017-18

In addition, there are 127 teachers in Lump-sum aided schools and 1211 teachers in Private Unaided schools who do not attend these training programmes.

It is easily observed from the above table that the distribution of teachers in Mizoram is heavily concentrated in two districts – Aizawl and Lunglei and amounts to almost half of the entire teacher population. Aizawl district alone accounts for one-third of the total number of teachers in the state.

3.3 SAMPLE

A sample is a portion of people drawn from a large population. The researcher collected proportionate sample of data in a random manner from all the eight districts. Due to limitations of resources, a sample of 15 percent with a minimum of 30 teachers, was selected from the population of teachers in each district using proportionate random sampling. A total 500 teachers were randomly selected as sample of the study. Further, officials and administrators including Deputy District Project Coordinators (Dy. DPC) from the state project offices of the School education department which acted as nodal agency for RMSA was included this study for interview.

Table 3.2

Sample of Study

Sl no	District	Population	Sample
1	Aizawl	1009	170
2	Champhai	379	70
3	Kolasib	245	40
4	Lawngtlai	194	30
5	Lunglei	519	80
6	Mamit	222	40
7	Siaha	152	30
8	Serchhip	226	40
	Total	2936	500

A proportionate number of male (350) and female (150) teachers with equal number of junior (< 10yrs experience) and senior teachers (> 10yrs experience) were selected. Also, equal number of subject teachers numbering 100 each were selected for the sample

3.4 TOOLS AND TECHNIQUES USED FOR DATA COLLECTION

For secondary data collection, the investigator went through different sources such as research journals, published theses, Government records and books which are related to the study for the development of the tools. With regards to primary data collection, the researcher conducted a workshop in the department to develop the opinionnaire, checklist and structured interview schedule. The investigator utilised a variety of tools for collecting data during the course of this study. The tools utilised included checklists, opinionnaires, interviews and focus group discussions.

1 Checklist

A checklist was prepared by the researcher to document the personal observation of facilities provided at the various training centres where the in-service training programmes were held. The checklist contained 28 items which were divided into two categories –

i) Infrastructural dimensions (17 items) and

ii) Instructional Dimensions (11 items).

A sample of the checklist is attached in Appendix -I

2 Opinionnaire

The investigator has also developed an opinionnaire containing 30 items which were administered to secondary school teachers to find out their opinions about various aspects of the training programmes. The opinionnaire was divided into three sections –

i) Effect and Utility of training programme (15 items)

ii) Capabilities of Resource Persons (7 items) and

iii) Problems encountered (8 items).

The content validity of the opinionnaire was established by taking the feedback from a number of expert opinions of 12 faculty members of IASE and

Dept. of Education, Mizoram University. A sample of the opinionnaire is attached in Appendix -II

3 Interview Schedule

An interview schedule for administrative officials was developed to find out the status of in-service training and the various aspects associated with it. A sample of the interview schedule is attached in Appendix -III

4 Group Discussion

Unstructured Group discussions were held in four districts without any rigid guidelines for conducting the discussion.

3.4.1 Validity of the Tools

Validity of a tool refers to the degree to which it measures what it supposes or claims to measure. Before any measuring device is used its validity should be assessed. Regarding the method of establishing the validity of opinionnaire. The drafted opinionnaire, interview schedule and check list were sent to a panel of experts working in the field of Education of the state. The purpose was:

a. To suggest any other item to be included in the opinionnaire if possible.

b. To delete any area or areas, item or items which were not relevant to the present study

c. To correct the ambiguities, biases, poor phrasing and in correct wording etc.

d. To examine the relation between the opinionnaire and schedules with objectives of the study.

It is needless to say that all the experts extended their full co-operation by giving views with valuable suggestions. Taking into consideration the views of the experts regarding improvement, the tools were properly reviewed and modifications were duly made. Instructions were made clearer and the language in some items was simplified. Some new items were added while some items were dropped and some

items were re-organized. The investigator consulted with his learned guide and prepared the final draft of these tools bringing changes in above mentioned areas. The opinionnaire and interview schedule were written in very simple English language and translated into the Mizo language as well. As the tools were developed taking the valuable suggestions of these esteemed experts in to consideration, it has satisfactory degree of content validity.

3.4.2 Reliability of Tools:

Reliability is the second most important characteristic of a measuring device. After the preparation of final draft of the opinionnaire for the sample respondents as per the suggestions and remarks of the experts, the investigator first administered the questionnaire over a sample of 100 teachers from one training centre of Aizawl district. The investigator then applied the split half-method to assess the reliability of the opinionnaire. The whole sample was randomly divided into two equal sub-samples of 50 each and the correlation between the two halves was calculated using Pearson's Product Moment method and the correlation coefficient was calculated as r = 0.89 which gives a high degree of reliability to the tool.

3.5 MODE OF DATA COLLECTION

The investigator collected the data over a period of two years, visiting all the districts during this time. Formal permission was obtained from the administrative offices of each district as well as the State offices. After getting the permission, he visited the all the training centres of RMSA.

After reaching the training centres the investigator met the coordinator of the concerned centres and collected different information regarding the participants, resource persons, infrastructural and instructional facilities available for them. The researcher visited the training centres to collect the information from the sampled teachers and made some observations regarding infrastructural and instructional facilities of the centres.

The investigator then randomly selected some teachers from each sample centres and established rapport with them. The investigator also administered the opinionnaire containing 30 items developed for the purpose, to the secondary school teachers to find out their opinions about various aspects of the training programmes. Then he gave the opinionnaire and requested them to answer all the items after the investigator explained the salient points of each item. The above process was adopted for all the training centres to collected data for the present study. The investigator was fully satisfied that the data collected were genuine. The researcher clarified some of the doubts raised by the some of the teachers. They were given sufficient time to fill in the opinionnaires. The filled in the opinionnaires collected from the teachers personally critically examined, cleaned and quantified as far as possible and tabulated systematically for further analysis. In this way the data collection in all the selected centres were covered.

The Deputy District Project Coordinators as well as supporting staff, who were the actual administrators of the in-service training programmes of RMSA were interviewed for the above study. The interviews were taped using a mobile phone for later transcription and translation. District officials were interviewed in all the eight districts.

In four districts namely, Aizawl, Serchhip, Siaha and Lunglei, unstructured Focus Group Discussions were conducted with few teachers gathered together at one location. The discussions were audio-taped using mobile phones for later transcription and analysis.

3.6 TABULATION AND ANALYSIS OF DATA

The data collected from all the respondents were scrutinized and tabulated. The data collected from interview was analysed qualitatively. The observations from the checklist and the responses of the teachers on the opinionnaires were tabulated using excel worksheets. The tabulated data from the checklist and the opinionnaires were analysed using simple percentages as well as chi-square test for independence between two variables.

CHAPTER 4

ANALYSIS AND INTERPRETATION OF DATA

The fourth chapter presents the pertinent analysis and interpretation of all the data collected from various sources, through the various techniques that were employed. The study was conducted to evaluate as objectively as possible the efficacy and efficiency of the in-service teacher training programmes under RMSA in Mizoram through the eyes of the researcher, participants (teachers/trainees) and administrators at the state and District RMSA offices. Its main objectives were - examination of the status and transactional modalities, survey of teacher perception on the various dimensions such as utility, capabilities of resource persons and problems encountered as well as to compare the results to see if there were any variations in terms of location or groups of people.

The data was collected through four main methods – observation (by the researcher), opinionnaire (of the trainees), interview (of administrators) and group discussion (trainees). These different methods required slightly different techniques of tabulation and the responses were tabulated as required by the technique. The tabulated data was then analysed with one eye focussed on the objectives of the study. The interpretation of the data was done using simple statistical techniques such as percentages and chi-square tests of independence. The data was also represented graphically to enable ease of understanding of the situations depicted in the numerical data. Much of the research was qualitative in nature so advanced statistical treatment of the data was not conducted as the variables were mostly nominal and ordinal which prevented the use of more advanced statistical methods.

4.1. General profile of the sampled teachers

Table no 4.1

General profile of the sampled teachers

	Gender		Experience		Subject taught				
	Male	**Female**	**Junior Teacher**	**Senior Teacher**	**English**	**Mizo**	**Social Science**	**Science**	**Mathematics**
Aizawl	111	59	90	80	39	40	38	22	37
Champhai	58	12	27	43	12	11	8	19	20
Kolasib	24	16	21	19	17	8	8	4	4
Lawngtlai	19	11	13	17	8	5	4	7	7
Lunglei	53	27	47	33	8	18	25	15	11
Mamit	33	7	23	17	1	2	2	19	17
Siaha	19	11	10	20	5	6	7	6	7
Serchhip	21	19	19	21	10	10	8	8	5
Total	350	150	250	250	100	100	100	100	108

It is seen from table no 4.1 that the sample of teachers is widely distributed all over that whole panorama of variables such as district, gender, experience and subject taught. Aizawl district contribute the greatest number of sample teachers at 170 teachers; Lunglei coming second at 80 teachers, closely followed by Champhai with 70 teachers. Kolasib, Mamit and Serchhip districts have each contributed 40 teachers to the sample while Siaha and Lawngtlai have contributed 30 teachers each. The following observations may also be made about the compositions of the teachers from the various districts with regards to gender, experience and subject taught:

1. **Aizawl District**: Out of the 170 teachers from Aizawl district, 111 teachers were male and 59 were female. It is also seen that 90 teachers had teaching experiences less than 10 years (labelled as junior teacher) while 80 teachers had more than 10 years teaching experience (labelled as senior

teacher). It is also observed that the sample from Aizawl was comprised of 33 English teachers, 37 Mizo teachers, 40 Social Science teachers, 23 Science teachers and 37 Mathematics teachers.

2. **Champhai District:** Champhai district contributed 70 teachers from which 58 teachers were male and 12 were female. It is also evident that 27 were junior teachers while 43 were senior teachers. It is also seen that they were comprised of 10 English teachers, 10 Mizo teachers, 10 Social Science teachers, 20 Science teachers and 20 Mathematics teachers.

3. **Kolasib District**: Kolasib district contributed 40 teachers from which 24 teachers were male and 16 were female. It is also seen that 21 were junior teachers while 19 were senior teachers. It is also evident that the district sample was comprised of 15 English teachers, 7 Mizo teachers, 10 Social Science teachers, 4 Science teachers and 4 Mathematics teachers.

4. **Lawngtlai District**: 30 teachers were from Lawngtlai district out of which 19 teachers were male and 11 were female. It is seen that 13 were junior teachers while 17 were senior teachers. It is also observed that the Lawngtlai district sample was comprised of 6 English teachers, 5 Mizo teachers, 5 Social Science teachers, 7 Science teachers and 7 Mathematics teachers.

5. **Lunglei District:** Lunglei District contributed the second largest sample of 80 teachers out of which 53 teachers were male and 27 were female. It is seen that 47 were junior teachers while 33 were senior teachers. It is also observed that the district sample was comprised of 8 English teachers, 7 Mizo teachers, 29 Social Science teachers, 15 Science teachers and 11 Mathematics teachers.

6. **Mamit District**: Out of the 40 teachers from Mamit district, 33 teachers were male and 7 were female. It is noticed that 23 were junior teachers while 17 were senior teachers. It is also seen that the Lawngtlai district sample was comprised of 2 Mizo teachers, 2 Social Science teachers, 19 Science teachers and 17 Mathematics teachers.

7. **Siaha District**: Siaha District contributed the smallest sample of 30 teachers out of which 19 teachers were male and 11 were female. It is seen that 10 were junior teachers while 20 were senior teachers. It is also observed that the district sample was comprised of 4 English teachers, 5 Mizo teachers, 8 Social Science teachers, 6 Science teachers and 7 Mathematics teachers.

8. **Serchhip District**: Serchhip district contributed 40 teachers from which 21 teachers were male and 19 were female. It is also seen that 19 were junior teachers while 21 were senior teachers. It is also evident that the district sample was comprised of 8 English teachers, 9 Mizo teachers, 10 Social Science teachers, 8 Science teachers and 5 Mathematics teachers.

Figure 4.1

Gender-wise Distribution of Sample in Various Districts

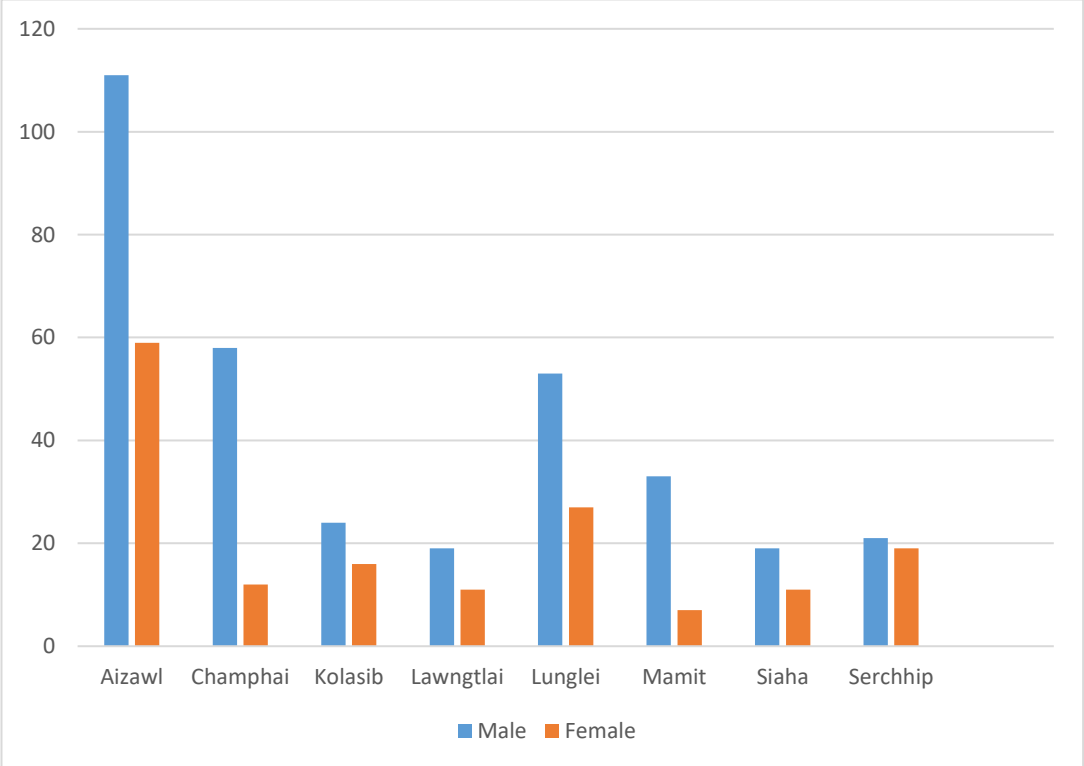


Figure 4.1 reveals a gender-wise distribution of the sample in all the districts. In the state of Mizoram, the ratio of male to female teachers is approximately 2.2:1; hence the sample has included 350 male teachers and 150 female teachers with a

ratio of (2.3:1). However, the same ratio could not be maintained in all the different districts due to numerous problems. In Aizawl (111:59), Lawngtlai (19:11), Kolasib (24:16), Lunglei (53:27) and Siaha (19:11) districts, the number of male teachers is nearly double that of the female teachers which corresponds to a ratio of 2.2:1. In Serchhip district (21:19), the number of male and female teachers is almost equal with a ratio of 1.1:1; while in Champhai (58:12) and Mamit (33:7) districts, the number of female teachers is almost a quarter of the number of male participants with a ratio of nearly 4.8:1.

Figure 4.2

Experience-wise Distribution of Sample in Various Districts

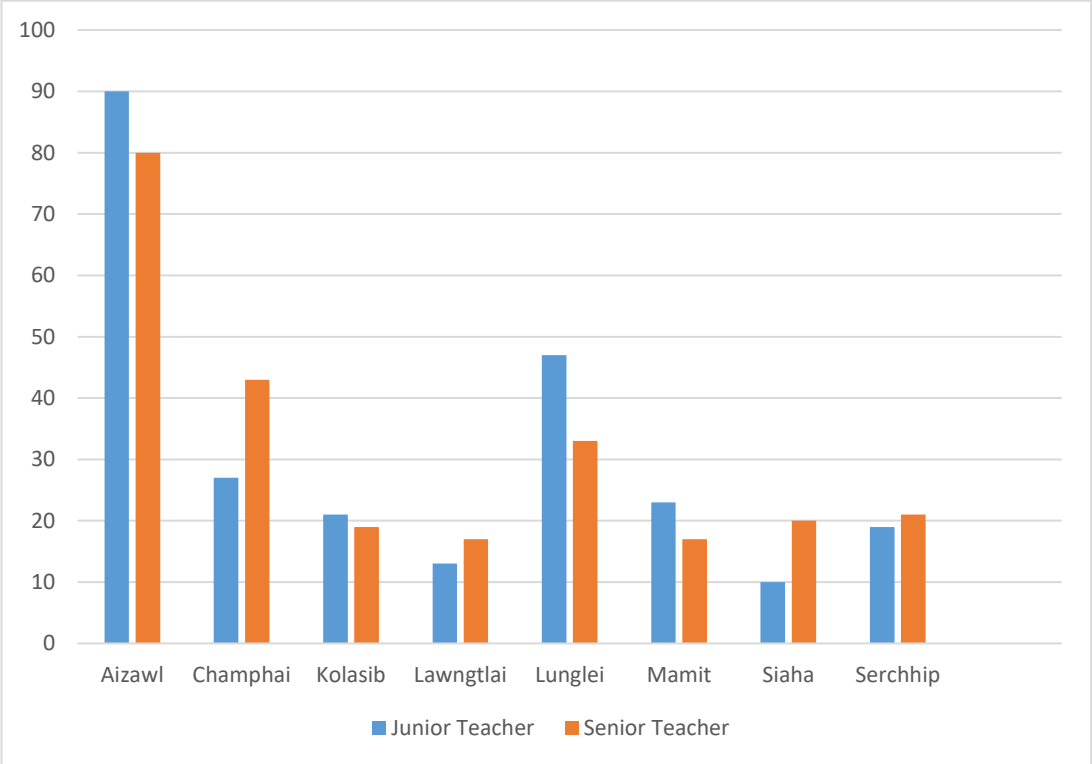


Figure 4.2 discloses the Experience-wise distribution of the sample teacher from various districts. In Mizoram there are approximately 3000 teachers who are eligible to attend the RMSA in-service training programmes. The distinction between junior and senior teachers was made from the age of the respondents from which it was found that approximately half of the sample had experience of 10 years.

It can be seen from table 4.2 that in Aizawl (90:80), Lunglei (47:33) and Mamit (23:17) districts, the number of junior teachers is slightly higher than the senior teachers. In Champhai (27:43), Lawngtlai (13:17) and Siaha (10:20) districts, the number of junior teachers is slightly less than the senior teachers. However, in Kolasib (21:19) and Serchhip (19:21) districts, the numbers of junior and senior teachers are approximately equal.

Figure 4.3

Subject-wise Distribution of Sample in Various Districts

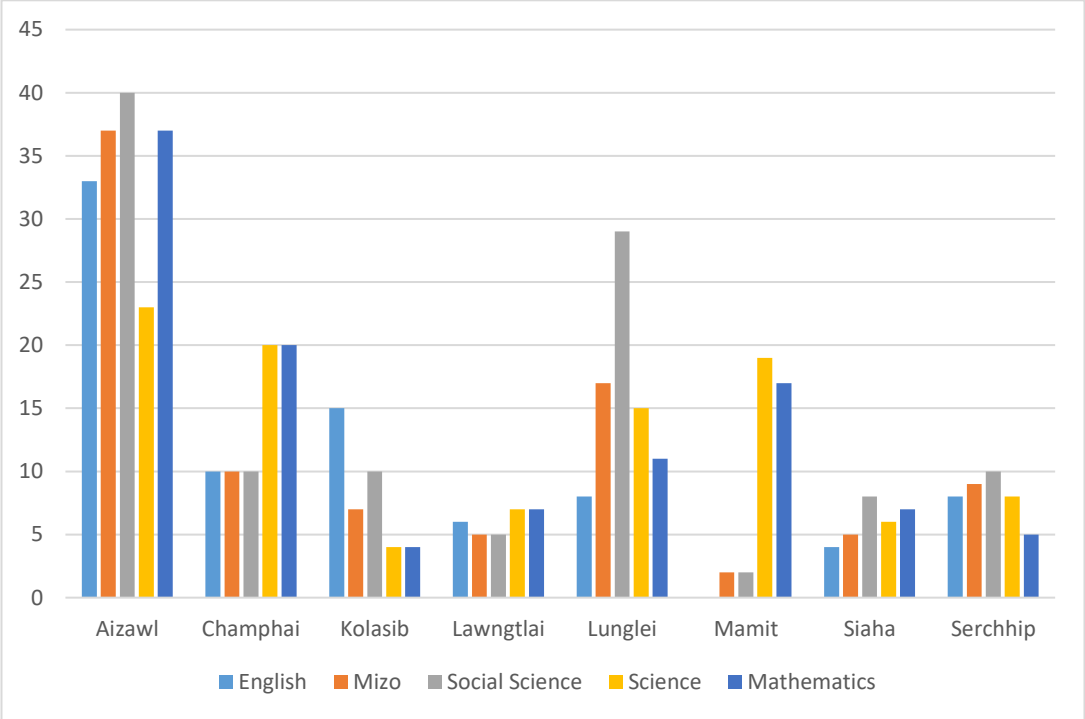


Figure 4.3 reveals the subject-wise distribution of the sample teachers in all the districts. In secondary education there are five compulsory subjects namely, English, Mizo, Social Science, Science and Mathematics and the investigator has attempted to garner the response from an equal number of subject teachers i.e. 100. It is also seen from the given figure that the distribution of subject teachers in the districts has varied significantly from district to district. Lunglei (8/17/29/15/11) and Mamit (0/2/2/19/17) exhibit the greatest variation in distribution while Lawngtlai (6/5/5/7/7), Siaha (4/5/8/6/7) and Serchhip (8/9/10/8/5) show greatest uniformity in subject teacher distribution.

4.2 Objective No 1. To examine the status of infrastructural and instructional facilities at the training centres of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram

In the course of collecting information and related data for the study, the investigator visited all the districts at the actual locations where the training programmes were conducted and observed first-hand the training programmes being conducted therein. The investigator made several observations regarding the facilities provided at these training centres where the in-service training programmes for teachers were being conducted. A checklist was prepared for collecting information about the various training centres and the availability and quality of the infrastructural and instructional facilities provided therein. The checklist was divided into two areas dealing with different dimensions - infrastructural and instructional dimensions. The infrastructural dimension contained 17 items while the instructional dimension contained 12 items. Items ranged from issues related to safety and comfort to ICT.

4.2.1 Infrastructural Dimensions

The researcher visited each of the training centres and collected data about the availability of the infrastructural facilities available in the training centres such as equipment and amenities that may contribute to the overall atmosphere of the training programmes and induce a sense of professionalism during the training programmes.

Table 4.2

Infrastructural Dimensions

Sl no	District / Dimensions	Aizawl	Champhai	Kolasib	Lawngtlai	Lunglei	Mamit	Siaha	Serchhip	Total (in percentages)	
										Yes	No
1	Single Day Access	Y	N	Y	Y	Y	N	Y	Y	75	25

2	RCC Building	Y	Y	Y	N	Y	N	N	N	50	50
3	Power Backup	Y	N	N	N	N	N	N	N	12.5	87.5
4	Ramps/Railings	N	N	N	N	N	N	N	N	0	100
5	Noise Free	Y	Y	Y	Y	Y	Y	Y	Y	100	0
6	Adequate Space	Y	Y	Y	Y	Y	Y	N	N	75	25
7	Fire-fighting equipment	Y	N	N	N	Y	N	N	N	25	75
8	Emergency Exits	N	N	N	N	N	N	N	N	0	100
9	Ambience Control	Y	Y	Y	N	Y	Y	N	N	62.5	27.5
10	Drinking water	Y	Y	Y	Y	Y	Y	Y	Y	100	0
11	Transportation	N	N	N	N	N	N	N	N	0	100
12	Commercial Transportation	Y	Y	Y	Y	Y	Y	Y	Y	100	0
13	Accommodation	N	N	N	N	N	N	N	N	0	100
14	Commercial Accommodation	Y	Y	Y	N	Y	N	N	N	50	50
15	Toilet for Women	Y	Y	Y	Y	Y	Y	Y	Y	100	0
16	Nearby Cafeterias	Y	N	Y	Y	Y	N	Y	N	62.5	37.5
17	Recreation Room	N	N	N	N	N	N	N	N	0	100
	Total Yes(s)	12	8	10	7	11	6	6	5		

From the above table 4.1, the following salient points may be noted about the infrastructural dimensions in the various training centres that had been observed by the investigator:

- With the development in roadways and transportation, the participants could, albeit with some difficulty in some cases, reach the town or city where the training centres were being conducted in 6 districts which accounted for 75 %; with the exception of Mamit and Champhai district where some participants could not reach the town of Mamit and Champhai from their places of posting in one day.
- The training programmes were held in reinforced concrete (RCC) buildings suitable for the purpose in 4 districts (50 %) whereas the other four districts namely, Siaha, Lawngtlai, Mamit and Serchhip conducted the training programmes in School classrooms which were either Assam type or Semi-pucca buildings.
- With the exception of Aizawl District, none of the other districts (87.5 %) made arrangements for any sort of power backup in case of power outage during the training sessions.
- The training centres in all the districts (100%) are not easily accessible to the differently abled. There were no ramps, lifts, braille books or hearing aids.
- The training centres in all the districts (100%) were suitably located in secluded environments, free from the numerous external noises that could disturb the training programmes.
- Six districts (75 %) have provided adequate space for the training programmes for teachers while two districts (25 %) namely Siaha and Serchhip were observed to not have adequately spacious rooms for conducting the training.
- Only two districts (25 %), namely Aizawl and Lunglei, provided fire-fighting equipment in their training centres while all the other six districts (75 %) did not provide such equipment in their training centres.
- None (0 %) of the training centres in the eight districts have provisions for emergency exits to be used in case of disasters or emergency situations.
- Training centres in six districts (62.5 %) were observed to have adequate ambience control devices such as air conditioners or ceiling fans, whereas three districts (37.5 %) namely Serchhip, Siaha and Lawngtlai conducted the training programmes in centres without adequate ambience control devices.

- The training centres in all the districts (100%) had access and provision to clean drinking water either in the form of bottled mineral water or water filters.
- None of the districts provide transportation for the participants from their places of residences to the training venues. However, all the districts training centres had access to commercial transportation for hire by the participants.
- None of the districts provide accommodation facilities for the participants. Also, the same table shows that only 4 (50 %) of the districts have hotels and lodges suitable in quality and number for the participants of the training programmes. The other four districts (50 %) namely, Mamit, Serchhip, Lawngtlai and Siaha have been observed to have a scarcity of good and cheap hotels for the residential needs of the participants.
- Adequate toilet facilities with separate toilets for men and women are provided in the training centres in all the eight districts (100 %).
- The training centres in 5 districts (62.5 %) had cafeterias in the nearby vicinity while the training centres in the other 3 districts (37.5 %) did not have such facilities.
- None of the training centres have made arrangements for a lounge or recreation centres for the use of the participants.

It can also be seen from table 4.1 that the performances or facilities available in the various districts are vastly different and the following points may also be noted about the individual districts:

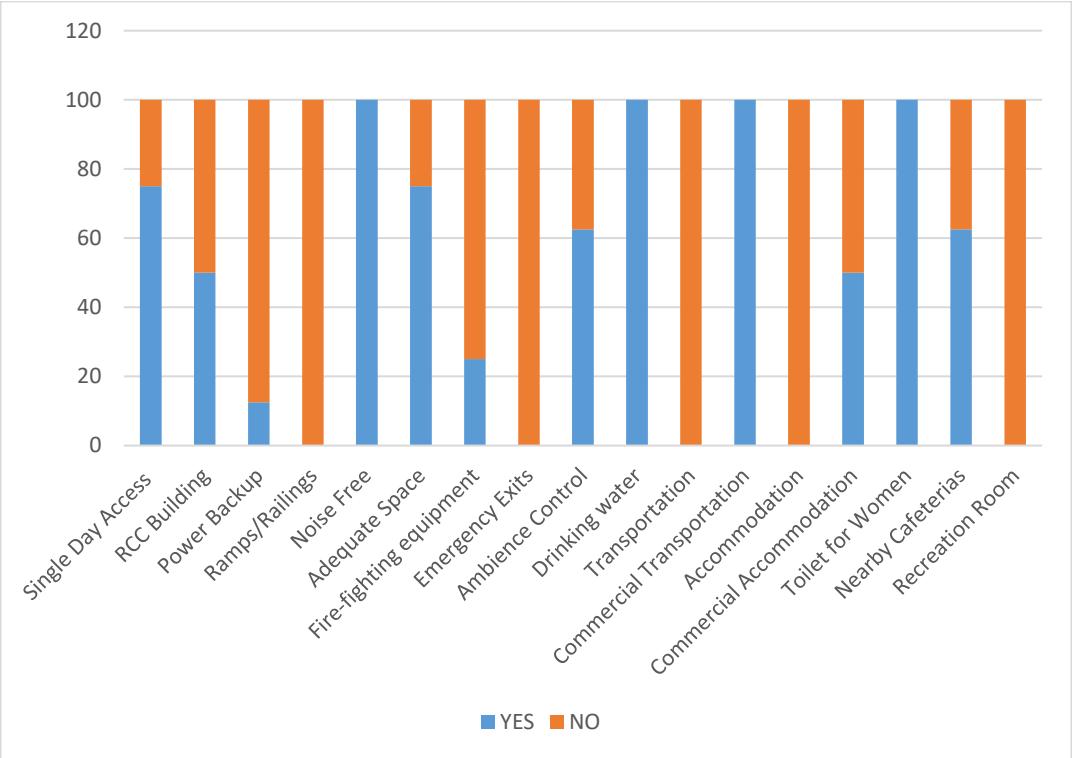
- **Aizawl District** and **Lunglei District** as expected have scored the highest among all the districts with scores of 12 and 11 respectively out of a possible 17. However, there is still scope for improvement in these districts with special reference to inclusivity of training centres and making them suitable for the differently abled as well as providing more amenities to the participants like accommodation and local transportation.
- **Kolasib District** comes a close third with a score of 10 out of a possible 17. As highlighted above, Kolasib district also has some scope for improvement in

realising a modern training facility and still lacks in areas like inclusivity, accommodation, transportation and ambience control.

- The training centres in **Champhai, Lawngtlai, Serchhip, Mamit and Siaha** districts are grossly inadequate scoring less than 50% (8.5/17) and exhibits serious lack of facilities and infrastructural amenities in many areas.

Figure 4.4

Infrastructural Dimensions



From a study of figure 4.4. we see from the said figure that most of the districts have done well in issues like nature of building, access to training centre, avoidance of external noise and disturbances, providing adequate space, providing drinking water, availability of commercial vehicles and toilet facilities.

However, in aspects like ambience control, availability of accommodation facilities as well as cafeterias, the overall picture shows that there is room for improvement. Similarly, in areas such as power backup, fire-fighting equipment, emergency exits, transportation for the participants, accommodation facilities and recreation centres, the districts have performed dismally throughout the state.

4.2.2 Instructional Dimensions

Table 4.3

Instructional Dimensions

Sl no	District / Dimensions	Aizawl	Champhai	Kolasib	Lawngtlai	Lunglei	Mamit	Siaha	Serchhip	Total (%)	
										Yes	No
1	Comfortable Seating	Y	N	N	N	Y	N	N	N	25	75
2	Writing Tables	Y	Y	N	Y	Y	Y	Y	N	75	25
3	Writing Equipment	Y	Y	Y	Y	Y	Y	Y	Y	100	0
4	Blackboards /Whiteboards	Y	Y	Y	Y	Y	Y	Y	Y	100	0
5	Projectors	Y	Y	Y	N	Y	Y	N	Y	75	25
6	Computers for Resource Persons	Y	Y	Y	Y	Y	Y	Y	Y	100	0
7	Computers for Participants	Y	N	N	N	N	Y	N	N	25	75
8	Internet	Y	N	N	N	N	N	N	N	12.5	87.5
9	Access to Textbooks	Y	N	N	N	N	N	N	N	12.5	87.5
10	Handouts	Y	N	Y	N	Y	N	N	N	37.5	62.6
11	Dedicated Library	Y	N	N	N	N	N	N	N	12.5	87.5
12	Nearby Library	N	N	N	N	Y	N	N	Y	28.6	71.4
	Total Yes(s)	12	5	5	4	8	6	4	5		

From a scrutiny of table 4.2, the following observations may be noted about:

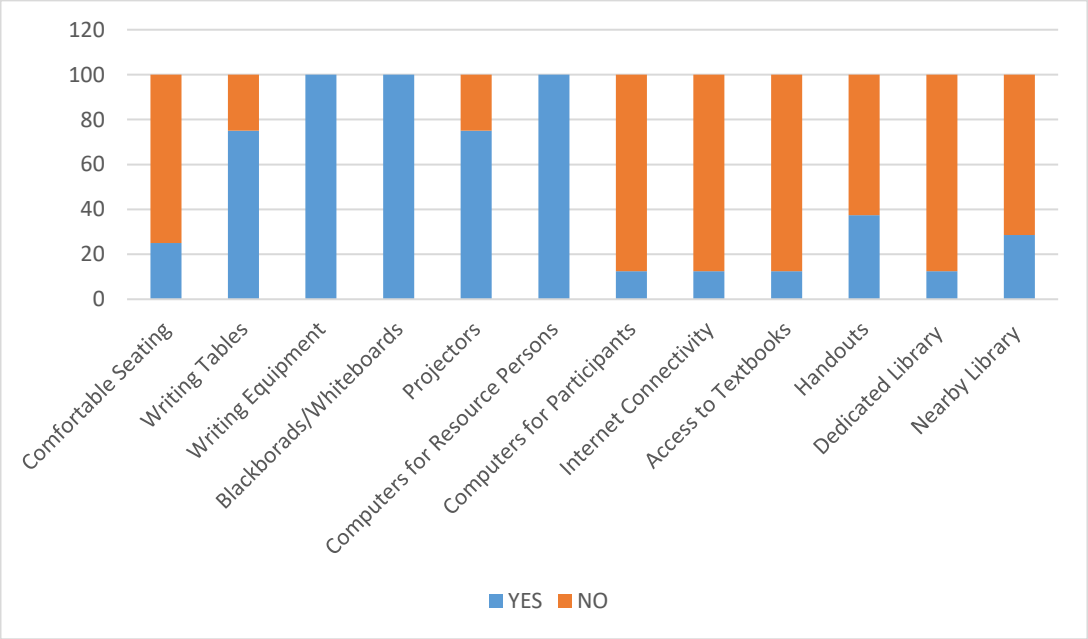
- The training centres in only two districts (25 %) namely Aizawl and Lunglei had seating arrangements suitable for prolonged seating while the other six (75%) training centres did not have provisions for such suitable seating arrangements.
- Six (75%) of the district training centres have made provisions for writing tables for the use of the participants whereas two (25%) of the training centres namely Serchhip and Kolasib, have failed to do so.
- The participants are provided with writing equipment and materials in all the district training centres.
- All the eight district training centres have provided whiteboards or blackboards at the training centres.
- Training centres in six (75%) districts were equipped with projectors while the training centres in two (25%) districts namely, Lawngtlai and Siaha could not provide such facilities.
- All the district training centres have provision of laptops or computers for the use of resource persons. However, computers/laptops are available for the use of participants in only two districts (25%) namely, Aizawl and Mamit.
- Internet connectivity in the training centres is available in only one (12.5%) of the districts i.e. Aizawl whereas all the other 7 (87.5%) districts could not provide such facilities.
- Only one (12.5%) of the district training centres namely Aizawl provided access to school textbooks for use by the participants. All other seven (87.5) districts could not provide school textbooks for the use of participants in the training programmes.
- The facility for reproduction and distribution of handouts by resource persons was available in only three (37.5%) district training centres namely Aizawl, Lunglei and Kolasib.
- Only one (12.5%) of the district training centres namely Aizawl had a library attached. However, two (28.6%) other training centres in Serchhip and Lunglei had close proximity to another library.

It can also be seen from table 4.2 that the situation in the various district are:

- **Aizawl District** has been able to provide all the amenities of a modern and ergonomic training centre and has scored 12 out of a possible 12.
- **Lunglei District** has disappointed and comes second with a score of 8 out of a possible 12. Lunglei district has some scope for improvement in realising a modern training facility and still lacks in areas like ICT and learning resources.
- The training centres in **Champhai, Lawngtlai, Serchhip, Mamit, Kolasib and Siaha** districts have scored 50% (6 out of 12) or less and exhibits serious lack of instructional facilities and are grossly inadequate in providing modern training centre befitting the importance of the situation.

Figure 4.5

Instructional Dimensions



It is easily observed from figure 4.5 that the districts have made provisions in matters relating to writing equipment, whiteboards or blackboards, computers for resource persons, writing tables and projectors. However, there is serious lack of aspects like provision of ergonomic seating, computers for participants, internet connectivity, textbooks, handouts and libraries throughout the state with the exception of a few districts.

4.3 Objective No 2. To examine the transactional modalities of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram.

The investigator also interviewed administrators in the various districts wherever available regarding various elements and aspects of the in-service training programmes conducted by the RMSA. Thirdly, the investigator conducted group discussions with the participants of the training programmes to ascertain their inputs on various aspects of the in-service training programmes for secondary teacher conducted by RMSA. Group Discussions were conducted in four out of eight districts namely Aizawl, Lunglei, Serchhip and Mamit.

The in-service training programme for secondary teachers was initiated as a part of the Rashtriya Madhyamik Shiksha Abhiyan umbrella to ensure quality education in the secondary schools of India through the continuous professional development of teachers through in-service contact programmes. The Programme Advisory Board of the RMSA had the mandate for the overall administration of the training programmes as well as the allocation of the necessary funds to the states.

