- Liberal education is at the heart of a civil society, and at the heart of a liberal education is the act of teaching.

- The instrument for measuring your level of education is not your high school or college but by your character.

- An eager learner brings to fore, the abilities of a great teacher.

- Only education can open the mind and the heart of man to achieve happiness, welfare and peaceful life.

- A teacher's purpose is not to create students in his own image, but to develop students who can create their own image.
A Compendium of Abstract of Research Projects in Tamil Nadu

(2012-2013)

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January, 2014
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Preface

SCERT is dedicated to the cause of professional development of teachers and research for improving the quality of school education in the state. It has been coordinating International, National and state level research projects such as PISA and NCERT surveys. Its sharper focus on research has resulted in number of research projects on various issues namely classroom process, learning resources, teacher profile, students achievement and continuous and comprehensive evaluation (CCE) across the state. All the 29 DIETs, have taken up studies relevant to district needs. Altogether, 59 research projects have been completed. State level projects have been initiated by the SCERT. They cover wide ranging issues like impact studies of in-service training programmes, development of instruments for on-site support to DIETs and schools, functioning of DIETs particularly pre-service education, science learning resources like lab utilization, evaluation of CCE, children’s proficiency to name a few. A number of workshops in different phases and places were conducted to develop and validate instruments, conduct field try-outs and data collection and to prepare research reports. Research, being the core competency of SCERT, helps the organization to attack the educational problems frontally and to provide policy inputs to the Government for quality schooling in Tamil Nadu.

Dissemination of Research findings is one of the key functions of SCERT. Hence, SCERT has meticulously consolidated the abstracts of researches conducted in all the Districts. It is believed the compendium shall help all the stake holders of education gain a deep insight into academic issues influencing quality in the schooling processes.

Editorial Board
<table>
<thead>
<tr>
<th>Abstract No.</th>
<th>Title of the Research Project</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Effect of Structure Substitution Drill Package in Developing the Listening and Speaking Skills of Fifth Standard Students</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Problems in Reading English among children at Elementary Level</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Enhancing the level of Reading Skill in English among class V Students through Innovative Activities</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Study Habits and Achievement in English among IX Standard students of Salem District</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Impact of Innovative Instructional Strategies in Improving Reading Skills in English at Upper Primary Level</td>
<td>18</td>
</tr>
<tr>
<td>6</td>
<td>Effectiveness of constructivist learning cards in enhancing reading skills in English at elementary level</td>
<td>21</td>
</tr>
<tr>
<td>7</td>
<td>Enhancing the English language skills of students at Standard VIII through VGC package in Thiruvarur District</td>
<td>27</td>
</tr>
<tr>
<td>8</td>
<td>Reading Difficulties in English among Std VII Pupils in Villupuram District</td>
<td>32</td>
</tr>
<tr>
<td>9</td>
<td>Writing skills of Standard VIII students in English at Upper Primary level in Kanyakumari District</td>
<td>36</td>
</tr>
<tr>
<td>10</td>
<td>Effectiveness of word cards, picture cards and phonetic cards in improving reading skill in English at primary level</td>
<td>41</td>
</tr>
<tr>
<td><strong>Tamil</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Enhancing the poem learning skills of Middle School Students by singing and teaching the Poems</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>12</td>
<td>Enhancing Tamil writing skills of VIII std Students of Thiruvidaimarudur Panchayat Union School in Tanjore District</td>
<td>48</td>
</tr>
<tr>
<td>13</td>
<td>Enhancement of Communicative Skills in Tamil using Tamil Language Games</td>
<td>55</td>
</tr>
</tbody>
</table>

**Mathematics**

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Enhancing logical thinking in Mathematics through laboratory activities among VIII standard students</td>
<td>58</td>
</tr>
<tr>
<td>15</td>
<td>Effectiveness of self learning packages on the achievements of Mathematical competencies at primary level among hill – area students in Theni District</td>
<td>61</td>
</tr>
<tr>
<td>16</td>
<td>Availability and utilization of self learning kits for Mathematics in primary school of Villupuram District</td>
<td>65</td>
</tr>
</tbody>
</table>

**Science**

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Effect of Computer Supported Instruction on the cognitive learning outcomes of seventh standard students in learning Science</td>
<td>68</td>
</tr>
<tr>
<td>18</td>
<td>Availability and utilisation of laboratory equipments at Upper primary level in Ariyalur and Perambalur Districts</td>
<td>77</td>
</tr>
<tr>
<td>19</td>
<td>Effectiveness of Co-operative learning in achievement of Science among Upper Primary students in Virudhunagar District</td>
<td>81</td>
</tr>
<tr>
<td>20</td>
<td>Availability and Utilization of Science Lab Equipments at Upper Primary and High School levels in Kanyakumari District</td>
<td>84</td>
</tr>
<tr>
<td>21</td>
<td>Attitude and practices of Science teachers towards handling practical sessions at secondary level in Thanjavur District</td>
<td>90</td>
</tr>
</tbody>
</table>

**Social Science**

<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Effectiveness of video clips – fused teaching on enhancement of the concepts of geography among VII Std students of Kovilpatti Educational District</td>
<td>98</td>
</tr>
<tr>
<td>No.</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>23</td>
<td>A study on Continuous and Comprehensive Evaluation</td>
<td>102</td>
</tr>
<tr>
<td>24</td>
<td>Effect of Formative Assessment in Science on Scientific Attitude among Eighth Standard Students in Virudhunagar District</td>
<td>112</td>
</tr>
<tr>
<td>25</td>
<td>An appraisal of Co-Scholastic areas in CCE of teachers and students at Upper Primary Level in Dharmapuri District</td>
<td>115</td>
</tr>
<tr>
<td>26</td>
<td>Scholastic and Co-scholastic Activities of Primary School students with regard to select variables</td>
<td>118</td>
</tr>
<tr>
<td>27</td>
<td>Utilization of Science Learning Materials for the Successful Implementation of CCE</td>
<td>121</td>
</tr>
<tr>
<td>28</td>
<td>Problems Faced by the Teachers in Implementing CCE at the Upper Primary level in Perambalur District</td>
<td>125</td>
</tr>
<tr>
<td>29</td>
<td>The Effectiveness of CCE on the Achievement of Educational Objectives of Elementary School Education Recommended by NCF, 2005</td>
<td>128</td>
</tr>
<tr>
<td>30</td>
<td>Personality Of High School Students in Relation To Scholastic Achievement in English through Continuous and Comprehensive Evaluation</td>
<td>131</td>
</tr>
<tr>
<td>31</td>
<td>Perception of Elementary School Teachers on Continuous and Comprehensive Evaluation in Tirunelveli District</td>
<td>135</td>
</tr>
<tr>
<td>32</td>
<td>Attitude of Teachers towards Implementing CCE in Relation to their Interest in Teaching</td>
<td>141</td>
</tr>
<tr>
<td>33</td>
<td>A study on kinesthetic Intelligence among upper primary students in Vellore block</td>
<td>145</td>
</tr>
<tr>
<td>34</td>
<td>Enhancing Club activities among upper primary Schools in Tiruchirappalli district</td>
<td>149</td>
</tr>
<tr>
<td>35</td>
<td>Life skills of upper primary children in tribal area schools</td>
<td>152</td>
</tr>
<tr>
<td></td>
<td><strong>RTE Act</strong></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>The Awareness on RTE Act, 2009 among Elementary School Teachers in Pudukkottai District</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>37</td>
<td>Availability and utilization of ICT materials at elementary level</td>
<td>163</td>
</tr>
<tr>
<td>38</td>
<td>Effectiveness of Multimedia Package in Promoting Environmental Awareness among the students of Std VIII in Kovilpatti Educational District</td>
<td>170</td>
</tr>
<tr>
<td>39</td>
<td>A study on Computer awareness of Tribal children of Jawadhu hills block at upper primary level in Thiruvannamalai District</td>
<td>174</td>
</tr>
<tr>
<td>40</td>
<td>Enhancing Reading Ability in Tamil among the Primary School Children of Narikoravars Community through Multimedia in Pollachi Educational District</td>
<td>178</td>
</tr>
<tr>
<td>41</td>
<td>Effectiveness of ICT in Enhancing Geographical Knowledge among Social Science Teachers at Upper Primary Level in Dharmapuri District</td>
<td>182</td>
</tr>
<tr>
<td>42</td>
<td>Enriching the lab skills of Art and Vocational group D.El.Ed., students in Thiruvarur District</td>
<td>186</td>
</tr>
<tr>
<td>43</td>
<td>Assessment of Life Skills among Pre-service Students in Thiruvallur District</td>
<td>189</td>
</tr>
<tr>
<td>44</td>
<td>Causes for the low performance of students in SSLC standard in Cuddalore District</td>
<td>193</td>
</tr>
<tr>
<td>45</td>
<td>Parental Involvement in increasing the achievement of secondary school students in Coimbatore District</td>
<td>198</td>
</tr>
<tr>
<td>46</td>
<td>A study on the relationship between the teacher commitment and the academic achievement of students at primary level in Tiruvallur district</td>
<td>201</td>
</tr>
<tr>
<td>47</td>
<td>Interpersonal relationship in inclusive classrooms as perceived by the teachers and</td>
<td>205</td>
</tr>
</tbody>
</table>

