Chapter 1
Introduction ..............................................................................01 - 25
1.1 Background of the study ----------------------------------------02
1.2 Need and significance ------------------------------------------10
1.3 Statement of the problem ---------------------------------------15
1.4 Definition of Key terms ----------------------------------------16
1.5 Hypotheses of the study ----------------------------------------18
1.6 Objectives of the study -----------------------------------------19
1.7 Functional outline of the study -------------------------------20
  1.7.1 Sample selected ---------------------------------------------21
  1.7.2 Tools and Techniques used ----------------------------------21
  1.7.3 Statistical procedures employed -----------------------------22
1.8 Scope of the study ---------------------------------------------22
1.9 Delimitation of the study ---------------------------------------23
1.10 Overview of the forthcoming chapters --------------------------24

Chapter 2
Theoretical Overview ...............................................................26 - 96
2.1 Introduction -----------------------------------------------------27
2.2. Contextualizing Learning styles. --------------------------------29
2.3. Select Models of Learning styles--------------------------------32
  2.3.1 Given’s five learning style systems------------------------32
  2.3.2 Kolb’s Experiential Learning Model -------------------------32
  2.3.3 Honey and Mumford’s Learning style.-----------------------33
  2.3.4 Gregore’s model------------------------------------------33
  2.3.5 Dunn and Dunn’s learning styles Theory ---------------------34
2.4. VAK learning style: A Neurolinguistic approach ---------------36
2.5. Meta cognition: A viable instrument for self directed
     learning. ------------------------------------------------------40
2.6. Select Models of Meta cognition-------------------------------45
2.7. Learning styles and Meta cognition: Boosters for Excellence ------------------------------------------53
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.8</td>
<td>Dimensions of language learning strategies-An interactionist perspective.</td>
<td>54</td>
</tr>
<tr>
<td>2.9</td>
<td>Structural design of select Meta cognitive class room practices</td>
<td>68</td>
</tr>
<tr>
<td>2.9.1</td>
<td>Graphic Organizer</td>
<td>68</td>
</tr>
<tr>
<td>2.9.2</td>
<td>Self Questioning</td>
<td>77</td>
</tr>
<tr>
<td>2.9.3</td>
<td>Problem Solving</td>
<td>89</td>
</tr>
</tbody>
</table>

**Chapter 3**

**Review of Related Literature**

3.1 Studies on learning styles. | 99 |
3.2 Studies on Meta cognitive Strategies | 105 |
3.3 Studies on Self Questioning | 116 |
3.4 Studies on Graphic Organizer | 124 |
3.5 Studies on Problem Solving | 129 |

**Chapter 4**

**Methodology**

4.1 Methodological guidelines | 138 |
4.2 Method Adopted | 139 |
4.3 Research Design | 139 |
4.4 Educational settings of the study. | 141 |
4.5 Participants of the study | 145 |
4.6 Variables Enacted for the study | 146 |
4.7 Tools and Techniques. | 147 |
4.7.1 Semi-Structured Interview | 147 |
4.7.2 Learning Style Inventory | 150 |
4.7.3 Self assessment Rubric on the differentiated components of Meta cognition | 155 |
4.7.4 Test of academic achievement in Malayalam Language. | 159 |
4.7.5 Lesson Design on Graphic Organizer | 163 |
4.7.6 Lesson Design on Self-Questioning. | 169 |
4.7.7 Lesson Design on problem solving. | 177 |
4.7.8 Observational checklist: An Assessment Window for Monitoring. | 183 |
4.7.9 Collection of Linguistic Discourses. | 186 |
4.7.10 Strategy Evaluation Proforma | 188 |
4.7.11 Student Generated Rubric -Pursuit of Excellence in learning task. | 189 |
4.8 Channelization of investigation in the procedural mode | 191 |
4.9 Statistical procedures Resorted | 194 |
Chapter 5
Analysis and interpretation .............................................195 - 356

Section 1
Analysis of the prevailing modalities of curriculum transaction in the learning of Malayalam Language at secondary level with special reference to meta cognitive classroom practices. ............................... 199

Section 2
Analysis of the learning preferences of the students based on sensory modalities. ..............................................208

Section 3
(a). Analysis of the effectiveness of the select meta cognitive classroom practices namely, Graphic Organizer, Self Questioning, and Problem Solving on the academic achievement of secondary school students in their Malayalam Language with respect to the sample selected. ........................................... 209
1. Total sample of students. .............................................210
2. Visual group of students. .................................215
3. Auditory group of students. ..............................221
4. Kinesthetic group of students. ..........................226
(b) Analysis of the effectiveness of the select meta cognitive classroom practices namely, Graphic Organizer, Self Questioning, and Problem Solving on strengthening the meta cognitive awareness of students at secondary level. ........................................... 281

Section 4
Comparison of the extent of effectiveness of the select Meta cognitive classroom practices, Graphic Organizer, Self Questioning and Problem Solving among the secondary school students having varied learning styles namely, Visual, Auditory and kinesthetic. ........................................... 288

Section 5
Analysis of the worthiness of the select meta cognitive classroom practices towards strengthening the awareness on meta cognition and enhancing the academic performance of the students at secondary level by means of: ................................................................. 311
1. Strategy Evaluation Proforma. .................................312
2. Collection of Linguistic Discourses. ...........................321
3. Observational Checklist. -------------------------------------------324
4. Student generated Rubric.------------------------------------------330

Chapter 6
Summary and Conclusions ..........................................357 - 402

6.1 The study in Retrospect.------------------------------------------358
6.2 Major findings and Conclusion.-----------------------------------362
6.3 Summary of Conclusion.-------------------------------------------389
6.4 Implications of the study.-----------------------------------------392
6.5 Limitations of the study.-------------------------------------------400
6.6 Suggestions for further Research----------------------------------400

Bibliography ........................................................................403 - 427

Appendices .........................................................................428 - 478