At the State level, the in-service training programmes were directed and overseen by the State Project Directors office which disbursed the necessary funds to the districts as soon as they were sanctioned from the National Project Mission Offices. In Mizoram, a separate RMSA wing under the Director of School Education who also functioned as the State Project Director was created with staff drawn from the Directorate of School Education as well as RMSA personnel. The State Project Offices also acted as the link between the National and District levels, passing on guidelines and relevant information whenever necessary. The State Project office is the main nerve centre for the whole state and coordinates all the efforts of the eight districts and consolidates the data accumulated from all over the state.

At the District level, The District Education Officer acted as the District Project Coordinator and was assisted by the Deputy District Project Coordinator. The Deputy District Project Coordinator was usually deputed from among the serving district office staff or in most cases, from headmasters or senior teachers of

secondary schools. The RMSA project offices were placed adjacent to the District Education Offices and often functioned parallelly and are usually manned by staff recruited through RMSA in various capacities.

In most districts, the training programmes are conducted at the back-end of the calendar year which usually coincides with the third or fourth quarters of the academic sessions. Usually, the programmes are initiated as soon as funds are sanctioned from the state project offices. However, sometimes the funds are sanctioned very late and the training programmes are initiated before the actual sanction of funds. In such cases, the expenditure is met from other sources and later recovered/recouped from the sanctioned funds.

At the onset, the district project staff formulates the training routines and identifies possible venues for the training programmes as well as the necessary resource persons for the various topics identified for the programmes. Mention must be made here of the situation in Aizawl district which is different from the rest of the state. For the case of Aizawl district, the National Project offices had identified Institute of Advanced Studies in Education (IASE) and National Institute of Technology (NIT) as Nodal Institutions for the in-service training programmes specifically for Aizawl District so all formalities such as venues, resource persons, training schedules, etc. are arranged in consultation with faculty members of these institutions. Letters are then issued to the secondary school headmasters informing them of the timing and schedule of the training programmes as well as advising them to send the appropriate teachers for the training programmes as per the schedules devised by the district offices.

The training programmes are usually conducted for five weeks with three to five working days scheduled in the routines. Due to difficulties in transportation from remote areas and the non-availability of such services on Sunday, most districts find it difficult to conduct training programmes for the full five days. Most districts schedule programmes spanning four days while a few districts manage four and a half day. An aberration to the trend was observed in Siaha District where a severe shortage of teachers has compounded the problem to such a degree that the absence

of one or two teachers from a school makes it practically impossible to manage the daily workings of the school in many cases. In order to minimise the impact of the training programmes on the daily management of the schools, training programmes for all the five subjects are conducted simultaneously at the same time. During this time, the schools are closed as all the teachers attend the training programmes. In Siaha, the training programmes usually last 2 – 4 days.

Training Centres in the districts vary from the air-conditioned classrooms of NIT, Aizawl to the school classrooms of Siaha, Serchhip, Mamit, etc. Block Resource Centres, Conference Centres, various Departmental Halls are also utilised for the training programmes subject to their availability at the time of the training programmes.

Resource persons are invited from a myriad number of sources and the quality greatly differs from district to district. Aizawl District, as expected, has access to extremely qualified resource persons including Mizoram University, IASE, NIT, SCERT, DIET Aizawl, Various Degree Colleges, etc. Other Districts rely mostly on the Degree Colleges and DIETs for the bulk of the resource persons. However, some districts like Kolasib have invited experts from various departments like Agriculture, Horticulture, Social Welfare, etc. to speak to the trainees at occasions.

Trainees attending the programmes are given Sitting Allowance/Daily Allowances in all districts with amounts ranging from Rs. 100 – 200 per person per day. However, only out-station trainees are given Travel Allowances which is usually calculated as the actual Sumo fares from their places of posting.

From the interviews of the administrative staff in all the eight districts, the following points may be highlighted:

1) The administrative staff at the district RMSA offices had an average experience of 2.5 years under RMSA. The Deputy District Project Coordinators were mostly teachers and Headmasters that had been deputed to the District office. The other administrative staff were mostly clerical staff that were recruited to work in the offices.

2) None of the administrative staff had attended any specific training or workshop for the purpose of organising in-service training programmes.

3) None of the administrative staff had been exposed to RMSA programmes in general and more specifically in-service training programmes, outside the state of Mizoram.

4) All of the respondents opined that the performance of the RMSA project in Mizoram was good and could find no glaring inadequacy in the overall performance. However, most of them did not feel qualified to comment on the comparision of the performances of Mizoram State with other States.

5) Majority of the administrative staff interviewed thought that the in-service training programmes under RMSA was satisfactory.

6) Some of the challenges of the RMSA in-service training programme mentioned by the interviewees were –

- Lack of suitable halls
- Lack of adequate number of suitable resource persons
- Unsuitable timing
- Demonetisation scheme
- Lack of resources and facilities
- Lack of interest among the participants
- Transportation problems
- Accommodation problems
- Shortage of teachers

7) The following thrust areas were identified as desirable by the interviewees -

- Mathematics education
- Motivation
- Early release of funds
- Information Technology
- Accommodation facilities

4. 4 Objective no 3: To examine the overall perception of teachers about the effect and utility of the in-service training programmes for secondary school teachers under RMSA.

4.4.1 Opinionnaire:

The investigator had prepared an opinionnaire for the purpose of identifying the perceptions or opinions of the trainees attending the in-service teacher training programmes under RMSA. The opinionnaire consisted of three parts, the first part dealing with the perceptions of trainees on the effect and utility of the training programmes. Fifteen (15) questions were framed for this purpose and the analysis of the responses of the 500 respondents is given in the following tables no 4.26 – 4.40. The numbers are converted to percentages only and no other statistical treatment is attempted as the data does not lend itself to complex statistical analysis. The data in each table is illustrated with the help of a pie-chart to facilitate a better presentation of the situation. The questions were framed on the following aspects of education:

1. Subject Mastery
2. Proficiency in Teaching Skills
3. Classroom Management
4. Variety in Learning Experiences
5. Using Non-Conventional Resources
6. Management of Working Relationships
7. Mobilisation of Community Resources
8. Professional Development
9. Development of Parent-Teacher Relationship
10. Balance of Lifestyle
11. Conducting Discussions
12. Presentation of Concepts
13. Enrichment of Content Knowledge
14. Assessment and Evaluation
15. Identification of student weakness

Table 4.4

Overall Perceptions of Teachers on Utility

Sl no	Items	Overall Perceptions (in percentages)			
		Always	**Mostly**	**Sometimes**	**Never**
1	Subject Mastery	31.6	29.6	36.6	2.2
2	Proficiency in Teaching Skills	32.4	35.8	29.4	2.4
3	Classroom Management	27.4	30.4	36.6	5.6
4	Variety in Learning Experiences	31.6	35	31.2	2.2
5	Using Non-Conventional Resources	21.4	30.8	42.2	5.6
6	Management of Working Relationships	34.6	38	22.6	4.8
7	Mobilisation of Community Resources	23.6	27.6	41.6	7.2
8	Development of Parent-Teacher Relationship	23.4	34.4	35.6	6.4
9	Professional Development	41.2	38	19.4	1.4
10	Balance of Lifestyle	23.4	35.6	36	5
11	Conducting Discussions	26.4	35.8	34.6	3.2
12	Presentation of Concepts	25.6	38.4	32.6	3.4
13	Enrichment of Content Knowledge	30	37.6	28.2	4.2
14	Assessment and Evaluation	32.4	39.8	25.2	2.6
15	Identification of student weakness	30	35.4	31.4	3.2
	Average Perceptions	**29**	**34.81**	**32.21**	**3.96**

A careful examination of table 4.4 reveals the following observations about the perceptions of teachers about the effect and utility of secondary school teachers regarding the effect and utility if the in-service training programmes:

- 31.6 % of the respondents have agreed that the training programme always helps them with achieving mastery of the subject content. Another 29.6 %

agreed that it helps most of the times and 36.6% felt that it sometimes helped. However, 2.2% argued that it never helped.

- 32.4% of the participants have agreed that the training programme always helped them to develop proficiency in teaching skills and 35.8% also opined that it helped them most of the time. However, 29.4% argued that it hardly helped them in develop teaching skills while another 2.4% says that it never helped.
- 27.4% of the respondents posited that the training programme always helped in classroom management and another 30.4 % agreed that it helped most of the times. However, 36.6 % argued that it only helped sometimes and the remaining 5.6% opined that such training programmes has never helped them in effectively managing difficult classroom situations.
- In the matter of enabling teachers to introduce variety into their teaching regimen, 31.6% said that it had always helped them; 35% agreed that it helped them most of the times and another 31.2 % also opined that it sometimes helped them. However, 2.2% of the 500 respondents argued that the training programmes were ineffective in helping them introduce variety of learning experiences.
- 21.4% of the respondents felt that the training programmes always helped them make use of non-conventional resources; and another 30.8% felt that it served that purpose most of the times. However, 42.2% opined that it only sometimes helped them to use non-conventional resources and another 5.6% argued that it never did that.
- 34.6% believed that the in-service training programmes has always helped them to effectively manage their working relationships while another 38% agreed that it helped them most of the time. However, 22.6% felt that it only helped them sometimes and the rest 4.8% contended that it has never helped them in managing working relationships.
- 23.6% of the 500 respondents have concluded that the training programmes has helped them in the mobilisation of community resources and another 27.6% agree with them that it helped them most of the times. On the other hand, a

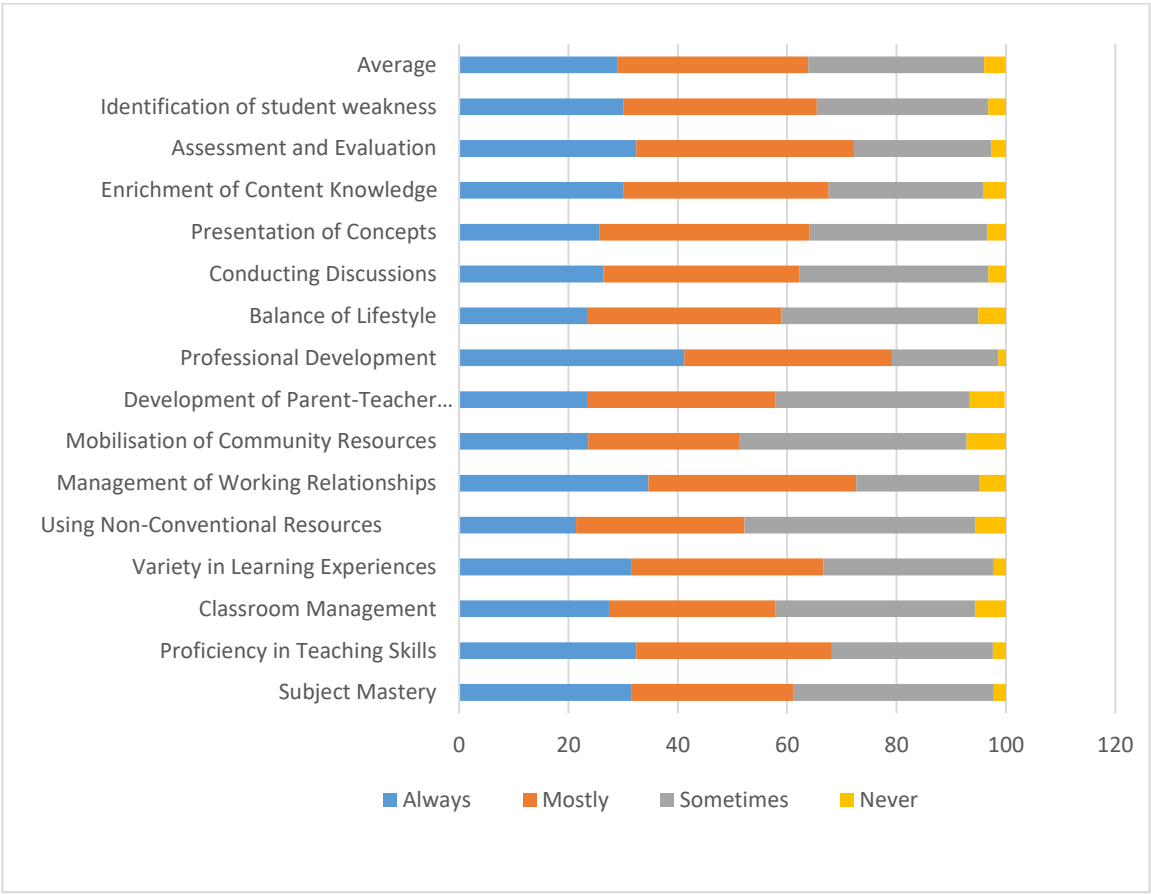
considerable fraction of 41.6% contended that it helped them only sometimes and the remaining 7.2% argued that it never helped them to mobilise community resources.

- 23.4% of the respondents agreed that the training programmes always helped them maintain better parent-parent relationships and another 34.4% agreed that it helped them most of the times. On the contrary, 35.6% felt that it has helped them only a few times and 6.4% argues that it has never helped them maintain better relationship with parents.
- Regarding the utility of the training programmes in advancing the professional development of trainees, 41.2% have concurred with another 38% agreeing on a limited level. A few respondents, 19.4% of them have however felt that its utility was partial while a minimal 1.4% have disagreed completely.
- 23.4% have agreed that the training programmes always helped them to maintain a balanced lifestyle; with a 35.6% concurring that it helped them most of the times. However, 36% have felt that it only helped them sometimes; and 5% disagreed and feels it has never helped them at all to maintain a balanced lifestyle.
- 26.4% who felt that the training programmes helped them to conduct meaningful discussions all the time and another 35.8% who also concurred that it helped most of the time. 34.6% have on the other hand felt that it helped them only limitedly sometimes while another 3.2% argued that it never helped them in that manner.
- 25.6% agreed that the training programmes always helped them to present concepts in a better way. Another 38.4% felt that it helped them most of the time while 32.6% disagreed that it helped them only some of the times. A small fraction 3.4% went even further by opining that it never helped at all.
- 30% of the respondents agreed that training programmes always helped in enrichment of content knowledge and 37.6% agreed that it helped most of the time. 28.2% have however, digressed, feeling that it helped only sometimes and 4.2% arguing that it did not help at all.

- 32.4% believed that the training programmes always helped in the assessment and evaluation of students and another 39.8% concurred that it helped most of the time. Nearly a fourth (25.2%) however opined that it was helpful only in some instances while 2.6% disagreed completely saying it never helped.
- 30% of respondents opined that the training programmes inadvertently helped to identify student's weaknesses. Another 35.4% felt that such was usually the case; while another 31.4% felt that it helped only sometimes. However, 3.2% said that the they were useless in identifying students' weaknesses.
- Over the whole spectrum of items, 29% of the respondents that the programme was always useful; 34.81% agreeing that it was helpful most of the time; while 32.21 argued it was only sometimes helpful and the remaining 3.96% said it was never helpful.

Figure 4.6

Overall Perception of Teachers on Utility of In-service Training Programmes



A closer look at figure 4.6 shows that the overall perceptions of teachers on the utility of the training programmes was highest for Professional development followed closely by its utility in management of working relationships.

On the other end of the spectrum, the teachers had opined that the training programmes are the least helpful in mobilisation of community resources; seconded only by its utility in helping the teachers in making use of non-conventional resources.

4.4.2 Group Discussion

The investigator also conducted unstructured group discussions in which a small number of trainees were invited to comment on the utility and effectiveness of the training programmes. The group discussions yielded the following observations about the training programmes:

1) The utility of the training programmes depended on the quality of the resource persons.

   "*..Kan resource person a zir niin ka hria..*" *(I think it depends upon the resource persons) – Serchhip GD*

2) The utility of the training programmes is limited by the following factors

   - exam based
   - unsuited to classroom situations
   - too theoretical
   - not textbook oriented.

   "…tlem a practical a hman nghal mai theih te hi tel ve deuh se…" (some practical topics which can be utilised ummediately may also be included) – Serchhip GD

   "… kum dang a mite kha chu kan chhawr lo, exam base ani mai…" (we did not benefit from the programmes in other years, it was exam based) – Mamit GD

"…a theoretical mah mah ka tia.." (i think it was too theoretical) – Aizawl GD

3) The utility of the training programmes may be enhanced by more interaction with the trainees as well as an earlier intimation of topics to be discussed

"… in enlawk theih ni ta sela, kan hlawkpui zual deuh ang…" (it would be more benficial if we could prepare beforehand) – Aizawl GD

4) The training programmes was useful for establishing and maintaining social and professional connections

".. inhmelhriat nan te kan hmang a, district chhunga mi kan inhriat phah a…" (It helps us in meeting and connecting with other teachers, especially from the same district) – Serchhip GD

5) The training programmes helped in improving the motivation levels of the trainees

"… han intuaithar leh intihphur thar nan chuan tha tak ani…" (it is very good for renewing our motivation) – Serchhip GD

"… motivation lampang ang chi ah khan, zirtirtu in hma kan sawn theihna tur chu min kawhhmuh tha in ka hria …" (i think they showed us a good way for us to develop in the area of motivation) – Mamit GD

"… a motivate em em a ni.." (it was very motivating) – Aizawl GD

6) The training programmes helped in the development of new ideas and concepts.

"… kan hriatloh tam tak kan hriat belh a…" (we gained a lot of new knowledge) – Aizawl GD

4.5 Objective No 4: To assess the perception of the participants on the capabilities of the resource persons in terms of training and their preparedness.

4.5.1 Opinionnaire:

The second part of the opinionnaire prepared by the investigator for the purpose of identifying the perceptions or opinions of the trainees attending the in-service teacher training programmes under RMSA dealt with questions concerning the perceptions of trainees on the capabilities of the resource persons of the training programmes in terms of their training and preparedness.

Seven (7) questions were framed for this purpose and the analysis of the responses of the 500 respondents is given in the following tables no 4.41 – 4.47. The numbers are converted to percentages only and no other statistical treatment is attempted as the data does not lend itself to complex statistical analysis. The data in each table is illustrated with the help of a pie-chart to facilitate a better presentation of the situation. The following aspects of the resource persons were examined:

1. Academic Qualification
2. Adequacy of Experience
3. Realistic Field Experience
4. ICT Skills
5. Open-mindedness and Empathy
6. Pedagogic Skills
7. Preparation

Table 4.5

Overall Perceptions of Teachers on Capabilities of Resource Persons

Sl no	Items	Overall Perceptions (in percentages)			
		Always	**Mostly**	**Sometimes**	**Never**
1	Qualified Academically	43.2	38.4	16.4	2
2	Adequate Experience	35.6	40.8	19.6	4
3	Realistic Field Experience	25.2	37.2	32.6	5
4	ICT Skills	31.2	37.6	27.2	4
5	Open-mindedness and Empathy	41.4	41.8	14.4	2.4
6	Pedagogic Skills	31.8	43.8	22	2.4
7	Adequate Preparation	36.2	44.4	17.8	1.6
	Average Perceptions	**34.94**	**40.57**	**21.43**	**3.06**

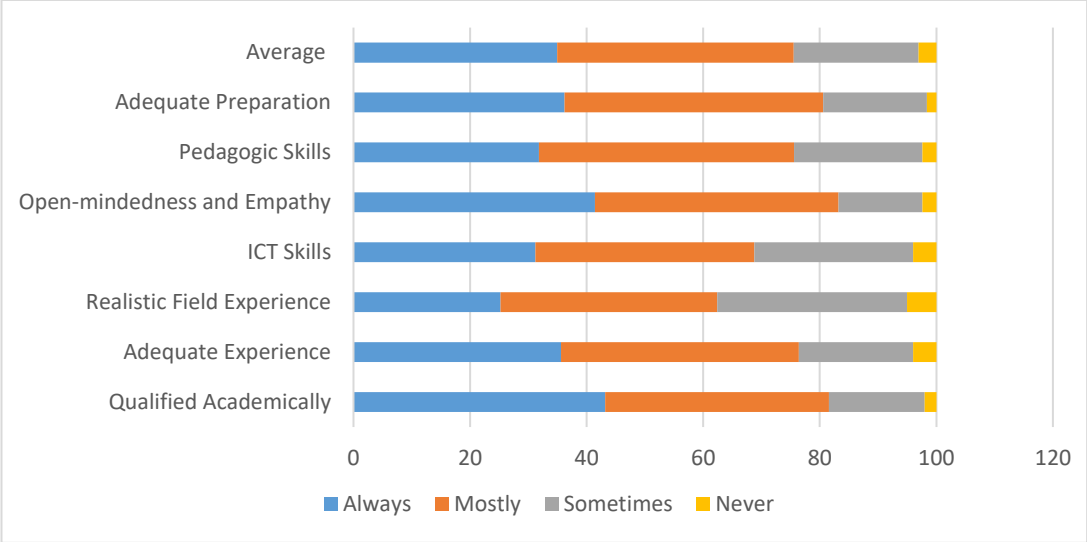
A careful study of table 4.5 reveals the following revelations aout the perceptions of the trainees about the capabilities of the resource persons of the in-service training programmes for secondary teachers:

- 43.2% of the respondents felt that the resource persons were always academically qualified for the job. Another 38.2% agreed that the case was true for most of the times while 16.4% opined that it was true only for some of the cases. A small fraction 2% argued that none of the resource persons were academically or educationally qualified to impart training.
- 35.6% agreed that all the resource persons had adequate experience; and 40.8% felt that most of them had the necessary experience. However, 19.6% opined that only some of them had adequate experience and 4% strongly contended that none of the resource persons had the necessary experience.

- 25.2% opined that the resource persons were in touch with the ground realities and another 37.2% agreed that such was the case for most of the resource persons. On the other hand, 32.6% felt that only some of the resource persons were grounded in reality and 5% even went further to say that none of them has the necessary reality realistic field experience.
- 31.2% felt that all the resource persons had the necessary ICT skills and other 37.6% agreed partially that most of them did. In contrast, 27.2% posited that most of the resource persons did not have such skills and 4% contended that none of them had the necessary ICT skills.
- 41.4% of the respondents felt that the resource persons were open-minded and emphatic. Another 41.8% concurred that such was mostly the case. On the other hand, 14.4% contended that only some of the resource persons were open-minded and emphatic and 2.4% even argued that none of them there open-minded and emphatic.
- 31.8% felt that the all the resource persons had the necessary pedagogic skills and that 43.8% also agrees that most of the resource persons were skilled in pedagogy. However, 22% digressed and opined that most of the resource persons did not possess such skills and 2.4% argued that none of them had the necessary pedagogic skills.
- 36.2% believed that the resource persons were always adequately prepared; and 44.4% confirmed this to be the case most of the times. However, 17.8% felt that such was the case only sometimes and 1.6% disagreed completely and opined that none of the resource persons were adequately prepared.
- In conclusion, 34.94 % opined that the resource persons were always qualified; while 40.57 % partially agreed on the capabilities of the resource persons. However, 21.43% were not too sure of the capabilities of the resource persons and 3.06 % even went to the degree of completely negating the capabilities of the resource persons.

Figure 4.7

Overall Perception of Teachers on Capabilities of Resource Persons



An analysis of figure 4.7 leads us to conclude that the teachers have, on the whole, positive opinions and perceptions about the capabilities of the resource persons at the in-service training programmes for secondary school teachers. The trainees have responded most positively about the academic qualifications of the resource persons; which was closely seconded by their perceptions about the open-mindedness and empathy. On the contrary, the respondents have been least enthusiastic about the field experience of the resource persons, opining that many of them were not in touch with the ground realities of secondary education. The trainees have also been less positive about the pedagogic and ICT Skills of the resource persons.

4.5.2 Group Discussion

The group discussions yielded the following revelations:

1. There were marked variations in the capabilities of the resource persons; some resource persons were innovative and motivating while lack of expertise and experience of the resource persons were observed in some cases.

   "… A hma zawng ami aiin a tha in ka hria kumin a mi hi…" (I think this year is better than all the others before) – Mamit GD

"... Khami tum kha chuan hlawkthlak ka ti lo khawp mai MR X kha resource person ani deuh ber a, tun tum hi chu midangin min zirtir a, ka hlawk viau in ka hria..." (I think the year was not very useful as MR X was the main resource person; but this year we have new RPs and i think it is better than before) – Aizawl GD

2. Participants voiced their opinions that the resource persons should conduct more detailed discussions on the topic and base their discussions on the current MBSE textbooks.

"... discussion hun kha awm thei ta ang se..." (there should be a time for discussions) – Aizawl GD

"... discussion hun kha awm thei ta ang se..." (there should be a time for discussions) – Aizawl GD

4.6 Objective No 5: To identify the problems encountered by the trainees during the training programmes.

4.6.1 Opinionnaire

The third component of the opinionnaire prepared by the investigator for the purpose of identifying the perceptions or opinions of the trainees attending the in-service teacher training programmes under RMSA dealt with questions which focussed on discovering the problems encountered by trainees while attending the training programmes.

Eight (8) questions were framed for this purpose and the analysis of the responses of the 500 respondents is given in the following tables no 4.48 – 4.55. The numbers are converted to percentages only and no other statistical treatment is attempted as the data does not lend itself to complex statistical analysis. The data in

each table is illustrated with the help of a pie-chart to facilitate a better presentation of the situation.

1. Transportation
2. Accommodation
3. Language
4. Support Materials
5. Mistreatment from Staff
6. Resistance from Schools
7. Infrastructure
8. Programme Timing

Table 4.6

Overall Perceptions of Teachers on Problems Encountered

Sl no	**Items**	**Overall Perceptions (in percentages)**			
		Always	**Mostly**	**Sometimes**	**Never**
1	Transportation problem	21.6	17	33.4	28
2	Accommodation problem	11.4	9.2	25.4	54
3	Language Problem	6.4	9.2	15	69.4
4	Lack of Support Materials	6	10.2	31.8	52
5	Mistreatment from Staff	2.8	4	9	84.2
6	Resistance from Schools	2.4	6.4	10.6	80.6
7	Lack of Infrastructure	7.2	13.4	38.2	41.2
8	Programme Timing	13.4	23.6	42	21
	Average Perceptions	**8.9**	**11.63**	**25.67**	**53.8**

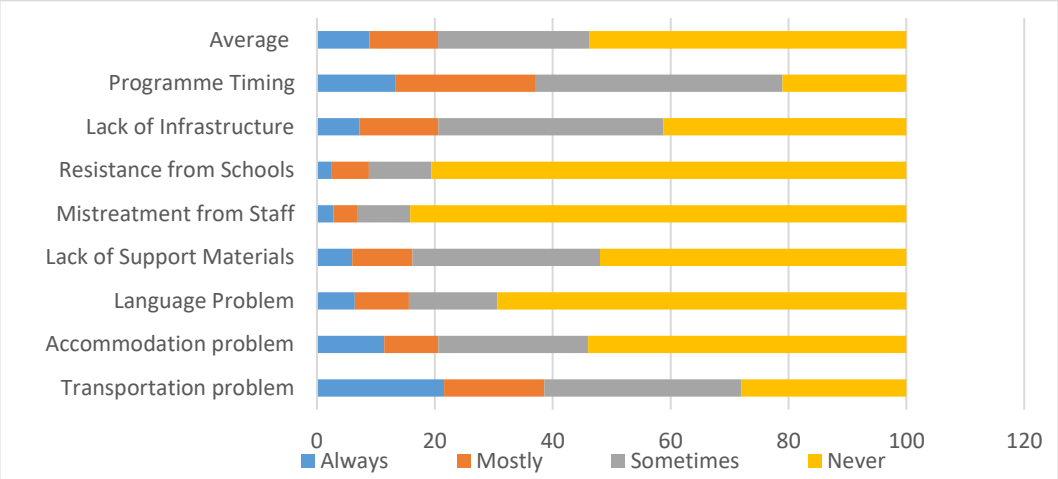
A detailed study of table 4.6 enlightens us to the problems encountered by the trainees at the in-service training programmes for secondary teachers which may be enumerated thus:

- Regarding the problem of transportation, 21.6% always encountered problems, 17% had problems most of the times, 28% faced problems sometimes and only 28% dis not have any problem regarding transportation.
- 11.4% always encountered accommodation problems with another 9.2% sharing that burden most of the time. 25.4% reported that they had such problems only on occasions and the majority 54% concurring that they face no problems regarding accommodation.
- A small fraction of the respondents encountered language problems with 6.4% complaining of always facing such problems, another 9.2% having opined that they had problems most of the times and another 15% regretted that they had problems some of the times. The majority (69.4%) did not have any such problem regarding language.
- 6% of the respondents always faced a dearth of support materials and another 10.2% having faced the same problem most of the time. On the other hand, 31.8% encountered such problems sometimes only and the rest 52% reported never experiencing a lack of support materials.
- A minute fraction of the respondents faced attitude problems and mistreatment from the staff. 2.8% of the respondents reported always facing such problems with 4% concurring that they faced similar problems most of the times. Another 9% revealed that they too faced such problems some of the times but the majority 84.2% reported that they did not have any such problem.
- The vast majority of trainees do not face resistance or opposition from school authorities or co-workers while attending the training programmes. An insignificant fraction 2.4% however, argued that they always faced opposition, and 6.4% said that faced such opposition most of the times. Another 10.6% also revealed that they faced opposition sometimes.

- 7.2% of the respondents felt there was always a lack of infrastructure with another 13.4% concurring that such was the case most of the times. 38.2% agreed that they faced lack of infrastructure some times while 41.2% were satisfied with the available infrastructure.
- 13.4% observed the programme timing to be always unsuited to the academic calendar and another 23.6% agreeing that it was mostly the case. A large fraction of 42% also stated that the timing was sometimes unsuitable but 21% argued that it was perfectly suitable for the academic calendar.
- To summarise, 8.9 % always complained of problems, while 11.63 complained most of the times. 25.67% sometimes encountered problems and the majority of 53.8 % never had problems during the training programmes.

Figure 4.8

Overall Perception of Teachers on Problems Encountered



A glance at figure 4.7 reveals that the incidence of problems at the training programmes is quite less and trainees complain least of resistance from schools as well as mistreatment form administrative staff.

However, the incidence and complain of transportation problems and poor timing of the programmes are highest among the trainees of the in-service training programmes for secondary school teachers.

4.6.2 Group Discussion

Participants from the group discussions mentioned the following problems as encountered by them:

1) Unsuitable timing

"... A timing hi buaithlak khawp mai..." (The timing is quite troublesome) – Serchhip GD

"... A timing hi fuhlo ka ti, academic session tir lamah te hian ni thei se..." (I think the timing is not suitable, i hope it can be done in the beginning of the academic session) – Mamit GD

2) Transportation

"... Ni khat a ban theilo te pawh an awm ve nual ang..." (there may be several people who cannot reach in one day) – Lunglei GD

"... Transportation ah hian ani mai, traffic jam nasa nen hian..." (our only problem is transportation, with the heavy traffic jams) – Aizawl GD

3) Lacking a connection with the actual realities of secondary schools.

"... an duh dan leh kan kal dan inmil lo thin a awm a maw..." (there is mismatch between what they want and how we can do it) – Serchhip GD

"... helaia kan tih and diak diak in kan ti theilo, course zawh hman loh a hlaihawm thin sia..." (we cannot always utilise our training as we have to think about covering the course) – Lunglei GD

4) Lack of printed study materials for further reference and hands-on activities

"... materials hi CD emaw a copy emaw te hi sem sela..." (they should distribute copies or CDs of the training materials) – Aizawl GD

4.7 Objective No 6: To compare various districts in terms of teacher perceptions on utility of training programmes, capabilities of resource persons and problems encountered.

The in-service teacher training programmes for secondary school teachers conducted under RMSA in Mizoram are organised separately in all the eight districts namely, Aizawl, Champhai, Kolasib, Lawngtlai, Lunglei, Mamit, Siaha and Serchhip without direct management of the State Project Office. A comparision of the eight districts is hereby presented to assess any differences between the various districts as there may be significant variations between the programmes in various districts. The three main components of the opinionnaire are analysed separately.

4.7.1 To compare the various districts in terms of Teacher perceptions on utility of training programmes

Table 4.7

District-wise Comparision of Teacher Perception on Utility of Training Programmes

Sl no	Item	Perception/ Opinion	Aizawl	Champhai	Kolasib	Lawngtlai	Lunglei	Mamit	Siaha	Serchhip
1	Subject Mastery	Always	57	19	7	14	24	9	7	14
		Mostly	53	22	9	5	22	14	14	9
		Sometimes	58	28	22	10	31	16	6	17
		Never	2	1	2	1	3	1	3	0
		χ^2 = 31.22				df = 21		< 32.671 (0.05)		
2	Proficiency in Teaching Skills	Always	49	24	6	18	25	16	10	11
		Mostly	70	28	18	6	27	10	8	11
		Sometimes	51	18	12	5	25	13	10	17
		Never	0	0	4	1	3	1	2	1

		χ^2 = 43.3				df = 21		> 38.932 (0.01)			
3	Classroom Management	Always	40	21	3	12	28	5	14	12	
		Mostly	66	19	10	9	19	19	3	9	
		Sometimes	56	26	26	8	27	14	11	16	
		Never	8	4	1	1	6	2	2	3	
		χ^2 = 44.89				df = 21		> 38.932 (0.01)			
4	Variety in Learning Experiences	Always	56	18	5	14	24	13	13	12	
		Mostly	71	29	15	6	27	12	3	12	
		Sometimes	43	22	18	9	28	15	9	15	
		Never	1	1	2	1	1	0	5	1	
		χ^2 = 56.52				df = 21		> 38.932 (0.01)			
5	Using Non-Conventional Resources	Always	35	19	5	11	13	3	4	12	
		Mostly	62	16	9	11	25	13	7	15	
		Sometimes	67	31	23	6	36	22	15	12	
		Never	6	4	3	2	6	2	4	1	
		χ^2 = 34.18				df = 21		> 32.671 (0.05)			
6	Management of Working Relationships	Always	52	28	10	17	27	11	12	13	
		Mostly	70	26	18	7	29	20	10	11	
		Sometimes	41	13	8	5	20	6	8	11	
		Never	7	3	4	1	4	3	0	5	
		χ^2 = 24.55				df = 21		< 32.671 (0.05)			
7	Mobilisation of Community Resources	Always	40	16	7	9	21	7	7	9	
		Mostly	50	15	10	11	21	12	7	11	
		Sometimes	70	33	18	9	31	16	12	17	
		Never	10	6	5	1	7	5	4	3	
		χ^2 = 11.19				df = 21		< 32.671 (0.05)			
8	Parent-Teacher	Always	33	17	5	12	21	9	7	12	
		Mostly	67	23	14	8	27	14	7	10	
		Sometimes	62	27	18	9	27	15	11	13	
		Never	8	3	3	1	5	2	5	5	

		χ^2 = 22.52				df = 21		< 32.671 (0.05)			
9	Professional Development	Always	67	29	12	19	28	18	15	15
		Mostly	77	32	16	5	27	15	6	15
		Sometimes	26	9	10	5	24	7	8	9
		Never	0	0	2	1	1	0	1	1
		χ^2 = 36.82				df = 21		> 32.671 (0.05)		
10	Balance of Lifestyle	Always	33	22	7	13	21	2	12	8
		Mostly	70	23	18	8	24	16	3	13
		Sometimes	61	21	12	6	30	20	15	13
		Never	6	4	3	3	5	2	0	6
		χ^2 = 45.93				df = 21		> 38.932 (0.01)		
11	Conducting Discussions	Always	39	15	6	12	23	10	12	15
		Mostly	69	27	15	12	25	19	5	7
		Sometimes	57	25	15	5	31	11	13	16
		Never	5	3	4	1	1	0	0	2
		χ^2 = 34.5				df = 21		> 32.671 (0.05)		
12	Presentation of Concepts	Always	39	17	7	11	24	9	8	12
		Mostly	67	25	11	10	30	20	10	13
		Sometimes	60	21	21	8	25	11	10	13
		Never	4	7	1	1	1	0	2	2
		χ^2 = 25.75				df = 21		< 32.671 (0.05)		
13	Enrichment of Content Knowledge	Always	50	16	9	14	25	14	5	12
		Mostly	67	29	18	5	33	14	12	10
		Sometimes	46	21	12	10	22	11	8	15
		Never	7	4	1	1	0	1	5	3
		χ^2 = 30.84				df = 21		< 32.671 (0.05)		
14	Assessment and Evaluation	Always	50	23	8	13	32	6	13	15
		Mostly	82	31	13	11	23	21	5	15
		Sometimes	38	16	14	5	25	13	9	9
		Never	0	0	5	1	0	0	3	1

		χ^2 = 66.65				df = 21		> 38.932 (0.01)		
15	Identification of student weakness	Always	54	21	4	12	26	9	10	15
		Mostly	72	28	15	10	23	12	5	15
		Sometimes	41	18	17	7	28	18	14	9
		Never	3	3	4	1	3	1	1	1
		χ^2 = 34				df = 21		> 32.671 (0.05)		

A careful examination of table 4.7 enlightens us with the following insights into the district-wise comparision of the perceptions of trainee teachers on the effect and utility of the RMSA in-service training for secondary school teachers:

Mastery of Subject Content: The calculated value of χ^2 is observed to be less than the critical value of 32.671 at 0.05 level of significance so it is inferred that there is no significant difference between the various districts regarding mastery of subject content.

Proficiency in Teaching Skills: In the matter of the utility of the training programmes in helping teachers achieve proficiency in teaching skills, the calculate value of χ^2 is observed to be greater than the critical value of 38.932 at 0.01 level of significance. Hence, it can safely be concluded that there is indeed a significant difference between the various districts regarding proficiency in teaching skills.

Classroom Management: Regarding the utility of the training programmes in helping teachers manage difficult classroom situations, the calculated value of χ^2 is seen to be greater than the critical value of 38.932 at 0.01 level of significance. Therefore, it may be concluded that there is indeed a significant difference between the various districts regarding classroom management.

Variety of Learning Experience: The calculated value of χ^2 is greater than the critical value of 38.932 at 0.01 level of significance. Therefore, it is inferred that there is indeed a significant difference between the various districts regarding the utility of the training programmes in helping teachers introduce variety into their classrooms.