**D.El.Ed., Student-teacher related Research**

**Academic Achievement**

**General Areas**
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Author/Place</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>Enhancing Teachers’ Academic Performance through Teacher Motivation at Upper Primary Level</td>
<td>students of Karur District</td>
<td>210</td>
</tr>
<tr>
<td>49</td>
<td>Relationship between Teachers’ Stress and School Environment among School Teachers working in Madurai District</td>
<td></td>
<td>214</td>
</tr>
<tr>
<td>50</td>
<td>Awareness of Natural Disasters among High School Students in Nagapattinam District</td>
<td></td>
<td>218</td>
</tr>
<tr>
<td>51</td>
<td>Effect of Neuro Cognitive Strategies in Improving the Retaining Capacity among children at Elementary Level in Sivagangai Dist</td>
<td></td>
<td>226</td>
</tr>
<tr>
<td>52</td>
<td>Behaviour of Punctuality and Academic Achievement among VIII Standard students in Theni District</td>
<td></td>
<td>232</td>
</tr>
<tr>
<td>53</td>
<td>Functioning of School Management Committees in Thiruchirappalli District</td>
<td></td>
<td>235</td>
</tr>
<tr>
<td>54</td>
<td>Personal and Social Values of Upper Primary Students in Kanchipuram District</td>
<td></td>
<td>240</td>
</tr>
<tr>
<td>55</td>
<td>Students’ Awareness and Attitude towards Environmental Issues at Upper Primary Level in Kanchipuram District</td>
<td></td>
<td>243</td>
</tr>
<tr>
<td>56</td>
<td>‘Parents’ Attitude towards Schooling and Education of Girl children in select blocks of Madurai District’</td>
<td></td>
<td>247</td>
</tr>
<tr>
<td>57</td>
<td>Awareness on health and hygiene among the Upper Primary Students in Nagapattinam District</td>
<td></td>
<td>251</td>
</tr>
<tr>
<td>58</td>
<td>Promoting health awareness among Tribal Area School Students</td>
<td></td>
<td>257</td>
</tr>
<tr>
<td>59</td>
<td>Effectiveness of Mobile Teaching in Enhancing the Achievement Levels of Tribal Students Studying in 9th Standard of Alangayam Block</td>
<td></td>
<td>260</td>
</tr>
</tbody>
</table>
Subject: English

Abstract – 1

Name of the DIET: Pudukkottai, Pudukkottai District
Principal Researcher: Dr. C.N. Ajith Jaya
Co-researchers: Ms. N. Vijaya Lakshmi, Mr. V. Narayanan
Title: Effect of Structure Substitution Drill Package in Developing the Listening and Speaking Skills of Fifth Standard Students

Need for the Study:

With the intention of inculcating the language skills among the school children, English has been introduced from the first standard itself. But our students have poor listening and speaking skills. Research studies have claimed the lack of exposure to the target language in the classroom is the main cause of this backwardness. Hence, the present study aimed at providing adequate opportunity to the students in the classroom by giving oral drill. The investigator planned to provide this opportunity by implementing the structure substitution drill package. Language acquisition is considered as an ‘imitation of an imitation’ and as students love imitation to a great extent, this method will definitely work with the students. Imitation, repetition and application are the main targets of the study

Objectives:

- To find the level of listening and speaking skills of v standard students
- To develop a SSD package to practice listening and speaking in English to fifth standard students.

To find out the effectiveness of Structure Substitution Drill package in improving the listening and speaking skills of the v standard students

Methodology:

Experimental method of research was found appropriate for this study. The pre-test post-test equivalent groups design was followed for the study. Random sampling method was used for the study
Sample:
The total sample of the study consisted of 100 students with almost equal number of boys and girls. 50 students formed the experimental group and the other 50 students formed the control group.

Tool:
A pre-test and post test to assess the listening and speaking skills of fifth standard students.

Intervention:
A Structure Substitution Drill Package (SSD) was developed to improve the listening and speaking skills of the students. For that 8 grammatical items in English were selected. For each grammatical item, a few structures were selected. Each structure was substitute by single slot, double slot prompts. Each prompt was supplemented by suitable still or animated pictures. PowerPoint presentations were prepared for all the eight grammatical items viz., demonstrative pronoun, verb ‘to be’, verb ‘has/have’, subject-verb agreement, present continuous tense, preposition, imperative sentences and models. The treatment was given to the students for 30 days.

Process of SSD:
Teacher selects a sentence structure Teacher models the sentence with suitable visual. Students repeat the sentence after the teacher explains the meaning of the sentence and the context in which it is used. Then, the teacher substitutes the sentence with single slot, double slot prompts with suitable visuals. Students generate a sentence by connecting the picture with the prompts. Then the teacher stops giving prompts and motivates the students to generate sentences of their own.

Statistical Techniques Used:
Mean, Standard Deviation and t-test were used to analyse the data. In addition to that Cohen’s Effect Size was calculated to find out the size of effectiveness.

Findings:
The listening and speaking skill of the fifth standard students in English language is very low.
The Structure Substitution Drill method is more effective than the traditional method in improving the listening skills of fifth standard students with respect to general, specific, inferential and intensive listening.

The Structure Substitution Drill method is more effective than the traditional method in improving the speaking skills of fifth standard students with respect to demonstrative pronoun, Subject-verb agreement, present perfect tense, the verb-to be, verb – has/have, Prepositions, imperative sentences and modals.

**Educational implications:**

The result shows that the SSD package has very large effect on the listening and speaking skills on the fifth standard students. The SSD package has developed the general, specific, inferential and intensive listening skills of the students. It has improved the speaking skills of the students with respect to demonstrative pronoun, verb ‘to be’, verb ‘has/have, subject-verb agreement, present continuous tense, imperative sentences and models.

The effect size which was calculated as 2.83 and 9.14 for listening and speaking respectively shows that the SSD method has a very large effect on the skills of the students. All the students in the experimental group performed better than the control group students.

Listening is the basic skill which is neglected in our language classrooms. It has been said, “What you don’t hear, you can’t say”. This SSD method proved that ‘what you give you get back’. It is proved to be very effective in developing the listening skills of the students. It provides the opportunity to the students to listen to English language as it involved repetition of the target sentence.

Speech cannot take place in a vacuum. There must be someone to speak to and something to speak about. In the language classrooms, the teachers neither speak nor make the students speak the language. This SSD method warrants both the teacher and the students to speak the language. This method provides an opportunity to the students to speak the language.
Students’ listening and speaking skill will improve when the method adopted by the teacher in the class is interesting and motivating. The students are attracted towards this method as it involves still and animated pictures. The student involves himself actively in the learning process.

This SSD method gives immediate feedback to the students. This motivates the students to use the language confidently. The cues and prompts provided along with pictures develop the vocabulary of the students considerably. It is evident from the performance of the students.

The SSD method also develops the pronunciation of the students. As they listen to the words and sentences repeatedly spoken, it improved the pronunciation of the students.

This method provides an opportunity to the students to practise the language in the class. As the Structure Substitution Drill is presented with appropriate visuals students get better understanding of the situation in which the structure is being used and learning becomes permanent. It drives away hesitation from the students and involves the students enthusiastically in the learning process. They become more confident in using the language. Students get a chance to listen to the language adequately so they get good pronunciation and fluency. Grammar is acquired automatically from the usage. Thus language acquisition becomes a habit. It is also a very convenient method for the teachers to use in the classroom. The amazing results will definitely motivate the teachers to adopt this method for English language practice.

**Recommendations:**

The study proved the effectiveness of the SSD package in developing the listening and speaking skills of fifth standard students. Hence, teachers can be given in-service training to develop such types of SSD packages to teach listening and speaking.

**Suggestions for further study:**

In the present study, the SSD method is used only for the fifth standard students. It can be extended to upper primary classes also.

1. In the present study, the SSD method is compared with traditional
method. It can be compared with any other method to find the effectiveness.

2. Only 8 grammatical items were selected for the present study. It can be extended to other grammatical items also.

3. It can also be used to reinforce the learning of a single item.

Only t-test and effect size were calculated for the present study. Correlation between listening and speaking can also be done.
Abstract – 2

**Name of the DIET** : Vadalur, Cuddalore District

**Principal Researcher** : R.Anbazhagan, Senior Lecturer

**Co-researchers** : Dr.K.Sampath, Lecturer

**Title** : Problems in Reading English among children at Elementary level

**Need for the study:**

From the baseline survey, it was found out that the reading skill of children in English was poor at elementary level. It may affect the academic performance of students. So, it was decided to take up the project.

**Objectives :**

- To study the problems in reading English by V Standard children in Cuddalore District.
- To find out if there is any significant difference in reading English between boys and girls.

**Methodology:**

Normative survey method was adapted for the study.

**Sample :**

120 Vth standard students from 6 blocks were selected as sample for the study.

**Tool:**

A test material was prepared suiting to the level of Vth standard children and it was evaluated by a Reading problem Inventory with 20 statements.

**Statistical technique used:**

1) Item wise analysis was done by mean percentage calculation.
2) ‘t’ test was used to compare the reading problems between boys and girls.

**Findings :**

**Item No. 1**: Total number of samples taken for study was 120. Out of 120 students, 63% of the students have difficulty in learning / remembering the names of letters.
Item No. 2: 89% of the students have difficulty recognizing that words can be separated into their basic sound, such as shoe can be broken down into /sh/ and /00/.

Item No. 3: 86% of the students have difficulty connecting letters to their sounds.

Item No. 4: 85% of the students say a word that is very different from it is text, such as saying house when reading giant.

Item No. 5: 72% of the students have difficulty pronouncing the beginning sounds in words.

Item No. 6: 81% of the students have difficulty spelling high frequency short words.

Item No. 7: 91% of the students have difficulty using context to identify new words.

Item No. 8: 31% of the students make letter reversals as b for d and q for p.

Item No. 9: 23% of the students make letter inversion as n for u and w for m.

Item No. 10: 58% of the students make words reversals, as pot for top.

Item No. 11: 77% of the students confuse small words, as and for said and goes for does.

Item No. 12: 96% of the students have difficulty pronouncing long, unfamiliar words.

Item No. 13: 22% of the students confuse letters, as n for h.

Item No. 14: 75% of the students confuse words that sound alike, as left for felt or ocean for motion.

Item No. 15: 90% of the students omit parts of words when sounding them out as enjible for enjoyable.

Item No. 16: 70% of the students avoid reading aloud.

Item No. 17: 76% of the students pause and hesitate during speech, lots of ums.

Item No. 18: 85% of the students have difficulty representing the complete sound of a word when spelling.
**Item No.19:** 80% of the students reverse letter sequences, as soiled for solid.

**Item No.20:** 72% of the students spell the same word differently on the same page. 11% of the students have reading problems in the ranges of 1–5. 11% of the students have reading problems in the ranges of 6–10. 21% of the students have reading problems in the ranges of 11–15. 57% of the students have reading problems in the ranges of 16–20.

Row wise total and percentage was calculated for 120 samples and the following inference was derived:

17% of the students are very poor and they do not read at all any letters or word or sentence.

Only 2% of the students are good in reading and they are able to read the letters, words and sentences.

The difference in the reading difficulties expressed both by boys and girls in the reading of English was found to be marginally significant. The t-value calculated was 0.7208 at 0.6 level. (t = 0.7208; p = 0.6). So there is no vast difference in the reading difficulties between boys and girls in the reading of English.

**Implications:**

From the study it was inferred that 17% of the students in V std feel it difficult even to identify the letters. The following are the implications of the study:

1. If the reading skill of the students is poor at primary level, it may affect the academic achievement of the students when they come to higher classes.
2. Suitable and proper methodology might not have been used effectively.
3. Suitable TLM may not be available in the school.
4. Students might not have been interested in listening to the actual reading style of the teachers.
5. Teachers might not have enough knowledge on basic pronunciations of simple English alphabets and words.
6. Teachers might not have adapted any innovative methods to make the students to develop the reading skill of the students.

**Recommendations:**
1. To develop the reading skill of the students in English, need based training should be given for the teachers.
2. The parents, relatives and friends also should shoulder the responsibility for the improvement of reading skill of the children. In a way it is a collective responsibility.
3. Remedial teaching, peer group interaction and reinforcement may help the children to develop the reading skill.
4. Continuous practice may perfect their reading skill.
5. To read any language, expertise should be there in the first language, ie in mother tongue. So a child is good in mother tongue. Teachers need to scaffold the learning of English on the foundation of the mother tongue.
6. The tips given in the ASER report also may be considered for the development of reading skill of the children.

**ASER – report:**
To make the students good in reading, Annual Status of Education Report (ASER – Rural) 2012 – Provisional – January 17, 2013, gives some suggestions. Reading practices may be given systematically in a hierarchal order as follows.

**Capital letter level**  **Small letter level**  **Word level**  **Sentence level**

It has four categories.

**1. Capital letters:**
Set of commonly used capital letters.
Example: D, L, T, K, G, X, P, N etc.,

**2. Small letters:**
Set of commonly used small letters.
Example: y, f, i, s, v, m, a, h etc.,

**3. Words:**
Familiar 3 letter words. After reading, the child is asked to say the meaning of the read words in the child’s local language.
Example: dog, fat, gun, boy, man, box etc.,
4. Simple sentences:

Set of simple sentences, each having number more than 4 – 5 words. These words or their equivalent are in the text books of the class English is introduced in the states. After reading, the child is asked to say the meaning of the read sentence in the child's local language.

Example:
What is the time?
I like to sleep.
This is a blue shirt
I have a brother.
Abstract – 3

Name of the DIET : Krishnagiri, Krishnagiri District
Name of the Principal Researcher : Dr. G. Anbumani
Name of the Co-Researcher : Dr. R. Parvathi
Title of the Research Project : Enhancing the level of reading skill in English among class V students through innovative activities.

Need for the Study :

English is an important subject in the primary Education curriculum. Teaching and learning of English is an art. Since English is a foreign language, students get scared about this subject. Learning English with interest is a great task. If a child likes a teacher than it likes the subject handled by the teacher. The investigator visited primary and upper primary schools and observed the poor reading skill performance. So he was stimulated much on how the V students developed in English reading skill. Hence the problem is stated as enhancing the level of reading skill in English among class V Students through innovative activities.

Objectives :

The main objectives of the study was to Enhance the level of Reading skill in English among V Standard students.

➢ To help the students enjoy the reading of English Language.
➢ To help them to listen and understand the language.
➢ To give them training in reading and understanding written language.

Methodology :

The experimental method was used in the study.

Sample :

The students of V standard studying in Krishnagiri District were the population of the study. The investigator selected 419 samples from 30 primary and upper primary schools of 5 blocks.

Tool :

The reading skill format was developed by SCERT faculties and issued to DIET for purpose of reading skill assessment. The given format was
modified and used as a tool for reading skill assessment. The tool consists of three items namely Good, Satisfaction and no reading.

**Statistical Technique Used:**

The data was collected from 30 panchayat union primary schools and panchayat union middle schools. Total marks, Mean, Percentage, standard deviation and ‘t’ values are calculated to find out the level of reading skills in English language.

**Interventions employed:**

The one day orientation training programme conducted by the investigator. The following items are given to the teacher

1. V standard English-hand out
2. Pronunciation cards
3. Vocabulary exercise cards
4. Picture cards
5. Conversation cards
6. Word making cards

**Findings:**

- By the treatment and frequent visits the level of English Reading has improved in post test when compared with pre-test
- In Panchayat Union Primary schools the level of English reading the boys is higher than the girls.
- In Panchayat Union Middle schools the level of English reading the girls is higher than the boys.
- Low performing students are very much interested to do the simple activities for the development of reading skills.

**Implication:**

- All possible steps were taken to enlighten parent and the community to be aware of the importance of suitable educative environment in acquiring English language skills by providing reading materials at home.
- The traditional classroom method should be discouraged through the provision of reading materials and objects that stimulate children’s
interest in reading.

- Low performing students are very much interested to do the simple activities for the development of reading skills
- With the help of the findings of the study the students will hope to read fluently in English at primary and upper primary level
- Schools in the lab area and BRCs in the districts may be encouraged to use the interventions employed in this research to address reading problem of students

**Recommendations:**

- Training to be given primary and upper primary school teachers related to picture cards and vocabulary cards
- Oral practices are more effective than the silent reading in primary level. So oral practices training may be conducted to the teachers
- Enhancing the reading skill in English to be supplied a handout for English subject handling teachers.

**Scope for further research:**

- This type of research may be conducted in lab area schools of other District DIETs
- This research project may be used for all primary and upper primary Schools.
Abstract – 4

Name of the DIET : Uthamasholapuram, Salem District

Name of the Principal Researcher : Dr. K. Kannaki, Lecturer in Mathematics

Name of the Co-Researcher : Mr. S. Peter Anandh, Mr. Mathu, Lecturers

Title of the Research Project : “Study Habits and Achievement in English among IX Standard students of Salem District”

Need for the Study :

Study means to apply the minds to the acquisition of learning whether by means of books or observation or experiment. Habits are acquired are not inborn. Habit is an accomplished form of behavior in which the things are done quickly, accurately, automatically with little voluntary attention. Study habit is essential to learning and fundamental to school life. Generally, English is an easy subject to learn with periodical preparation, understanding the style of language, use of grammar and vocabulary. But many students feel it difficult to understand English and they feel it is a foreign language. When the teacher emphasizes the study habits to learn English definitely, it will not be a difficult one. Hence the researcher wants to analyze how a study habits influence the learning of English language and if there is any relationship between study habits and achievement in English

Objectives :

- To find out the different language study habits and to find out the significant difference in the study habits with respect to Gender, locality, type of school, fathers’ qualification, mothers’ qualification, fathers’ occupation, mothers’ occupation, monthly income of the family, teachers’ qualification and experience of the teacher in relation to the achievement in English among standard IX students Salem District.

- To find out the significant difference in the achievement in English among Standard IX students with respect Gender, locality, type of
school, fathers’ qualification, mothers’ qualification, fathers’ occupation, mothers’ occupation, monthly income of the family, teachers’ qualification and experience of the teacher.

- To find out the correlation between study habits and achievement in English among standard IX students.

**Methodology:**

Survey method was employed in the present study.

**Sample:**

The investigator used multi stage stratified random sampling technique for the present study. There are 21 blocks in Salem District. Out of 21 blocks 10 blocks were selected on simple random sampling technique. From each block 3 schools were selected purposively viz. co-education school, Boys’ School and Girls’ school. 30 students from each school were selected on simple random sampling technique. Altogether 900 standard IX students were selected for study.

**Tool:**

Study habits questionnaire and achievement test in English

**Statistical Technique Used:**

Percentage analysis, t test, ANNOVA and Correlation analysis were used for the study.

**Findings:**

The students have different study habits viz. Reading habits, note taking skills and preparation for the test and examination.

- In reading habits 61 % of the samples are moderate level, 22 % and 17 % have high and low level of reading habits.
- In note taking skill 68 % of the samples are moderate level, 30 % and 2 % of the samples have high and low level of note taking skill.
- In preparation for exam/test the majority i.e. 69 percentages have moderate level of study habits 22 % have high level and 9 % have low level.
- In the overall study habits only 18% have high level of study habits, 69 have moderate and the remaining 10 % have low level of study habits.
- Achievement in English
• The majority i.e. 73 percentage of the students are in moderate level of achievement in English
• 15 percentage of them have high level of achievement in English
• 12 percentage of the students have low level of achievement in English.
• Male and female students do not differ in their study habits.
• IX standard students differ in their study habits with respect to their locality.
• The rural and urban students do not differ in their study habits.
• Whereas, the hill students differ with both urban and rural students.
• The IX standard students do not differ in their study habits with respect to their
  Type of School,
  Fathers’ Qualification, Mothers’ Qualification,
  Fathers’ Occupation, Mothers’ Occupation
  Teachers Experience.
  The IX standard students differ in their study habits with respect to their teachers’ qualification.
• The IX standard students do not differ in their achievement in English with respect to their
  Gender, Locality, Type of school,
  fathers’ qualification, Mothers’ qualification,
  fathers’ occupation, mothers’ occupation,
  teachers’ qualification and Teachers’ experience
• There is positive correlation between study habits and achievement in English.

Implication:
• In study habits the hill area students differ from both urban and rural students.
• To improve their study habits special training shall be given to hill area students.
• Above 50% of the samples (61%) have moderate level of reading habit. Teachers shall be guided to design learning task, assignments
groupwork and pairwork in such a way that students study habits steadily improve.