Use of Non-conventional Resources: For ascertaining the utility of the training programme in helping teachers make use of non-conventional resources, the value of χ^2 calculated was found to be greater than the critical value of 32.671 at 0.05 level of significance but less than was 38.932 at 0.01 level of significance. Therefore, it can be concluded with 95% confidence that there is a significant difference between the various districts in this matter.

Management of Working Relationships: As for the utility of the training programme in helping teachers manage their working relationships, the calculated value of χ^2 was observed to be less than the critical value of 32.671 at 0.05 level of significance. Hence it is concluded that there is no significant difference between the different districts.

Mobilisation of Community Resources: In the matter of the use of the training programmes in helping teachers mobilise community resources, the calculated value of χ^2 was observed to be less than the critical value of 32.671 at 0.05 level of significance. Hence it is concluded that there is no significant difference between the different districts in this regard.

Developing Parent-Teacher Relationships: In the case of developing parent-teacher relationships, the calculated value of χ^2 was observed to be less than the critical value of 32.671 at 0.05 level of significance. Hence it is concluded that there is no significant difference between the different districts in this regard.

Professional Development: For determining the value of the training programme in the professional development of teachers, the value of χ^2 calculated was found to be greater than the critical value of 32.671 at 0.05 level of significance but less than was 38.932 at 0.01 level of significance. Therefore, it can be concluded with 95% confidence that there is a significant difference between the various districts in this matter.

Lifestyle Balance: In the matter of the utility of the training programmes in helping teachers achieve balance between the various areas of their lives, the calculate value of χ^2 is observed to be greater than the critical value of 38.932 at 0.01

level of significance. Hence, it can safely be concluded that there is indeed a significant difference between the various districts regarding lifestyle balance.

Conducting Discussions: For evaluating the value of the training programme in helping teachers to conduct meaningful discussions, the value of χ^2 calculated was found to be greater than the critical value of 32.671 at 0.05 level of significance but less than was 38.932 at 0.01 level of significance. Therefore, it can be concluded with 95% confidence that there is a significant difference between the various districts concerning this aspect.

Presentation of Concepts: In the matter of the utility of the training programme in helping teachers to improve their presentation of learning concepts, the calculated value of χ^2 was observed to be less than the critical value of 32.671 at 0.05 level of significance. Hence it is concluded that there is no significant difference between the different districts.

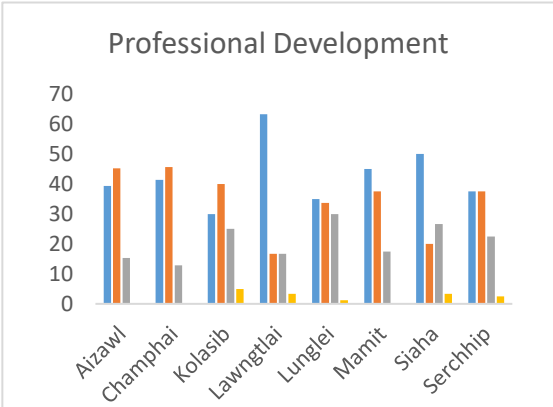
Enrichment of Content Knowledge: The calculated value of χ^2 is observed to be less than the critical value of 32.671 at 0.05 level of significance so it is inferred that there is no significant difference between the various districts regarding enrichment of content knowledge.

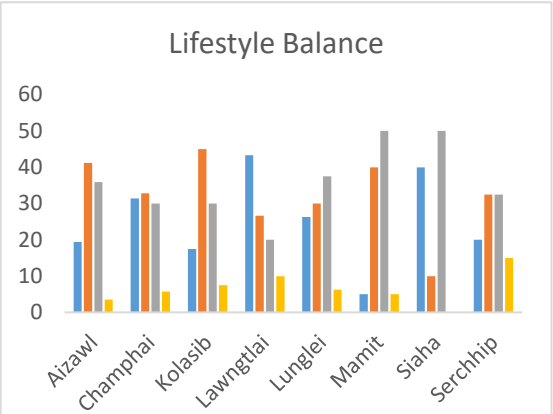
Assessment and Evaluation: Regarding the utility of the training programmes in helping teachers in better assessing and evaluating their students, the calculated value of χ^2 is seen to be greater than the critical value of 38.932 at 0.01 level of significance. Therefore, it may be concluded that there is indeed a significant difference between the various districts regarding assessment and evaluation.

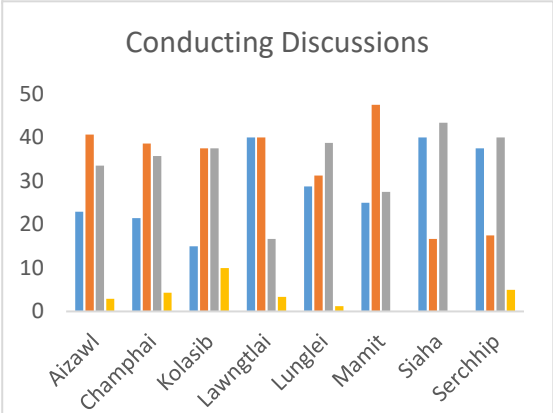
Identification of Student Weaknesses: For evaluating the utility of the training programme in helping teachers to identify student weaknesses, the value of χ^2 calculated was found to be greater than the critical value of 32.671 at 0.05 level of significance but less than was 38.932 at 0.01 level of significance. Therefore, it can be concluded with 95% confidence that there is a significant difference between the various districts.

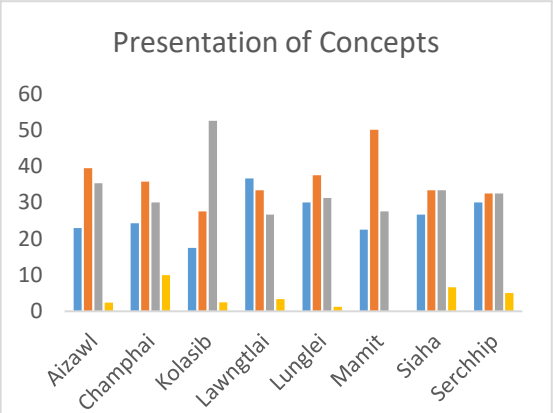
Figure 4.9

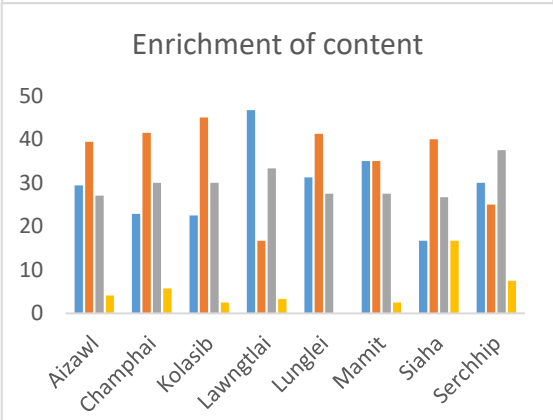
District-wise Comparision of Teacher Perceptions on Utility of Training Programmes

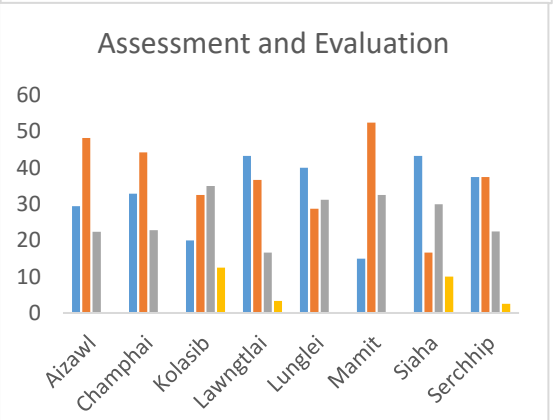

Professional Development
70
60
50
40
30
20
10
0
Aizawl
Champhai
Kolasib
Lawngtlai
Lunglei
Mamit
Siaha
Serchhip

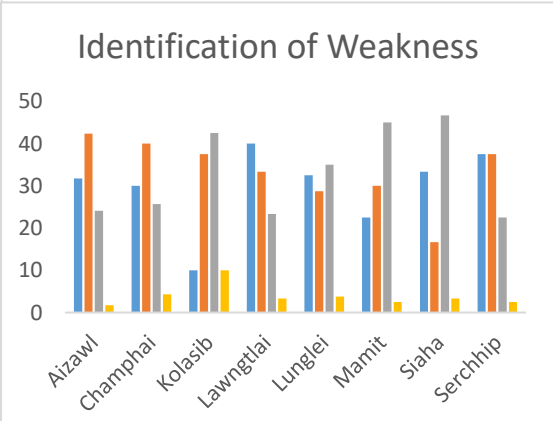

Lifestyle Balance
60
50
40
30
20
10
0
Aizawl
Champhai
Kolasib
Lawngtlai
Lunglei
Mamit
Siaha
Serchhip


Conducting Discussions
50
40
30
20
10
0
Aizawl
Champhai
Kolasib
Lawngtlai
Lunglei
Mamit
Siaha
Serchhip


Presentation of Concepts
60
50
40
30
20
10
0
Aizawl
Champhai
Kolasib
Lawngtlai
Lunglei
Mamit
Siaha
Serchhip


Enrichment of content
50
40
30
20
10
0
Aizawl
Champhai
Kolasib
Lawngtlai
Lunglei
Mamit
Siaha
Serchhip


Assessment and Evaluation
60
50
40
30
20
10
0
Aizawl
Champhai
Kolasib
Lawngtlai
Lunglei
Mamit
Siaha
Serchhip


Identification of Weakness
50
40
30
20
10
0
Aizawl
Champhai
Kolasib
Lawngtlai
Lunglei
Mamit
Siaha
Serchhip

A careful examination of figure 4.10 enlightens us with the following insights into the district-wise comparision of the perceptions of trainee teachers on the effect and utility of the RMSA in-service training for secondary school teachers:

The trainees from six of the eight districts had expressed relatively uniform opinions about the programmes' utility in mastery of subject content

The trainees from five of the eight districts had enunciated relatively similar opinions about the utility of the training programme in achieving proficiency in teaching skills. The opinions of the trainees from Kolasib district had however, lagged that of the other districts. On the contrary, teachers from Mamit and Lawngtlai district had positive opinions exceeding that of teachers from other districts in this regard.

In the matter of the programmes' utility in helping teachers manage difficult classroom situations, trainees from Kolasib and Mamit districts had pronounced opinions lower than their counterparts from other districts while trainees from Siaha district had expresses opinions higher than others. The trainees from the other five districts had relatively uniform opinions about the utility of the training programme in classroom management.

Regarding the training programmes utility in helping teachers introduce variety into their classrooms, the trainees from Kolasib district had expressed opinions relatively lower that the other districts while the teachers from Siaha and Lawngtlai had expressed their relatively higher opinions about the above mention aspect. All the other districts have expressed relatively similar opinions regarding the matter.

Trainees from the eight districts had highlighted varying opinions about the utility of the training programme in making use of non-conventional resources. Most markedly, trainees from Mamit district had expressed lowest opinions regarding the matter; whereas opinions of trainees from Serchhip and Lawngtlai districts had exceeded that of the other districts regarding the same.

The trainees from seven districts had conveyed relatively similar opinions about the utility of the training programme in the management of working relationships.

The trainees from seven districts had expressed very similar opinions about the utility of the training programme in the mobilisation of community resources.

The trainees from six of the eight districts had asserted relatively uniform opinions about the utility of the in-service training programmes' utility in maintaining parent-teacher relationships.

The trainees from five of the eight districts had disclosed relatively uniform opinions about the utility of the training programmes for their professional development. However, trainees from Kolasib district had expressed opinions lower than the other districts; and trainees from Siaha and Lawngtlai districts had conveyed opinions exceeding that of the other districts.

Trainees from six districts had declared relatively uniform opinions about the utility of the in-service training programmes for secondary teachers in maintaining a balance between the various spheres of their lives such as personal, social, work, etc. However, trainees from Mamit district had agreed the least; while trainees from Siaha and Lawngtlai districts had voiced opinions more positive than other districts.

The opinions of the trainees from seven districts about the utility of the training programme in conducting meaningful discussions were seen to be relatively uniform with the exception of Kolasib district where the trainees had expressed opinions lower than the rest of the state.

The trainees from six of the eight districts had indicated relatively uniform opinions about the utility of training programmes in the better presentation of concepts.

Regarding the utility of training programmes in enrichment of content knowledge, the trainees from six of the eight districts had divulged relatively uniform opinions.

With the exception of Mamit and Kolasib districts, whose trainees had expressed opinions lower than the other districts, the trainees of the other six districts had felt that the in-service training programme was helpful in assessment and evaluation and had stated opinions that were relatively uniform.

The trainees from six districts had declared relatively similar opinions about the utility of the training programme in identification of student weaknesses with the exception of Kolasib and Mamit districts where the trainees had revealed opinions lower than the rest of the state.

A cursory glance at table 4.6 also reveals the following features of the individual districts:

- The trainees from **Lawngtlai and Siaha District** had expressed very opinions higher than the rest of the districts in most areas concerning the effect and utility of the training programmes.
- The opinions of trainees from **Kolasib and Mamit District** had been observed to be lower than the rest of the state in some dimensions.

4.7.2 To compare the various districts in terms of capabilities of resource persons.

Table 4.8

District-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons

Sl no	Item	Perception/ Opinion	Aizawl	Champhai	Kolasib	Lawngtlai	Lunglei	Mamit	Siaha	Serchhip
1	Academic Qualification	Always	79	13	18	16	37	18	11	21
		Mostly	74	37	14	7	26	12	11	9
		Sometimes	16	17	6	6	15	10	7	8
		Never	1	3	2	1	2	0	1	2
		χ^2 = 41.07				df = 21		> 38.932 (0.01)		
2	Adequate Experience	Always	64	13	16	13	32	8	11	17
		Mostly	81	34	13	8	29	16	14	10
		Sometimes	20	20	9	8	15	15	4	8
		Never	5	3	2	1	4	1	1	5
		χ^2 = 42.19				df = 21		> 38.932 (0.01)		
3	Realistic Experience	Always	43	13	9	9	21	9	8	15
		Mostly	75	19	11	13	28	13	14	9
		Sometimes	43	31	19	7	29	15	7	11

		Never	9	7	1	1	2	3	1	5
		χ^2 = 32.45				df = 21		< 32.671 (0.05)		
4	ICT Skills	Always	52	13	7	11	26	15	12	16
		Mostly	70	28	16	11	31	11	9	12
		Sometimes	41	25	15	7	21	13	9	10
		Never	7	4	2	1	2	1	0	2
		χ^2 = 18.79				df = 21		< 32.671 (0.05)		
5	Open-mindedness and Empathy	Always	64	20	16	17	40	18	16	17
		Mostly	83	28	14	7	32	14	11	18
		Sometimes	18	20	7	5	7	7	3	4
		Never	5	2	3	1	1	1	0	1
		χ^2 = 33.18				df = 21		> 32.671 (0.05)		
6	Pedagogic Skills	Always	57	13	8	13	27	10	9	20
		Mostly	81	29	20	9	34	23	14	10
		Sometimes	28	27	10	7	18	7	6	8
		Never	4	1	2	1	1	0	1	2
		χ^2 = 35.16				df = 21		> 32.671 (0.05)		
7	Adequate Preparation	Always	63	21	10	11	33	9	14	16
		Mostly	79	26	25	12	31	21	13	13
		Sometimes	27	23	4	6	13	9	2	10
		Never	1	0	1	1	2	1	1	1
		χ^2 = 30.31				df = 21		< 32.671 (0.05)		

A detailed study of table 4.8 reveals to us the following insights

Academic Qualification: Regarding the academic qualifications of the resource persons, the calculated value of χ^2 is seen to be greater than the critical value of 38.932 at 0.01 level of significance. Therefore, it may be concluded that there is indeed a significant difference between the various districts regarding academic qualification of resource persons.

Adequacy of Experience: In the matter of the adequacy of the experience of the resource persons, the calculated value of χ^2 is seen to be greater than the critical value of 38.932 at 0.01 level of significance. Therefore, it may be concluded that there is indeed a significant difference between the various districts regarding adequacy of the experience of the resource persons.

Realistic Experience: In order to ascertain if the resource persons were in touch with the ground realities of secondary education, the calculated value of χ^2 was observed to be less than the critical value of 32.671 at 0.05 level of significance. Hence, it is concluded that there is no significant difference between the different districts in this regard.

ICT Skills: In the process of determining the ICT Skills of the resource persons, the calculated value of χ^2 was observed to be less than the critical value of 32.671 at 0.05 level of significance. Hence, it is concluded that there is no significant difference between the different districts in this matter.

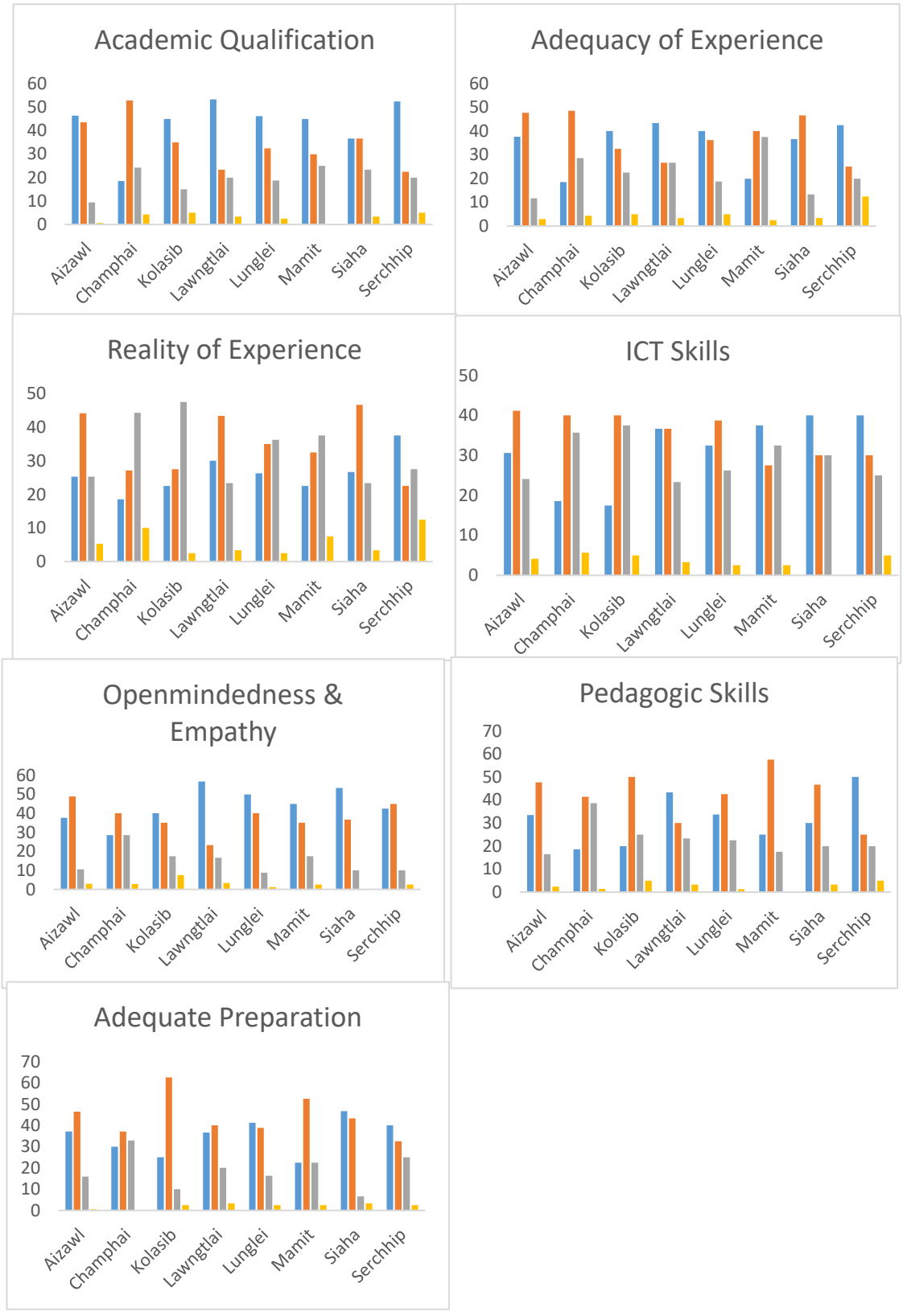
Open-mindedness and Empathy: While assessing the open-mindedness and empathy of the resource persons, the value of χ^2 calculated was found to be greater than the critical value of 32.671 at 0.05 level of significance but less than was 38.932 at 0.01 level of significance. Therefore, it can be concluded that there is a significant difference between the various districts concerning this aspect.

Pedagogic Skills: Regarding the pedagogic skills of the resource persons, the value of χ^2 calculated was found to be greater than the critical value of 32.671 at 0.05 level of significance but less than was 38.932 at 0.01 level of significance. Therefore, it can be concluded that there is a significant difference between the various districts concerning this aspect.

Adequacy of Preparation: In the matter of the preparedness of the resource persons, the calculated value of χ^2 was observed to be less than the critical value of 32.671 at 0.05 level of significance. Hence it is concluded that there is no significant difference between the different districts in this regard

Figure 4.10

District-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons



A study of figure 4.10 reveals to us the following insights into the district-wise comparision of the perceptions of trainees on the capabilities of the resource persons:

- The trainees from seven districts had expressed relatively similar opinions about the academic qualifications of resource persons; with the exception of those from Champhai district whose opinions about the academic qualifications of the resources were significantly lower than the rest of the state.
- The trainees from six districts had conveyed remarkably similar opinions about adequacy of experience of resource persons. However, the opinions of trainees from Champhai and Mamit districts had voiced opinions lower than the other districts.
- The trainees from seven districts had divulged relatively uniform opinions about the resource persons that they were in touch with the ground realities of secondary education.
- Regarding the matter of the ICT Skills of the resource persons, the trainees from six districts had revealed relatively uniform opinions.
- The trainees from five districts had communicated relatively similar opinions about the open-mindedness and empathy level of the resource persons. However, trainees from Champhai district had digressed and revealed opinions lower than the rest of the state; whereas the opinions of trainees from Siaha and Lawngtlai districts had exceeded the other districts.
- Trainees from six districts had shared similar opinions about the pedagogic skills of the resource persons while trainees from Serchhip and Lawngtlai had exhibited opinions relatively higher than the other districts.
- The trainees from all the eight districts had professed relatively uniform opinions about the adequacy of the preparation of the resource persons for the training programmes.

It can therefore be concluded from the analysis of table 4.8 and figure 4.10 that:

- Trainees from Serchhip and Lawngtlai Districts had expressed the most positive opinions about the capabilities of the resource persons
- Trainees from Champhai have divulged the least positive opinions about the capabilities of the resource persons.

4.7.3 To compare the various districts in terms of problems encountered by the trainees.

Table 4.9

District-wise Comparision of Teacher Perceptions on Problems Encountered

Sl no	Item	Perception/ Opinion	Aizawl	Champhai	Kolasib	Lawngtlai	Lunglei	Mamit	Siaha	Serchhip
1	Transportation Problems	Always	34	11	10	8	18	14	7	4
		Mostly	26	14	6	3	18	13	3	7
		Sometimes	62	27	13	15	22	7	12	7
		Never	48	18	11	4	22	6	8	22
			χ^2 = 42.96			df = 21		> 38.932 (0.01)		
2	Accommodation Problems	Always	10	8	8	3	12	7	2	5
		Mostly	9	10	2	5	10	9	3	1
		Sometimes	41	18	9	12	22	13	12	4
		Never	110	34	21	10	36	11	13	30
			χ^2 = 53.45			df = 21		> 38.932 (0.01)		
3	Language Problems	Always	12	1	0	0	8	7	4	1
		Mostly	14	7	3	4	6	5	4	2
		Sometimes	32	8	5	5	15	7	3	1
		Never	112	54	32	21	51	21	19	36
			χ^2 = 36.32			df = 21		> 32.671 (0.05)		
4	Lack of Support Materials	Always	9	3	2	4	2	4	6	2
		Mostly	17	3	4	3	4	9	8	3
		Sometimes	51	14	13	13	37	12	13	5
		Never	93	50	21	10	37	15	3	30
			χ^2 = 73.04			df = 21		> 38.932 (0.01)		
5	Mistr eatme	Always	0	1	1	2	5	2	4	0
		Mostly	4	4	2	0	6	3	0	1

		Sometimes	14	3	4	2	8	6	5	3
		Never	152	62	33	26	61	29	21	36
		χ^2 = 39.04				df = 21		> 38.932 (0.01)		
6	Resistance from School	Always	2	0	2	0	3	1	4	1
		Mostly	14	1	2	4	4	3	0	2
		Sometimes	18	6	5	1	9	6	7	1
		Never	136	63	31	25	64	30	19	36
		χ^2 = 39.55				df = 21		> 38.932 (0.01)		
7	Lack of Infrastructure	Always	8	0	1	2	9	6	8	2
		Mostly	14	10	9	2	12	8	9	4
		Sometimes	64	25	18	14	36	18	11	7
		Never	84	35	12	12	23	8	2	27
		χ^2 = 79.16				df = 21		> 38.932 (0.01)		
8	Programme Timing	Always	22	12	6	4	11	2	5	0
		Mostly	42	8	7	10	18	11	10	8
		Sometimes	60	29	23	14	45	24	10	15
		Never	46	21	4	2	6	3	5	17
		χ^2 = 58.65				df = 21		> 38.932 (0.01)		

A detailed examination of table 4.9 enlightens us with the problems encountered by the trainees in different districts as follows:

Transportation Problem: Regarding the problem of transportation, the calculated value of χ^2 was observed to be greater than the critical value of 38.932 at 0.01 level of significance. Hence, it may be concluded that there is a significant difference between the different districts in the problem of transportation.

Accommodation Problem: In the matter of accommodation, the calculated value of χ^2 was observed to be greater than the critical value of 38.932 at 0.01 level of significance. Hence, it may be concluded that there is a significant difference between the different districts in the problem of accommodation.

Language Problem: While assessing the language problems faced by the teachers, the value of χ^2 calculated was found to be greater than the critical value of 32.671 at 0.05 level of significance but less than was 38.932 at 0.01 level of significance. Therefore, it can be concluded that there is a significant difference between the various districts concerning this aspect.

Support Materials: In the matter of the adequacy of support materials, the calculated value of χ^2 is seen to be greater than the critical value of 38.932 at 0.01 level of significance. Therefore, it may be concluded that there is indeed a significant difference between the various districts regarding adequacy of support materials.

Mistreatment from Staff: With respect to the matter of mistreatment from administrative staff, the calculated value of χ^2 was observed to be greater than the critical value of 38.932 at 0.01 level of significance. Hence, it may be concluded that there is a significant difference between the different districts in the issue.

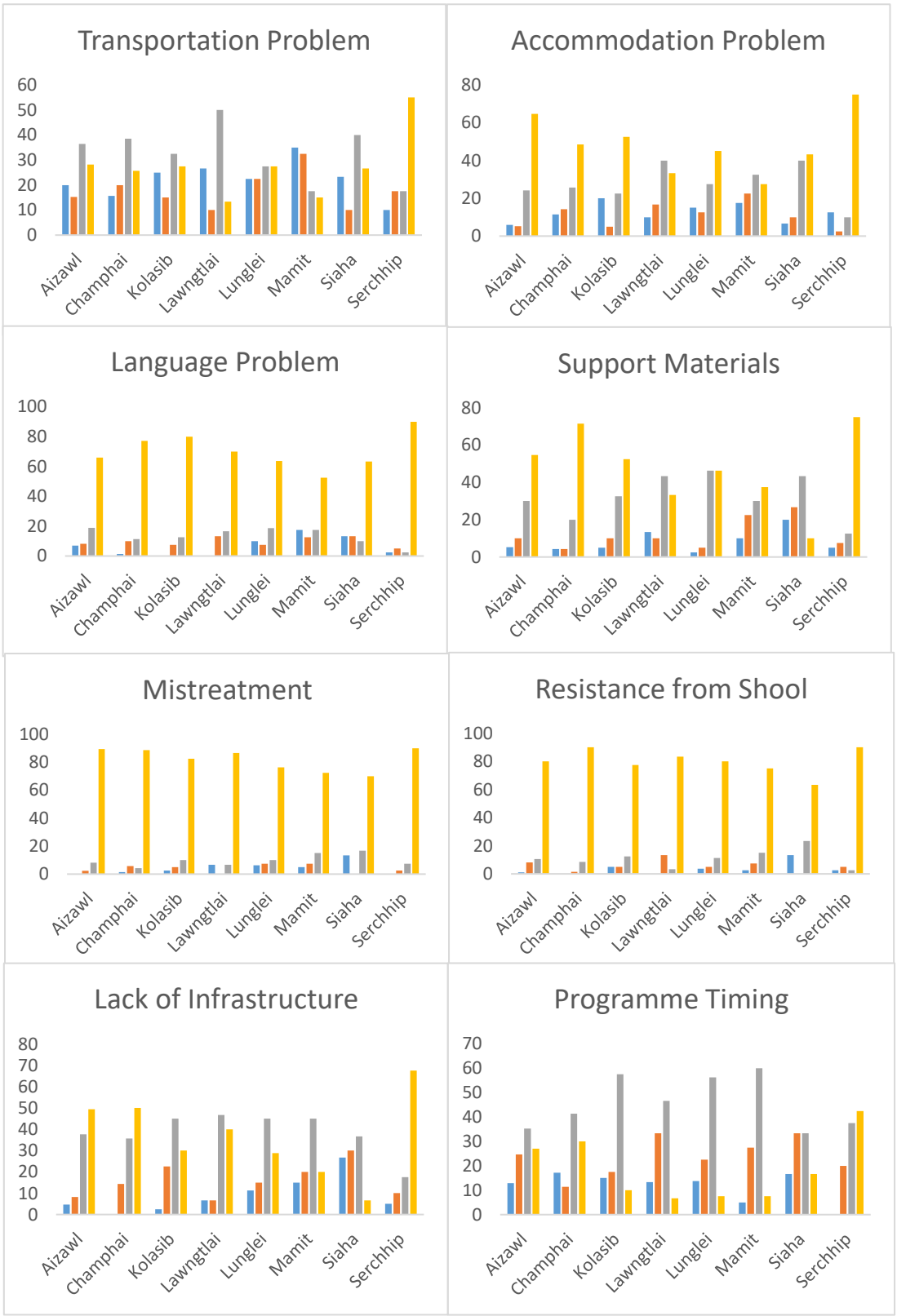
Resistance from Schools: Regarding the issue of resistance from schools, the calculated value of χ^2 was observed to be greater than the critical value of 38.932 at 0.01 level of significance. Hence, it may be concluded that there is a significant difference between the different districts in the matter at hand.

Lack of Infrastructure: In assessing the issue of adequacy of infrastructure, the calculated value of χ^2 was observed to be greater than the critical value of 38.932 at 0.01 level of significance. Hence, it may be concluded that there is a significant difference between the different districts in adequacy of infrastructure.

Timing of Programmes: In the matter of programme timing, the calculated value of χ^2 was observed to be greater than the critical value of 38.932 at 0.01 level of significance. Hence, it may be concluded that there is a significant difference between the different districts in the problem of timing.

Figure 4.11

District-wise Comparision of Teacher Perceptions on Problems Encountered



A detailed examination of figure 4.11 enlightens us with the problems encountered by the trainees in different districts as follows:

- Trainees from Mamit faced the most problems in transportation and those from Serchhip the least. The opinions of the teachers from rest of the state was relatively uniform.
- With regards to the problem of accommodation, trainees from Kolasib and Mamit had experienced the most problems while those from Aizawl and Siaha encountered the least; while the rest of the state had relatively uniform opinions.
- Trainees from Mamit and Siaha had professed to face the most problems in language while those from Lawngtlai and Kolasib opined that they were affronted with the least problems regarding language; while the other districts had fairly uniform opinions in the matter.
- A lack or inadequacy of support materials was most badly suffered by the trainees of Siaha, Lawngtlai and Mamit while the other districts did not complain as much.
- There was detected a very low incidence of mistreatment from administrative staff felt by the trainees all over the state except for the trainees from Siaha district complained slightly more than the other districts about mistreatment.
- Most of the trainees professed to experiencing very less resistance from school authorities or colleagues when attending training programmes except for Siaha district where the opinion levels are slightly higher than the rest of the state.
- Trainees from most districts did not endure a serious lack of infrastructure in the training centres. However, trainees from Siaha and Mamit districts have complained more vocally than the other districts regarding the matter.
- The opinions of trainees from most districts had been seen to concur with each other with the exception of trainees from Serchhip district whose opinions of the suitability of the timing of the training falls significantly below the rest of the state.

A study of table 4.9 and figure 4.11 also reveals the following opinions of the individual districts regarding the problems encountered by the trainees:

- The trainees from **Aizawl, Lunglei and Champhai Districts** had expressed very low incidences of problems encountered by them.
- The trainees from **Kolasib District** had complained of accommodation as a significant problem for them while those from **Serchhip District** had indicated in no uncertain terms the unsuitability of the timing of the programme and the trainees from **Lawngtlai** District complained of a lack of support materials.
- The trainees from **Siaha District** had complained of several problems including lack of infrastructure as well as support materials, resistance from schools and language problems.
- The trainees from **Mamit** District had also complained of several issues like transportation, accommodation and lack of infrastructure and support materials.

4.8 Objective No 7: To compare the perceptions of different teachers based on their gender, experience and subject taught.

Teachers are educated professionals and are very objective in their observations and thereby the opinions and beliefs formed thereafter. They have the necessary qualifications and experience to objectively pass judgement on any given topic that is related to their work and service.

However, different human beings respond to a particular situation in different ways depending upon their mental, social and cultural characteristics. And the in-service teacher training programmes may have different effects on different types of people. It is, therefore, important to ascertain the variations in the effects of the training programmes on different classes of teachers and to verify that it meets the needs of all the population that it was intended for. The following section compares the opinions of various categories of teachers that are classified based on:

1. Gender: The gender of a person could have significant bearing on the effect of the training programme as well as their perception on the different aspects of the training programme. Teachers are classified as - Male or Female

2. Teaching Experience: The teaching experience accrued over the years could also have a substantial effect on the effect of the training programme as well as the perception of the teachers who have been classified for the sake of simplicity into two categories – Junior Teacher (0 – 10 years) and Senior Teacher (10 years or more)

3. Teaching subject: The training programme could have differential effects on various teaching subjects. Teaching subjects are classified according to the normal school subjects – English, Mizo, Science, Social Science and Mathematics.

4.8.1 Comparision of the perceptions of different teachers based on their gender

4.8.1.1 Gender-wise comparision of the perceptions of teachers regarding the effect and utility of the training programmes.

Table 4.10

Gender-wise comparision of Teacher Perceptions on Utility of Training Programmes

Sl no	Item	Gender	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Subject Mastery	Male	101	134	103	12
		Female	46	49	50	5
		χ^2 = 1.548733		df = 3	< 7.815 (0.05)	
2	Proficiency in Teaching Skills	Male	115	117	107	11
		Female	44	61	44	1
		χ^2 = 4.69105		df = 3	< 7.815 (0.05)	
3	Classroom Management	Male	97	105	127	21
		Female	33	47	60	10
		χ^2 = 1.842672		df = 3	< 7.815 (0.05)	
4	Variety in Learning Experiences	Male	105	118	117	10
		Female	48	54	44	4
		χ^2 = 0.857208		df = 3	< 7.815 (0.05)	
5	Using Non-Conventional Resources	Male	73	100	157	20
		Female	27	57	59	7
		χ^2 = 4.3563		df = 3	< 7.815 (0.05)	

6	Management of Working Relationships	Male	121	138	75	16
		Female	47	56	37	10
		$\chi^2 = 1.82441$		df = 3	< 7.815 (0.05)	
7	Mobilisation of Community Resources	Male	85	88	150	27
		Female	29	48	61	12
		$\chi^2 = 3.074992$		df = 3	< 7.815 (0.05)	
8	Development of Parent-Teacher Relationship	Male	81	117	129	23
		Female	34	52	53	11
		$\chi^2 = 0.214588$		df = 3	< 7.815 (0.05)	
9	Professional Development	Male	146	133	67	4
		Female	56	60	32	2
		$\chi^2 = 0.893825$		df = 3	< 7.815 (0.05)	
10	Balance of Lifestyle	Male	80	120	128	22
		Female	35	52	56	7
		$\chi^2 = 0.505893$		df = 3	< 7.815 (0.05)	
11	Conducting Discussions	Male	96	119	126	9
		Female	34	63	47	6
		$\chi^2 = 4.137077$		df = 3	< 7.815 (0.05)	
12	Presentation of Concepts	Male	86	130	121	13
		Female	40	56	50	4
		$\chi^2 = 0.569939$		df = 3	< 7.815 (0.05)	
13	Enrichment of Content	Male	95	126	115	14

	Knowledge	Female	49	59	33	9
		χ^2 = 6.52226		df = 3	< 7.815 (0.05)	
14	Assessment and Evaluation	Male	116	132	96	6
		Female	42	64	35	9
		χ^2 = 8.636482		df = 3	> 7.815 (0.05)	
15	Identification of Student Weaknesses	Male	101	134	103	12
		Female	46	49	50	5
		χ^2 = 1.548733		df = 3	< 7.815 (0.05)	

A thorough study of table 4.7 enlightens us with the following observations into the gender-wise comparision of the perceptions of trainee teachers on the effect and utility of the RMSA in-service training for secondary school teachers:

Mastery of Subject Content: In the issue of mastery of subject content, the calculated value of χ^2 is observed to be less than the critical value of 7.815 at 0.05 level of significance so it is inferred that there is no significant difference between male and female teachers regarding mastery of subject content.

Proficiency in Teaching Skills: In the matter of the utility of the training programmes in helping teachers achieve proficiency in teaching skills, the calculated value of χ^2 is observed to be less than the critical value of 7.815 at 0.05 level of significance. So, it is inferred that there is no significant difference between male and female teachers regarding proficiency in teaching skills.