- Above 50% of the sample (68%) have moderate level ability in taking notes. Students need more practice in taking notes.
- Above 50% of the sample (67.7%) opined that early morning is the suitable time for retaining what is learnt.
- Students shall be encouraged to study portions which are difficult in the early hours of the morning which are difficulty in the early hours of the morning to ensure better understanding and retention.
- Below 50% of the sample (19.6%) never visit the library. Teachers shall be motivated to give assignments and groupwork in such a way that it warrants library reference often.
- Below 50% of the sample (39%) do not have the habit of using English dictionary. Activities inculcating a thirst for finding new words and employ them new contents must be developed by the teachers.

**Recommendations:**

- This study is limited to IX standard students of Salem District only. It can be extended to other educational districts of Tamilnadu.
- This study can be extended to other subjects viz Tamil, Mathematics, Science and Social Science.
- This study can be extended to higher secondary level students.
- Further study can be done to compare the study habits of state board and CBSE School students.
Abstract – 5

Name of the DIET : DIET, Uthamacholapuram,
Name of the Principal Researcher : P.SO.KESAVAN
Name of the Co-Researcher : E.MAANHVIZHI
Title of the Research Project : “Impact of innovative instructional strategies in improving reading skills in English at upper primary level.

Need for the Study :

In Tamil Nadu, according to the ASER - 2012, regarding the reading level in English, children enrolled in Standard VIII, 2.1% children could not even read English capital letters and only 46.2% could read easy sentences in English. During the Blockwise school visits, DIET faculty found that, more number of students in the upper primary level was found to be struggling to read the prescribed English textbooks. So it is clear that English reading is a serious concern at the upper primary level. The present study being an attempt to study reading skill in English at upper primary level of students and the influence of innovational instructional strategies which would help the students perform the tasks involved in reading English.

Objectives:

(i) To study the level of attainment of standard VIII students with regard to Reading skill in English and its sub skills before and after the implementation of the instructional strategies.
(ii) To develop instructional strategies which would help the eighth standard students perform the tasks involved in reading English.
(iii) To find out the impact of the instructional strategies among the VIII standard students in English Reading skill.

Methodology:

Pre-experimental research method with single group pretest and post test design was used in this study.

Sample:

The sample of the study comprised 72 students (38 Male and 34 Female) of standard VIII from three middle schools of Salem district presenting rural and
urban environment. These schools were selected purposively.

**Tool:**

The tools used to collect the relevant data included test of decoding skills, test of oral reading fluency and test of reading comprehension.

**Statistical Technique Used:**

The collected data were analysed statistically using percentages, mean, SD,’t’ test and analysis of variance.

**Interventions Employed**

- To improve the decoding skills the following interventions were carried out:
  - Letter recognition (Upper and Lower case) and Familiarizing high frequency words (Sight words)
  - Practice of list of contraction words list of word families (short and long vowels) are made to practice
  - Echo reading of sentences prepared on the 20 diphthongal and 24 consonant sounds with audio narration
  - Paired reading and repeated reading to improve the oral reading fluency
  - Text look back intervention to increase reading comprehension

**Findings:**

(i) More than half of the subjects taken for the study were fall under Frustration Level with regard to Reading skill in English and its sub skills before the implementation of the interventions. (ii) After the interventions were carried out, none of the subject was retained in the frustration level with regard to Reading skill in English and its sub skills. (iii) There was a significant difference in the students’ English reading skill and its sub skills from Pre-test to Post-test. (vi) Gender, locality, parental education, family size, and birth order does not have significant impact over the level of attainment of standard VIII students with regard to Reading skill in English before and after interventions. (v) Among the sub samples Locality and parental education has significant impact over the level of attainment of standard VIII students with regard to Oral Reading Fluency before and after the implementation of the instructional strategies.

Identifying need and intervening accordingly in the appropriate areas of
Reading skill in English showed improved outcomes for the students with reading difficulties. The findings suggested that students in upper primary level benefited from interventions adopted in this study and these interventions may be disseminated to other upper primary schools.

**Implication:**

(i) The study helps the upper primary teachers to understand their students’ reading problems better and to find an appropriate way for teaching reading.

(ii) In this study decoding skills showed greater treatment effects, so the interventions adopted in this study may be used for the students who lack efficiency in word identification.

(iii) This research revealed that students who struggle to read can be helped with well.

(iv) Planned, intensive, intervention programs in an appropriate environment.

(v) This study confirmed that providing additional resources along with practice and support could improve students reading skills in English in short-run.

**Recommendations:**

(i) The interventions of this study may be disseminated to other upper primary schools.

(ii) Teachers handling lower standards could use this work as a model and use the interventions adopted in this study to improve reading skills in English.

(iii) Further study is needed, using larger populations to determine the most efficient and effective ways to support the English handling teachers in improving reading skill of the student populations.

(iv) Prospective longitudinal studies are needed in order to provide a more comprehensive model of growth in reading skills over time.
Abstract - 6

Name of the DIET : DIET, KALAYARKOVIL
Name of the Principal Researcher : S.USHA, LECTURER.
Name of the Co-Researcher : ---

Title of the Research Project : Effectiveness of Constructivist Learning Cards in enhancing reading skills in English at Elementary level

Need for the Study :

The prime duty of the teacher is not to impart textual information but to sensitize child and kindle the curiosity of the child. Therefore, it is imperative on the part of the teacher to deviate from the conventional method of imparting the textual content in a classroom. Annual Educational Status Report (ASER2014) stated that the students at elementary level encounter difficulties in reading. The methods and approaches in English Language teaching and learning must be interactive, child centered, and need based in order to create interest among the students. Constructivists learning cards enrich the student’s performance in reading. So the investigator has taken an attempt to study the effect of Constructivist Learning cards in enhancing reading skills in English at elementary level.

Objectives :

- To design Constructivist Learning Cards to enhance the reading skill in English for STD VI students.
- To implement constructivist learning cards to enhance the reading skill in English for VI STD students.
- To find out the effectiveness of constructivist learning cards in enhancing the reading skill in English for STD VI students.

Methodology :

The present study is based on Parallel group Experiment design. The investigator conducted pre-test for both control group and experimental groups and assessed the reading skills among the students. The investigator identified reading difficulties among the experimental group students. The investigator
prepared and implemented Constructivist Learning Cards to the experimental group students for 30 days. Then the investigator conducted post-test for both control group and experiment group and assessed the reading skills among the students.

**Sample:**

The sample was selected by Purposive and Random sampling technique. The sample collected from selected 5 schools in sakottai block. 10 Students from each school studying in standard VI at upper primary level were selected, five students for control group and five student for experimental group, totally 50 students were taken for the study.

**Tool:**

The investigator used two types of tools to assess the reading skills of the students. The first type of tool was Observation schedule and the second type of tool was Questionnaire developed by the investigator with various components to assess the reading skill. Observation schedule was for assessing oral reading skills. Questionnaire was for assessing comprehensive reading skills.

**Statistical Technique Used:**

The data collected were analyzed by using descriptive and inferential analysis. The statistical technique-‘t’ test was employed for analysis and interpretation of data.

**Interventions Employed**

- The investigator prepared learning cards in the perspectives of Constructivism.
- Constructivism states that learning environments and tasks are relevant, realistic, and contextualised.
- Teachers were encouraged to play the role of facilitators to ensure learner-centered teaching learning processes. Learning process should be active and constructive. Learning needs be flexible, scaffolding, practical, and based on prior knowledge.
- Learner builds knowledge with the help of the activities. Learning occurs through interactions.
Based on the above constructivist principles the investigator prepared Constructivist learning cards to enhance reading skills among the students of Std VI.

Constructivist learning cards consist of ten sets of cards. Consonant sound card, Vowel sound card, Word making card, Sentence making card, Word stress, Sentence stress card and Story cards.

Each card has activities for the students to enhance their reading skills. For example, in the Story cards the story was given to the students in a jumbled order. The students were asked to rearrange the jumbled sentences into a story.

Students were asked to draw a story map and summarising a story. They answered the questions given in the cards. The questions were based on skimming, scanning, vocabulary, inferencing and understanding skills of the students.

Other cards were focused on to enhance oral reading skills in English among the Std VI students. The intervention was carried out 30 days.

**Findings:**

The scores secured by the students collected by the investigator are computed for analysis. The relevant data collected and analysed as follows.

- The pre-test Mean score and SD of control group students in oral reading skills is 14.84 and 1.77. The post-test mean and SD is 15.00 and 3.16. This proved that traditional way of reading strategies has very less (ie 0.16) improvement in the control group students.

- The pre-test Mean score and SD of Experimental group students in oral reading skills is 15.36 and 3.46 and post-test mean score and SD is test Mean score and SD is 36.72 and 5.22. It showed that the post-test score is greater than pre-test score. This proved that the constructivist cards enhance the oral reading skills in English among the std VI students.

- The post-test Mean score and SD of control group is 15.00 and 3.16 and the experimental group students in the post-test level is 36.72 and 5.22 respectively. Mean of the experimental group students are greater than control group students. It is implied that the traditional way of reading
strategies has less significant in improving oral reading skills in English among the control group students. Constructivist learning cards enhance the oral reading skills among the experimental group students after treatment. This showed constructivist learning methodology enhance the reading skills among sixth std students.

- The pre-test Mean score SD of control group students is 9.64 and 1.75. The post-test Mean and SD is 9.12 and 1.45. This proved that there is no more improvement in the comprehensive reading skill of the control group students.

- The pre-test Mean score and SD of Experimental group students are 8.96 and 1.24 and post-test mean score and SD is 16.24 and 2.16. It showed that the post-test score is greater than pre-test score. This proved that constructivist cards enhance the comprehensive reading skills in English among the std VI students.

- The pre-test Mean score and SD of Experimental group students are 8.96 and 1.24 and post-test mean score and SD is 16.24 and 2.16. It showed that the post-test score is greater than pre-test score. This proved that constructivist cards enhance the comprehensive reading skills in English among the std VI students.

- The pre-test Mean score and SD of control group students is 9.64 and 1.75. The pre-test Mean score and SD of experimental group students is 8.96 and 1.24 at pre-test stage.

- The post-test mean score and SD of control group and experimental group students in comprehensive reading skills in post-test. The Mean and SD of experimental group students is greater than control group students. It is implied that the experimental group improved the comprehensive reading skills in English. Constructivist learning cards enhance the comprehensive reading skills among the experimental group students at post-test. The obtained ‘t’ value (1.024) is greater than the table value at 0.01 level of significance between the pre and post of control group. Hence there is no significant mean difference between pre-test and post-test scores of control group in English oral reading skill. Hence the hypothesis was accepted.

- The obtained t’ value (7.748) is greater than the table value at 0.01 level of
significance. The post-test is greater than the pre-test score. Hence there is a significant difference between pre-test and post-test scores of experimental group in English oral reading skill. It explored that the constructivist learning cards enhance the oral reading skill among students.

- The obtained ‘t’ value (13.562) is greater than the table value at 0.01 level of significance between the post-test of control group and experimental group. Hence there is a significant mean difference between post-test of control group and experimental group in English oral reading skill.

- The obtained t’ value (14.510) is greater than the table value at 0.01 level of significance. The post-test score is greater than the pre-test score. Hence there is a significant difference between pre-test and post-test scores of experimental group in English oral reading skill. It evidenced that the constructivist learning cards enhance the oral reading skill among students.

- The obtained ‘t’ value (0.642) is greater than the table value at 0.01 level of significance between the pre test of control group and experimental group. Hence there is no significant mean difference between pre-test of control group and experimental group in English comprehensive reading skill.

- The obtained ‘t’ value (28.954) is greater than the table value at 0.01 level of significance between the post-test of control group and experimental group. Hence there is a significant mean difference between post-test of control group and experimental group in English comprehensive reading skill.

**Implication:**

- Constructivist learning cards are useful for the teachers to enhance students' reading skills in English.
- It is helpful for the students to create interest in reading.
- It reduces the difficulties in reading English faced by the students.
- It is helpful for the teachers to enhance skimming, scanning skills of the students.
- It encourages the students to read English more.
• It increases the other language skills such as writing, listening and speaking among the students. It motivates the students to learn English in an interesting way.
• It increases the achievement of the students in English.
• It gives ideas to the teacher to design various kinds of activities enhance reading skills among the students. It enhances the students self-confidence in reading English.

Recommendations:
- It is suggested to conduct a workshop for the teachers to develop Constructivist Learning Cards relevant to their classroom needs.
- It is suggested that the training may be given to the English language teachers to utilise the constructivist learning cards for the students in order to enhance their reading skills.
- It is suggested that the cards may be given to the students studying at various classes.
- It is suggested that the cards may be given to the struggling readers.
- It is suggested that separate reading session may arranged in the schools for the students for practising with the cards.
- It is suggested that training may be given to the DIET students to utilise the cards for the students in order to enhance their reading skills.
- It is suggested that the cards may be displayed in the English Language Lab.
**Abstract - 7**

**Name of the DIET** : DIET, Mannargudi, Thiruvarur Dist.

**Name of the Principal Researcher** : Dr.T.L. Vasanthi, Lecturer

**Name of the Co-Researcher** : ---

**Title of the Research Project** : Enhancing the english language skills of students at standard viii through vgc package in Thiruvarur District

**Need for the Study :**

English is taught in India as a second language. Most of the students are very poor in learning English at school level. The low achievement might be due to some personal, psychological, academic and administrative reasons. These problems interfere with the classroom learning and curtail the opportunities of the child to learn English language. The investigator during her visits to school has observed that the students of standard VIII are very poor in English language skills. The degree of proficiency acquired in learning a language at school very much depends on the method of teaching adopted and efficient classroom transactions by the teacher. In order to strengthen the classroom transaction and to enhance the English language skills of the students the investigator has decided to prepare VGC package. The package will constitute three parts viz V for vocabulary, G for grammar and C for Communicative skills. If the knowledge of the students is improved in these three dimensions, their language skills will be improved to a great extent. The present study is an attempt to undertake such a venture.

**Objectives :**

1. To assess the level of English language skills of students at std VIII
2. To develop VGC package for enhancing the English Language skills of the students.
3. To find out the effectiveness of VGC package in enhancing the English Language skills of the students with reference to sex, locale, type of school and educational qualification of parents.

**Methodology :**

Method – Experimental method,
Design – Parallel Group – Experimental design.

**Sample:**
A sample of 120 students of Eighth standard was selected from 2 blocks of Thiruvarur District considering the variables sex, locale and type of school.

**Tool:**
- a) Pre and post test for vocabulary.
- b) Pre and post test for Grammar.
- c) Pre and post test for communicative skill
- d) Observation schedule for communicative skill
- e) Development of VGC package.

**Statistical Technique Used:**
- i. Descriptive analysis – Mean and SD
- ii. Inferential analysis – ‘t’ test, Analysis of variance – F test

**Interventions Employed:**
VGC package provides scope for the students to enhance the language skills. Since the research was conducted during the second term of the academic year, the second term portions of standard VIII was taken for consideration. Pretests were conducted both for control group and experimental group. VGC package consisting of a module and video CDs was developed. The module comprised of 25 activities and language games for vocabulary, grammar and communicative skills. Video CDs with role play, stories, song stories and biographies were prepared focusing on communicative skills. The finalised VGC package was then implemented to the experimental group for 35 days by the researcher. After the intervention was over post tests were conducted both for control and experimental groups and the data collected were analysed to find out the effectiveness of the package in enhancing the language skills.

**Findings:**
1) The English language skills of students at VIII is poor. It is quite evident from the fact that control group students scored 8.38% and experimental group students scored 8.76% of marks in the pre-tests
2) The mean score of the experimental group students is increased by 65.49%. It is concluded that the VGC package is effective in enhancing
the English language skills of students at Std. VIII.

3) There is a significant difference between the achievement mean scores of the control group and experimental group students in the post tests with respect to English language skills. (t value -12.10, significant at 0.01 level)

4) There is a significant difference between achievement scores of control group and experimental group in the post test with respect to vocabulary. (t value -11.79, significant at 0.01 level)

5) There is a significant difference between achievement scores of control group and experimental group in the post test with respect to grammar. (t value -9.94, significant at 0.01 level)

6) There is a significant difference between achievement scores of control group and experimental group in the post test with respect to communicative skills. (t value -9.38, significant at 0.01 level)

7) There is a significant difference between the achievement mean scores of experimental group boys and experimental group girls in the post test with respect to language skills (Girls scored 15.37% of marks more than the boys).

8) There is no significant difference between the achievement mean scores of Government and aided school students of the experiment group in the post test with respect to English language skills. (t value -0.088, not significant at 0.01 level)

9) There is no significant difference between the achievement mean scores of rural and urban students of the experiment group in the post test with respect to English language skills.

10) There is a significant difference between the achievement mean scores of boys and girls of experimental group in the post test with respect to Vocabulary, Grammar and Communicative skills. (t value -5.85, t value -9.18, t value -7.71 respectively, significant at 0.01 level)

11) There is no significant difference between the achievement mean scores of Government and aided school students of experimental group in the post test with respect to Vocabulary, Grammar and Communicative skills. (t value -1.86, t value -1.94, t value -0.71
There is no significant difference between the achievement mean scores of rural and urban students of experimental group in the post test with respect to Vocabulary, Grammar and Communicative skills. (t value-1.35, t value-0.33, t value-1.75 respectively, not significant at 0.01 level)

There is no significant variance among the students of experimental group in the post test with respect to English language skills in regard to father's qualification. (F value-0.726, at 0.01 level)

There is a significant variance among the students of experimental group in the post test with respect to English language skills in regard to mother’s qualification. (F value-14.675, at 0.01 level)

There is no significant variance among the achievement mean scores in vocabulary, Grammar and communicative skills of experimental group in the post test. (F value-1.475, at 0.01 level)

**Implication:**

The intervention has enhanced the achievement level of VIII std students. The VGC package prepared by the researcher has been helpful in developing their English language skills.

1. Vocabulary of the students can be enriched using VGC package (The increase in the mean score of experimental students in the post test with respect to vocabulary is 57.38 %).
2. Grammatical knowledge of the students can be enriched using VGC package (The increase in the mean score of experimental students in the post test with respect to grammar is 73.27 %).
3. Communicative skills of the students can be enriched using VGC package (The increase in the mean score of experimental students in the post test with respect to communicative skills is 66.44 %).
4. Among the experimental group students girls scored more marks than boys in the post test. (Girls 81.93%, Boys 66.56%. Difference 15.37%). The finding shows that more attention to be given to boys to promote their English language skills.
5. The enhancement of language skills will ultimately lead to the development
of interest in English language learning.

6. VGC package attracts the attention of the students so that their learning is sustained over period of time.

7. VGC package will facilitate the students to acquire the language skills in a short duration.

8. The performance of the students in English will be enhanced through VGC package.

9. VGC package encourages lively classroom transaction.

10. Besides VIII standard, the VGC package developed by the researcher can be used in VI and VII standard as well.

11. Since most of the activities suggested in the package are of no cost, they can be used by all the schools.

12. VGC package promotes active participation of the students.

13. VGC package enhances the teaching learning process.

14. Activities and games are liked by all students. Hence VGC package can create a joyful learning atmosphere in the classroom.

**Recommendations:**

- The study proved the the effectiveness of VGC package in enhancing the vocabulary, grammar and communicative skills at VIII standard level. Hence teachers may be given inservice training programmes for preparing VGC packages at all levels.

- The VGC package may be multiplied and supplied to all schools.

**Suggestions for Further Research:**

1. This study may be extended to all the standards of school education.

2. This study may be taken up on other language competencies also to assess the effectiveness of packages to be developed.

3. This study may be extended to other languages also.

4. A study on the attitude of teachers towards English Language Teaching may be taken up.
Abstract – 8

Name of the DIET : G. Ariyur, Villupuram District.

Name of the Principal Researcher : S. Mabel Soruba Rani.