Classroom Management: Regarding the utility of the training programmes in helping teachers manage difficult classroom situations, the calculated value of χ^2 is seen to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between male and female teachers regarding classroom management.

Variety of Learning Experience: As for the question of the utility of the programmes in helping teachers introduce variety into their teaching, the calculated value of χ^2 is less than the critical value of 7.815 at 0.05 level of significance. Therefore, it is inferred that there is no significant difference between male and female teachers regarding the utility of the training programmes in helping teachers introduce variety into their classrooms.

Use of Non-conventional Resources: For ascertaining the utility of the training programme in helping teachers make use of non-conventional resources, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it can be concluded with that there is no significant difference between male and female teachers in this matter.

Management of Working Relationships: As for the utility of the training programme in helping teachers manage their working relationships, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between male and female teachers.

Mobilisation of Community Resources: In the matter of the use of the training programmes in helping teachers mobilise community resources, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between male and female teachers in this regard.

Developing Parent-Teacher Relationships: In the case of the development of parent-teacher relationships, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference male and female teachers in this regard.

Professional Development: For determining the value of the training programme in the professional development of teachers, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it can be concluded that there is no significant difference between male and female teachers in this matter.

Lifestyle Balance: In the matter of the utility of the training programmes in helping teachers achieve balance between the various areas of their lives, the calculated value of χ^2 is observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it can safely be concluded that there is no significant difference between male and female teachers regarding lifestyle balance.

Conducting Discussions: For evaluating the value of the training programme in helping teachers to conduct meaningful lessons, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it can be concluded that there is no significant difference between male and female teachers concerning this aspect.

Presentation of Concepts: In the matter of the utility of the training programme in helping teachers to improve their presentation of learning concepts, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between male and female teachers.

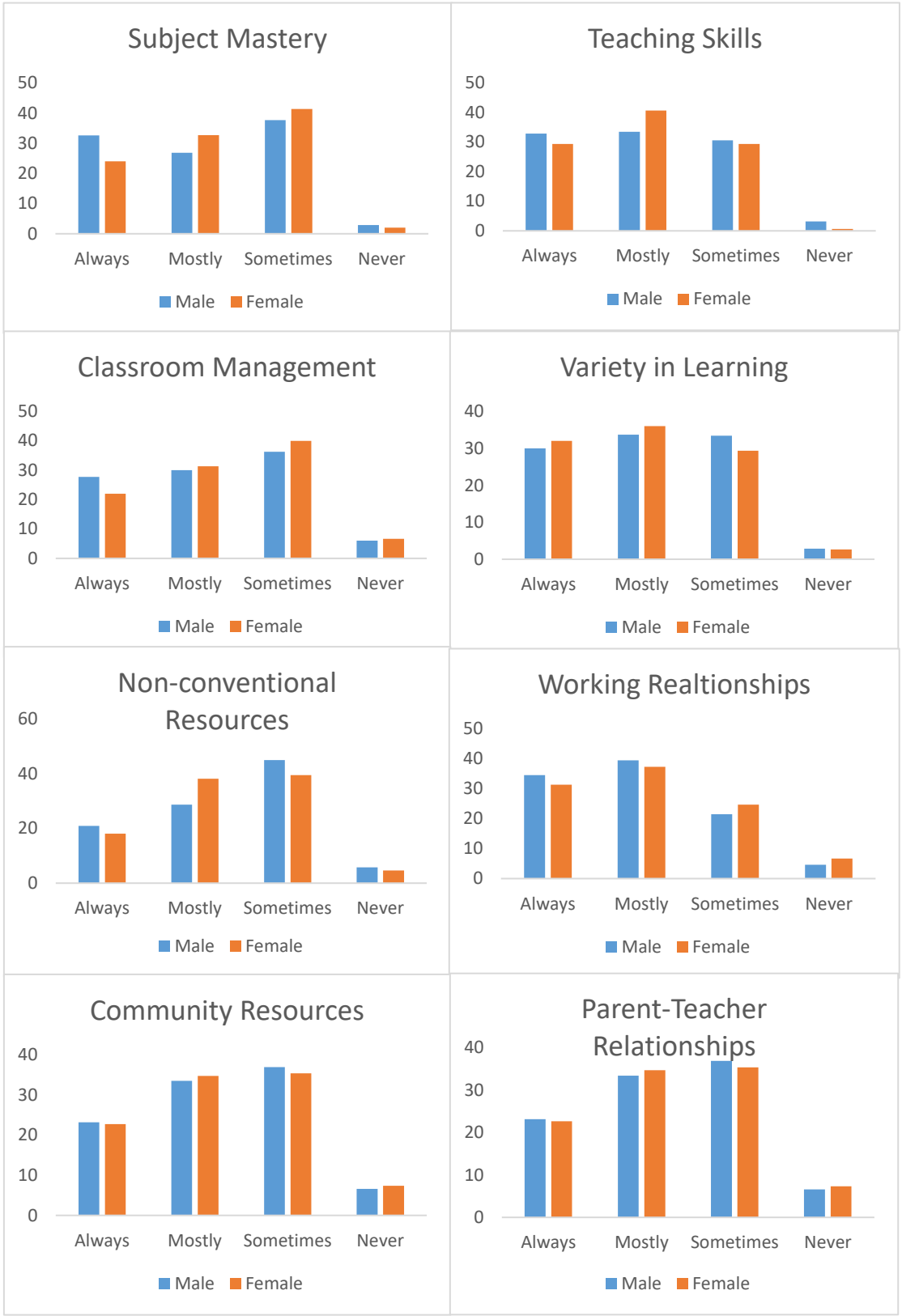
Enrichment of Content Knowledge: Regarding enrichment of content knowledge, the calculated value of χ^2 is observed to be less than the critical value of 7.815 at 0.05 level of significance so it is inferred that there is no significant difference between male and female teachers regarding enrichment of content knowledge.

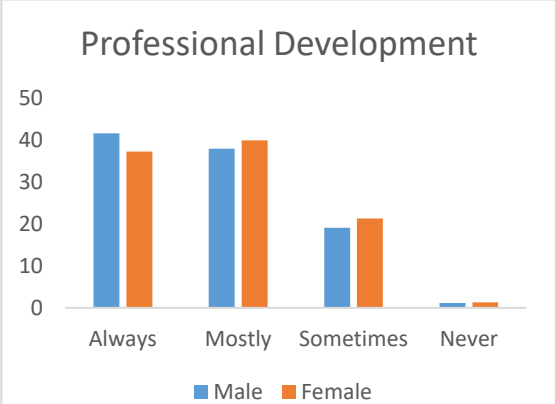
Assessment and Evaluation: For evaluating the utility of the training programme in helping teachers in better assessing and evaluating their students, the value of χ^2 calculated was found to be greater than the critical value of 7.815 at 0.05 level of significance but less than was 11.345 at 0.01 level of significance. Therefore, it can be concluded with 95% confidence that there is a significant difference between male and female teachers.

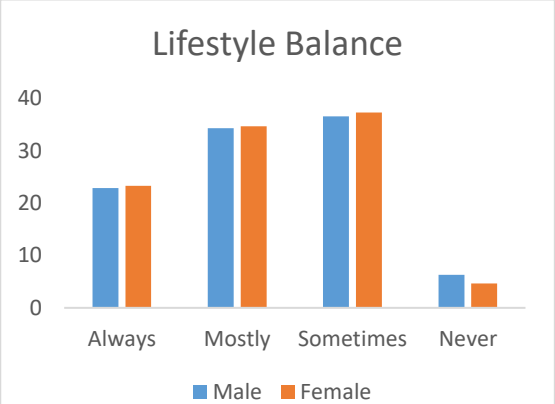
Identification of Student Weaknesses: Regarding the utility of the training programmes in helping teachers to identify student weaknesses, the calculated value of χ^2 is seen to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between male and female teachers.

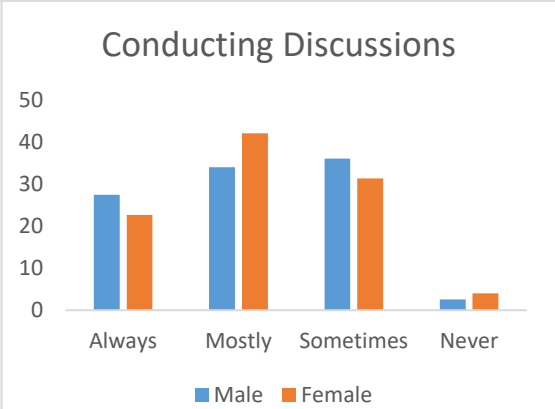
Figure 4.12

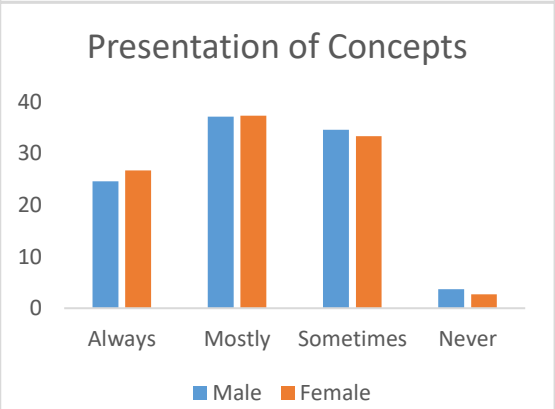
Gender-wise comparision of Teacher Perceptions on Utility of Training Programmes

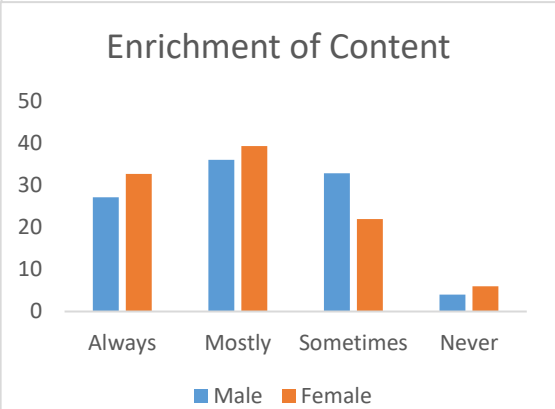


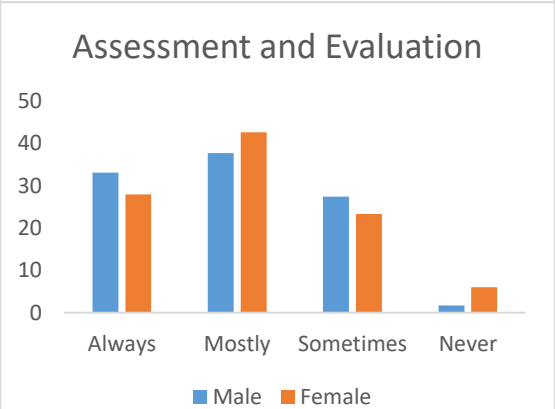

Professional Development
50
40
30
20
10
0
Always
Mostly
Sometimes
Never
Male
Female

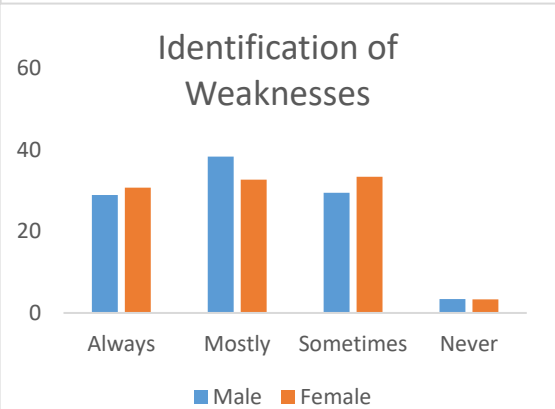

Lifestyle Balance
40
30
20
10
0
Always
Mostly
Sometimes
Never
Male
Female


Conducting Discussions
50
40
30
20
10
0
Always
Mostly
Sometimes
Never
Male
Female


Presentation of Concepts
40
30
20
10
0
Always
Mostly
Sometimes
Never
Male
Female


Enrichment of Content
50
40
30
20
10
0
Always
Mostly
Sometimes
Never
Male
Female


Assessment and Evaluation
50
40
30
20
10
0
Always
Mostly
Sometimes
Never
Male
Female


Identification of Weaknesses
60
40
20
0
Always
Mostly
Sometimes
Never
Male
Female

A careful perusal of figure 4.12 reveals that the gender-wise comparision of the utility of the training programmes has shown no significant differences between the perceptions of male and female teachers in the various component of the utility of the training programmes with the exception of the programmes' utility in assessment and evaluation of the students where the opinion of male teachers is relatively higher than that of the female teachers.

4.8.1.2 Gender-wise comparision of the perceptions of teachers regarding the capabilities of resource person.

Table 4.11

Gender-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons

Sl no	Item	Gender	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Academic Qualification	Male	139	136	69	6
		Female	76	49	20	5
		χ^2 = 7.669543		df = 3	< 7.815 (0.05)	
2	Adequate Experience	Male	110	148	78	14
		Female	62	56	23	9
		χ^2 = 7.051186		df = 3	< 7.815 (0.05)	
3	Realistic Experience	Male	81	124	122	23
		Female	44	59	36	11
		χ^2 = 6.053396		df = 3	< 7.815 (0.05)	
4	ICT Skills	Male	96	126	117	11
		Female	54	57	31	8
		χ^2 = 9.789346		df = 3	> 7.815 (0.05)	

5	Open-mindedness and Empathy	Male	146	143	55	6
		Female	60	65	17	8
		χ^2 = 6.540693		df = 3	< 7.815 (0.05)	
6	Pedagogic Skills	Male	110	148	85	7
		Female	49	71	24	6
		χ^2 = 5.583468		df = 3	< 7.815 (0.05)	
7	Adequate Preparation	Male	118	154	73	5
		Female	60	65	21	4
		χ^2 = 4.696303		df = 3	< 7.815 (0.05)	

A careful study of table 4.11 reveals to us the following insights into the gender-wise comparision of the perceptions of trainee teachers on the capabilities of the resource persons:

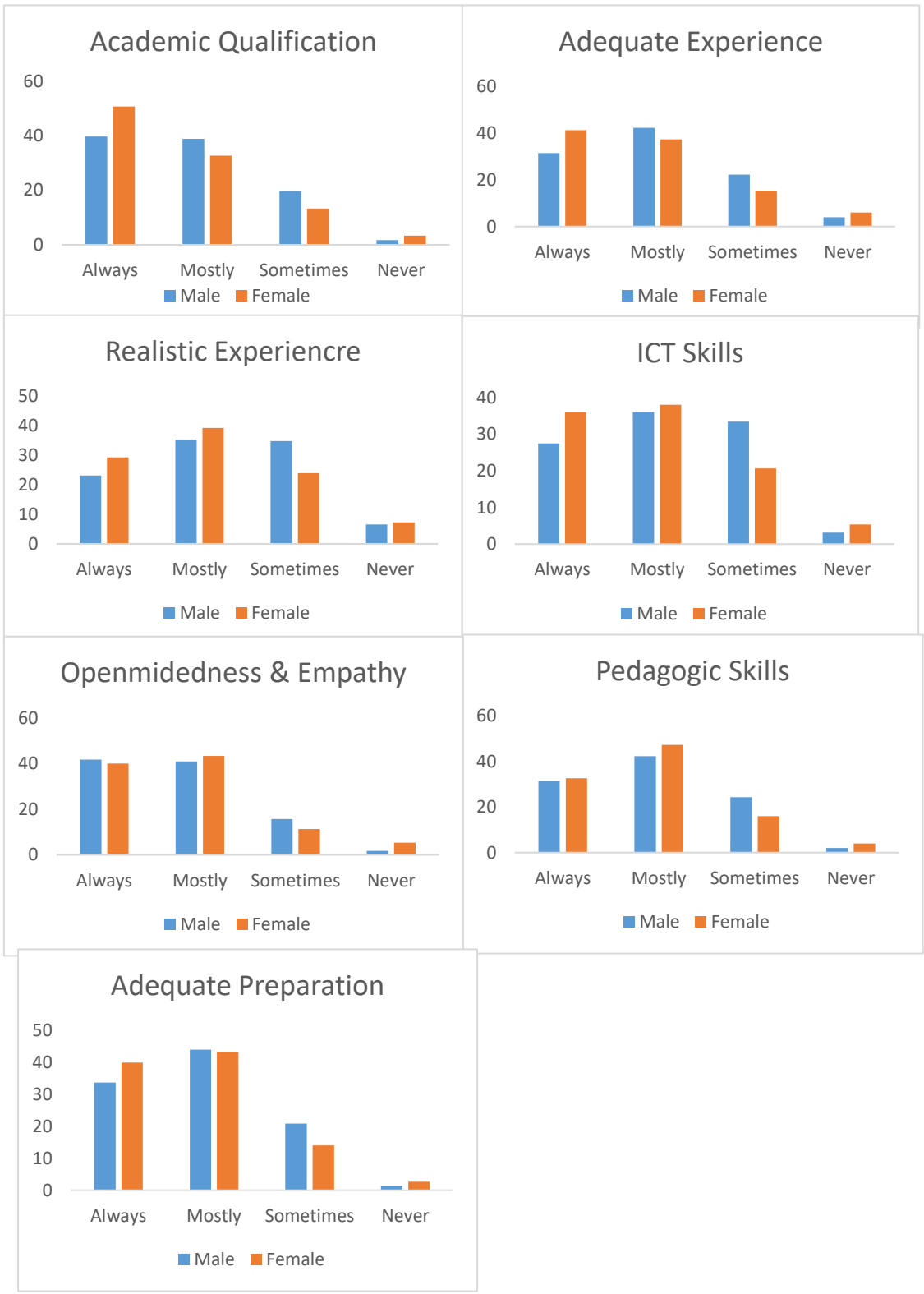
1. **Academic Qualification**: Regarding the academic qualification of the resource persons, the calculated value of χ^2 is seen to be the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between male and female teachers regarding academic qualification of resource persons.
2. **Adequacy of Experience**: In the matter of the adequacy of the experience of the resource persons, the calculated value of χ^2 is seen to be the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between male and female teachers regarding adequacy of the experience of the resource persons.
3. **Realistic Experience**: In order to ascertain if the resource persons were in touch with the ground realities of secondary education, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it is concluded that there is no significant difference between male and female teachers in this regard.

4. **ICT Skills**: In the process of determining the ICT Skills of the resource persons, the value of χ^2 calculated was found to be greater than the critical value of 7.815 at 0.05 level of significance but less than was 11.345 at 0.01 level of significance. Therefore, it can be concluded that there is a significant difference between male and female teachers concerning this aspect.
5. **Open-mindedness and Empathy**: While assessing the open-mindedness and empathy of the resource persons, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between male and female teachers concerning this matter.
6. **Pedagogic Skills**: Regarding the pedagogic skills of the resource persons, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between male and female teachers concerning this aspect.
7. **Adequacy of Preparation**: In the matter of the preparedness of the resource persons, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between male and female teachers in this regard.

A careful study of figure 4.13 below informs us that there is very little difference between the perceptions and opinions of male and female teachers regarding the capabilities of the resource persons with the exception of their ICT skills where the female teachers had slightly higher opinions of the ICT skills of the resource persons as compared to their male counterparts.

Table 4.13

Gender-wise comparision of Teacher Perceptions on Capabilities of Resource Persons



4.8.1.3 Gender-wise comparision of the perceptions of teachers regarding problems encountered by them.

Table 4.12

Gender-wise comparision of Teacher Perceptions on Problems Encountered

Sl no	Item	Gender	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Transportation Problem	Male	75	79	106	90
		Female	33	13	54	50
		χ^2 = 14.2973		df = 3	> 7.815 (0.05)	
2	Accommodation Problem	Male	38	41	97	174
		Female	17	10	33	90
		χ^2 = 6.067005		df = 3	< 7.815 (0.05)	
3	Language Problem	Male	23	32	54	241
		Female	10	13	21	106
		χ^2 = 0.220295		df = 3	< 7.815 (0.05)	
4	Lack of Support Materials	Male	25	42	113	170
		Female	8	9	46	87
		χ^2 = 6.129368		df = 3	< 7.815 (0.05)	
5	Mistreatment form Staff	Male	14	15	35	286
		Female	2	4	11	133
		χ^2 = 4.474875		df = 3	< 7.815 (0.05)	
6	Resistance from School	Male	12	18	39	281
		Female	2	12	12	124
		χ^2 = 4.165123		df = 3	< 7.815 (0.05)	

7	Lack of Infrastructure	Male	32	56	131	131
		Female	6	13	65	66
		χ^2 = 9.830673		df = 3	> 7.815 (0.05)	
8	Programme Timings	Male	42	89	147	72
		Female	17	27	75	31
		χ^2 = 4.051061		df = 3	< 7.815 (0.05)	

A careful examination of table 4.9 enlightens us with the gender-wise comparision of the problems encountered by the trainees as follows:

1 **Transportation Problem**: Regarding the problem of transportation, the calculated value of χ^2 was observed to be greater than the critical value of 7.815 at 0.05 level of significance but less than 11.345 at 0.01 level. Hence, it may be concluded that there is a significant difference between male and female teachers concerning the problem of transportation.

2 **Accommodation Problem**: In the matter of accommodation, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference between male and female teachers in the problem of accommodation.

3 **Language Problem**: While assessing the language problems faced by the teachers, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between male and female teachers concerning this aspect.

4 **Support Materials**: In the matter of the adequacy of support materials, the calculated value of χ^2 is seen to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference between male and female teachers.

5 **Mistreatment from Staff**: Regarding mistreatment from administrative staff, the calculated value of χ^2 was observed to be less than the critical value of

7.815 at 0.05 level of significance. So, it may be concluded that there is no significant difference between male and female teachers in the issue.

6 **Resistance from Schools**: In the issue of resistance from schools, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference between male and female teachers in the matter at hand.

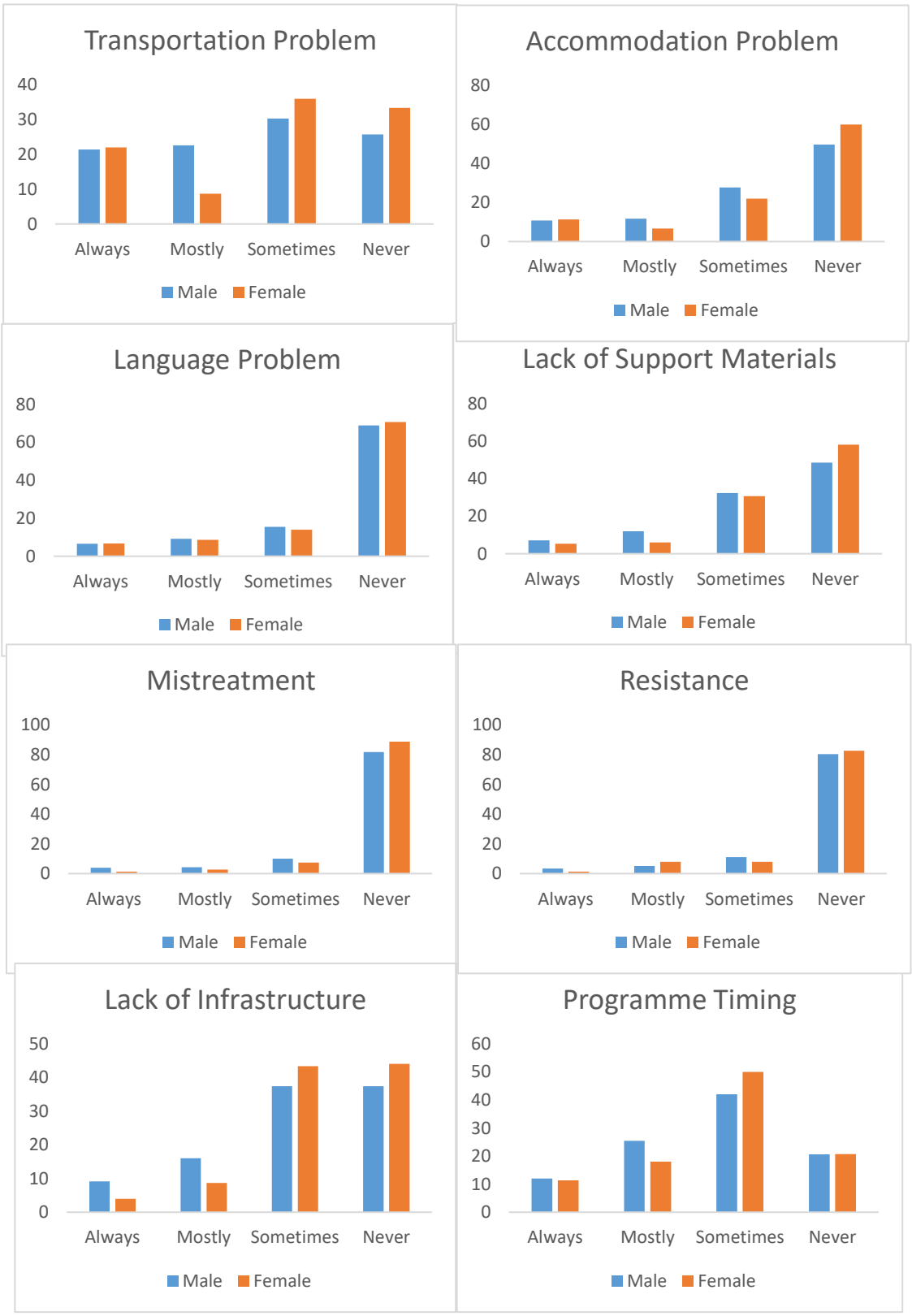
7 **Lack of Infrastructure**: Pertaining to adequacy of infrastructure, the calculated value of χ^2 was observed to be greater than the critical value of 7.815 at 0.05 level of significance. Hence, it is concluded that there is a significant difference between male and female teachers.

8 **Timing of Programmes**: As for programme timing, the value of χ^2 was seen to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between male and female teachers in the problem of timing.

A cursory glance at figure 4.13 below reveals to us that the differences between the problems encountered by male and female teachers are largely insignificant except in the area of transportation and availability of infrastructure where male teachers have complained of problems in this area more than the female teachers.

Figure 4.14

Gender-wise comparision of Teacher Perceptions on Problems Encountered



4.8.2 Comparision of the perceptions of teachers based on teaching experience

4.8.2.1 Comparision of the perceptions of teachers regarding the effect and utility of the training programmes based on their teaching experience.

Table 4.13

Experience-wise Comparision of Teacher Perceptions on Utility of Training Programmes

Sl no	Item	Junior / Senior	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Subject Mastery	Junior	74	75	96	5
		Senior	76	68	98	8
		χ^2 = 1.08225		df = 3	< 7.815 (0.05)	
2	Proficiency in Teaching Skills	Junior	84	100	63	3
		Senior	75	78	88	9
		χ^2 = 10.36761		df = 3	>7.815 (0.05)	
3	Classroom Management	Junior	63	86	90	11
		Senior	67	67	96	20
		χ^2 = 5.289006		df = 3	< 7.815 (0.05)	
4	Variety in Learning Experiences	Junior	77	93	75	5
		Senior	76	80	85	9
		χ^2 = 2.751272		df = 3	< 7.815 (0.05)	
5	Using Non-Conventional Resources	Junior	43	91	107	9
		Senior	57	65	110	18
		χ^2 = 9.334808		df = 3	> 7.815 (0.05)	
6	Management of Working	Junior	86	95	56	13

	Relationships	Senior	82	99	56	13
		χ^2 = 0.177712		df = 3	< 7.815 (0.05)	
7	Mobilisation of Community Resources	Junior	49	87	97	17
		Senior	65	49	114	22
		χ^2 = 14.87395		df = 3	> 11.345 (0.01)	
8	Development of Parent-Teacher Relationship	Junior	55	95	88	12
		Senior	60	74	94	22
		χ^2 = 5.965837		df = 3	< 7.815 (0.05)	
9	Professional Development	Junior	103	100	46	1
		Senior	99	93	53	5
		χ^2 = 3.49471		df = 3	< 7.815 (0.05)	
10	Balance of Lifestyle	Junior	54	91	92	13
		Senior	61	81	92	16
		χ^2 = 1.317827		df = 3	< 7.815 (0.05)	
11	Conducting Discussions	Junior	58	96	88	8
		Senior	72	86	85	7
		χ^2 = 2.175833		df = 3	< 7.815 (0.05)	
12	Presentation of Concepts	Junior	64	100	78	8
		Senior	62	86	93	9
		χ^2 = 2.460122		df = 3	< 7.815 (0.05)	
13	Enrichment of Content Knowledge	Junior	76	97	66	11
		Senior	68	88	82	12
		χ^2 = 2.65549		df = 3	< 7.815 (0.05)	
14	Assessment and Evaluation	Junior	75	105	64	6
		Senior	83	91	67	9

		χ^2 = 2.073766		df = 3	< 7.815 (0.05)	
15	Identification of Student Weaknesses	Junior	76	89	80	5
		Senior	71	94	73	12
		χ^2 = 3.509294		df = 3	< 7.815 (0.05)	

A comprehensive review of table 4.13 enlightens us with the following observations into the experience-wise comparision of the perceptions of trainee teachers on the effect and utility of the RMSA in-service training for secondary school teachers:

Mastery of Subject Content: In the issue of mastery of subject content, the calculated value of χ^2 is observed to be less than the critical value of 7.815 at 0.05 level of significance so it is inferred that there is no significant difference between junior and senior teachers regarding mastery of subject content.

Proficiency in Teaching Skills: In the matter of the utility of the training programmes in helping teachers achieve proficiency in teaching skills, the calculated value of χ^2 is observed to be greater than the critical value of 7.815 at 0.05 level of significance but was less than 11.345 at 0.01 level of significance. Therefore, it can be concluded with 95% confidence that there is a significant difference between junior and senior teachers.

Classroom Management: Regarding the utility of the training programmes in helping teachers manage difficult classroom situations, the calculated value of χ^2 is seen to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between junior and senior teachers regarding classroom management.

Variety of Learning Experience: As for the question of the utility of the programmes in helping teachers introduce variety into their teaching, the calculated value of χ^2 is less than the critical value of 7.815 at 0.05 level of significance. Therefore, it is inferred that there is no significant difference between junior and

senior teachers regarding the utility of the training programmes in helping teachers introduce variety into their classrooms.

Use of Non-conventional Resources: For ascertaining the utility of the training programme in helping teachers make use of non-conventional resources, the calculated value of χ^2 is observed to be greater than the critical value of 7.815 at 0.05 level of significance but was less than 11.345 at 0.01 level of significance. Therefore, it can be concluded with 95% confidence that there is a significant difference between junior and senior teachers in this matter.

Management of Working Relationships: As for the utility of the training programme in helping teachers manage their working relationships, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between junior and senior teachers.

Mobilisation of Community Resources: In the matter of the use of the training programmes in helping teachers mobilise community resources, the calculated value of χ^2 was observed to be greater than the critical value of 11.345 at 0.01 level of significance. Hence it is concluded that there is indeed a significant difference between junior and senior teachers in this regard.

Developing Parent-Teacher Relationships: In the case of the development of parent-teacher relationships, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference junior and senior teachers in this regard.

Professional Development: For determining the value of the training programme in the professional development of teachers, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it can be concluded that there is no significant difference between junior and senior teachers in this matter.

Lifestyle Balance: In the matter of the utility of the training programmes in helping teachers achieve balance between the various areas of their lives, the

calculate value of χ^2 is observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it can safely be concluded that there is no significant difference between junior and senior teachers regarding lifestyle balance.

Conducting Discussions: For evaluating the value of the training programme in helping teachers to conduct meaningful lessons, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it can be concluded that there is no significant difference between junior and senior teachers concerning this aspect.

Presentation of Concepts: In the matter of the utility of the training programme in helping teachers to improve their presentation of learning concepts, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between junior and senior teachers.

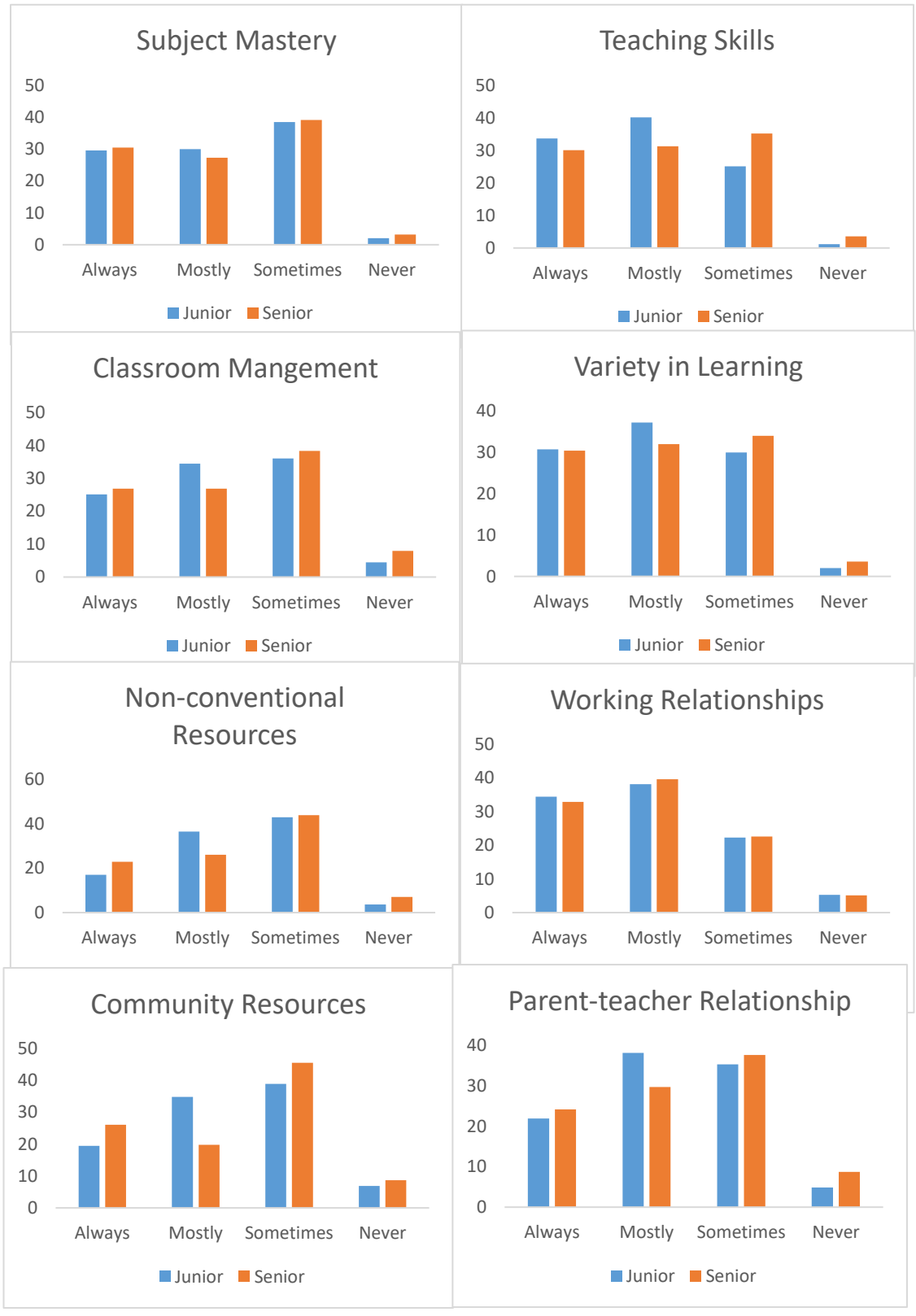
Enrichment of Content Knowledge: Regarding enrichment of content knowledge, the calculated value of χ^2 is observed to be less than the critical value of 7.815 at 0.05 level of significance so it is inferred that there is no significant difference between junior and senior teachers regarding enrichment of content knowledge.

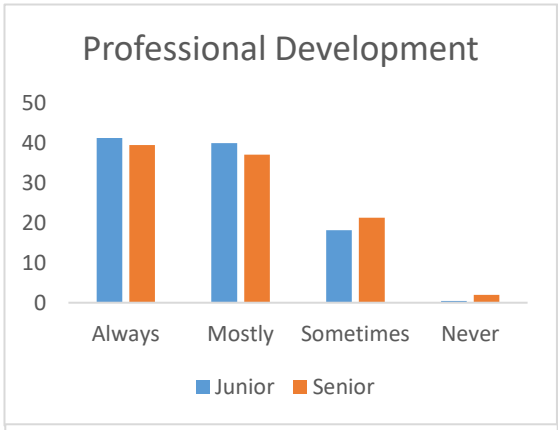
Assessment and Evaluation: For evaluating the utility of the training programme in helping teachers in better assessing and evaluating their students, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it can be concluded that there is no significant difference between junior and senior teachers regarding assessment and evaluation.

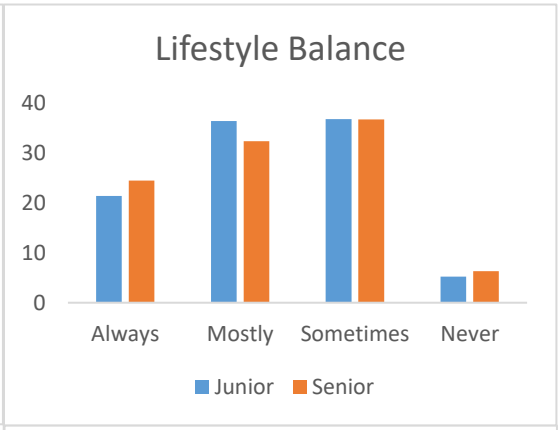
Identification of Student Weaknesses: Regarding the utility of the training programmes in helping teachers to identify student weaknesses, the calculated value of χ^2 is seen to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between junior and senior teachers.