Name of the Co-Researcher :

Title of the Research Project : Reading difficulties in english among standard VIII pupils in Villupuram District

Need for the Study :

The acquisition of reading skill is the first requirement for the achievement during and after school. If the pupils have low level reading skill, it will affect their academic result, personality and social adjustment. Reading skill is gained as a result of self driven analysis. The investigator found a problem in English reading skill from her experiences. Even VIII standard pupil can’t read their English textbook. The investigator wanted to study the difficulties faced by the pupils, while reading English. Hence, the investigator selected this problem.

Objectives :

1. To study the difficulties in reading in English by VIII standard pupils in Villupuram district.

2. To find out if there is any significant difference in reading difficulties in English with regard to gender, location of the school, type of the school, management, father’s educational level and number of siblings.

Methodology :

The investigator adopted survey method for this study.

Sample :

The investigator used simple random sampling technique and selected 315 pupils studying VIII standard as sample from 10 schools in Villupuram district.

Tool :

The investigator used these tools for her study.

1. Personal data sheet
2. Observation Schedule (Loud Reading)
3. Comprehension Test (Silent Reading)

**Statistical Technique Used:**
The investigator used the following statistical techniques for analysing the data gathered.

1. Arithmetic Mean
2. Standard Deviation
3. T-test
4. F-test

**Findings:**

- From the baseline studies, 13 different types of reading problems in English among students in VIII standard were identified. All the problems were analyzed individually based on good, average and poor performance of the students.
- From the data analysis the following are inferred. Nearly 50% of the students in standard VIII have reading difficulties in English because the mean value calculated was 24.37 for the maximum 39 marks.
- The understanding of a passage is very essential to develop the academic knowledge of a particular subject. But standard VIII pupils are lacking the ability of understanding due to rote memory. 89.2% of the student in VIII standard has the problem of understanding.
- 97.5% of the students in standard VIII have the ability to identify the letters and only 0.6% of the students feel difficult to identify the letters.
- Regarding the fluency of English while reading is concerned, 19.7% of the students are good, 46.3% are average and 34% of students are in poor category.
- Only 22.5% of the students are good at following pronunciation, 45.1% of the students are in average level and 32.4% of the students are poor.
- 21.3% of the students are good at following punctuation in reading, 45.1% of the students are average and 33.7% of the students are poor.
- 35.2% of the students have the ability of word decoding and 64.8% of the students feel difficult to decode words.
- 29.8% of the students recognize the words, 41.3% of the students are
in average level in recognizing words and 28.9% of the students are not able to recognize the words properly.

• Reading difficulties in English among standard VIII pupils have no significant difference in terms of gender, father’s educational level and number of siblings.

• There is significant difference in the reading difficulties in English among standard VIII pupils with regard to locality, type and management of the school.

Implication:

➢ The following are the implications of the study.

➢ In general the understanding skill of the VIII standard students is very poor. This may be due to rote memory. To enhance the understanding ability, suitable methodology of teaching is essential in the classroom situation.

➢ As per the data, it gives a clear picture that students are good in letter identification when they are in VIII standard. This is worrisome. Identification of letter should have been practised in the primary level.

➢ Other reading problems like pronunciation, following punctuation, fluency, recognizing words, word decoding etc. also exist among children at VIII standard.

➢ Reading difficulties will affect the academic achievement of the students when they come to higher classes.

➢ It has come to limelight that the reading problems of the children differ according to locality, type and management of the school. Such a situation will affect the educational standard of the children. When uniform curriculum is followed throughout the state one will expect the uniform standard among student educationally. But it does not happen.

Recommendations:

➢ The reading problems among students may be addressing the following programmes:

➢ Need based training should be given for the teachers.

➢ Orientating programmes on reading skills and reading strategies may be given to teachers.
➢ Suitable TLM may be used to make the students perfect while reading English.

➢ Importance should be given for English reading right from the primary classes.

➢ Development of reading skill among students is a collective responsibility of the parents, friends and relatives. So the society also should play role to improve the reading skill of students.

➢ To face the challenges in this ICT era, multimedia visual packages also may be practised in the classroom to improve the reading skill of students.

➢ The language laboratories established in DIETs will be highly useful for the teachers to improve the pronunciation of students when they handle the classroom situations. So the teachers should make use of in-service training programmes especially for the language development through language laboratory equipment. Phonetic, basic pronunciation, reading style etc. may be improved through language laboratory.

➢ By giving very short and simple conversation passages, punctuation practices may be given for the children. This will be successful only after making them to understand very clearly the meaning of the comprehension. So children should be made familiar with common used short words. Then only they can understand questioning, exclamation etc.

➢ Peer group interaction, remedial teaching and reinforcement may reduce the probability of committing mistakes while reading by the students.
Abstract – 9

Name of the DIET : DIET Theroor, Kanyakumari District
Name of the Principal Researcher : Dr. R. Baby Vijila
Name of the Co-Researcher : M. C. Padma Rolands
                                      S. Sahaya Pon Malar
Title of the Research Project : Writing skills of standard VIII students in English at upper primary level in Kanyakumari district

Need for the Study :

English as a second language is taught to the children with an aim of developing the basic fundamental skills, viz. Listening, Speaking, Reading and Writing in their hierarchical order. Among these skills writing is the last but the most important skill in language acquisition. Writing aims at clear and efficient communication. Writing helps to express oneself on paper. It is the productive skill which requires a lot of practice, patience, determination and effort on the part of the learner. The scholarly identity of a person is best revealed through his mastery over the writing skills in a language. Effective written communication skills play a vital role to academic excellence, getting a job and career success. Everyone has a different reason to improve their writing. Writing as a skill is learnt only inside a classroom’s wall. The English classroom is to help the children develop good writing skills during the elementary years. So it demands the teachers to provide suitable and comfortable instructional strategies and situations to improve the writing skills of the students in English. The best classroom writing practices results in better learning outcomes. The worth of learning is measured on the qualitative outcome of a learner towards the target framed in learning process. Keeping the need and importance of developing the writing skills in mind the investigator attempted to conduct a survey study to find out the writing skills of students in English who are at the bottle neck of upper primary education in Kanyakumari District.

Objectives :

1. To find out the writing skills of VIII standard students with reference to
gender.

- To find out the writing skills of VIII standard students with reference to the type of management. (Government/Aided)
- To find out the writing skills of VIII standard students with reference to locality of the schools. (Rural/Urban)
- To find out the writing skills of VIII standard students in coastal and hilly areas

**Methodology:**

The Descriptive Survey Method was adopted to find out the writing skills of standard VIII students in English at the Upper Primary Level in Kanyakumari District.

**Sample:**

A total number of 350 students studying in standard VIII of the selected upper primary schools in the district formed the sample of the study. The sample was drawn through stratified random sampling technique.

**Tool:**

Data were obtained using a standardized writing test in the form of Worksheets to identify the level of standard VIII students' writing skills in English. The worksheet consisted of ten prompts and aimed to measure the writing traits – content, grammar, vocabulary, spelling and handwriting.

**Statistical Technique Used:**

The collected data was analyzed using Mean, SD, ‘t’ test and percentage analysis.

**Findings:**

The significant findings which emerged in the course of investigation are as follows;

- There is a significant difference between the male and female students in exhibiting their writing skills in English. The mean difference and the ‘t’ ratio reveals the significance of the difference at 0.01 level. Hence the null hypothesis is rejected. It is observed that the female students scored higher than their male counterparts.
- There is a significant difference between the students in Government and
Management schools in exhibiting their writing skills in English. The mean difference and the ‘t’ ratio reveals the significance of the difference at 0.01 level. It is revealed the students in Aided school scored higher than the students in government schools. Hence the null hypothesis is rejected.

- There is no significant difference between the rural and urban students in their writing skills in English. The calculated value is significant at 0.01 level. Hence the null hypothesis is accepted.
- The students from the schools in Hills and Coastal Areas do not differ significantly in their writing skills in English. The ‘t’ values is significant at 0.01 level. Hence the null hypothesis is accepted.
- It is revealed that 25% of the male sample could score 1 and below and the female could score 3 and below, 50% of the male sample could score 2 and below and the female could score 5 and below and the 75% of the male sample could score 6 and below and the female could score 9 and below in their writing performance in English.
- It is also evident that 63% of the students have scored between 0-5 marks, 23% have scored between 6-10 marks, 10% have scored between 11-15 marks, 3% have scored between 16-20 marks and only one percentage of the students have scored 21 and 22 marks.
- The findings reveal that out of 350 students, 10% have scored 0.
- The result of the study regarding the components of the writing skills reveals that the students have scored high in content but have scored low in vocabulary. Although the students know the content well they couldn’t express their ideas in writing because of lack of vocabulary skill in English. The top down scores on the components of writing skills are given based on the order of their ranking as content, grammar, spelling, handwriting and vocabulary.

**Implication:**

The findings of the study have significant implications for improving the quality of second language classroom transaction and acquisition of language skills in English at the Elementary level in the district. The methods, practices and evaluation strategies are in need of thorough relook on developing the
language competence of the L2 learners during their schooling. The results of the study help the practicing teachers in identifying and addressing roadblocks to writing at the Elementary years. This status report would definitely provide an opportunity to the teacher educators at DIET and SSA to develop suitable strategies and interventions for teaching writing skills in English in the District through their training priorities and programmes in future.

**Recommendations:**

- The results based on the quantitative analysis of the present investigation revealed that the students exhibited poor writing skills in English. This in turn led to the conclusion that the students are with writing difficulties to produce quality written materials in English. The scores outcomes show that none of the students in the present study are good at exhibiting their writing skills in English.

In view of the findings the researcher makes the following recommendations.

- Teachers should engage students in pre writing activities which motivate the students to succeed in building writing skills with confidence.

- The English teachers ought to pay more attention to their instructional strategies while teaching writing. The teacher should make use of ICT resources and materials to enhance the writing skills of students in English classroom.

- The L1 transfer leads to transfer of errors during L2 writing. The Teachers have to be found out the solutions to minimize negative L1 transfer to L2 writing.

- Teacher must develop links between home and school so that writing is shared and valued. Conducting three-way conferences where the teacher, parent and student meet to discuss the outcomes achieved and address relevant issues in writing attempts.