Figure 4.15

Experience-wise Comparision of Teacher Perceptions on Utility of Programmes




Professional Development
50
40
30
20
10
0
Always
Mostly
Sometimes
Never
Junior
Senior


Lifestyle Balance
40
30
20
10
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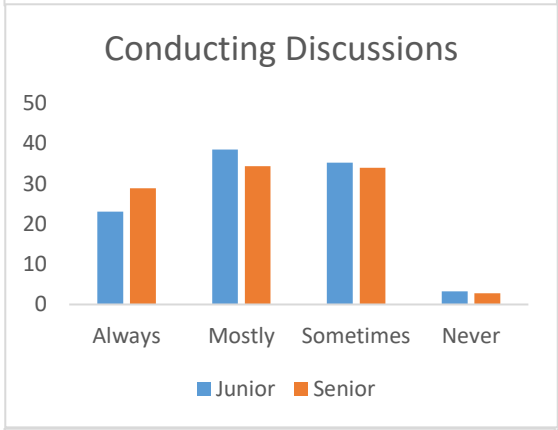
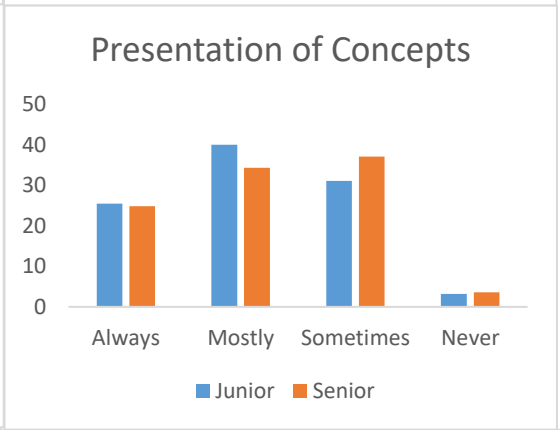
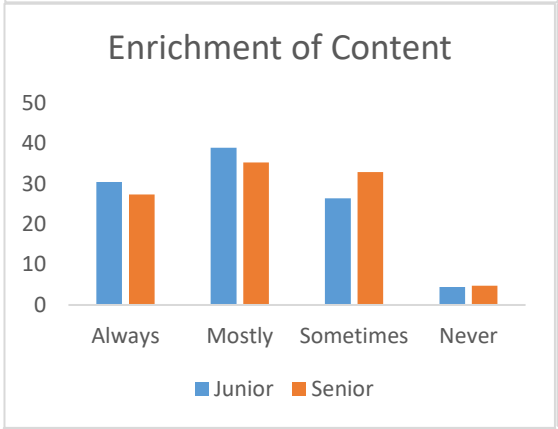
Always
Mostly
Sometimes
Never
Junior
Senior


Conducting Discussions
50
40
30
20
10
0
Always
Mostly
Sometimes
Never
Junior
Senior


Presentation of Concepts
50
40
30
20
10
0
Always
Mostly
Sometimes
Never
Junior
Senior


Enrichment of Content
50
40
30
20
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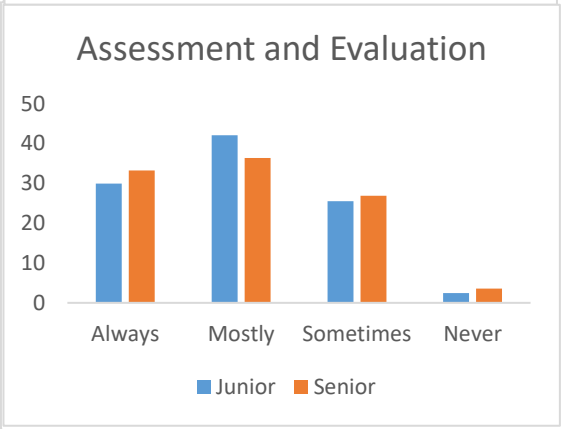
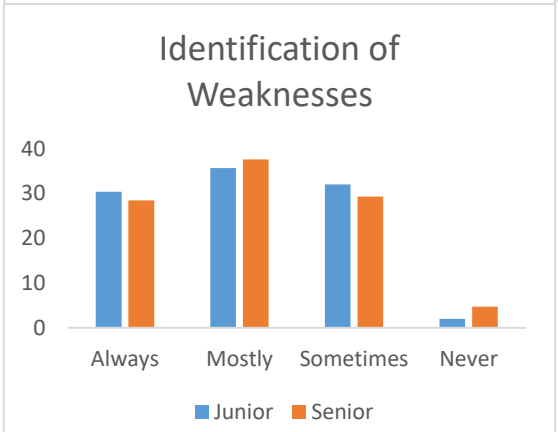
0
Always
Mostly
Sometimes
Never
Junior
Senior


Assessment and Evaluation
50
40
30
20
10
0
Always
Mostly
Sometimes
Never
Junior
Senior


Identification of Weaknesses
40
30
20
10
0
Always
Mostly
Sometimes
Never
Junior
Senior

A careful analysis of figure 4.12 highlights the fact that the opinions of the junior teachers have exceeded that of the senior teachers in the areas of proficiency in teaching skills, use of non-conventional resources and in the mobilisation of community resources.

4.8.2.2 Comparision of the perceptions of teachers regarding the capabilities of resource person based on their teaching experience.

Table 4.14

Experience-wise Comparision of Teacher Perceptions on Teaching Experience

Sl no	Item	Junior/ Senior	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Academic Qualification	Junior	120	81	44	5
		Senior	95	104	45	6
		χ^2 = 5.868581		df = 3	< 7.815 (0.05)	
2	Adequate Experience	Junior	86	101	53	10
		Senior	86	103	48	13
		χ^2 = 0.658437		df = 3	< 7.815 (0.05)	
3	Realistic Experience	Junior	63	98	70	19
		Senior	62	85	88	15
		χ^2 = 3.452718		df = 3	< 7.815 (0.05)	
4	ICT Skills	Junior	72	96	74	8
		Senior	78	87	74	11
		χ^2 = 1.156307		df = 3	< 7.815 (0.05)	
5	Open-mindedness and Empathy	Junior	100	103	38	8
		Senior	106	105	34	6
		χ^2 = 0.693936		df = 3	< 7.815 (0.05)	
6	Pedagogic Skills	Junior	76	117	50	7
		Senior	83	102	59	6
		χ^2 = 2.155616		df = 3	< 7.815 (0.05)	
7	Adequate Preparation	Junior	87	114	47	2
		Senior	91	105	47	7
		χ^2 = 3.237528		df = 3	< 7.815 (0.05)	

A scrutiny of table 4.14 reveals to us the following insights:

Academic Qualification: Regarding the academic qualification of the resource persons, the calculated value of χ^2 is seen to be the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between junior and senior teachers.

Adequacy of Experience: In the matter of the adequacy of the experience of the resource persons, the calculated value of χ^2 is seen to be the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence there is no significant difference between junior and senior teachers.

Realistic Experience: In order to ascertain if the resource persons were in touch with the ground realities of secondary education, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, there is no significant difference between junior and senior teachers.

ICT Skills: In the process of determining the ICT Skills of the resource persons, the value of χ^2 calculated was found to be greater than the critical value of 7.815 at 0.05 level of significance. Therefore, it can be concluded that there is no significant difference between junior and senior teachers concerning this aspect.

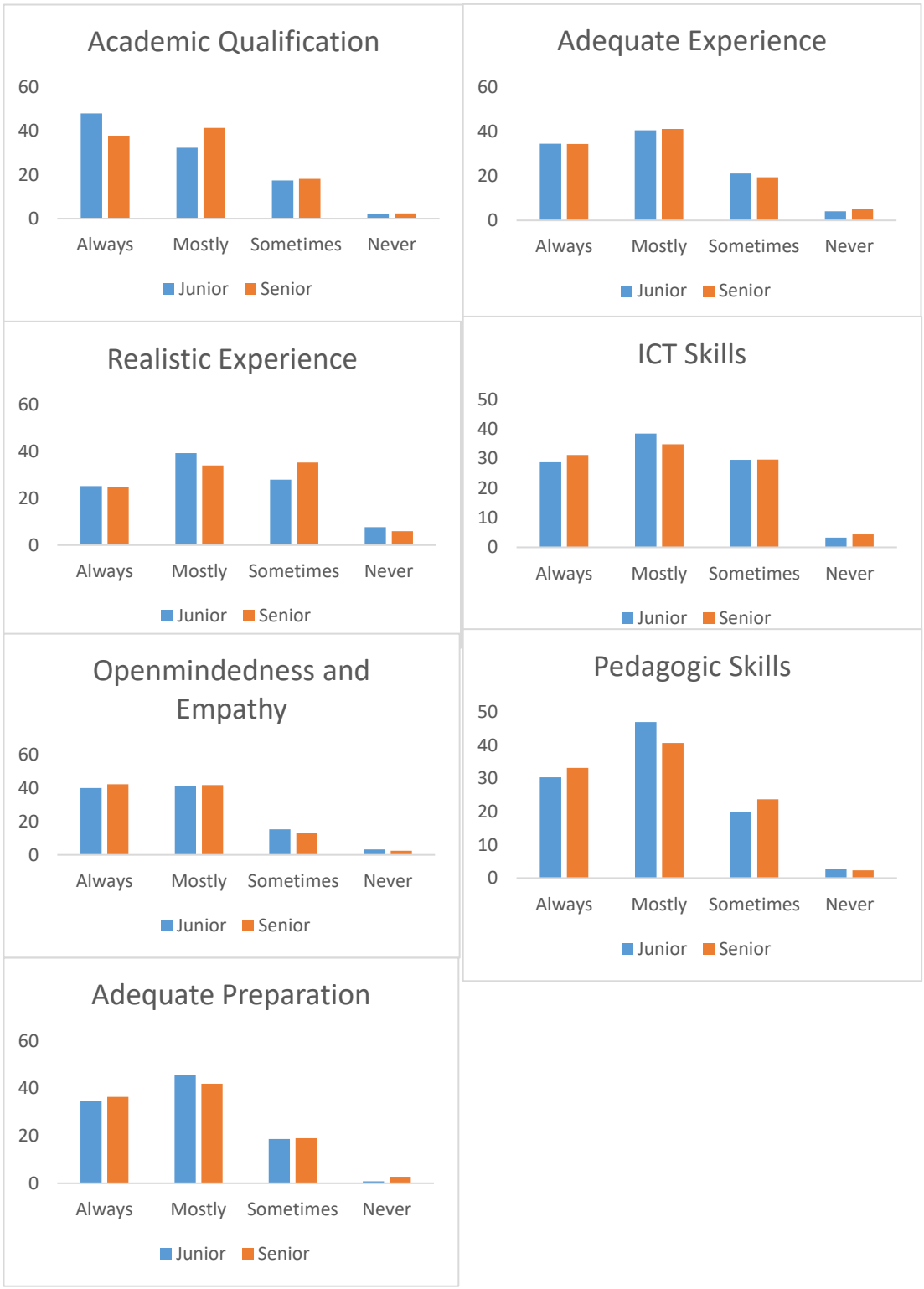
Open-mindedness and Empathy: While assessing the open-mindedness and empathy of the resource persons, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between junior and senior teachers concerning this matter.

Pedagogic Skills: Regarding the pedagogic skills, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between junior and senior teachers.

Adequacy of Preparation: In the matter of the preparedness of the resource persons, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence it is concluded that there is no significant difference between junior and senior teachers in this regard.

Figure 4.16

Experience-wise Comparision of Teacher Perceptions on Capabilities of Resource Persons



4.8.2.3 Comparision of the perceptions of teachers regarding problems encountered by them based on their teaching experience.

Table 4.15

Experience-wise Comparision of Teacher Perceptions on Problems Encountered

Sl no	Item	Junior/ Senior	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Transportation Problem	Junior	53	40	88	69
		Senior	55	51	72	71
		χ^2 = 2.993287		df = 3	< 7.815 (0.05)	
2	Accommodation Problem	Junior	31	26	69	123
		Senior	24	25	61	140
		χ^2 = 2.49969		df = 3	< 7.815 (0.05)	
3	Language Problem	Junior	18	20	39	172
		Senior	15	25	36	175
		χ^2 = 0.966235		df = 3	< 7.815 (0.05)	
4	Lack of Support Materials	Junior	15	26	79	130
		Senior	18	25	80	127
		χ^2 = 0.333644		df = 3	< 7.815 (0.05)	
5	Mistreatment form Staff	Junior	10	9	23	208
		Senior	6	10	23	211
		χ^2 = 1.074111		df = 3	< 7.815 (0.05)	
6	Resistance from School	Junior	10	16	23	200
		Senior	4	14	28	205
		χ^2 = 3.248738		df = 3	< 7.815 (0.05)	
7	Lack of Infrastructure	Junior	18	31	103	97
		Senior	20	38	93	100
		χ^2 = 1.363319		df = 3	< 7.815 (0.05)	
8	Programme Timings	Junior	26	57	112	55
		Senior	33	59	110	48
		χ^2 = 1.358737		df = 3	< 7.815 (0.05)	

A careful examination of table 4.15 enlightens us with the followsing:

Transportation Problem: Regarding the problem of transportation, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference.

Accommodation Problem: In the matter of accommodation, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference

Language Problem: While assessing the language problems faced by the teachers, the value of χ^2 calculated was found to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between junior and senior teachers concerning this aspect.

Support Materials: In the matter of the adequacy of support materials, the calculated value of χ^2 is seen to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference

Mistreatment from Staff: Regarding mistreatment from administrative staff, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. So, it may be concluded that there is no significant difference between junior and senior teachers in the issue.

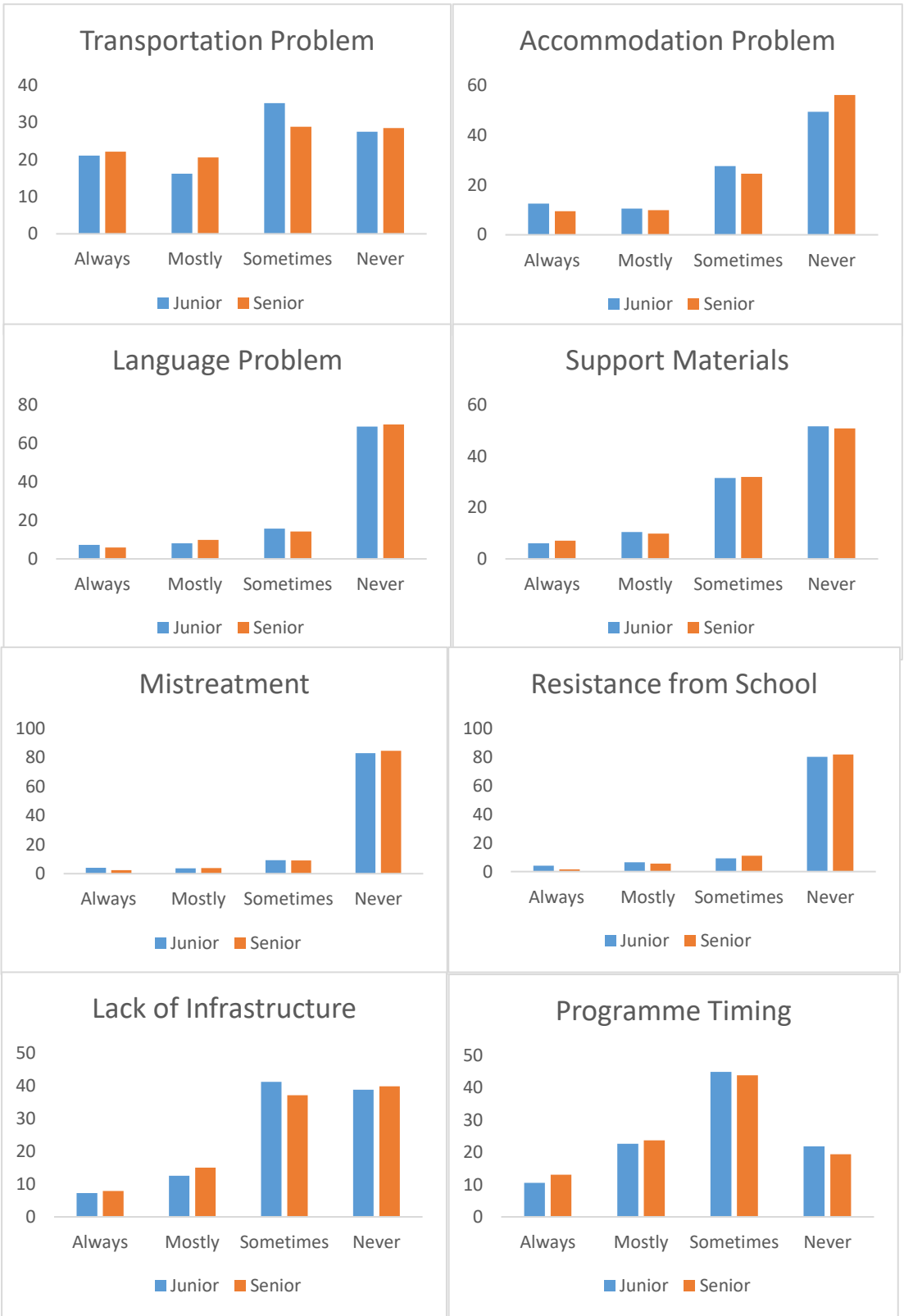
Resistance from Schools: In the issue of resistance from schools, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference between junior and senior teachers in the matter at hand.

Lack of Infrastructure: Pertaining to adequacy of infrastructure, the calculated value of χ^2 was observed to be less than the critical value of 7.815 at 0.05 level of significance. Hence, it is concluded that there is no significant difference between junior and senior teachers.

Timing of Programmes: As for programme timing, the value of χ^2 was seen to be less than the critical value of 7.815 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between junior and senior teachers in the problem of timing.

Figure 4.17

Experience-wise Comparision of Teacher Perceptions on Problems Encountered



4.8.3 Comparision of the perceptions of different teachers based on subjects taught.

4.8.3.1 Subject-wise comparision of the perceptions of teachers regarding the effect and utility of the training programmes.

Table 4.16

Subject-wise Comparision of Teacher Perceptions on Utility of Training Programmes

Sl no	Item	Subject Taught	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Subject Mastery	English	30	31	38	1
		Mizo	38	33	25	4
		Social Sc	38	24	34	4
		Science	18	41	39	2
		Mathematics	37	25	36	2
		χ^2 = 21.75603		df = 12	> 21.026 (0.05)	
2	Proficiency in Teaching Skills	English	29	46	22	3
		Mizo	26	43	28	3
		Social Sc	38	35	25	2
		Science	29	35	35	1
		Mathematics	36	37	25	2
		χ^2 = 10.8029		df = 12	< 21.026 (0.05)	
3	Classroom Management	English	28	34	36	2
		Mizo	28	30	36	6
		Social Sc	34	36	25	5
		Science	22	30	46	2

		Mathematics	34	24	36	6
		χ^2 = 16.3729		df = 12	< 21.026 (0.05)	
4	Variety in Learning Experiences	English	35	39	24	2
		Mizo	23	43	31	3
		Social Sc	43	33	22	2
		Science	23	45	30	2
		Mathematics	33	32	33	2
		χ^2 = 16.37264		df = 12	< 21.026 (0.05)	
5	Using Non-Conventional Resources	English	26	34	35	5
		Mizo	24	35	36	5
		Social Sc	17	30	46	7
		Science	15	28	48	9
		Mathematics	22	29	43	6
		χ^2 = 10.46474		df = 12	< 21.026 (0.05)	
6	Management of Working Relationships	English	33	44	19	4
		Mizo	38	38	17	7
		Social Sc	43	38	19	0
		Science	31	37	30	2
		Mathematics	30	35	26	9
		χ^2 = 22.17095		df = 12	> 21.026 (0.05)	
7	Mobilisation of Community Resources	English	29	28	37	6
		Mizo	22	36	38	4
		Social Sc	26	30	39	5
		Science	19	26	49	6
		Mathematics	19	29	45	7

		χ^2 = 8.802839		df = 12	< 21.026 (0.05)	
8	Development of Parent-Teacher Relationship	English	26	29	43	2
		Mizo	28	39	30	3
		Social Sc	30	34	32	4
		Science	14	39	37	10
		Mathematics	25	33	35	7
		χ^2 = 19.49042		df = 12	< 21.026 (0.05)	
9	Professional Development	English	46	40	12	2
		Mizo	38	43	17	2
		Social Sc	51	35	14	0
		Science	39	40	21	0
		Mathematics	47	35	17	1
		χ^2 = 10.94178		df = 12	< 21.026 (0.05)	
10	Balance of Lifestyle	English	29	35	31	5
		Mizo	21	37	40	2
		Social Sc	24	43	30	3
		Science	20	37	39	4
		Mathematics	27	38	28	7
		χ^2 = 10.50807		df = 12	< 21.026 (0.05)	
11	Conducting Discussions	English	23	40	36	1
		Mizo	26	39	31	4
		Social Sc	39	39	22	0
		Science	22	43	33	2
		Mathematics	24	36	35	5
		χ^2 = 19.06218		df = 12	< 21.026 (0.05)	

12	Presentation of Concepts	English	20	44	35	1
		Mizo	26	47	24	3
		Social Sc	26	41	30	3
		Science	28	38	29	5
		Mathematics	22	34	40	4
		χ^2 = 11.76162		df = 12	< 21.026 (0.05)	
13	Enrichment of Content Knowledge	English	30	39	30	1
		Mizo	35	40	20	5
		Social Sc	39	28	31	2
		Science	18	44	35	3
		Mathematics	29	32	34	5
		χ^2 = 21.60628		df = 12	> 21.026 (0.05)	
14	Assessment and Evaluation	English	38	38	20	4
		Mizo	29	39	29	3
		Social Sc	44	38	16	2
		Science	19	51	28	2
		Mathematics	40	35	24	1
		χ^2 = 22.93496		df = 12	> 21.026 (0.05)	
15	Identification of Student Weaknesses	English	33	32	32	3
		Mizo	31	43	23	3
		Social Sc	33	43	21	3
		Science	18	37	40	5
		Mathematics	31	40	27	2
		χ^2 = 17.36582		df = 12	< 21.026 (0.05)	

A thorough study of table 4.16 enlightens us with the following observations into the subject-wise comparision of the perceptions of trainee teachers on the effect and utility of the RMSA in-service training for secondary school teachers:

Mastery of Subject Content: In the issue of mastery of subject content, the calculated value of χ^2 is observed to be greater than the critical value of 21.026 at 0.05 level of significance but less than 26.217 at 0.01 level of significance; so it is inferred that there is a significant difference between various subject teachers regarding mastery of subject content.

Proficiency in Teaching Skills: In the matter of the utility of the training programmes in helping teachers achieve proficiency in teaching skills, the calculate value of χ^2 is observed to be less than the critical value of 21.026 at 0.05 level of significance. So, it is inferred that there is no significant difference between different subject teachers regarding proficiency in teaching skills.

Classroom Management: Regarding the utility of the training programmes in helping teachers manage difficult classroom situations, the calculated value of χ^2 is seen to be less than the critical value of 21.026 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between different subject teachers regarding classroom management.

Variety of Learning Experience: As for the question of the utility of the programmes in helping teachers introduce variety into their teaching, the calculated value of χ^2 is less than the critical value of 21.026 at 0.05 level of significance. Therefore, it is inferred that there is no significant difference between different subject teachers regarding the utility of the training programmes in helping teachers introduce variety into their classrooms.

Use of Non-conventional Resources: For ascertaining the utility of the training programme in helping teachers make use of non-conventional resources, the value of χ^2 calculated was found to be less than the critical value of 21.026 at 0.05 level of significance. Therefore, it can be concluded with that there is no significant difference between different subject teachers in this matter.

Management of Working Relationships: As for the utility of the training programme in helping teachers manage their working relationships, the calculated value of χ^2 was observed to be greater than the critical value of 21.026 at 0.05 level of significance but less than 26.217 at 0.01 level of significance. Hence it is concluded that there is a significant difference between different subject teachers.

Mobilisation of Community Resources: In the matter of the use of the training programmes in helping teachers mobilise community resources, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence it is concluded that there is no significant difference between different subject teachers in this regard.

Developing Parent-Teacher Relationships: In the case of the development of parent-teacher relationships, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence it is concluded that there is no significant difference different subject teachers in this regard.

Professional Development: For determining the value of the training programme in the professional development of teachers, the value of χ^2 calculated was found to be less than the critical value of 21.026 at 0.05 level of significance. Therefore, it can be concluded that there is no significant difference between different subject teachers.

Lifestyle Balance: In the matter of the utility of the training programmes in helping teachers achieve balance between the various areas of their lives, the calculated value of χ^2 is observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence, it can be concluded that there is no significant difference between different subject teachers regarding lifestyle balance.

Conducting Discussions: For evaluating the value of the training programme in helping teachers to conduct meaningful lessons, the value of χ^2 calculated was found to be less than the critical value of 21.026 at 0.05 level of significance. Hence, it can be concluded that there is no significant difference between different subject teachers.

Presentation of Concepts: In the matter of the utility of the training programme in helping teachers to improve their presentation of learning concepts, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence it is concluded that there is no significant difference between different subject teachers.

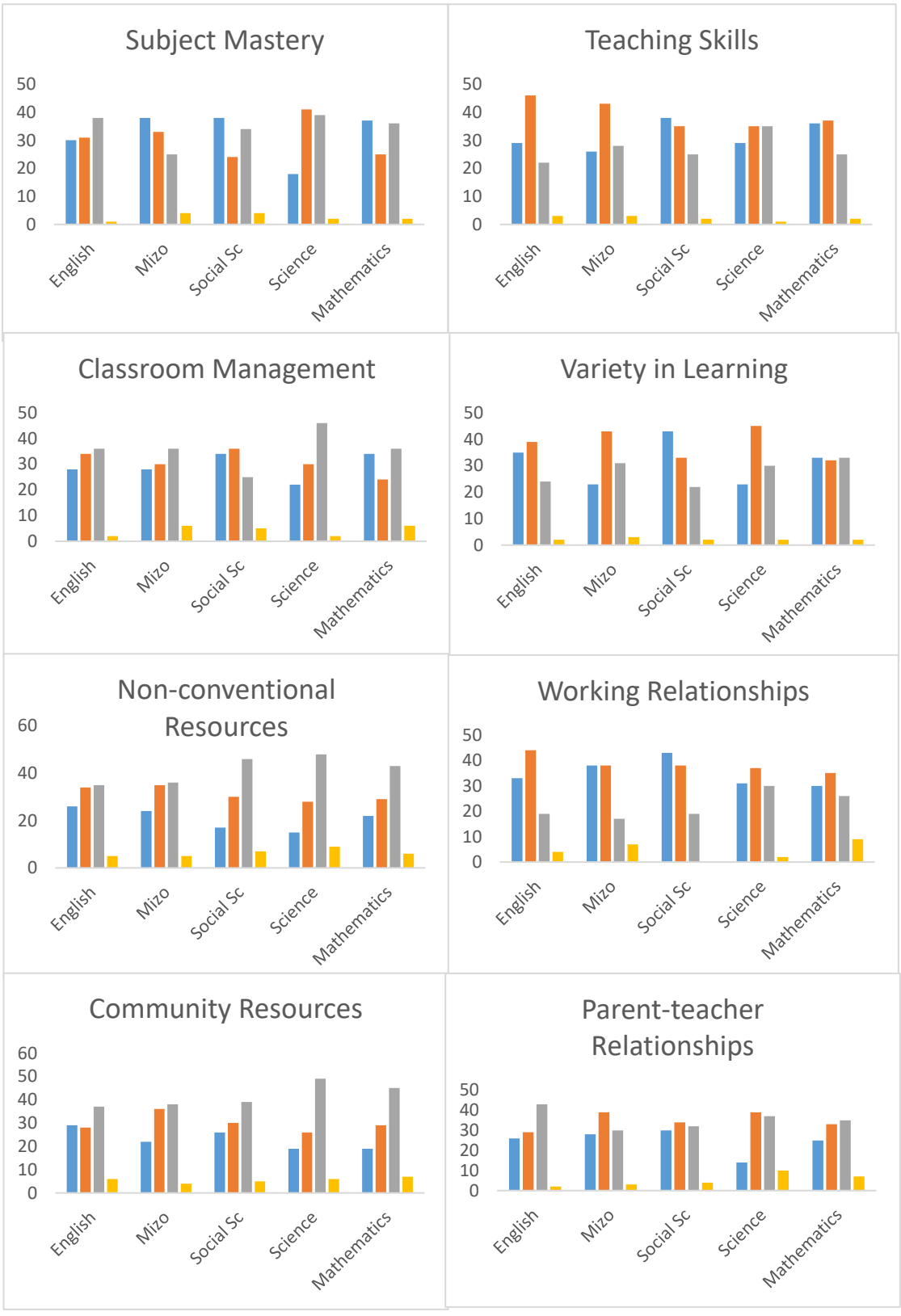
Enrichment of Content Knowledge: Regarding enrichment of content knowledge, the calculated value of χ^2 is observed to be greater than the critical value of 21.026 at 0.05 level of significance but less than 26.217 at 0.01 level of significance so it is inferred that there is indeed a significant difference between different subject teachers regarding enrichment of content knowledge.

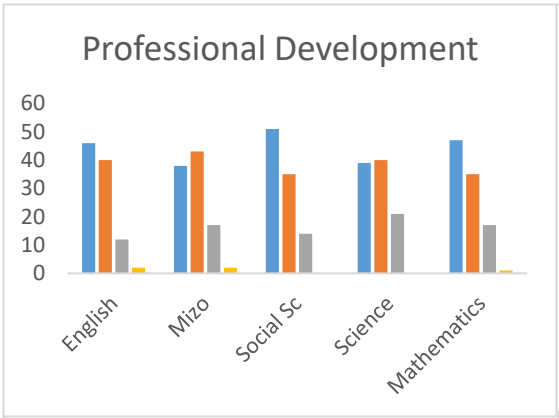
Assessment and Evaluation: For evaluating the utility of the training programme in helping teachers in better assessing and evaluating their students, the value of χ^2 calculated was found to be greater than the critical value of 21.026 at 0.05 level of significance but less than 26.217 at 0.01 level of significance. Therefore, it can be concluded that there is a significant difference between different subject teachers.

Identification of Student Weaknesses: Regarding the utility of the training programmes in helping teachers to identify student weaknesses, the calculated value of χ^2 is seen to be less than the critical value of 21.026 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between different subject teachers.

Figure 4.18

Subject-wise Comparision of Teacher Perceptions on Utility of Programmes




Professional Development
60
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40
30
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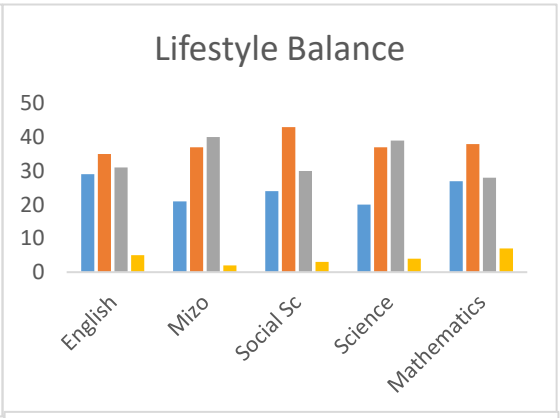
10
0
English
Mizo
Social Sc
Science
Mathematics


Lifestyle Balance
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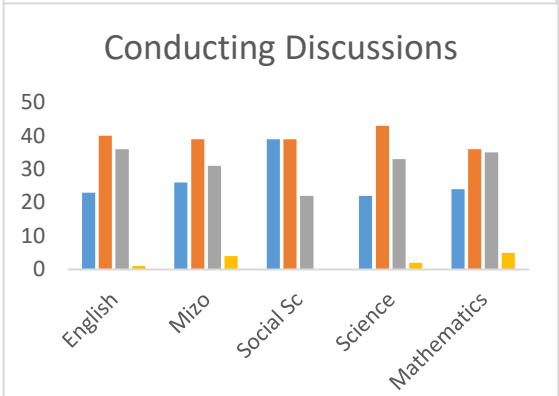
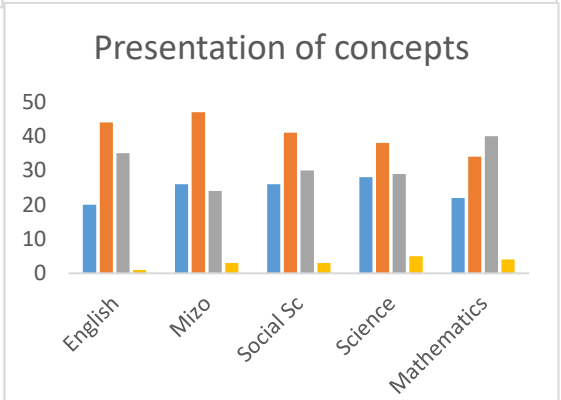
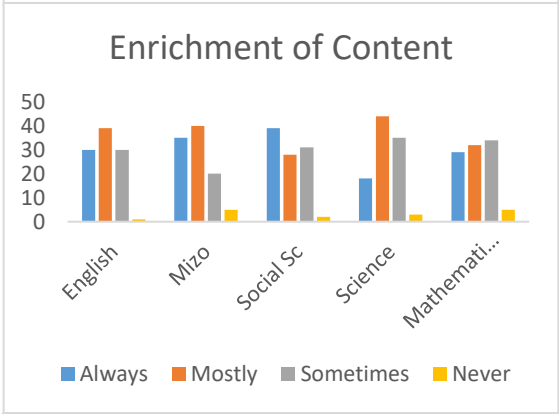
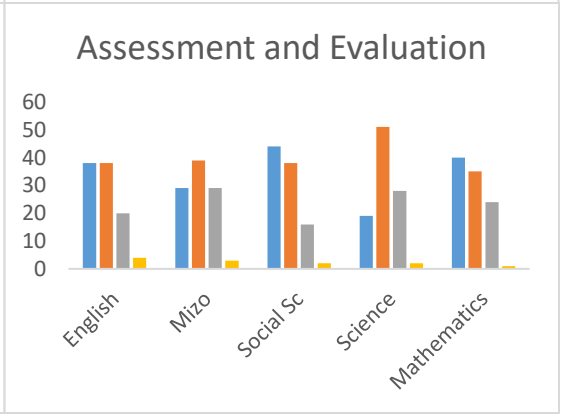
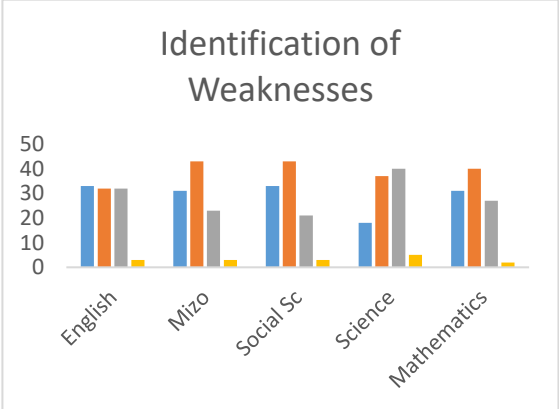
English
Mizo
Social Sc
Science
Mathematics


Conducting Discussions
50
40
30
20
10
0
English
Mizo
Social Sc
Science
Mathematics


Presentation of concepts
50
40
30
20
10
0
English
Mizo
Social Sc
Science
Mathematics


Enrichment of Content
50
40
30
20
10
0
English
Mizo
Social Sc
Science
Mathemati...
Always
Mostly
Sometimes
Never


Assessment and Evaluation
60
50
40
30
20
10
0
English
Mizo
Social Sc
Science
Mathematics


Identification of Weaknesses
50
40
30
20
10
0
English
Mizo
Social Sc
Science
Mathematics

A close scrutiny of figure no 4.18 reveals the following observations about the comparision of the perceptions and opinions of the subject teachers regarding the effect and utility of the in-service training programmes for scondary school teachers:

- Among all the teachers, Science teachers consider the training programme to be least useful in helping them achieve mastery of their subjects
- The perception of Science and Mizo teachers is markedly lower than other teachers in the matter of the training programmes helping them achieve a better working relationship with their colleagues and co-workers.
- The percentage of Science teachers agreeing that the training programmes help in enrichment of content knowledge is slightly lower than the rest of the teachers.
- The percentage of Science and Mizo teachers opining that the training programmes are useful in assessment and evaluation of students are marginally lower than that of their colleagues while that of Social Science teachers is nominally higher than that of the others.

4.8.3.2 Subject-wise comparision of the perceptions of teachers regarding the capabilities of resource persons.

Table 4.17

Subject-wise Comparision of Perceptions on Capabilities of Resource Persons

Sl no	Item	Subject Taught	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Academic Qualification	English	56	28	14	2
		Mizo	50	35	14	1
		Social Sc	56	32	11	1
		Science	34	46	19	1

		Mathematics	42	43	11	4
		χ^2 = 20.67252		df = 12	< 21.026 (0.05)	
2	Adequate Experience	English	45	35	18	2
		Mizo	44	39	14	3
		Social Sc	45	38	14	3
		Science	27	46	21	6
		Mathematics	32	46	15	7
		χ^2 = 16.65828		df = 12	< 21.026 (0.05)	
3	Realistic Experience	English	32	36	28	4
		Mizo	28	43	27	2
		Social Sc	30	50	16	4
		Science	13	38	36	13
		Mathematics	23	37	33	7
		χ^2 = 33.15313		df = 12	> 26.217 (0.01)	
4	ICT Skills	English	32	45	22	1
		Mizo	33	45	16	6
		Social Sc	43	32	25	0
		Science	23	41	31	5
		Mathematics	27	40	26	7
		χ^2 = 25.27191		df = 12	> 21.026 (0.05)	
5	Open-mindedness and Empathy	English	46	40	13	1
		Mizo	38	48	11	3
		Social Sc	59	31	8	2
		Science	34	45	17	4
		Mathematics	44	39	15	2

		χ^2 = 18.40005		df = 12	< 21.026 (0.05)	
6	Pedagogic Skills	English	30	50	19	1
		Mizo	37	43	17	3
		Social Sc	44	38	17	1
		Science	20	48	30	2
		Mathematics	34	44	20	2
		χ^2 = 18.77579		df = 12	< 21.026 (0.05)	
7	Adequate Preparation	English	35	44	20	1
		Mizo	49	40	9	2
		Social Sc	46	37	16	1
		Science	28	50	22	0
		Mathematics	39	38	20	3
		χ^2 = 19.81235		df = 12	< 21.026 (0.05)	

A careful study of table 4.17 reveals to us the following insights into the subject-wise comparision of the perceptions of trainee teachers on the capabilities of the resource persons:

Academic Qualification: Regarding the academic qualification of the resource persons, the calculated value of χ^2 is seen to be the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence it is concluded that there is no significant difference between different subject teachers regarding academic qualification of resource persons.

Adequacy of Experience: In the matter of the adequacy of the experience of the resource persons, the calculated value of χ^2 is seen to be the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence it is concluded that there is no significant difference between different subject teachers regarding adequacy of the experience of the resource persons.

Realistic Experience: In order to ascertain if the resource persons were in touch with the ground realities of secondary education, the calculated value of χ^2 was observed to be greater than the critical value of 26.217 at 0.01 level of significance. Hence, it is concluded that there is indeed a significant difference between different subject teachers in this regard.

ICT Skills: In the process of determining the ICT Skills of the resource persons, the value of χ^2 calculated was found to be greater than the critical value of 21.026 at 0.05 level of significance but less than the critical value of 26.217 at 0.01 level of significance. Therefore, it can be concluded that there is a significant difference between different subject teachers concerning this aspect.

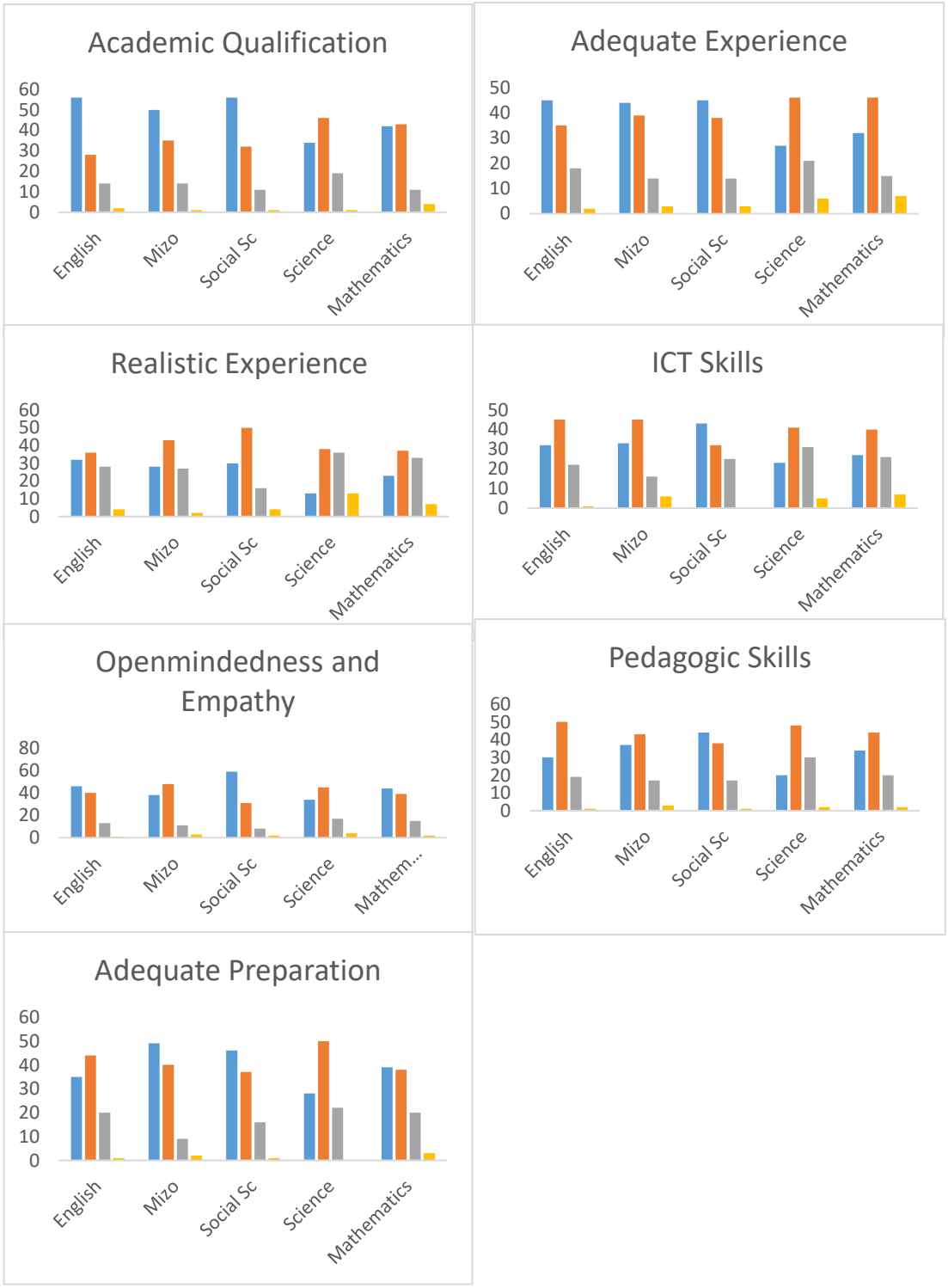
Open-mindedness and Empathy: While assessing the open-mindedness and empathy of the resource persons, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence it is concluded that there is no significant difference between different subject teachers concerning this matter.

Pedagogic Skills: Regarding the pedagogic skills of the resource persons, the value of χ^2 calculated was found to be less than the critical value of 21.026 at 0.05 level of significance. Hence it is concluded that there is no significant difference between different subject teachers concerning this aspect.

Adequacy of Preparation: In the matter of the preparedness of the resource persons, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence it is concluded that there is no significant difference between different subject teachers in this regard.

Figure 4.19

Subject-wise Comparision of Perceptions on Capabilities of Resource Persons



A careful study of figure no 4.19 highlights the following observations about comparision of the perceptions of the subject teachers regarding the capabilities of the resource persons at the in-service training programmes:

- The Science teachers had opinions lower than others, of the realistic field experience of the resource persons.
- The percentage of Social Science teachers who think that the resource persons had the requisite ICT skills is considerably higher than that of their colleagues while the opinions of the Science Teachers were visibly lower than others.

4.8.3.3 Subject-wise comparision of the perceptions of teachers regarding problems encountered by them.

Table 4.18

Subject-wise Comparision of Teacher Perceptions on Problems Encountered

Sl no	Item	Subject Taught	Perception/Opinion			
			Always	Mostly	Some-times	Never
1	Transportation Problem	English	22	19	29	30
		Mizo	25	13	27	35
		Social Sc	17	19	37	27
		Science	28	17	34	21
		Mathematics	13	19	37	31
		$\chi^2 = 14.87874$		df = 12	< 21.026 (0.05)	
2	Accommodation Problem	English	9	5	22	64
		Mizo	13	6	25	56
		Social Sc	11	9	17	63

		Science	7	8	31	54
		Mathematics	5	11	23	61
		χ^2 = 13.0357		df = 12	< 21.026 (0.05)	
3	Language Problem	English	3	11	8	78
		Mizo	9	10	17	64
		Social Sc	7	11	11	71
		Science	3	8	17	72
		Mathematics	7	14	19	60
		χ^2 = 15.66036		df = 12	< 21.026 (0.05)	
4	Lack of Support Materials	English	10	6	26	58
		Mizo	9	11	35	45
		Social Sc	7	13	28	52
		Science	7	11	33	49
		Mathematics	3	7	31	59
		χ^2 = 12.08964		df = 12	< 21.026 (0.05)	
5	Mistreatment form Staff	English	5	1	4	90
		Mizo	5	2	9	84
		Social Sc	6	2	6	86
		Science	2	6	4	88
		Mathematics	4	4	10	82
		χ^2 = 12.61663		df = 12	< 21.026 (0.05)	
6	Resistance from School	English	5	4	7	84
		Mizo	5	14	11	70
		Social Sc	5	5	10	80
		Science	1	4	11	84

		Mathematics	1	3	12	84
		χ^2 = 22.59555		df = 12	> 21.026 (0.05)	
7	Lack of Infrastructure	English	6	10	43	41
		Mizo	5	14	45	36
		Social Sc	7	15	36	42
		Science	6	12	39	43
		Mathematics	8	15	39	38
		χ^2 = 4.354069		df = 12	< 21.026 (0.05)	
8	Programme Timings	English	14	21	45	20
		Mizo	38	33	25	4
		Social Sc	18	27	32	23
		Science	12	21	52	15
		Mathematics	9	25	38	28
		χ^2 = 63.43371		df = 12	> 26.217 (0.01)	

A careful examination of table 4.18 enlightens us with the subject-wise comparision of problems encountered by the trainees as follows:

Transportation Problem: Regarding the problem of transportation, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference between different subject teachers concerning the problem of transportation.

Accommodation Problem: In the matter of accommodation, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference between different subject teachers in the problem of accommodation.

Language Problem: While assessing the language problems faced by the teachers, the value of χ^2 calculated was found to be less than the critical value of 21.026 at 0.05 level of significance. Therefore, it may be concluded that there is no significant difference between different subject teachers concerning this aspect.

Support Materials: In the matter of the adequacy of support materials, the calculated value of χ^2 is seen to be less than the critical value of 21.026 at 0.05 level of significance. Hence, it may be concluded that there is no significant difference between different subject teachers.

Mistreatment from Staff: Regarding mistreatment from administrative staff, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. So, it may be concluded that there is no significant difference between different subject teachers in the issue.

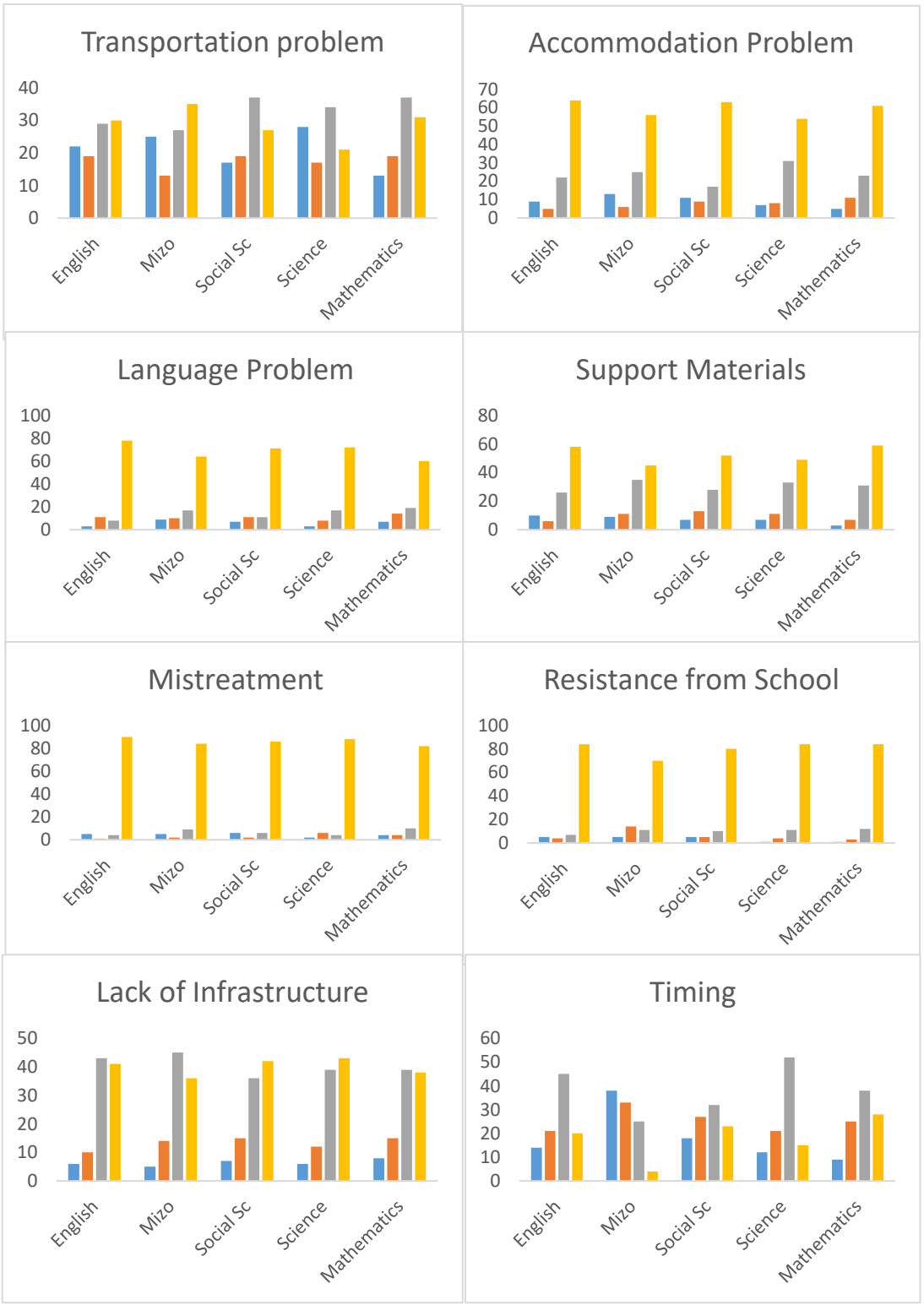
Resistance from Schools: In the issue of resistance from schools, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance but greater than the critical value of 26.217 at 0.01 level of significance. Hence, it may be concluded that there is a significant difference between different subject teachers in the matter at hand.

Lack of Infrastructure: Pertaining to adequacy of infrastructure, the calculated value of χ^2 was observed to be less than the critical value of 21.026 at 0.05 level of significance. Hence, it is concluded that there is no significant difference between different subject teachers.

Timing of Programmes: As for programme timing, the value of χ^2 was seen to be greater than the critical value of 26.217 at 0.01 level of significance. Therefore, it may be concluded that there is indeed a significant difference between different subject teachers in the problem of timing.

Figure 4.20

Subject-wise Comparision of Teacher Perceptions on Problems Encountered



A perusal of figure 4.20 reveals the following aspects of the subject-wise comparision of the problems encountered by trainees during the in-service training programmes:

- Compared to the other teachers, Mathematics and Science teachers face the least resistance from schools when attending training programmes while Mizo teachers complain the most about resistance from schools.
- There is least objection to the programmes' timing from the Mathematics teachers while Mizo teachers complain most about the timing of the training programmes.

CHAPTER 5

MAJOR FINDINGS AND DISCUSSIONS; RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER STUDIES

The fifth and final chapter presents a concluding summarisation of all the analysed and interpreted data and takes us forward into a peek of possible future scenarios. It consists of three main parts as follows:

5.1 Major Findings and Discussions: The important and relevant parts of the analysed data is presented in a simpler format and subsequently discussed in the light of various contemporary situations and contexts.

5.2 Recommendations: The discussion on the data is followed by the researcher's recommendations based on the discussions on the various issues and aspects of the in-service training programmes with a view to affect improvement in all aspects of the programmes.

5.3 Suggestions for Further Study: The last part consists of suggestions for further study on similar as well as different aspects of the in-service training programmes, and other related issues and programmes.

5.1. Major Findings and Discussions

The major findings of the study and a discussion of the findings are as follows:

5.1.1 Major Findings and Discussions on Status of infrastructural and instructional facilities at the training centres of in-service teacher training programmes

1) Participants from majority of the districts could reach the training centres in one day.

Discussion:

Mizoram is a hilly state with poor roadways. Linkages between towns and villages are often very poor so the first issue in the infrastructural dimension was related to the question of approachability. The amount of time needed for participants to reach the training centres varied greatly. Some participants who were stationed in the district capitals required a few minutes whereas a few participants could not reach the training centres even after a full day of travel. Most participants required a few hours but some participants from **Mamit** district reported that with the road conditions and the travel facilities available, they could not reach the district capital in one day. This greatly reduced the number of days available for actual training and greatly increased the travel costs of the participants. Adding to this problem was the availability of transit accommodation during the journey. Another addition to this problem was the lack of travel services on Sundays in Mizoram where all commerce comes to a halt on Sunday and commercial vehicles are not available on this day. This greatly aggravates the problem of the participants from distant villages in travelling to and from their stations to the training centres.

2) Better Training centres are needed in many of the districts.

Discussion:

The ambience lends a particular dignity to a venture and the quality of the buildings and its surroundings accord an aura to the training programmes. The participants develop attitudes towards the training programmes depending upon the perceived respect they are accorded by the authorities. If they feel that they are respected and treated well, they correspondingly develop favourable attitudes towards the training programmes. In this respect, it is important that these training programmes be conducted in respectable surroundings wherein

the participants fell that their worth and value is acknowledged and appreciated. In a few districts like Aizawl, Lunglei, Kolasib, etc. the in-service training programmes were held in good buildings like seminar halls, conference halls, etc. The overall quality of the building and its surroundings lent a professionality to the training programmes and participants could feel valued and respected. It was noticeable that the overall behaviour of the participants was solemn and sincere. In some districts like Mamit, Siaha, Lawngtlai, etc., the programmes were held in school classrooms with a general feeling of neglect and lack of professionalism. These buildings and the surroundings did not convey a message of respect, quality and sincerity to the training programmes. It could be inferred that the participants showed signs of lack of enthusiasm and a feeling of dissatisfaction in general.

3) Provision of power backup is needed in most of the training centres.

Discussion:

In most cases, training programmes were conducted with the help of electrical and electronic devices such as laptops, computers, projectors, microphones, etc. In the case of a power outage, the normal and smooth functioning of the training programmes would be affected in most cases and maybe even actually stop the programme altogether. In such cases, it would be necessary to have a power backup system like inverters or generators in the training sessions to maintain continuity and smooth flow of information. It was observed that the training centres of Aizawl district namely, Institute of Advanced Studies in Education (IASE) and National Institute of Technology (NIT) alone had such facilities. All other districts were observed to conduct the RMSA in-service training programmes in centres without power backup.

4) The training centres in all the districts needs to be made inclusive.

Discussion:

Inclusiveness is a desirable quality of any programme. We have to make provisions for the differently abled to participate in all our activities. While observing the training programmes in all the 8 districts, the researcher sadly observed that not one of the training centres had any provision for the differently-abled. The training programmes were conducted in buildings that were not suited for people with disabilities. There were no ramps for wheelchairs and no railings for people with loco-motor problems. Teachers with physical disabilities would find it very difficult to attend these in-service programmes in order to develop professionally.

5) The training centres in all the districts were free from noise pollution.

Discussion:

It is also very important to have a stress-free environment free from noise pollution. The training programmes must be conducted in an environment conducive to contemplation and learning. In all the districts the training programmes were conducted in secluded environments free from external disturbances such as noise from traffic, market, etc. with an academic atmosphere.

6) Majority of the training centres had adequate spaces.

Discussion:

Physical space as well as general comfort is necessary for a conducive environment. The training programmes should be conducted in large rooms with adequate personal space for all the participants some of which are advanced in age. Most training programmes had adequate space for all participants to comfortably position themselves. However, the training

programmes conducted in Siaha and Serchhip were carried out in school classrooms which were not large enough to comfortably accommodate all the participants. The participants were observed to be tightly packed in small classrooms and it would be desirable to find more spacious accommodations or bigger rooms for these training programmes.

7) Majority of the training centres did not have fire-fighting equipment.

Discussion:

Although the chances of a fire breakout during a training session is very slim, it is important that in this modern age, some form of precaution or remedial measures be available in such training institutions. Electric circuits and equipment such as projectors, computers, etc. always carry with them the possibility of spark or a flare-up; and training sessions may include practical hands on demonstrations where combustible materials may be handled. Therefore, it is desirable that the training centres be equipped with some rudimentary fire-fighting equipment. The investigator observed such fire-fighting equipment only in training centres at Aizawl and Lunglei Districts where fire extinguishers were made available in the training centres. All other districts did not make provisions for such safety measures.

8) None of the training centres had provisions for emergency exits.

Discussion:

8) Mizoram is a hilly state prone to landslides and earthquakes. It would be reasonable to assume that standards of safety would require training centres to be equipped with emergency exits in case of emergencies like fire, landslides or earthquakes in the unlikely eventuality that the main exit gets blocked off. Sadly, such features were not observed on any of the training centres in all the eight districts.

9) Majority of the training centres had ambience control devices.

Discussion:

Environmental conditions such as weather, humidity, heat, cold, etc. can have a significant bearing on the learning outcomes of the training sessions. Extremes in heat and cold can often cause trainees to lose focus and experience discomfort during the training sessions. The NIT centre of Aizawl District was observed to be equipped with air-conditioning; while most of the training centres had ceiling fans for ambience control. Sadly, few places like Siaha, Serchhip and Lawngtlai were observed to conduct training in centres where some of the rooms were not even fitted with ceiling fans. In such centres, the trainees were observed to be at various levels of discomfiture during the training sessions.

10) The training centres in all the districts had clean drinking water.

Discussion:

10) All the training centres in all districts provided clean drinking water to all the participants either in the form of bottled mineral water or water filters and cisterns. However, with the Government directive to reduce single use plastics, the coordinators of the training programmes would do well to look to a more environmentally viable alternative.

11) None of the districts provided local transportation for the participants.

Discussion:

Transportation is a major concern for the participants. Most of them are out-station participants and have arrived at the training centres by commercial means of transport like sumo, bus, etc while some even had to hire vehicles as there were no sumo or bus service in their places of posting. The cost of arranging local transportation could create additional burden -financial as well as emotional - on the participants. Sadly, none of the district centres provide

local transportation for the participants. This situation should be remedied as much as possible as it could perhaps be a cause of poor participation and lack of enthusiasm among the participants. It also reflects on the self-image of the participants as well as the larger image in the society. The problem of local transportation is compounded in the outer districts because of lack of suitable cheap local transportation. It is difficult to find auto-rickshaws and taxis in some of the areas of the district capitals. There was a dearth of local transportation in Siaha, Lawngtlai, and Mamit. Of all these, Mamit was observed to be the worst case in terms of local transportation with only a few taxi-stands in the whole town.

12) None of the districts provided local accommodation for the participants while some districts did not even have adequate paid accommodation facilities.

Discussion:

Sadly, none of the districts provided accommodation to the participants of the training programmes. The participants are left to fend for themselves and arrange accommodation on their own means. They stay in the homes of friends and relatives; sometimes in relative discomfort. It is imperative that the participants of the training programmes be provided with lodging of a certain quality befitting their status. In many cases, it is possible that participants do not have friends or relatives in that particular town; hence they are faced with a daunting problem. It has been observed that certain teachers do not like to attend these in-service training programmes. Again, the problem of accommodation is compounded by the sad fact that the towns where the training centres are located do not have adequate hotels or lodges to accommodate the participants who require them. This problem is more pronounced in the districts of Mamit, Serchhip, Lawngtlai and Siaha. Cheap and good hotels and lodges are scarce in these district capitals which can cater to the needs of the participants. Another aspect to this issue is the paltry allowances provided to the participants which is not nearly sufficient.

13) The training centres in all the districts had adequate toilet facilities with separate toilets for women.

Discussion:

Adequate toilet facilities with separate provisions for men and women were provided in all the district training centres.

14) Majority of the training centres had cafeterias for use by participants.

Discussion:

In most cases, the participants were provided with some sustenance during lunch break. However, some participants expressed their desires for more nourishment in addition that which was served. Also, lack of variety in the lunches provided meant that it was not suitable for the palate of all participants. Hence, in addition to the lunch provided, the participants should be provided with a cafeteria within short walking distance to cater to their needs. In this regard, majority of the training centres had access to food items in the form of canteens and restaurants. Centres in Mamit, Serchhip and Champhai were fairly isolated and did not have such amenities in the immediate vicinity.

15) None of the training centres had lounges or recreation centres

Discussion:

The in-service training programmes last for a week with full day sessions ranging from 4 to 6 hrs a day. Such programmes can be very tiring especially for those more advanced in age. It would be desirable for all training centres to have a lounge or rest-room or recreation room where the participants can relax for short whiles. The participants are not mechanistic machines and the training centres need to take that into account and provide for physical as well as mental recreation of the participants during the training period. Sadly, such facilities were not observed in any of the district training centres.

16) Majority of the training centres did not have comfortable and ergonomic seating.

Discussion:

In the in-service training programmes conducted by RMSA, participants were required to sit for long durations even up to 6 hrs in some instances. With variations in age and health, comfortable seating arrangements are an absolute necessity with cushioning and back support. The investigator observed such amenities only in Aizawl and Lunglei where the participants were, for the most part, seated in ergonomic chairs. Some other district training centres provided un-cushioned plastic chairs and certain training centres in districts like Mamit and Siaha had the participants seated in wooden benches. Such seating arrangements must be replaced immediately with ergonomic seating.

17) Most of the training centres provided writing tables for the participants.

Discussion:

The in-service training programmes often required participants to write down notes as well as participate in hands-on activities. In such cases, they would require comfortable writing tables or desks. In most of the training centres, the participants were provided with such tables or desks, except for some training rooms in Serchhip and Kolasib where the training was conducted in halls equipped with only plastic chairs and the participants were observed to write with some difficulty.

18) All the districts provided writing equipment and materials to all the participants.

Discussion:

All the district training centres provided the participants with writing equipment such as pens, notebooks, paper, etc. which is an absolute necessity in these kind of training sessions. However, a better quality of writing equipment would be much welcomed.

19) All the districts provided whiteboards or blackboards at the training centres.

Discussion:

All training centres in the eight districts provided standard blackboards/whiteboards in all the training rooms for use by the resource persons although in this time and age, interactive whiteboards or smartboards like the ones at NIT, Aizawl would be more appropriate.

20) Majority of the training centres were equipped with projectors.

Discussion:

In today's modern age, projectors have become an integral part of a standard classroom. Most resource persons like to use power-points for presenting their materials. Sadly, Lawngtlai and Siaha did not provide projectors.

21) All the districts provided laptops or computers for the use of resource persons but majority of them could not provide the same to the participants.

Discussion:

These in-service training programmes invite resource persons from different places which sometimes makes it untenable to carry their own equipment sometimes. So, the training centres should provide computers and laptops at the disposal of the trainers. All the district training centres were able to provide such equipment to the trainers. Training in ICT related issues is an important part of the in-service training programmes. Such training in ICT must be accompanied by practical works on actual computers. It is therefore essential that training centres provide access to such facilities for the participants. Aizawl district was able to provide comprehensively such facilities and Mamit district also made some efforts although there was some disparity between no of participants and the no of systems. All other districts were not observed to provide such facilities to the participants.

22) Only one of the training centres provided internet connectivity to the participants and resource persons.

Discussion:

Connectivity to the internet is also a very important resource as far as training programmes are concerned. Ready access to the internet at reasonable speeds was provided only by the Aizawl District Training Centres. All other districts must upgrade their training centres in this regard.

23) Majority of the training centres could not provide the participants with access to school textbooks.

Discussion:

In some training sessions the participants required access to school textbooks for practical and hands-on activities. It would be impractical to expect them to bring such books on their own from their far-flung locations. It is desirable therefore that the training centres provide them with access to school textbooks to facilitate their training. Sadly, only the Aizawl District Centre at IASE was able to provide access to such books.

24) Only few of the districts had the resources for providing handouts.

Discussion:

Sometimes the resource persons would like to give handouts to the participants for practical or hands-on activities. Only a few training centres had the facilities to multiply such handouts at short notice. It would be desirable to attach such training centres with a small office and staff to assist in the training processes.

25) Most of the training centres were not equipped with libraries although a few had public libraries nearby.

Discussion:

A well-equipped library with a variety of reading materials would be a great asset to any training programme. Only the Aizawl District Centre was able to attach the training centre with a library although a few others had one nearby such as Lunglei and Serchhip.

26) Aizawl District had shown the best infrastructural and instructional conditions in its training centres.

Discussion:

Aizawl is the capital city of Mizoram with a generous concentration of material as well as human resources. Therefore, it is expected that it should lead the way in providing amenities to the trainees in terms of infrastructure and instructional components. However, there are still some areas where the training centres in Aizawl needs to be upgraded in order to meet the national and international standards and norms regarding such training centre and should continue to push the boundaries in every component for other districts to aspire to.

26) Training Centres in other districts exhibited many areas needing improvement.

Discussion:

The training centres in the other districts left much to be desired although Lunglei District came a close second to Aizawl district in terms of amenities. All the other six districts showed huge gaps in their infrastructural and instructional resources and drastic measure are required for these training centres to be able to provide the resources and foundations necessary for conducting in-service training to secondary school teachers at any degree of satisfaction by any standard. These findings are supported by other research studies for which an example is the study by Gairola (2013) where DIET & CRC personnel as well as a significant number of teachers found facilities as inadequate.

5.1.2 Major Findings and Discussions on Transactional modalities of in-service teacher training programmes.

1) The administrative staff at the district RMSA offices had an average experience of 2.5 years under RMSA. The Deputy District Project Coordinators were mostly teachers and Headmasters that had been deputed to the District office. The other administrative staff were mostly clerical staff that were recruited to work in the offices.

Discussion:

Any successful programme needs experienced and qualified personnel to handle the administrative and organisational aspects of the programme. Similarly, the success and effectiveness of the in-service training programmes organised by RMSA requires efficient and able staff manning the administrative and organisational aspects of the programme. The staff should be trained in educational management and administration as well as knowledgeable in various aspects such as andragogy, technological advancements, recent researches in educational management, etc. They should also possess adequate experience in the actual field of work i.e. secondary education. The administrative staff at the districts could be barely termed adequate in totality and may be strengthened by various professional developmental programmes and field experiences to do justice to the work required.

2) None of the administrative staff had attended any specific training or workshop for the purpose of organising in-service training programmes.

Discussion:

General education in colleges and universities hardly equips us for the vocational world and personal insight and experience can only take us so far. In order to be able to organise a truly effective and fruitful training programme, the administrative staff needs to be equipped with special skills and knowledge without which they can hardly be expected to carry out their

duties in the manner that is expected of them. Therefore, the deviations of the training programmes from the ideal in various aspects may be attributed to the lack of technical and andragogic expertise in the administrative staff.

3) None of the administrative staff had been exposed to RMSA programmes in general and more specifically in-service training programmes, outside the state of Mizoram.

Discussion:

Any endeavour or undertaking can greatly benefit by comparing and collaboration with other like-minded individuals or entities engrossed in similar pursuits. The in-service training programmes in Mizoram can improve by imitating and emulating the best practices of other states and incorporating these practices into our very own programmes with adaptations depending on our social reality. Isolationistic mentalities will not help us to improve the quality of our programmes including the in-service training programmes for teachers. Hence, it is sad to learn that none of the staff at the state or district levels have been exposed to training programmes outside the state from where they could benefit to a great extent.

4) All of the respondents opined that the performance of the RMSA project in Mizoram was “good” and could find no glaring inadequacy in the overall performance. However, most of them did not feel qualified to comment on the comparision of the performances of Mizoram State with other States.

Discussion:

The opinions of the administrative staff regarding the performance of RMSA in Mizoram reveals that the state overall performance still leaves room for improvement in various areas and aspects of the mission. The goal must ultimately be to have the best secondary education in India which can be achieved through a concerted effort from all the stakeholders including

RMSA. Also, due to lack of external exposure, the staff at the state and district offices are unable to formulate criterion or norms with which to compare and evaluate the performance of RMSA in Mizoram with other states. In order to improve, we must first identify the weaknesses and faults in our programmes thereby taking the first step to improvement and development.

5) Majority of the administrative staff interviewed thought that the in-service training programmes under RMSA was satisfactory.

Discussion:

The opinions of the staff are reliable to a certain degree; yet all evaluation must be objective with norms for classification and evaluation. There is a lack of norms and guidelines for conducting these in-service programmes for staff to base their evaluations upon thereby reducing the validity and reliability of their opinions. The opinions of the respondents reveal that there are areas in the in-service training programmes which requires upgradation and improvement and that the current situation is still far from the ideal.

6) Some of the challenges of the RMSA in-service training programme mentioned by the administrative staff were –

- Lack of suitable halls
- Lack of adequate number of suitable resource persons
- Unsuitable timing
- Demonetisation scheme
- Lack of resources and facilities
- Lack of interest among the participants
- Transportation problems
- Accommodation problems
- Shortage of teachers

Discussion:

The administrative staff identified several areas as major sources of problems for managers as well as participants in the in-service training programmes for secondary teachers and all efforts must be made to remedy the current situations:

- Training programmes of this nature, with the participants being teachers from secondary schools require state-of-the-art lecture or training halls with all the amenities of the modern age and equipped with the latest technological advances. Such training halls are few and far in between with even Aizawl district barely meeting the standards required. The ambience lends an air of professionalism and instantly creates positive attitudes in trainees which the current training halls in Mizoram have failed to do so.
- The main component of the training programmes is the resource person and the success of the training programme lies heavily in their hands. Although there are significant numbers of persons who may be invited to speak at such training programmes, there is a very small number of teacher-educators who are academically and professionally qualified to spearhead the training programmes. Subject experts often lack the necessary educational background which decreases the utility of their presentations. Also, the trainees often feel alienated from resource persons whom they feel do not have the actual realistic field experience. The situation is aggravated in the far-flung districts where there is serious lack of capable resource persons.
- Due to administrative and financial constraints, the in-service training programmes are generally organised near the end of the academic sessions. This fact has caused a lot of the participants to complain about the unsuitability of such a timing as it places the teachers in serious predicaments with their focus on the board examinations looming large. It is possible that some schools may refuse to allow subject teachers to leave the school at such a crucial stage of the session.
- In November 2016, the Government of India introduced the demonetisation scheme which caused quite a bit of a problem with the administrative staff in

the matter of distributing the allowances (travel allowance/daily allowance) to the participants.

- The administrative staff also highlighted a serious lack of resources and facilities in the training centres in most of the districts. Ergonomic furniture, adequate number of technical equipment and assorted teaching-learning materials are essential to the success of the training programmes and expenses should not be spared in the acquisition of such facilities and resources.
- Some of the administrative personnel have identified a general lack of interest among the participants which is a serious challenge to the in-service training programmes. Lack of motivation and interest among the participants may reflect upon the quality of the training programmes; indicating that it is not meeting the needs of the target population as much as desired. It also reflects poorly on the quality of the resource persons and inadvertently on the manner in which the training programmes are being conducted.
- The problem of transportation was also mentioned by many of the administrative staff. They deeply sympathised with many of the participants who had to face extremely difficult situations to attend the training programmes. Many teachers are posted in villages where there is no commercial transportation service and had to hire vehicles on their own; while a few even had to walk several miles before reaching a station connected by motorable roads. Some participants could not reach the training centres in one working day and had to stop at unfamiliar villages to spend the night. Although such is the case, many participants could not be reimbursed fully due to lack of financial resources. In remote and hilly state like Mizoram, transportation is one of the major problems facing the participants and administrative staff of the in-service training programmes. In addition, many centres did not have cheap local transport in quantities required by the participants and many had to walk to and from their places of residences to the training centres.
- Accommodation was another problem which was highlighted by the staff of the RMSA offices especially in the remoter districts. Mizos are generally a very hospitable community and would welcome any needy stranger into their

homes, and the house of a relative or a friend is a sure bet for anyone. However, many teachers are posted in areas that are far from their hometowns and thus have no relatives in the training centres. They have to put up at the houses of faint acquaintances and sometimes complete strangers. This is not a very comfortable situation to be in especially if the duration of the stay exceeds a couple of nights. The problem is compounded for non-Mizo teachers for whom relatives and acquaintances are a scarcity in a strange state. On top of that, religious and cultural differences aggravate the difficulty of the situation.

- Many schools face a shortage of teachers as a result of which it becomes difficult to release teachers to attend the in-service training programmes especially at the end of the academic sessions with the final summative and board examinations looming just ahead. This problem is extremely pronounced in Siaha District where the schools close for one week and all the teachers attend the programmes together as most of the schools cannot spare the teachers without closing the school.

7) The following thrust areas were identified as desirable for the training programmes by the interviewees -

- Mathematics education
- Motivation
- Early release of funds
- Information Technology
- Accommodation facilities

Discussion:

When the administrative staff at the RMSA District Project offices were asked about possible thrust areas that should be taken up, several areas were identified by the respondents as necessary at the earliest.

- A few of the staff identified Mathematics education as a possible and desirable thrust area for the in-service training of secondary teachers as Mizo students

have been identified as particularly weak in these areas and the teachers teaching this subject need special focus and empowerment.

- Motivation and its inculcation were another area which some of the administrative personnel felt was needed in the training programmes as they had identified lack of motivation as one of the challenges facing the teachers.
- Most of the staff at the district offices of the RMSA have lamented that the funds for the training programmes are released too late into the session and an early release of funds would go a long way in helping to organise a more effective and well-timed training programme for secondary teachers.
- Information and Communications Technology (ICT) was also identified as a desirable thrust area for future training programmes by some of the administrative staff as many of the teachers lacked the necessary ICT knowledge to facilitate the modern methodology of learning in their classrooms.
- Since accommodation was a problem for some of the participants, a few districts like Serchhip and Siaha have started focussing on the development of lodges for teachers in the district capitals similar to the Teachers Inn at Aizawl which will greatly alleviate the accommodation problems faced by participants.

These findings are reflected in similar studies. SCERT, Andhra Pradesh (1981) also found that the training programmes needed more staff, science consultants and resources such as books and also inferred that administrative reforms and a more practical approach are needed. Butala (1987) also concurred that in-service training programmes conducted were grossly inadequate and that certain areas were not covered at all with only traditional methods being utilised. Mahiwal and Kumar (2017) also discovered that delay in receiving funds as well as inadequacy of training duration hampered the effectiveness of the in-service training programmes. Other studies such as Arends, et al. (1978) and Saeed (1999) also have highlighted various suggestions to improve in-service teacher education such as paying more attention to characteristics of professionals, embracing new models of delivery, increasing the human interaction and new frameworks for in-service education as well as incorporating a distance learning mode to supplement the contact programmes.