- Teachers must be aware of the techniques of assessing the written expression of the students as per their syllabus requirements.

b. Recommendation for Teachers Educators and Administrators
• The teacher educators have to discover which instructional components have the most robust effects for helping students with difficulties to produce quality written materials in English.

• Teacher Educators shall design and deliver appropriate interventions and to evaluate the efficacy of the interventions through field try out and action researches before the delivery of the intervention in actual classroom.

• A training programme to teachers of English on Holistic and Analytic scoring methods and the writing rubrics for each writing type or form is to be conducted to update their knowledge of rating process and scoring procedures in writing.

• An intensive Training programme for Upper primary teachers on writing skills has to be conducted by DIET/SSA so as to make the teachers to acquire proficiency in writing skills in English.

• A need based Survey is to be conducted to all the students in standard VIII to find out the difficulties and the weaknesses of the students in writing skill in English.

**Scope for Further Research:**

1. Replication of the study may be done with different samples. (primary/secondary/Higher secondary)

2. Similar studies may be undertaken for the samples selected from different districts of Tamilnadu.

3. A separate study can be undertaken to assess the different types of essay writing skills in English.
Abstract –10

Name of the DIET : Kothagiri, The Nilgiris

Name of the Principal Researcher : M. Amudha, Lecturer

Name of the Co-Researcher : Mr. Ramesh, H.M.Pups
Kookalthorai, The Nilgiris

Title of the Research Project : Effectiveness of word cards, picture cards and phonetic cards in improving reading skill in English at primary level

Need for the Study :

An erroneous or poor reading ability at primary level will render further studies difficult for the students in future and will bring down the achievement level. Hence there is a necessity to find the difficulty and errors committed by primary students in reading English and to suggest a few remedies for reducing the errors through systematic investigation.

Objectives :

❖ To assess the errors in reading,
❖ To find out the effectiveness of planned strategies in improving learner’s ability in reading,
❖ To study the level of awareness about readiness in reading among primary pupils,
❖ To diagnose the drive given by the teachers towards organising conducive reading hours

Methodology :

“Randomized Groups-pre test-post test Design”
Subjects are assigned to the experimental and control groups by random procedures and administered a pre test. The experimenter introduced the treatment only to the experimental group for the period of four weeks. At the end of the experiment, the experimental and control groups were administered through post test. The difference between the means of T1 and T2 is found for each group and those mean difference scores were compared with help an appropriate statistical test to ascertain whether the treatment produced a
significant effect than the control condition.

**Sample:**

Thirty students of fifth standard studying in panchayat union primary school Kookalthorai at Ooty block in The Nilgiris district were selected as sample of this study.

**Tool:**

Check list consisting the components of reading
Reading Aptitude test to teachers
Reading Aptitude test to students—developed by the investigator is used for the study.

**Intervention**

This experimental study was carried for period of four weeks. Effectiveness cards were measure through post-test and the results were analysed. The following cards were used as interventions for the study:

- **Word Cards**: four sets of word cards arranged in alphabetical order consisting of two letters to five letters totally 383 words in it. Words of more than five letters were given in the form of syllable cards.
- **Picture Cards**: It is consisting four short stories with simple words. These pictures depict the entire story by stages.
- **Phonetic Cards**: Consist of words related to tamil related sounds, minimal pairs and additional and word cards to all the word cards.

**Statistical Technique Used:**

Percentage analysis, ‘t’ test, standard deviation were the statistical techniques used for the study.

**Findings:**

- From the percentage analysis on the basis of comparing Pre and Post-test scores shows remarkable improvement in reading. Most of the students in (87%) performed poor in pretest, but Post-test scores showed improvement in reading.
- Mean score differences between pre(18.13) and post(80.13) test of both male and female in control group shows the impact of traditional teaching on enhancing reading.
Mean score differences between pre(17.71) and post(90.29) test of both male and female in experimental group is higher than the control group in reading ability. So it is inferred that the planned intervention played a vital role in enhancing reading ability.

The findings of the study answered the research statement to improve the reading ability of fifth standard students.

It is inferred from the percentage analysis after the remedial action by the investigator supported to rectifying the errors in English reading. This study built up students’ confidence and enhances students reading not just in school but also at home.

Implication:

- English teachers are supposed to provide students with varied reading materials in order to improve their English Comprehension.
- Various materials provided by the department of education like CD’s of storytelling, pronunciation, vocabulary, conversations etc. can be played at least twice in a week. English classes can be imported through English. Separate period for reading is must.

Recommendations:

1. Teachers can display the word cards, picture cards and phonetic cards in classroom. The Print-rich environment can provide chances of daily practices.
2. Teachers can organize a classroom with literacy-rich environment, this can prove self identity, self awareness, selfworth and expression of primary students.
3. Sophisticated language labs can be installed in all the primary school.
4. Word building activities and language games can be practiced daily similar to multiplication tables.
Subject : Tamil

Abstract –11

DIETd; ngaH : ஓட்டம்; > ஓட்டம்; வட்டம். 

அத்தாள் : தமிழ்த் தமிழ். மேற்குத்து கருவை, விளைவுச் சார்ந்ததாக

துவாச அத்தாளர்கள் : 1. கிருட்கிற் பார். அறிவியல் விளையாட்டு. விளையாட்டுத் திண்டுகள்
2. கிருட்கி். பார். சுற்றுப்பயிற்சி, விளையாட்டுச் சார்ந்ததாக

அறிமுக தகவல் : தமிழ்த் தமிழ் தமிழ் விளையாட்டுகள் விளையாட்டு விளையாட்டு குறிப்பிட்டு நிறைந்ததற்காக

அறிமுக விளக்கம்:

பலம்பாக்காத விளையாட்டுகள் குறிப்பிட்டு நிறைந்ததற்காக. முதல் கருவைகள் பல 
காலம். குறிப்பாக பலம்பாக்காத விளையாட்டு விளையாட்டு விளையாட்டு குறிப்பிட்டு நிறைந்ததற்காக. அவை 
கருவைகள் விளையாட்டு விளையாட்டு குறிப்பிட்டு நிறைந்ததற்காக.

பலம்பாக்காத விளையாட்டுகள் விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு 
கருவைகள் விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு குறிப்பிட்டு 

பலம்பாக்காத விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு 
கருவைகள் விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு குறிப்பிட்டு 

துவாச முக்கியாக்கல்: பலம்பாக்காத விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு 

பலம்பாக்காத விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு விளையாட்டு 
கருவைகள் விளையாட்டு விளையாட்டு விளையாட்டு 

உரை கருத்தளிப்பு: பலம்பாக்காத விளையாட்டு விளையாட்டு விளையாட்டு 

44
காரணிகள்:

குறுக்கு பாடல் செய்தல் கொண்ட முறையையே செய்தல் செய்தல் பட்டரசு குறுக்கு பாடல் செய்தல் கொண்ட முறையையே செய்தல் செய்தல் பட்டரசு குறுக்கு பாடல் செய்தல் பட்டரசு. இது இல்லையே பாடல் பட்டரசு கொண்ட முறையையே செய்தல் செய்தல் பட்டரசு குறுக்கு பாடல் செய்தல் பட்டரசு. 

துணைப்படைமை:

சோளம் எடுப்பிடம்-பாடல்நிகழ்ச்சிகளின் விளைவு குறுக்கு அலகு அகற்றுகிறது கருத்துறுத்துகிறது. 

பாடல்நிகழ்ச்சிகள் குறிப்பிட்டிருப்பது ஆகியவை:

- ஆரித்மிக சான்று (Arithmetic mean), சான்று விளக்கம் (Standard deviation), t. சோகனம் (t. test) தெளிவாக.

காலாளக்குறைகள்:

- விளைவு குறுக்கு அலகு பாடல்நிகழ்ச்சிகளின் பாடல்நிகழ்ச்சிகள் விளையாட்டு சிறப்புப் பாடல்நிகழ்ச்சிகள்.
- பாடல்நிகழ்ச்சிகள் குறுக்கு அலகு பாடல்நிகழ்ச்சிகளின் பாடல்நிகழ்ச்சிகள் சி.ச.ச குறுக்கு அலகு பாடல்நிகழ்ச்சிகளை நிரூபிக்கிறது. 
- பாடல்நிகழ்ச்சிகள் குறுக்கு அலகு பாடல்நிகழ்ச்சிகள் பாடல்நிகழ்ச்சிகளின் பாடல்நிகழ்ச்சிகள் சி.ச.ச குறுக்கு அலகு பாடல்நிகழ்ச்சிகளை நிரூபிக்கிறது.
- பாடல்நிகழ்ச்சிகள் குறுக்கு அலகு (70.95%) சிறந்ததாக பாடல்நிகழ்ச்சிகளின் (77.20%) சிறந்த பாடல்நிகழ்ச்சிகள் விளைவு குறுக்கு அலகு பாடல்நிகழ்ச்சிகளை (6.25%) 
- பாடல்நிகழ்ச்சிகள் குறுக்கு அலகு பாடல்நிகழ்ச்சிகளின் வரவிட்டிருப்பது விளைவு குறுக்கு அலகு பாடல்நிகழ்ச்சிகளை நிரூபிக்கிறது.
- பாடல்நிகழ்ச்சிகள் குறுக்கு அலகு பாடல்நிகழ்ச்சிகளின் வரவிட்டிருப்பது விளையாட்டு சிற பாடல் சுத்தமாய் பாடல்நிகழ்ச்சிகளை நிரூபிக்கிறது. 
- விளைவு குறுக்கு அலகு பாடல்நிகழ்ச்சிகளின் விளையாட்டு சிறந்த பாடல்நிகழ்ச்சிகளை விளைவு குறுக்கு அலகு பாடல்நிகழ்ச்சிகளை நிரூபிக்கிறது.