5.1.3 Major Findings and Discussion on the overall perception of teachers about the effect and utility of the in-service training programmes for secondary school teachers under RMSA.

1. The opinionnaire has revealed that majority of the teachers attending the training programmes opined that the training programmes were useful or helpful in the following ways:

1) achieving mastery of subject content.

2) developing proficiency in teaching skills

3) managing difficult classroom situations.

4) introducing variety into the teaching regimen.

5) making use of non-conventional resources

6) effectively managing working relationships

7) mobilising community resources

8) maintaining better parent-teacher relationships

9) professional development

10) maintaining a balanced lifestyle

11) conducting meaningful discussions

12) presenting concepts in a better way

13) enrichment of content knowledge

14) assessment and evaluation of students

15) identifying students weaknesses

Discussion:

It is heartening to see that the respondents had indicated favourable opinions in all the fifteen categories or criteria regarding the effect and utility of the training programmes. However, from a deeper study of the percentages in the various levels

of opinions (always/mostly/sometimes/never), it is evident that there is ample scope for improvement and the present scenario is still far from the ideal.

The average of all the percentages of the opinions in the fifteen criteria having answered as 'ALWAYS' is 29%. This is laudable but far from satisfactory. An average of 60%-80% may be marked to be the desired target in order to have a training programme of a high quality and relevance for the teachers in particular and the state in general. Similarly, it is highly desirable that the average percentages for 'MOSTLY' should fall to 10%-20% while the percentages for 'SOMETIMES' and 'NEVER' should hover at averages of 0%-3%.

In addition to these fifteen criteria, as the training programmes evolves many more issues can be taken up for discussion and their utility and effectiveness be measured from time to time.

It is therefore imperative that the effectiveness and utility of the training programmes be increased through all means necessary and ensure that the time and energy spent by the teachers in the training programme, as well as the resources spent by the government are utilised to the optimum levels and the teachers are continuously empowered to become better teachers through an efficient and effective training programme.

2. The group discussions yielded the following observations about the training programmes:

1) The utility of the training programmes is limited by the following factors

- quality of resource persons
- exam based
- unsuited to classroom situations
- too theoretical
- not textbook oriented.
- amount of interaction with trainees
- previous intimation of topics

2) The training programmes was useful for the following:

- establishing and maintaining social and professional connections
- improving the motivation levels of the trainees
- the development of new ideas and concepts.

Discussion:

1) The participants of the group discussions portrayed the quality of the training programmes as dependent on the quality of the resource persons which is most likely true. All other amenities and resources might be rendered ineffective at the hands of an inept resource person; therefore, it is very important that the training programmes be manned by qualified and expert resource persons.

The programmes were often conducted with a single-minded focus on the board examinations which often restricted a holistic treatment of the subject matter required for in-depth and wider understanding of the subject content as well as other issues related with the education of the children but not directly related to the board examinations. It is desirable that the training programmes include topics and issues not directly related to the board examinations but indirectly useful for the all-round development of the children such as career guidance, personality development, etc.

On the other hand, other teachers complained that the training programmes were not textbook oriented and did have direct utility for the school environment or for the academic development of the children. A balanced approach is perhaps best suited with adequate time for sensitisation included within the programmes.

Another issue raised by the teachers in the group discussions was that the training programmes were often too theoretical and not suited to classroom situations. Such complaints are often valid as many of the resource persons were not familiar with the intricacies of secondary education and the various aspects and issues involved in secondary classrooms. It is important that the resource persons have some experience of the workings of secondary schools and tweak their presentations to help the teachers in the adaptation of the topics discussed to suit their respective classrooms.

The group discussion participants also opined that the training programmes were mostly uni-directional monologues in nature with very little participation from the participants reducing its effectiveness; thus, the utility of the training programmes may be enhanced by more interaction with the trainees

It was also remarked by a few participants that the topics to be discussed in the training programmes may be made known to the participants at an earlier date so that they may be intellectually and emotionally prepared to discuss such issues and topics before attending the actual training programmes, so as to increase the effectiveness and productivity of the time spent in the programmes.

2) The training programmes has enabled teachers of similar work and interests from various towns and villages to come together and share a common platform, interact with each other and share ideas and experiences. This aspect and utility of the training programmes in establishing and maintaining social and professional connections was highlighted by the participants of the group discussion. This concept may be taken further by creating social media groups to facilitate the interchange of ideas and materials between the teachers.

One of the challenges of the training programmes that had been mentioned by a few of the administrative staff was that of the low levels of motivation. It was heartening to learn from some of the participants in the group discussion that the training programmes helped in improving the motivation levels of the trainees. This benefit will surely depend on the quality of the resource persons but it is still a positive sign and should be improved upon in the coming years and hopefully see a radical increase in the motivation levels of the teachers.

Education in general as well as teaching subjects in particular are dynamic and constantly evolving with the changing times with new ideas and concepts being birthed constantly. It is important that the teachers be kept abreast with the latest developments in content knowledge as well as pedagogy. According to the participants, the training programmes have helped in the development of new ideas and concepts and must continue to do so with even more vigour.

These findings are supported by various similar studies. Kumar and Lal (1980), Sharma (1982), Butala (1987), Soni (2011), etc. have found that in-service training is beneficial to teacher development in teaching skills as well as improvement in teacher confidence, competence and attitudes. Davis et. Al (2014) showed that in-service training did indeed make a difference in the growth of knowledge, attitude and professional skills of teachers. Kumar (2017) also conducted a similar study and concluded that such training programmes did bring about change in teacher attitudes and competencies. Halpin, et al. (1990) similarly, reported that In-service Education of Teachers (INSET) had impacted positively on their teaching and, relatedly, on improved levels of pupil attainment with greatest impact on teachers' attitudes and knowledge levels. Zhao and Frank (2003) have also found that technology plays a very important role in the efficiency of the training programmes. Eswaran and Singh (2009) have reported the content of the training programmes to be relevant to the professional learning needs of teachers.

5.1.4 Major Findings and Discussion on the overall perception of the participants on the capabilities of the resource persons in terms of training and their preparedness.

1. The opinionnaire revealed that a majority of the teachers who attended the in-service training programmes organised by RMSA agreed on the following observations about the capabilities of the resource persons:

1) Adequately qualified academically

2) Possessed the necessary experience

3) In-touch with the ground realities of secondary education

4) Possessed the necessary ICT skills

5) Open-minded and emphatic

6) Possessed the necessary pedagogic skills

7) Adequately prepared for the programmes

Discussion:

It is indeed encouraging to observe that majority of the trainees/teachers had reported favourable opinions and perceptions about the capabilities of the resource persons in all the seven criteria. On a closer inspection, however, it is noted that the percentages in the various levels of opinions (always/mostly/sometimes/never) are far from satisfactory and it can be concluded that there leaves much room for improvement.

The average of all the percentages of the opinions in the fifteen criteria having answered as 'ALWAYS' is 34.94 %. This is commendable but far from satisfactory. A much higher average of 60%-80% is desired in this category as it indicates that the quality of the resource persons is not always of the needed level. Similarly, it is highly desirable that the average percentages for 'MOSTLY' should fall from 40.57 % to 10%-20% while the percentages for 'SOMETIMES' and 'NEVER' should be reduced from 21.43% and 3% to averages of 2% - 0%.

One of the challenges mentioned by the administrative staff was in the interest and motivation levels of the trainees. The quality and capabilities of the resource persons is perhaps the most important factor in this regard. It follows that the training programmes need a cadre of highly capable and qualified resource persons to man the training programmes all over the state.

It is also observed that the opinions of the trainees are lower in some components than others; such as field experience, ICT Skills and Pedagogic Skills. In today's world, such capabilities are considered very important and all efforts must be made to strengthen the resource persons in these areas. Special mention may be made to the lack of ICT Skills in the resource persons which may hamper the development of the teachers in this area and subsequently that of the students; which in the digital world that we live in today, could be a major catastrophe in the making.

It is, therefore, very important that resource persons of better quality and caliber be sourced to man the helm at these training programmes or the existing resource persons be empowered and developed professionally to meet the needs of the trainees in a more fulfilling manner.

2. The group discussions have also shown that there were marked variations in the capabilities of the resource persons; some resource persons were innovative and motivating while lack of expertise and experience of the resource persons were observed in some cases especially in the secondary level of education. The participants also opined that resource persons should conduct more detailed discussions on the topic and base the MBSE textbooks.

Discussion:

It was sad to learn from the participants of the group discussion that there were marked differences in the quality or capabilities of the resource persons which could impact the overall performance of the training programmes. Only resource persons of the highest quality and caliber should be invited to give presentations in these training programmes; and resource persons who do not come up to the desired levels should be identified and should be asked to improve the quality of their presentations.

It was heartening to hear from the participants of the group discussions that some resource persons were innovative and motivating and greatly increased the quality of the training programmes. Such resource persons should be identified and be invited more frequently to give presentations and take classes in the training programmes.

It was also remarked by some of the participants that several times the topics were discussed at a superficial level and that the resource persons should conduct more detailed discussions on the topic under study and contention. This should be avoided and all content must be given their due time and effort. Also, it is preferable that the MBSE textbooks form the basis of discussions as they are the foremost tools of the teachers in the schools.

Soni (2011) investigated into the in-service training programme and its effects on classroom practices by examining the perceptions of SC teacher is Pali and Nagaur Districts of Rajasthan. It was found that 1) In-service training needed improvements both in terms of content and selection of resource persons. 2) The trainees claimed usefulness of training programmes. 3) No observable difference between male and female teachers.

5.1.5 Major Findings and Discussion on the Overall Perception on Problems encountered by the trainees during the training programmes.

1. The opinionnaire has revealed that a substantial majority of the trainees attending the training programmes agreed that they did not have significant problems while a small minority of the opined that they faced or encountered problems in the following areas:

1) Transportation

2) Accommodation

3) Language

4) Support Materials

5) Mistreatment from Staff

6) Resistance from Schools

7) Infrastructure

8) Programme Timing

Discussion:

The majority of the trainees had reported low incidences of problems encountered in all eight areas while attending the training programmes, which is a very good sign on the surface level. However, it is observed that the percentages in the various levels of opinions (always/mostly/sometimes/never) still fall a little short of the desired values and it is evident with a little more effort from the part of the administration, the opinions could further show improvement.

The average of all the percentages of the opinions in the eight problem areas having answered as 'ALWAYS' is 8.9 %. This figure might seem small but if nearly 10 % of the trainees always encounter problems that would constitute a serious problem and may be deemed highly satisfactory. The percentage of people always encountering problems should without fail be reduced to 0 %. Similarly, it is highly

desirable that the average percentages for ‘MOSTLY’ should fall from 11.63 % to 0 %-2 % while the percentages for ‘SOMETIMES’ and ‘NEVER’ should drastically increase from 25.67 % and 53.8 % to averages of 5 % - 8% and 80 % - 95 % respectively.

It is impossible to organise any large-scale event or programme involving dozens of people from different villages and towns for any administrative team. However, with a little more care and dedication, many of these problems can be completely eliminated and the more serious or resilient problems can be reduced to marginally low percentages of incidence.

Infrastructure Problems such as accommodation, transportation, materials, etc. are easily solved without much stress and effort and must be eliminated at the district administrative level. Although the administration may not be obliged to provide accommodation and local transportation to all the participants, it falls upon the administration to facilitate the attendance and comfortable stay of the participants during the course of the training programmes.

More serious problems such as resistance from schools due to lack of teachers and poor programme timing due to slow release of funds which is a problem felt all over the state, are more difficult to solve at the district level and requires the attention of the top brass in the state machinery who must ensure that these problems are minimised through timely interventions.

In this manner, it is imperative that the trainees are freed from any persisting and repeating problems when attending the training programmes to realise the full potential and utility of the programmes.

The declining rates of attendance of the training programmes attest to the severity and negative impact of these problems and every effort must be taken to reduce or eliminate such problems.

2. Participants from the group discussions mentioned the following problems as encountered by them:

- Unsuitable timing
- Transportation
- Lacking a connection with the actual realities of secondary schools.
- Lack of printed study materials for further reference and hands-on activities

Discussion:

Mizoram being a remote and hilly state, it is no wonder that transportation was a prominent problem encountered by the participants. Schools are often located in remote villages, some with hardly any commercial transportation. Thus, for a teacher without his/her own means of transportation, conveyance truly becomes a burden. The timing of the training programmes, which was usually conducted towards the end of the academic session was also quoted as problematic by the participants as unsuitable for them as they did not like leaving their students at a crucial time just before the final examinations.

The participants also complained of the training programmes sometimes lacking connections with the actual realities of secondary education. This is mostly due to the resource persons lack of experience in secondary education and their inability to connect the content with the actual classroom situations.

Another issue of content was the lack of printed study materials for further reference as well as hands-on activities. Also, hands-on activities must be conducted to concretise the learning especially where practical issues are involves such as computers, equipment, etc. Learning procedures and processes without actual practice is hardly sufficient and effective so hands-on activities must follow the theory.

Sharma (1982) has similarly reported that teachers complained of unsuitability of timing of training programmes.

5.1.6 Major Findings and Discussion on the Comparision of various districts in terms of trainee perceptions on utility of training programmes, capabilities of resource persons and problems encountered.

5.1.6.1 Major Findings and Discussion on the Comparision of various districts in terms of trainee perceptions on utility of training programmes.

The major findings regarding the comparision of various districts in terms of trainee perceptions on utility of the RMSA in-service training for secondary school teachers are as follows:

1. It was observed that there was no significant difference between the various districts in the following six (6) areas:

    - Mastery of Subject Content:
    - Management of Working Relationships
    - Mobilisation of Community Resources
    - Developing Parent-Teacher Relationships
    - Presentation of Concepts
    - Enrichment of Content Knowledge

2. It was also observed that there was significant difference between the various districts in the following nine (9) areas:

    - Proficiency in Teaching Skills
    - Classroom Management
    - Variety of Learning Experience
    - Use of Non-conventional Resources
    - Professional Development
    - Lifestyle Balance
    - Conducting Discussions
    - Assessment and Evaluation
    - Identification of Student Weaknesses

3. The trainees from **Lawngtlai and Siaha District** had expressed very positive opinions higher than the rest of the districts in most areas concerning the effect and utility of the training programmes.

4. The opinions of trainees from **Kolasib and Mamit District** had been observed to be lower than the rest of the state in some dimensions.

Discussion:

It is desirable that trainees from all districts should benefit uniformly from the training programmes at more or less the same level. Non-uniformity in utility of the training programmes is a worrying factor as it may lead to the intensification of already existing regional imbalances in the quality of secondary education. Although it is observed that all the districts have uniform opinions and perceptions in six areas, there are nine areas in which there are significant differences between the various districts. Thus, efforts must be made to ensure that all the districts must derive the maximum benefits from the training programmes.

Among the eight districts, trainees from Kolasib and Mamit have been observed to be least benefited from the training programmes. This situation must be remedied as early as possible by the district officials.

5.1.6.2 Major Findings and Discussion on the Comparision of various districts in terms of trainee perceptions on capabilities of resource persons.

1. It was observed that there was no significant difference between the various districts in the following three (3) areas regarding the capabilities of the resource persons:

    - Realistic nature of experience
    - ICT Skills
    - Adequacy of preparation

2. It was also observed that there was indeed a statistically significant difference between the various districts in the following four (4) areas regarding the capabilities of the resource persons:

   - Academic qualification
   - Adequacy of experience
   - Open-mindedness and empathy
   - Pedagogic Skills

3. Trainees from Serchhip and Lawngtlai Districts had expressed the most positive opinions about the capabilities of the resource persons

4. Trainees from Champhai have divulged poorest opinions about the capabilities of the resource persons.

Discussion:

Resource persons are perhaps the most important factor in ensuring the utility and worth of the training programmes and it must be ensured that the same quality and standards of resource persons man these training programmes all over state to see to it that the quality of secondary education does not lag behind in any of the districts. While the study reveals that trainees from all the districts have opined that resource persons have similar capabilities in three areas, there are disparities in four other areas which may introduce a significant difference in the quality of the training programmes between the various districts.

While trainees from Lawngtlai and Serchhip districts have revealed very encouraging opinions about the resource persons in their districts, the trainees from Champhai district have been very critical of the resource persons in their districts. This situation needs to be remedied at the earliest and measure must be taken up to ensure that all the districts in the state have access to resource persons that are of comparable quality.

5.1.6.3 Major Findings and Discussion on the Comparision of various districts in terms of trainee perceptions on problems encountered.

1. It was seen that there were significant differences between the various districts in all of the eight (8) problem areas, namely:

- Transportation
- Accommodation
- Language
- Support Materials
- Mistreatment from Staff
- Resistance from Schools
- Lack of Infrastructure
- Timing of Programmes

3. The trainees from Aizawl, Lunglei and Champhai Districts had expressed very low incidences of problems encountered by them.

4 The trainees from Kolasib District and Serchhip District complained of a few problems.

5 However, the trainees from Siaha District and Mamit District had complained of several problematic issues.

Discussion:

It is very difficult to organise a programme of this scale and magnitude without encountering a few minor problems along the way. However, many such problems may be minimised or even eliminated with careful consideration and heartfelt application of all possible efforts. In order to reduce the regional imbalances, it is imperative that the relevant authorities maintain a problem-free training experience for all the trainees in all the districts. Significant efforts are needed in the districts of Kolasib and Serchhip districts to eliminate all the problems whereas even more drastic measures may be needed in Siaha and Mamit districts to ensure state-wide uniformity in in-service training programmes for the secondary school teachers.

5.1.7 Major Findings and Discussion on the Comparision of the perceptions of different teachers based on their gender, experience and subject taught.

5.1.7.1 Major Findings and Discussion on the Comparision of the perceptions of different teachers based on their Gender.

1. Effect and utility of the training programmes.

The study found no significant difference between the opinions of male and female teachers in almost all the areas with the exception of the area of assessment and evaluation where the male teachers have been observed to have a higher opinion.

2. Capabilities of resource person.

The present study revealed no substantial difference between the opinions of male and female teachers in the capabilities of resource person of the training programmes with the sole exception of their ICT Skills where the female teachers have expressed opinions more positive than their male counterparts.

3. Problems.

It is also evident that there are no differences between the problems encountered by male and female teachers except in the areas of transportation and lack of infrastructure during the training programmes.

Discussion:

The study revealed very less differences in the opinions of male and female teachers and it may be concluded that the training programmes are equally suitable for both male and female teachers and neither is disadvantaged in the training process. These findings are corroborated by Soni (2011) who found no observable difference between male and female teachers.

5.1.7.2 Major Findings and Discussion on the Comparision of the perceptions of different teachers based on their teaching experience.

1 Effect and utility of the training programmes

The study found no significant differences between the opinions of junior and senior teachers in most areas regarding the utility of the training programmes with the exception of three areas, namely, development of proficiency in teaching skills, use of non-conventional resources and mobilisation of community resources; where compared to the senior teacher, the junior teachers have expressed the training programmes to be helpful and useful.

2 Capabilities of resource person.

The study also revealed almost no significant difference in the opinions of junior and senior teachers regarding the capabilities of resource person of the training programmes.

3 Problems encountered.

The study has shown no significant difference between the problems encountered or the lack of the same between junior and senior teachers during the training programmes.

Discussion:

The present study revealed very few differences between the opinions of junior and senior teachers regarding the various aspects of the training programmes. Hence, it may be concluded that the training programmes are equally suitable for teachers of varying ages and experiences.

5.1.6.3 Major Findings and Discussion on the Comparision of the perceptions of different teachers based on subjects taught.

1 Effect and utility of the training programmes.

The present study revealed that there were very few significant differences between the opinions of different subject teachers with the exception of the following areas:

- Subject mastery
- achievement of better working relationship
- enrichment of content knowledge
- assessment and evaluation of students

2 Capabilities of resource persons.

Regarding the capabilities of the resource persons, the study found differences in the opinions of the various subject teachers only in two areas namely, realistic field experience and ICT skills.

3 Problems encountered.

The present study has revealed that regarding the problems encountered by the trainees, there were differences in the opinions of the various subject teachers only in two areas, namely, resistance from schools and programme timing.

Discussion:

It is commendable that very few differences in opinions of various subject teachers were observed but some minor issues still need ironing out. It may be noted that Science teachers had the lowest opinions of the utility of the training programmes and capabilities of the resource persons.

5.2 Recommendations

The investigator has suggested the following recommendations regarding the in-service training programmes for secondary teachers in Mizoram under RMSA in order to improve the efficiency and utility as well as avoid the various pitfalls that may reduce the same and provide an excellent learning atmosphere for the trainees.

1. The State Project Offices should, after thorough research and study as well as consultation with experts in the field, establish a set of parameters, requirements and specifications for the infrastructural and instructional dimensions that should be provided at the training centres. Such guidelines should be made mandatory to all the districts with little or no leeway for deviations and all the district training centres should conform to these specifications.

2. The State Project Office should conduct routine studies/surveys/inspections in all the districts to ensure that the stipulations for the various components of the infrastructural and other aspects are rigorously met by the various districts.

3. In the very likely scenario that some of the districts fail to meet the standards prescribed for the quality of the training centres, the State Project Offices should initiate a mechanism of providing aid, financial or otherwise, to the district training centres to help them meet these quality specifications.

4. The RMSA State Project Offices may also collaborate and coordinate with other governmental departments and organisations to pool their resources to provide the best possible facilities to the trainees during the in-service training programmes.

5. In the eventuality that it is not possible to provide or establish such state-of-the-art training halls in all the districts, the authorities may identify suitable districts (preferably in at least 50%) where such facilities may be provided and hence prepare a sharing schedule or a plan wherein more than one district may use of these facilities on a rotational or need basis.

6. The relevant authorities may identify suitable skill sets that are needed to organise such training programmes and appoint such qualified persons instead of randomly assigning or recruiting people without any prior specifications. In the very possible scenario that personnel with suitable skill sets are not available, the state project offices must conduct training programmes (or send them to such training programmes organised by other organisations and entities) for people appointed to such posts and positions that are responsible for convening and organising training programmes; so that they develop such skills sets as are necessary to ensure a harmonious and fruitful training programmes for secondary school teachers.
7. The state authorities should send the RMSA personnel involved in organising the training programmes for exposure and educational trips to other states who have been identified as high-performing; to observe and learn from the programmes that are organised in other states as well as to interact with personnel from other places so that they might import some of the best practices from other states.
8. The State authorities must initiate a mechanism for the early release of such funds as are necessary for conducting the training programmes upon which the success of the training programmes hinges in a major way.
9. The State Project Office and other relevant authorities must prepare a vision and mission statement of the training programmes with clear outlines on what the training programmes are supposed to achieve in the long run. The objectives of the programme must be identified and the training programmes tailored accordingly. Also, this must be followed by a system of assessment and evaluation which will ascertain the level to which these objectives have been achieved and what remedial measures need to be taken up. Also, the objectives must be revised on a routine basis to encompass the dynamic nature of secondary education in particular and education in general.
10. The State Project Office may prepare a broad framework for the training programmes that would serve as a guide to all the various districts in the manner of allocation of classes and topics in the training programmes. Such

measures would promote a more rounded development in the in-service training programmes while still allowing some flexibility to the district offices.

11. The State as well as district offices may conduct various need analyses of the teachers and schools to incorporate into the training programmes and improve the utility and effectiveness of the in-service programmes. This would also help in the correct application of resources to those areas where it is most needed and thus induce optimum effectiveness and productivity.

12. The State Project Office may recruit a number of highly qualified personnel to serve as resource persons or faculties for the purpose of training teachers in these in-service training programmes along with other allied programmes that may be organised. These faculty members may be circulated among the various districts in a planned fashion so as to ensure that all the districts avail of the expertise of each faculty member. This will reduce the gap between the various districts in terms of manpower availability for the training programmes. Also, such persons may be developed professionally by the project offices as and when required such as sending them for training in national institutions, etc.

13. The State Project Office may prepare several criteria for suitability and eligibility to serve as resource persons in the in-service training programmes. Based on these criteria, the various districts may then shortlist a number of people to serve as the core members of the resource team in their districts. Before the start of the in-service training programmes, such identified persons may be routinely gathered for sensitisation or given additional training as and when required.

14. All Districts should have a permanent or a temporary Teachers Inn at the district headquarters, preferably close to the training centres to provide accommodation for all the out-station teachers who many times had to find shelter with complete strangers in an uncomfortable living arrangement. Fooding may be also be provided at these centres on a subsidised basis.

15. The District Administration may arrange for transportation arrangements in the form of buses or taxis which will transport the participants from their places of residence to the training centres as many of the participants have to often walk for long distances during the training programmes. This problem is further compounded by the fact that adequate public transportation is sometimes unavailable in the district capitals and is sometimes costly to the participants.

16. The District Project Offices must arrange for a state-of-the-art training centre with all the latest amenities and facilities wherein to conduct the training programmes. If unable to do so, it may collaborate with other governmental and non-governmental organisations to facilitate the construction or development of such a training facility in their district which may be utilised by several organisations or departments as and when needed.

17. One of the major problems in the in-service training programmes is the timing of the programme which usually is held at the end of the academic session due to the slow release of funds from the relevant authorities. The State Project Office may create a funding mechanism for this purpose so that the training programmes may be conducted at a more appropriate time during the academic calendar.

18. The training programmes might be conducted in a more hands-on and practical oriented approach compared to the theoretical approach currently being carried on. The trainees should be more engaged in the training process with real-world problem-solving activities and hands-on learning activities in actual and simulated situations.

19. Experienced and expert teachers who are well-known in the teaching community for their excellent work may be invited to share their experiences and best practices at the training programmes.

20. Interaction with high-ranking officials of the education and other allied departments may be conducted to provide a forum for the teachers to provide their personal input to the policy makers and leaders of the teaching community.

5.3 Suggestions for Further Study

The investigator offers the following suggestions for continuance of the present study to complement and follow up on the findings of the study:

1. A comparative study of the in-service training programmes under RMSA with other states with at least one other north-eastern state may be conducted.
2. Similar studies may be conducted after a temporal lapse of 5-7 years to ascertain the progress and development of the training programmes.
3. Studies of other in-service training programmes conducted by other agencies such as SCERT, Faculty Development Centre (MZU), etc may be conducted and comparisions made with RMSA training programmes.
4. A correlational study between the secondary school curriculum and the in-service training programmes may be conducted to ensure a parallelism and connection between the two.
5. SWOC (Strengths, Weaknesses, Opportunities and Challenges) analysis of the RMSA in-service training programmes may be conducted.
6. A study of the impact of the in-service training programmes on various factors such as academic achievement, student and teacher motivation, working environment, etc. may be undertaken.
7. A study of the connection and correlation between teacher education programmes such as D El Ed, B Ed and M Ed programmes with the in-service training programmes may be taken up.

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SUMMARY

INTRODUCTION

Education is the underpinning of the developmental effort of any nation, and a pivotal point in the transformation of a society or a nation through various stages of its growth. The status – quantitative and qualitative – of the educational sector is most often an indicator of the level of development that has been achieved by the nation as the two are not mutually exclusive but symbiotic in their relationship.

A modern and organized system of education with curricular control by the governments arrived with the British. However, only after independence was the country blessed with a system of education that was even close to meeting the needs of the population of India. However, even today it is generally felt that there are many areas within education in general, and secondary education in particular, that needs renewed efforts and a determined push in the never-ending search for a world class education.

Education arrived in Mizoram with the Christian Missionaries and after independence, Mizoram came under the control of India and the number of schools also increased steadily over the years with a corresponding increase in literacy. Today the scenario has improved greatly with Mizoram featuring at the highest level of educational indicators within the country such as literacy rate although there is still much scope for improvement in many areas including the professional development of the teachers.

Following the success of the Sarva Shiksha Abhiyan (SSA), The Rashtriya Madhyamik Shiksha Abhiyan or RMSA in short was launched in March 2009 with the following goals:

1. To affect a substantial improvement in the quality of secondary education.

2. To remove all barriers and hindrances to such quality education

3. To ensure universal access of secondary education by 2017 (GER of 100.

4. To achieve universal retention (0% dropout rate) by 2020.

In order to achieve the objective of universalization of secondary education, the Rashtriya Madhyamik Shiksha Abhiyan has made great inroads in several areas through concerted efforts.

- Physical Facilities for improving Access such as constructing new schools, classrooms, laboratories, libraries, toilets, hostels, etc.
- Quality Interventions such as appointment of teachers, in-service training, curricular and pedagogic reforms, ICT enablement, etc.
- Equity Interventions for weaker sections of society like women, SC/STs, differently abled, locationally disadvantaged, etc.

One of the important and visible aspects of the quality interventions has been the in-service training of the secondary school teachers. According to the guidelines of the scheme, RMSA has been given the responsibility of conducting comprehensive training programmes for in-service teachers and other functionaries such as headmasters on a timely basis which is the topic of this study.

NEED OF THE STUDY

Teachers who are responsible for the education of our children, must possess the highest calibers and qualities. The professional development of school teachers, especially secondary teachers is a very important aspect of education in general. The in-service training programmes for secondary teachers rest largely on the hands of the RMSA and the quality of their training programmes with regards to facilities and resources gain due significance.

Mizoram is a remote state located in the farthest reaches of the country; yet it must be ensured that reasonable norms and standards are met in these training programmes. Thus, a study of the status and transactional modalities is urgently required if conformity to national standards is to be realised as well as to remain relevant in changing educational scenarios. The effectiveness of any training programme depends to a large extent on the transactional modalities employed during the training programme. Hence a detailed study needs to be made and

necessary recommendations voiced to ensure that the training programme meets desirable standards in various aspects of the programme.

The various districts have conditions and peculiarities that differentiate it from the rest of the state. It would also be necessary to make a district wise study and comparision of the training programmes on different areas. It would be advisable to also compare the perceptions of various groups of teachers based on age, gender, level of professional education, experience, etc. Such a comparision may unearth answers to questions about the efficacy of the training programmes. The study may therefore yield suggestions and guidelines on the manner in which future training programmes may be structured and implemented leading to an efficient utilisation of resources.

STATEMENT OF THE PROBLEM

The study is titled "**In-service teacher training programmes for secondary school teachers in Mizoram under RMSA: An evaluative study**".

OPERATIONAL DEFINITION OF THE TERMS

1. RMSA - Rashtriya Madhyamik Shiksha Abhiyan, a scheme of Government of India, launched in March 2009, with the objective to enhance access to secondary education and to improve its quality.
2. Teacher - Any person employed/attached/deputed by the Government of Mizoram on Regular/Contract/Part-time basis for active teaching duties in a school.
3. In-service training programme - The 5 day (later extended to 10 days) training programmes organised by the State Education Department under RMSA in every district headquarters for teachers currently teaching in schools.
4. Secondary School-Any school within Mizoram where classes IX and X are taught.

OBJECTIVES

1. To examine the status of infrastructural and instructional facilities at the training centres of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram.

2. To examine the transactional modalities of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram.

3. To examine the perception of teachers about the effect and utility of the in-service training programmes for secondary school teachers under RMSA.

4. To assess the perception of the participants on the capabilities of the resource persons in terms of training and their preparedness.

5. To identify the problems encountered by the trainees during the training programmes.

6. To compare various districts in terms of trainee perceptions on utility of training programmes, capabilities of resource persons and problems encountered.

7. To compare the perceptions of different teachers based on their gender, experience and subject taught.

RESEARCH DESIGN

The present study was intended to examine the status and transactional modalities of in-service teacher training programmes for secondary school teachers under RMSA in Mizoram. It also purports to examine the perception of teachers about the effect and utility of the in-service training programmes, the capabilities of the resource persons and identify the problems encountered by the trainees. Comparision of various districts as well as the comparision of the teacher perception based on experience, gender and subject taught is attempted. Further, this study suggested measures for improving training programmes. Thus, to attain the objectives, descriptive survey approach was followed in the present study. The study will be conducted through mixed methods of research and will include both

qualitative and quantitative aspects. The researcher will employ quantitative methods of data collection such as opinionnaire as well as qualitative methods such as interviews, observations and group discussions. Data analysis will be done using simple statistical methods such as percentages and chi-square tests.

POPULATION

At the time of data collection, there were eight (8) districts in Mizoram with a total number of 3276 teachers. Out of these, 2936 teachers who were working in Government (State and Central) Schools, Deficit Schools, Ad-hoc Aided and new RMSA schools were eligible to attend the training programmes.

In addition, there are 127 teachers in Lump-sum aided schools and 1211 teachers in Private Unaided schools who do not attend these training programmes.

SAMPLE

Due to limitations of resources, a sample of 15 percent with a minimum of 30 was selected from the population of teachers in each district using simple random sampling. A total 500 teachers were randomly selected as sample of the study. Further, officials and administrators including Deputy District Project Coordinators (Dy. DPC) from the state project offices of the School education department which acted as nodal agency for RMSA was included this study for interview.

Table 3.2

Sample of Study

Sl no	District	Population	Sample
1	Aizawl	1009	170
2	Champhai	379	70
3	Kolasib	245	40
4	Lawngtlai	194	30

5	Lunglei	519	80
6	Mamit	222	40
7	Siaha	152	30
8	Serchhip	226	40
	Total	2936	500

TOOLS AND TECHNIQUES USED FOR DATA COLLECTION

Checklist

The checklist contained 28 items which were divided into two categories –

i) Infrastructural dimensions (17 items) and

ii) Instructional Dimensions (11 items).

A sample of the checklist is attached in Appendix -I

Opinionnaire

The opinionnaire was divided into three sections –

i) Effect and Utility of training programme (15 items)

ii) Capabilities of Resource Persons (7 items) and

iii) Problems encountered (8 items).

Interview Schedule

An interview schedule for administrative officials was developed to find out the status of in-service training and the various aspects associated with it.

Group Discussion

Unstructured Group discussions were held in four districts without any rigid guidelines for conducting the discussion.

MODE OF DATA COLLECTION

The investigator collected the data over a period of two years, visiting all the districts during this time. Formal permission was obtained from the administrative offices of each district as well as the State offices. The researcher visited the training centres to collect the information from the sampled teachers and also made some observations regarding infrastructural and instructional facilities of the centres.

The Deputy District Project Coordinators as well as supporting staff, who were the actual administrators of the in-service training programmes of RMSA were interviewed for the above study.

In four districts namely, Aizawl, Serchhip, Siaha and Lunglei, unstructured Focus Group Discussions were conducted with few teachers gathered together at one location.

TABULATION AND ANALYSIS OF DATA

The data collected from all the respondents were scrutinized and tabulated. The data collected from interview was analysed qualitatively. The observations from the checklist and the responses of the teachers on the opinionnaires were tabulated using excel worksheets. The tabulated data from the checklist and the opinionnaires were analysed using simple percentages as well as chi-square test for independence between two variables.

MAJOR FINDINGS

Status of Training Programmes

1) Participants from majority of the districts could reach the training centres in one day.

2) Better Training centres are needed in many of the districts.

3) Provision of power backup is needed in most of the training centres.

4) The training centres in all the districts needs to be made inclusive.

5) The training centres in all the districts were free from noise pollution.

6) Majority of the training centres had adequate spaces.

7) Majority of the training centres did not have fire-fighting equipment.

8) None of the training centres had provisions for emergency exits.

9) Majority of the training centres had ambience control devices.

10) The training centres in all the districts had clean drinking water.

11) None of the districts provided local transportation for the participants.

12) None of the districts provided local accommodation for the participants while some districts did not even have adequate paid accommodation facilities.

13) The training centres in all the districts had adequate toilet facilities with separate toilets for women.

14) Majority of the training centres had cafeterias for use by participants.

15) None of the training centres had lounges or recreation centres for use by participants.

16) Majority of the training centres did not have comfortable and ergonomic seating arrangements.

17) Most of the training centres provided writing tables for the participants.

18) All the districts provided writing equipment and materials to all the participants.

19) All the districts provided whiteboards or blackboards at the training centres.

20) Majority of the training centres were equipped with projectors.

21) All the districts provided laptops or computers for the use of resource persons but majority of them could not provide the same to the participants.

22) Only one of the training centres provided internet connectivity to the participants and resource persons.

23) Majority of the training centres could not provide the participants with access to school textbooks.

24) Only few of the districts had the resources for providing handouts.

25) Most of the training centres were not equipped with libraries although a few had public libraries nearby.

26) Aizawl District had shown the best infrastructural and instructional conditions in its training centres.

27) Training Centres in other districts exhibited many areas needing improvement.

Transactional modalities.

1) The administrative staff at the district RMSA offices had an average experience of 2.5 years under RMSA. The Deputy District Project Coordinators were mostly teachers and Headmasters that had been deputed to the District office. The other administrative staff were mostly clerical staff that were recruited to work in the offices.

2) None of the administrative staff had attended any specific training or workshop for the purpose of organising in-service training programmes.

3) None of the administrative staff had been exposed to RMSA programmes in general and more specifically in-service training programmes, outside the state of Mizoram.

4) All of the respondents opined that the performance of the RMSA project in Mizoram was "good" and could find no glaring inadequacy in the overall performance. However, most of them did not feel qualified to comment on the comparision of the performances of Mizoram State with other States.

5) Majority of the administrative staff interviewed thought that the in-service training programmes under RMSA was satisfactory.

6) Some of the challenges of the RMSA in-service training programme mentioned by the administrative staff were –

- Lack of suitable halls
- Lack of adequate number of suitable resource persons
- Unsuitable timing
- Demonetisation scheme
- Lack of resources and facilities
- Lack of interest among the participants
- Transportation problems
- Accommodation problems
- Shortage of teachers

7) The following thrust areas were identified as desirable for the training programmes by the interviewees -

- Mathematics education
- Motivation
- Early release of funds
- Information Technology
- Accommodation facilities

Overall perception of teachers about the effect and utility of the in-service training programmes.

1. The opinionnaire has revealed that majority of the teachers attending the training programmes opined that the training programmes were useful or helpful in the following ways:

1) achieving mastery of subject content.

2) developing proficiency in teaching skills

3) managing difficult classroom situations.

4) introducing variety into the teaching regimen.

5) making use of non-conventional resources

6) effectively managing working relationships

7) mobilising community resources

8) maintaining better parent-teacher relationships

9) professional development

10) maintaining a balanced lifestyle

11) conducting meaningful discussions

12) presenting concepts in a better way

13) enrichment of content knowledge

14) assessment and evaluation of students

15) identifying student's weaknesses

2. The group discussions yielded the following observations about the training programmes:

1) The utility of the training programmes is limited by the following factors

- Quality of resource persons
- exam based
- unsuited to classroom situations
- too theoretical
- not textbook oriented.
- Amount of interaction with trainees
- Previous intimation of topics

2) The training programmes was useful for the following:

- establishing and maintaining social and professional connections
- improving the motivation levels of the trainees
- the development of new ideas and concepts.

Overall perception of the participants on the capabilities of the resource persons

1. The opinionnaire revealed that a majority of the teachers who attended the in-service training programmes organised by RMSA agreed on the following observations about the capabilities of the resource persons at these training programmes:

1) Adequately qualified academically

2) Possessed the necessary experience

3) In-touch with the ground realities of secondary education

4) Possessed the necessary ICT skills

5) Open-minded and emphatic

6) Possessed the necessary pedagogic skills

7) Adequately prepared for the programmes

2. The group discussions have also shown that there were marked variations in the capabilities of the resource persons; some resource persons were innovative and motivating while lack of expertise and experience of the resource persons were observed in some cases especially in the secondary level of education. The participants also opined that resource persons should conduct more detailed discussions on the topic and base the MBSE textbooks.

Overall Perception on Problems encountered by the trainees during the training programmes.

1. The opinionnaire has revealed that a substantial majority of the trainees attending the training programmes agreed that they did not have significant problems while a small minority of the opined that they faced or encountered problems in the following areas:

1) Transportation
2) Accommodation
3) Language
4) Support Materials
5) Mistreatment from Staff
6) Resistance from Schools
7) Infrastructure
8) Programme Timing

2. Participants from the group discussions mentioned the following problems as encountered by them:

- Unsuitable timing
- Transportation
- Lacking a connection with the actual realities of secondary schools.
- Lack of printed study materials for further reference and hands-on activities

Comparision of various districts in terms of trainee perceptions on utility of training programmes, capabilities of resource persons and problems encountered.

A. Comparision of various districts in terms of trainee perceptions on utility of training programmes.

1. It was observed that there was no significant difference between the various districts in the following six (6) areas:
    - Mastery of Subject Content:
    - Management of Working Relationships
    - Mobilisation of Community Resources
    - Developing Parent-Teacher Relationships
    - Presentation of Concepts
    - Enrichment of Content Knowledge

2. It was also observed that there was significant difference between the various districts in the following nine (9) areas:
    - Proficiency in Teaching Skills
    - Classroom Management
    - Variety of Learning Experience
    - Use of Non-conventional Resources
    - Professional Development
    - Lifestyle Balance
    - Conducting Discussions
    - Assessment and Evaluation
    - Identification of Student Weaknesses

3. The trainees from **Lawngtlai and Siaha District** had expressed very positive opinions higher than the rest of the districts in most areas concerning the effect and utility of the training programmes.

4. The opinions of trainees from **Kolasib and Mamit District** had been observed to be lower than the rest of the state in some dimensions.

B. Comparision of various districts in terms of trainee perceptions on capabilities of resource persons.

1. It was observed that there was no significant difference between the various districts in the following three (3) areas regarding the capabilities of the resource persons:

   - Realistic nature of experience
   - ICT Skills
   - Adequacy of preparation

2. It was also observed that there was indeed a statistically significant difference between the various districts in the following four (4) areas regarding the capabilities of the resource persons:

   - Academic qualification
   - Adequacy of experience
   - Open-mindedness and empathy
   - Pedagogic Skills

3. Trainees from Serchhip and Lawngtlai Districts had expressed the most positive opinions about the capabilities of the resource persons

4. Trainees from Champhai have divulged poorest opinions about the capabilities of the resource persons.

C. Comparision of various districts in terms of trainee perceptions on problems encountered.

1. It was seen that there was were significant differences between the various districts in all of the eight (8) problem areas, namely:

   - Transportation
   - Accommodation
   - Language

- Support Materials
- Mistreatment from Staff
- Resistance from Schools
- Lack of Infrastructure
- Timing of Programmes

3. The trainees from Aizawl, Lunglei and Champhai Districts had expressed very low incidences of problems encountered by them.

4 The trainees from Kolasib District and Serchhip District complained of a few problems.

5 However, the trainees from Siaha District and Mamit District had complained of several problematic issues.

Comparision of the perceptions of different teachers based on their gender

1. Effect and utility of the training programmes.

The study found no significant difference between the opinions of male and female teachers in almost all the areas regarding the utility of the training programmes with the singular exception of the area of assessment and evaluation where the male teachers have been observed to have a higher opinion.

2. Capabilities of resource person.

The present study revealed no substantial difference between the opinions of male and female teachers in the capabilities of resource person of the training programmes with the sole exception of their ICT Skills where the female teachers have expressed opinions more positive than their male counterparts.

3. Problems.

It is also evident that there are no differences between the problems encountered by male and female teachers except in the areas of transportation and lack of infrastructure during the training programmes.

Comparision of the perceptions of different teachers based on their teaching experience.

1 Effect and utility of the training programmes

The study found no significant differences between the opinions of junior and senior teachers in most areas regarding the utility of the training programmes with the exception of three areas, namely, development of proficiency in teaching skills, use of non-conventional resources and mobilisation of community resources; where compared to the senior teacher, the junior teachers have expressed the training programmes to be helpful and useful.

2 Capabilities of resource person.

The study also revealed almost no significant difference in the opinions of junior and senior teachers regarding the capabilities of resource person of the training programmes.

3 Problems encountered.

The study has shown no significant difference between the problems encountered or the lack of the same between junior and senior teachers during the training programmes.

Comparision of the perceptions of different teachers based on subjects taught.

1 Effect and utility of the training programmes.

The present study revealed that there were very few significant differences between the opinions of different subject teachers with the exception of the following areas:

- Subject mastery
- achievement of better working relationship
- enrichment of content knowledge
- assessment and evaluation of students

2 Capabilities of resource persons.

Regarding the capabilities of the resource persons, the study found differences in the opinions of the various subject teachers only in two areas namely, realistic field experience and ICT skills.

3 Problems encountered.

The present study has revealed that regarding the problems encountered by the trainees, there were differences in the opinions of the various subject teachers only in two areas, namely, resistance from schools and programme timing.

RECOMMENDATIONS

The investigator has suggested the following recommendations regarding the in-service training programmes for secondary teachers in Mizoram under RMSA in order to improve the efficiency and utility as well as avoid the various pitfalls that may reduce the same and provide an excellent learning atmosphere for the trainees.

1. The State Project Offices should, after thorough research and study as well as consultation with experts in the field, establish a set of parameters, requirements and specifications for the infrastructural and instructional dimensions that should be provided at the training centres. Such guidelines should be made mandatory to all the districts with little or no leeway for deviations and all the district training centres should conform to these specifications.

2. The State Project Office should conduct routine studies/surveys/inspections in all the districts to ensure that the stipulations for the various components of the infrastructural and other aspects are rigorously met by the various districts.

3. In the very likely scenario that some of the districts fail to meet the standards prescribed for the quality of the training centres, the State Project Offices should initiate a mechanism of providing aid, financial or otherwise, to the district training centres to help them meet these quality specifications.

4. The RMSA State Project Offices may also collaborate and coordinate with other governmental departments and organisations to pool their resources to provide the best possible facilities to the trainees during the in-service training programmes.

5. In the eventuality that it is not possible to provide or establish such state-of-the-art training halls in all the districts, the authorities may identify suitable districts (preferably in at least 50%) where such facilities may be provided and hence prepare a sharing schedule or a plan wherein more than one district may use of these facilities on a rotational or need basis.

6. The relevant authorities may identify suitable skill sets that are needed to organise such training programmes and appoint such qualified persons. In the very possible scenario that personnel with suitable skill sets are not available, the state project offices must conduct training programmes (or send them to such training programmes organised by other organisations and entities) for people appointed to such posts and positions that are responsible for convening and organising such training programmes; so that they develop such skills sets as are necessary to ensure a harmonious and fruitful training programmes for secondary school teachers.

7. The state authorities should send the RMSA personnel involved in organising the training programmes for exposure and educational trips to other states who have been identified as high-performing; to observe and learn from the programmes that are organised in other states as well as to interact with personnel from other places.

8. The State authorities must initiate a mechanism for the early release of such funds as are necessary for conducting the training programmes upon which the success of the training programmes hinges in a major way.

9. The State Project Office and other relevant authorities must prepare a vision and mission statement of the training programmes with clear outlines on what the training programmes are supposed to achieve in the long run. The objectives of the programme must be identified and the training programmes

tailored accordingly. Also, this must be followed by a system of assessment and evaluation which will ascertain the level to which these objectives have been achieved and what remedial measures need to be taken up. Also, the objectives must be revised on a routine basis to encompass the dynamic nature of secondary education in particular and education in general.

10. The State Project Office may prepare a broad framework for the training programmes that would serve as a guide to all the various districts in the manner of allocation of classes and topics in the training programmes. Such measures would promote a more rounded development in the in-service training programmes while still allowing some flexibility to the district offices.

11. The State as well as district offices may conduct various need analyses of the teachers and schools to incorporate into the training programmes and improve the utility and effectiveness of the in-service programmes. This would also help in the correct application of resources to those areas where it is most needed and thus induce optimum effectiveness and productivity.

12. The State Project Office may recruit a number of highly qualified personnel to serve as resource persons or faculties for the purpose of training teachers in these in-service training programmes. These faculty members may be circulated among the various districts in a planned fashion so as to ensure that all the districts avail of the expertise of each faculty member. This will reduce the gap between the various districts in terms of manpower availability for the training programmes. Also, such persons may be developed professionally by the project offices as and when required such as sending them for training in national institutions, etc.

13. The state Project Office may prepare several criteria for suitability and eligibility to serve as resource persons in the in-service training programmes. Based on these criteria, the various districts may then shortlist a number of people to serve as the core members of the resource team in their districts. Before the start of the in-service training programmes, such identified persons

may be routinely gathered for sensitisation or given additional training as and when required.

14. All Districts should have a permanent or a temporary Teachers Inn at the district headquarters, preferably close to the training centres to provide accommodation for all the out-station teachers who many times had to find shelter with complete strangers in an uncomfortable living arrangement. Fooding may be also be provided at these centres on a subsidised basis.

15. The District Administration may arrange for transportation arrangements in the form of buses or taxis which will transport the participants from their places of residence to the training centres as many of the participants have to often walk for long distances during the training programmes. This problem is further compounded by the fact that adequate public transportation is sometimes unavailable in the district capitals and is sometimes costly to the participants.

16. The District Project Offices must arrange for a state-of-the-art training centre with all the latest amenities and facilities wherein to conduct the training programmes. If unable to do so, it may collaborate with other governmental and non-governmental organisations to facilitate the construction or development of such a training facility in their district which may be utilised by several organisations or departments as and when needed.

17. One if the major problems in the in-service training programmes is the timing of the programme which usually is held at the end of the academic session due to the slow release of funds from the relevant authorities. The State Project Office may create a funding mechanism for this purpose so that the training programmes may be conducted at a more appropriate time during the academic calendar.

18. The training programmes might be conducted in a more hands-on and practical oriented approach compared to the theoretical approach currently being carried on. The trainees should be more engaged in the training process with real-world problem-solving activities and hands-on learning activities in actual and simulated situations.

19. Experienced and expert teachers who are well-known in the teaching community for their excellent work may be invited to share their experiences and best practices at the training programmes.

20. Interaction with high-ranking officials of the education and other allied departments may be conducted to provide a forum for the teachers to provide their personal input to the policy makers and leaders of the teaching community.

5.3 Suggestions for Further Study

The investigator offers the following suggestions for continuance of the present study to complement and follow up on the findings of the study:

8. SWOC (Strengths, Weaknesses, Opportunities and Challenges) analysis of the RMSA in-service training programmes may be conducted.
9. A study of the impact of the in-service training A comparative study of the in-service training programmes under RMSA with other states with at least one other north-eastern state may be conducted.
10. Similar studies may be conducted after a temporal lapse of 5-7 years to ascertain the progress and development of the training programmes.
11. Studies of other in-service training programmes conducted by other agencies such as SCERT, Faculty Development Centre (MZU), etc may be conducted and comparisions made with RMSA training programmes.
12. A correlational study between the secondary school curriculum and the in-service training programmes may be conducted to ensure a parallelism and connection between the two.
13. A study of the impact of the in-service training programmes on various factors such as academic achievement, student and teacher motivation, working environment, etc. may be undertaken.
14. A study of the connection and correlation between teacher education programmes such as D El Ed, B Ed and M Ed programmes with the in-service training programmes may be taken up.

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A FIELD STUDY OF THE TRANSACTIONAL MODALITIES OF THE IN-SERVICE TEACHER TRAINING PROGRAMMES FOR SECONDARY SCHOOL TEACHERS UNDER RMSA IN MIZORAM

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----------ABSTRACT----------

The professional development of teachers is an important aspect of education and the main avenue for the professional development of secondary school teachers is the in-service training programmes organised by the district education offices. This study is an attempt to study the transactional modalities i.e. the manner in which the training programmes are organised by the various district education offices. Training Centres in all eight districts of Mizoram were visited and administrative staff from all the district offices were interviewed. Findings were tabulated and recommendations made for improvement.

KEYWORDS: *In-service Training Programme, Secondary School Teachers, Training Centres, Transactional Modalities, Challenges, Thrust Areas, Recommendations.*

INTRODUCTION

It has often been said that 'Teachers are the builders of the nation'. The importance of teachers in directly and indirectly shaping the present and future of our country is beyond contention and argument. The quality of teachers therefore determines to a very large extent the quality of education in our country and the continuous professional development of our teachers is a necessity to keep up with the dynamic nature of society and education.

In India the responsibility for the continuous professional development of school teachers falls mainly upon the Central Schemes such as Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA) which have taken up the mandate by financing annually the in-service training programmes for school teachers. For the secondary stage, in-service training of teachers is annually organised by Rashtriya Madhyamik Shiksha Abhiyan for a duration of 5 days for each subject teacher.

In Mizoram, the training programmes are conducted/organised by the District Education Offices where the DEOs are the District Project Coordinators and are assisted by Deputy District Programme Coordinators and other staff. The teachers are gathered at the district headquarters in a suitable venue where the training takes place. Various resource persons from different agencies and institutions are invited to lend their expertise for the training programmes.

Mizoram is one of the remotest states in India and is still plagued by a variety of maladies in education and teacher education as well. Mizoram had 8 districts at the time of the study namely Aizawl, Champhai, Kolasib, Lawngtlai, Lunglei, Mamit, Siaha and Serchhip. Some of these districts may be classed as educationally backward with poor performance of students and a general lack of infrastructure and facilities including manpower. Hopefully, this study will shed some light into the problem areas regarding the in-service training programmes for secondary teachers in Mizoram under RMSA.

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NEED OF THE STUDY

This study aims to examine the manner in which the in-service training programmes for secondary school teachers under RMSA are organised in the State of Mizoram. The success of any programme lies to a great extent on the manner in which it is organised and managed. A professional and efficient transaction is very important to achieve optimum results in the training programmes as well as to circumvent any possible loopholes that may arise.

In addition, the various challenges or difficulties that are encountered in the organisation and management of the training programmes needs to be identified with a ground-level investigation so as to develop means to overcome these challenges. Also, the future roadmap of the training programmes needs to be charted out through identification of possible thrust areas so that the training programmes remain relevant in the future. Lastly, possible remedies of the difficulties as well as measures to affect qualitative improvements must be worked out which will help the in-service training programmes meet the need of the secondary school teachers which will in turn affect the educational development of their students in a positive manner.

OBJECTIVES OF THE STUDY

1. To examine the transactional modalities of the in-service training programmes for secondary school teachers in Mizoram.
2. To assess the challenges facing the in-service training programmes.
3. To identify possible thrust areas for the in-service training programmes.
4. To make necessary recommendations for improvement of the training programmes.

METHODOLOGY

For the purpose of collecting information and related data for the study, the investigator visited all the districts at the actual locations where the training programmes were conducted. The investigator met and interacted with various officials from the district education offices such as Deputy District Project Coordinators, Counsellors, Office Assistants, etc. The investigator conducted formal interviews in all the district training centres with personnel who were directly involved with the organisation and management of the programmes under study with the help of an interview schedule. The interviews were recorded digitally which were later transcribed and translated into English. The data was analysed qualitatively.

FINDINGS

A. Transactional Modalities

The in-service training programme for secondary teachers was initiated as a part of the Rashtriya Madhyamik Shiksha Abhiyan umbrella to ensure quality education in the secondary schools of India through the continuous professional development of teachers through in-service contact programmes. The Programme Advisory Board of the RMSA had the mandate for the overall administration of the training programmes as well as the allocation of the necessary funds to the states.

At the State level, the in-service training programmes were directed and overseen by the State Project Directors office which disbursed the necessary funds to the districts as soon as they were sanctioned from the National Project Mission Offices. In Mizoram, a separate RMSA wing under the Director of School Education who also functioned as the State Project Director was created with staff drawn from the Directorate of School Education as well as RMSA personnel. The State Project Offices also acted as the link between the National and District levels, passing on guidelines and relevant information whenever necessary. The State Project office is the main nerve centre for the whole state and coordinates all the efforts of the eight districts and consolidates the data accumulated from all over the state.

At the District level, The District Education Officer acted as the District Project Coordinator and was assisted by the Deputy District Project Coordinator. The Deputy District Project Coordinator was usually deputed from among the serving district office staff or in most cases, from headmasters or senior teachers of secondary schools. The RMSA project offices were placed adjacent to the District Education Offices and often functioned parallelly and are usually manned by staff recruited through RMSA in various capacities.

In most districts, the training programmes are conducted at the back-end of the calendar year which usually coincides with the third or fourth quarters of the academic sessions. Usually, the programmes are initiated as soon as funds are sanctioned from the state project offices. However, sometimes the funds are sanctioned very late and the training programmes are initiated before the actual sanction of funds. In such cases, the expenditure is met from other sources and later recovered/recouped from the sanctioned funds.

At the onset, the district project staff formulates the training routines and identifies possible venues for the training programmes as well as the necessary resource persons for the various topics identified for the programmes. Mention must be made here of the situation in Aizawl district which was found to be different from the rest of the state. For the case of Aizawl district, the National Project offices had identified Institute of Advanced Studies in

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Education (IASE) and National Institute of Technology (NIT) as Nodal Institutions for the in-service training programmes specifically for Aizawl District so all formalities such as venues, resource persons, training schedules, etc. are arranged in consultation with faculty members of these institutions. Letters are then issued to the secondary school headmasters informing them of the timing and schedule of the training programmes as well as advising them to send the appropriate teachers for the training programmes as per the schedules devised by the district offices.

The training programmes are usually conducted for five weeks with three to five working days scheduled in the routines. Due to difficulties in transportation from remote areas and the non-availability of such services on Sunday, most districts find it difficult to conduct training programmes for the full five days. Most districts schedule programmes spanning four days while a few districts manage four and a half days. An aberration to the trend was observed in Siaha District where a severe shortage of teachers has compounded the problem to such a degree that the absence of one or two teachers from a school makes it practically impossible to manage the daily workings of the school in many cases. In order to minimise the impact of the training programmes on the daily management of the schools, training programmes for all the five subjects are conducted simultaneously at the same time. During this time, the schools are closed as all the teachers attend the training programmes. In Siaha, the training programmes usually last 2 – 4 days.

Training Centres in the districts vary from the air-conditioned classrooms of NIT, Aizawl to the school classrooms of Siaha, Serchhip, Mamit, etc. Block Resource Centres, Conference Centres, various Departmental Halls are also utilised for the training programmes subject to their availability at the time of the training programmes.

Resource persons are invited from a myriad number of sources and the quality greatly differs from district to district. Aizawl District, as expected, has access to extremely qualified resource persons including Mizoram University, IASE, NIT, SCERT, DIET Aizawl, Various Degree Colleges, etc. Other Districts rely mostly on the Degree Colleges and DIETs for the bulk of the resource persons. However, some districts like Kolasib have invited experts from various departments like Agriculture, Horticulture, Social Welfare, etc. to speak to the trainees at occasions.

Trainees attending the programmes are given Sitting Allowance/Daily Allowances in all districts with amounts ranging from Rs. 100 – 200 per person per day. However, only out-station trainees are given Travel Allowances which is usually calculated as the actual Sumo fares from their places of posting.

From the interviews of the administrative staff in all the eight districts, the following points may be highlighted:

1) The administrative staff at the district RMSA offices had an average experience of 2.5 years under RMSA. The Deputy District Project Coordinators were mostly teachers and Headmasters that had been deputed to the District office. The other administrative staff were mostly clerical staff that were recruited to work in the offices.
2) None of the administrative staff had attended any specific training or workshop for the purpose of organising in-service training programmes.
3) None of the administrative staff had been exposed to RMSA programmes in general and more specifically in-service training programmes, outside the state of Mizoram.
4) All of the respondents opined that the performance of the RMSA project in Mizoram was good and could find no glaring inadequacy in the overall performance. However, most of them did not feel qualified to comment on the comparision of the performances of Mizoram State with other States.
5) Majority of the administrative staff interviewed thought that the in-service training programmes under RMSA was satisfactory.

B. Challenges

Some of the challenges of the RMSA in-service training programme mentioned by the interviewees were –

- Lack of suitable halls
- Lack of adequate number of suitable resource persons
- Unsuitable timing
- Demonetisation scheme
- Lack of resources and facilities
- Lack of interest among the participants
- Transportation problems
- Accommodation problems
- Shortage of teachers

C. Thrust Areas

The following thrust areas were identified as desirable by the interviewees -

- Mathematics education
- Motivation

- Early release of funds
- Information Technology
- Accommodation facilities

RECOMMENDATIONS

The investigator has suggested the following recommendations regarding the in-service training programmes for secondary teachers in Mizoram under RMSA in order to improve the efficiency and effectiveness as well as avoid the various pitfalls that may reduce the same and provide an excellent learning atmosphere for the trainees.

1. The relevant authorities may identify suitable skill sets that are needed to organise such training programmes and appoint such qualified persons instead of randomly assigning or recruiting people without any prior specifications. In the very possible scenario that personnel with suitable skill sets are not available, the state project offices must conduct training programmes (or send them to such training programmes organised by other organisations and entities) for people appointed to such posts and positions that are responsible for convening and organising training programmes; so that they develop such skills sets as are necessary to ensure a harmonious and fruitful training programmes for secondary school teachers.
2. The state authorities should send the RMSA personnel involved in organising the training programmes for exposure and educational trips to other states who have been identified as high-performing; to observe and learn from the programmes that are organised in other states as well as to interact with personnel from other places so that they might import some of the best practices from other states.
3. The State authorities must initiate a mechanism for the early release of such funds as are necessary for conducting the training programmes upon which the success of the training programmes hinges in a major way.
4. The State Project Office and other relevant authorities must prepare a vision and mission statement of the training programmes with clear outlines on what the training programmes are supposed to achieve in the long run. The objectives of the programme must be identified and the training programmes tailored accordingly. Also, this must be followed by a system of assessment and evaluation which will ascertain the level to which these objectives have been achieved and what remedial measures need to be taken up. Also, the objectives must be revised on a routine basis to encompass the dynamic nature of secondary education in particular and education in general.
5. The State Project Office may prepare a broad framework for the training programmes that would serve as a guide to all the various districts in the manner of allocation of classes and topics in the training programmes. Such measures would promote a more rounded development in the in-service training programmes while still allowing some flexibility to the district offices.
6. The State as well as district offices may conduct various need analyses of the teachers and schools to incorporate into the training programmes and improve the utility and effectiveness of the in-service programmes. This would also help in the correct application of resources to those areas where it is most needed and thus induce optimum effectiveness and productivity.
7. The State Project Office may recruit a number of highly qualified personnel to serve as resource persons or faculties for the purpose of training teachers in these in-service training programmes along with other allied programmes that may be organised. These faculty members may be circulated among the various districts in a planned fashion so as to ensure that all the districts avail of the expertise of each faculty member. This will reduce the gap between the various districts in terms of manpower availability for the training programmes. Also, such persons may be developed professionally by the project offices as and when required such as sending them for training in national institutions, etc.
8. The State Project Office may prepare several criteria for suitability and eligibility to serve as resource persons in the in-service training programmes. Based on these criteria, the various districts may then shortlist a number of people to serve as the core members of the resource team in their districts. Before the start of the in-service training programmes, such identified persons may be routinely gathered for sensitisation or given additional training as and when required.
9. All Districts should have a permanent or a temporary Teachers Inn at the district headquarters, preferably close to the training centres to provide accommodation for all the out-station teachers who many times had to find shelter with complete strangers in an uncomfortable living arrangement. Fooding may be also be provided at these centres on a subsidised basis.
10. The District Administration may arrange for transportation arrangements in the form of buses or taxis which will transport the participants from their places of residence to the training centres as many of the participants have to often walk for long distances during the training programmes. This problem is further

compounded by the fact that adequate public transportation is sometimes unavailable in the district capitals and is sometimes costly to the participants.

11. The District Project Offices must arrange for a state-of-the-art training centre with all the latest amenities and facilities wherein to conduct the training programmes. If unable to do so, it may collaborate with other governmental and non-governmental organisations to facilitate the construction or development of such a training facility in their district which may be utilised by several organisations or departments as and when needed.
12. One of the major problems in the in-service training programmes is the timing of the programme which usually is held at the end of the academic session due to the slow release of funds from the relevant authorities. The State Project Office may create a funding mechanism for this purpose so that the training programmes may be conducted at a more appropriate time during the academic calendar.
13. The training programmes might be conducted in a more hands-on and practical oriented approach compared to the theoretical approach currently being carried on. The trainees should be more engaged in the training process with real-world problem-solving activities and hands-on learning activities in actual and simulated situations.
14. Experienced and expert teachers who are well-known in the teaching community for their excellent work may be invited to share their experiences and best practices at the training programmes.

CONCLUSION

A vibrant and dynamic in-service training programme is sorely needed to improve the effectiveness of the teachers in transacting the curriculum in an effective and efficient manner so as to help the students obtain optimum benefit from their times and effort spent in the schools. The various shortfalls that plague the present system of in-service education of secondary school teachers must be met and dealt with as soon as possible in the most effective manner permitted by the constraints of our resources.

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APPENDIX I

CHECKLIST FOR FACILITIES PROVIDED AT TRAINING CENTRES FOR IN-SERVICE TRAINING OF SECONDARY TEACHERS

	A. INFRASTRUCTURAL DIMENSIONS	**Yes**	**No**
1	Can all the participants reach the training centre in one day?		
2	Is the training conducted in a regular RCC building?		
3	In case of power outage, is there power backup?		
4	Is the training centre fitted with ramps or railings for the differently abled?		
5	Is the training centre free from external noise e.g. traffic, market, etc?		
6	Is the training centre large enough to comfortably accommodate all the participants?		
7	Does the centre have fire-fighting equipment?		
8	Does the training centre have emergency exits?		
9	Doe the rooms have ceiling fans or other ambience control devices?		
10	Does the training centre have clean drinking water?		
11	Does the administration provide transportation facilities from the place of residence to the training centre?		
12	If no, are there commercial vehicles for hire by the participants?		
13	Are the participants provided with accommodation?		
14	Are there enough hotels/lodges in the town/city where the training is being conducted?		
15	Does the training centre have adequate toilets, separately for men and women		
16	Is there a cafeteria within or nearby the training centre?		
17	Is there a lounge or recreation room in the training centre?		

	B. INSTRUCTIONAL DIMENSIONS		
1	Are the seating arrangements comfortable for prolonged duration?		
2	Are there writing tables for all participants?		
3	Are the participants provided with writing equipment?		
4	Does the training rooms have whiteboards/blackboards?		
5	Are the rooms equipped with projectors?		
6	Does the training centre have computers/laptops for use by resource persons?		
7	Does the training centre have computers/laptops for use by participants?		
8	Does the training centre have internet connection?		
9	Are the participants provided with access to school textbooks?		
10	Are the participants provided with handouts?		
11	A. Does the training centre have a library?		
	B. If no, is there one nearby (2kms)?		

APPENDIX II

QUESTIONNAIRE FOR IN-SERVICE TEACHER TRAINEES REGARDING RMSA TRAINING PROGRAMMES (ENGLISH)

Particulars of Respondent:

1. Name _____

2. Gender(M/F): _____ 3. Age : _____ yrs

4. Educational Qualification:

(i) B.A./B.Sc/B.Com, etc. _____ (honours/major subject)

(ii) M.A./M.Sc/M.Com, etc. _____ (honours/major subject)

(iii) B Ed/M Ed _____

(iii) Others _____

5. Teaching Experience:

(i) In Secondary Schools _____ years

(ii) Others _____ years

6. Subjects taught:

(i) _____ (ii) _____(iii) _____

Sl No		Always	Mostly	Sometimes	Never
DIMENSION-1: EFFECT AND UTILTIY OF TRAINING PROGRAMMES					
1	Has the training programme helped you in achieving mastery of the subject content?				
2	Has the training programme helped you to develop proficiency in specific teaching skills?				

3	Do you think the training programme empowered you to effectively manage difficult classroom situations?				
4	Did the training programme enable you to introduce variety into the teaching-learning experiences?				
5	Did the training programme enable you to make use of non-conventional learning resources?				
6	Do you think the training programme will help you to achieve a better working relationship with your colleagues and co-workers?				
7	Do you think the training programme will help you to mobilize community resources?				
8	Will the training programme help you to maintain a better relationship with parents/guardians of students?				
9	Was the training programme helpful for your professional development?				
10	Do you think the training programme will help you to maintain a healthy balance between various spheres of your life like work, family, society, etc.?				
11	Do you think the training programme will help you to conduct meaningful discussions?				
12	Do you think the training programme will help you in the better presentation of new concepts?				

13	Has the training programme helped you in the enrichment of content knowledge?				
14	Will the training programme help you to assess and evaluate your students more objectively and effectively?				
15	Do you think the training programme will help you to identify specific weaknesses of students?				
DIMENSION-2: CAPABILITIES OF RESOURCE PERSONS					
1	Do you think that the resource persons in your training programmes were academically / educationally qualified for the job?				
2	Do you think the resource persons had adequate experience to conduct trainings for secondary school teachers?				
3	Do you think the resource persons were in touch with the ground realities of secondary education?				
4	Do you think the resource persons had the skills necessary to integrate ICT into the training sessions?				
5	Do you feel that the resource persons were open-minded and able to empathise with the trainees?				
6	Do you think that the resource persons had the necessary pedagogic skills required to train secondary school teachers?				

7	Do you think that the resource persons were adequately prepared for the training programmes?				
DIMENSION-3: PROBLEMS ENCOUNTERED BY TRAINEES					
1	Did you face any problem regarding transportation between your place of work and the training centre?				
2	Did you have any problem regarding accommodation during your training period?				
3	Did you encounter any difficulties regarding language/medium of instruction during the training period?				
4	Did you lack in any support materials needed for the training sessions?				
5	Did you face any problem regarding the attitude of the staff at the training centre or face any mistreatment from them?				
6	Did you encounter any resistance from your school authorities or co-workers for attending the training?				
7	Did you feel that there is lack of training infrastructure?				
8	Do you think the timing of the training programmes is best suited to the academic calendar?				
SUGGESTIONS FOR IMPROVEMENT OF TRAINING PROGRAMMES					
1					
2					

APPENDIX III

QUESTIONNAIRE FOR IN-SERVICE TEACHER TRAINEES REGARDING RMSA TRAINING PROGRAMMES (MIZO)

Particulars of Respondent:

1. Name :_____

2. Gender(M/F): _____ 3. Age : _____yrs

4. Educational Qualification:

(i) B.A./B.Sc/B.Com, etc. _____ (honours/major subject)

(ii) M.A./M.Sc/M.Com, etc. _____ (honours/major subject)

(iii) B Ed/M Ed _____

(iii) Others _____

5. Teaching Experience:

(i) In Secondary Schools _____ years

(ii) Others _____ years

6. Subjects taught:

(i) _____ (ii) _____(iii) _____

Sl No		Always	Mostly	Sometimes	Never
DIMENSION-1: EFFECT AND UTILTIY OF TRAINING PROGRAMMES					
1	Training programme hian subject hriatchianna/belna kawngah a pui che em?				
2	Training programme hian zirtir thiamna (teaching skills) kawngah hmasawnna a pe che em?				

3	Classroom chhunga harsatna sukiang thei turin training hian a pui che em?				
4	Zirtirna pek kawngah kawnghmang chi hrang hrang (variety) dap chhuak thei turin he training programme hian a pui che em?				
5	Training programme hian zirlaibu pawn lam a thilte hmang tangkai thiam turin a pui che em?				
6	I thawhpuite/zirtirtu puite nen a thawhhona tha zawk nei thei turin training hian a pui che em?				
7	Training hian tualchhung mi te leh hmanruate hmang tangkai thei turin a pui che em?				
8	Naupang nu leh pa te nen a inlaichinna tha zawk eni turin training hian a pui che em?				
9	I hnathawhna kawngah hmasawnna (professional development) nei zel turin a pui che em?				
10	Training hian i nun peng hrang (chhungkua, hna, khawtlang, adt.) te inkarah insiamrem turina pui che em?				
11	Training hian sawihona (discussion) tha tak a buatsaih/kalpui thei turin a pui che em?				
12	Concept thar zirtirna kawngah training hian a pui che em?				
13	Training hian zirlai tih hausakna kawngah a pui che em?				

14	Training hian i zirlaite dinhmun hraitchianna leh endikna kawngah hmasawnna a pe che em?				
15	Naupangte chaklohna leh harsatna haichhuak thei turin training hian a pui che em?				
DIMENSION-2: CAPABILITIES OF RESOURCE PERSONS					
1	Training programme a resource person te hi zirna leh thiamna kawngah an tha tawkin i hria em?				
2	Resource person te hian secondary school zirtirtute training pe turin experience an nei tha tawkin i hria em?				
3	Secondary education hi resource person te hian an luhchilh/belchiang tawkin i hria em?				
4	Resource persons te hian training programme leh ICT an thlunzawm thiam in i hria em?				
5	Resource person te hian rilru zau tak an pu in trainee te rilru sukthlek an man pha in i hria em?				
6	Resource persons te hian secondary school zirtirtute training pe turin zirtir thiamna (pedagogy) lamah thiamna bik neiin i hria em?				
7	Training pe turin resource person te an in buatsaih tha tawkin i hria em?				

DIMENSION-3: PROBLEMS ENCOUNTERED BY TRAINEES					
1	I hnathawhna hmun leh training centre inkar a veivahna kawngah harsatna i tawk em?				
2	I training chhungin chenna/thlenna chungchangah harsatna i tawk em?				
3	Training chhungin tawng (language of instruction) chungchangah harsatna i nei em?				
4	Training chhungin training atan a pawimawh hmanrua/bungrua tlakchham i nei em?				
5	I training chhungin training centre a staff te hnen atangin harsatna emaw thil duhawmlo tawn i nei em?				
6	School thuneitute emaw thawhpuite emaw hnen atangin training kal chungchangah dodalna i tawk em?				
7	Training bungrua (infrastructure) lamah talkchham awmin i hria em?				
8	Training programme hi academic calendar nen hian inmil in i hria em?				
TRAINING PROGRAMME HMASAWNNA ATAN A SUGGESTION					
1					
2					

APPENDIX IV

INTERVIEW SCHEDULE FOR ADMINISTRATORS

1. How long and in what capacity have you been working under RMSA?

(RMSA ah hian eng chen nge I thawh tawh a, eng and dinhmun te nge I chelh tawh?)

2. Have you undergone any specific training to help you organise these in-service training programmes?

(In-service training huaihawt tur hian a bika zirtirna emaw training emaw I dawng tawh em?)

3. Have you been exposed to other training programmes outside the district or state?

(District dang emaw State dang emaw a an training programmes huaihawt i chhim/zirchiang tawh em?)

4. Can you kindly tell me the manner and process in which the in-service training programmes are organised and conducted?

(Hetiang training programmes in huaihawt dan kalphung tlangpui min hrilh thei angem?)

5. Are you able to conduct the training programmes for the required 5 days as prescribed by the RMSA guidelines?

(RMSA kaihhruaina in a tarlan ang hian ni 5 chhung training hi in kalpui thei em?)

6. What types of venues do you use for the training programmes?

(Training na atan hian eng ang hmunhma nge in hman thin?)

7. From where do you invite the resource persons for the training sessions?

(Resource person te hi khawi ami nge in sawm thin?

8. What are the facilities and emoluments given to the teachers attending the training programmes?

(Training tur a lo kal zirtirtute hi eng ang hamthatna nge in pek ve thin?)

9. What is your evaluation of the RMSA programmes in general and more specifically the in-service training programme?

(RMSA hrim hrim leh in-service training bik te hi an kalphung tha tawkin i hria em?)

10. What in your opinion are the challenges and weaknesses of the in-service training programmes under RMSA?

(RMSA hnuaia in-service training ah hian enge harsatna leh tlakchham lian zualte ni a i hriat?)

11. What in your opinion, are the possible thrust areas that the in-service training programmes need to address?

(RMSA in-service training hian hma a sawn theih na turin eng kawngah te nge hma lak ni se tha a i rin?

12. Would you like to make any other comments regarding RMSA in-service training programmes for secondary school teachers?

(High School zirtirtu te tana RMSA in-service training programme chungchangah hian han sawi belh duh i nei em?)

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Approval of Research Proposal

1. Departmental Research Committee:

2. Board of Studies : 12.04.2016

3. School Board : 19.04.2106

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Extension : Nil

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