பரிசோதனாக இந்த பாடல்நிகழ்ச்சிகள் பாடல்நிகழ்ச்சிகள் சுருக்கின்றன, அதேபோல்பட்ட பாடல்நிகழ்ச்சிகள் விளையாட்டு சிறந்த பாடல்நிகழ்ச்சிகளை நிரூபிக்கிறது.
பிற்புலிக்கும்பனியும், அரியப் பிற்புலிக்கும், புத்ததை சிற்பகிற்பரிக்கும் அவர்கள் நல்லையும் முற்றக்கொள்ளும். 

கோஞ்சமுடைய அதுவரை வெளிப்புறமான பலவகை கிருட்பத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. இக்கோட்டையில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. கோஞ்சமுடைய அதுவரை வெளிப்புறமான பலவகை கிருட்பத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. சிறுகுழுவின் வெளிப்புற்றில் சிறுகுழுவின் வெளிப்புறத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. சிறுகுழுவின் வெளிப்புறத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. 

நிறைய விளையாட்டு நல்லையும் முற்றக்கொள்ளும், நிறைய விளையாட்டு நல்லையும் முற்றக்கொள்ளும். கோஞ்சமுடைய அதுவரை வெளிப்புறமான பலவகை கிருட்பத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. சிறுகுழுவின் வெளிப்புறத்தில் சிறுகுழுவின் வெளிப்புறத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. சிறுகுழுவின் வெளிப்புறத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. சிறுகுழுவின் வெளிப்புறத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு.

தின்கால அதிகாரிகள் வெளிப்புறமான பலவகை கிருட்பத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. 

தின்கால அதிகாரிகள் வெளிப்புறமான பலவகை கிருட்பத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. 

தின்கால அதிகாரிகள் வெளிப்புறமான பலவகை கிருட்பத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு. 

தின்கால அதிகாரிகள் வெளிப்புறமான பலவகை கிருட்பத்தில் பெண்கள் தம் இழுப்பாக்கினார் வருமாறு.

ghlpyd; %yk; nra;Ais fw;gp;Fk;ngHOJ nra;Aspy; Gije;Js;s mhp
fl;Jf;sisAk;>ngHUis;sisAk; El;gkhd mwAPk; Mw;wy; ngWth; Mwe;j fl;Uj;fisr;rwe;j Kiwapy;
ntsp;gLj;Jk; Mw;wyAk; nra;Aspd; nghUis jpwk;gl tpsf;fpAiuf;Fk; jpwdAk; ngWth; .

'gh' ntd;gJ XJq;hyy; czh;tf;VJthfg;gue;J gl;l Xir. ghliy cuif;fg;gbd;Fk; NghJ ghll;bYs;s
xypfs; .aq;Fpdp;wd. Xirkpf; ghlNy Nf;Fk; Miria;jHz;Lk; xypf;Fk; fhymst>xypf;Fk;
jd;ik>xypf;Fk;jd;ik>xypf;Fk; Kiw ,k;%d;Wk; nra;ASF;F ,d;wpkahjd. ,rft;fiyApYk;
gh;Lfi;fiyApYk; ,J Njitahd mstpw;F gad;gLj;gggLfpwJ. xyp eaj;jpyUpUe;J jhd;nra;Aspd; ahg;G
Kiw mikfPwJ.

jpwd;kp;f fw;gp;jy; Kiffs;>mjpf epiwtpidjJUk; kjpg;gPl;L El;gq;fs;>tskhf
NkYk; nra;a Ntz;ba Ma;Tfs;

- kw;w nkhop ghlj;jpYk; ,J Nghd;w Ma;tpid Nkw;nfhs;syhk;.
- fy;tpgbepiyf;F jFe;jthW (njhl;fg;gs;sp>eLepiyg;gs;sp>cah;epiyg;gs;sp>Nky;epiyg;gs;spfspy;); ,J Nghd;w Ma;tpid Nkw;nfhs;syhk;.
Abstract -12

DIET; ngaH : DIET, MLJu> jQ;rhT+H kht;lk;

ஆப்பாஸ்தான் : (மொழிபாட். V.fz;ad:> KJepiy tpupTiuaH

துண்டு ஆப்பாஸ்தான் : jpU.S.fky;fz;zd:> KJepiy மிரு மொழிபாட்டான்

ஆப்பாஸ்தான் தம்பு: குற்றல் மர்மம் சிந்தினால் மூட்டிட
தூரும்போக்கள் பயின்றோம் வரவு மூட்டும் நூற்றணக் கிராண்டோ

ஆப்பாஸ்தான் செயல்முறை:

• குற்றல் குற்றில் குற்றி குற்ற குற்றம் குற்ற குற்றம் குற்றம் குற்றம்
• பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற
• குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற
• பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற
• குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற
• பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற பற்றுகுற்ற

குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற

ஆப்பாஸ்தான் தம்பு:

போலோனியோ போலோ, (மொழிபாட்டான் குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற குற்றுகுற்ற

முறை:

குற்றல் மர்மம், சிந்தினால் மூட்டிடம் மூட்டிடம் மூட்டிடம் மூட்டிடம் மூட்டிடம்
தூரும்போக்கள் பயின்றோம் வரவு மூட்டும் நூற்றணக் கிராண்டோ

• குற்றாக குற்றாக குற்றாக குற்றாக
• குற்றாக குற்றாக குற்றாக
• குற்றாக குற்றாக குற்றாக
• குற்றாக குற்றாக குற்றாக
• ஆறு என்று வெளிப்படுத்தப்பட்ட வேர்க்காற்று
• சத போக்கு என்று வெளிப்படுத்தப்பட்ட வேர்க்காற்று சத போக்கு
• அனைத்துக் குறிப்பிட்டு என்று வெளிப்படுத்தப்பட்ட குறிப்பிட்டு
• ஆறு போக்குகள் வெளிப்படுத்தப்பட்ட போக்குகள்
• ஆறு போக்குகள் வெளிப்படுத்தப்பட்ட குறிப்பிட்டு

அறுபத்தொன்றா

செயல்பாட்டை அனுப்பிய பாண்டுருவாளர்கள் ஆறு போக்குகளில் குறிப்பிட்டு ஆறுவர் குறியீட்டாக 1. 17 குறியீட்டில் செயல்பாடு பார்க்கவும்,

1. குறிப்பிட்டு வெளிப்படுத்தப்பட்ட போக்குகளில் ஆறு போக்குகள் செயல்பாட்டை அனுப்பிய போக்குகள் 1வருட குறியீட்டு 1
2. மாற்றுக்கூறு வெளிப்படுத்தப்பட்ட போக்குகளில் செயல்பாட்டை ஆறு போக்குகள் 2வருட குறியீட்டு 2
3. புரிந்து புதிது 2வருட போக்குகளில் செயல்பாட்டை ஆறு போக்குகள் 3வருட குறியீட்டு 3
4. குறிப்பிட்டு வெளிப்படுத்தப்பட்ட போக்குகளில் செயல்பாட்டை ஆறு போக்குகள் 4வருட குறியீட்டு 4
5. முழுக்குகையான போக்குகளில் செயல்பாட்டை ஆறு போக்குகள் 5வருட குறியீட்டு 5
6. செயல்பாடுகள் புதிது வெளிப்படுத்தப்பட்ட போக்குகள் செயல்பாடுகளும் ஆறு போக்குகள் 6வருட குறியீட்டு 6
7. உரிமை வெளிப்படுத்தப்பட்ட போக்குகளில் செயல்பாட்டை ஆறு போக்குகள் 7வருட குறியீட்டு 7
8. போக்குகளில் புதிது வெளிப்படுத்தப்பட்ட போக்குகள் செயல்பாடுகளும் ஆறு போக்குகள் 8வருட குறியீட்டு 8
9. அறு போக்குகளில் செயல்பாடு ஆறு போக்குகள் 9வருட குறியீட்டு 9
10. போக்குகளில் வெளிப்படுத்தப்பட்ட போக்குகள் செயல்பாடு ஆறு போக்குகள் 10வருட குறியீட்டு 10
11. போக்குகளில் வெளிப்படுத்தப்பட்ட போக்குகள் செயல்பாடு ஆறு போக்குகள் 11வருட குறியீட்டு 11
12. போக்குகளில் வெளிப்படுத்தப்பட்ட போக்குகள் செயல்பாடு ஆறு போக்குகள் 12வருட குறியீட்டு 12
13. போக்குகளில் வெளிப்படுத்தப்பட்ட போக்குகள் செயல்பாடு ஆறு போக்குகள் 13வருட குறியீட்டு 13
14. போக்குகளில் வெளிப்படுத்தப்பட்ட போக்குகளில் செயல்பாடு ஆறு போக்குகள் 14வருட குறியீட்டு 14
15. போக்குகளில் வெளிப்படுத்தப்பட்ட போக்குகளில் செயல்பாடு ஆறு போக்குகள் 15,16,17வருட குறியீட்டு 15,16,17

போக்குகளில் புதிது வெளிப்பட்ட போக்குகள் 2 குறியீட்டுகள்:

2. இத்தகையது ஒரு தனது காப்புற்றுக்கதற்கு ஐத்தீன்களின் கரன்கள் குறிக்கும் 8 கருத்து பிரிவுகளில் 39 கருத்து பார்வைகள், அமையாது குறிப்பிட்டு 32 கருத்து பிரிவுகளில் 49 கருத்து பார்வைகள், தம் கருத்து குறிப்பிட்டு 27 கருத்து பிரிவுகளில் 0 கருத்து பார்வைகள், நிலையில் பார்வைகள் 14 கருத்து பிரிவுகளில் 9 கருத்து பார்வைகள் பெறப்பட்டுள்ளன. இந்தக் காப்புற்றுக்கதற்கு குறிப்பிட்டு பார்வைகளில் 31 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது. அமையாது குறிப்பிட்டு பார்வைகளில் 17 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது. நிலையில் பார்வைகளில் 5 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது.

3. மருத்துவச் சுத்தியல் (காப்புற்றுக்கதற்கு பிரிவுகளுடன்) குறிப்பிட்டு காப்புற்றுக்கதற்கு ஐத்தீன்களின் கரன்கள் குறிக்கும் 12 கருத்து பிரிவுகளில் 57 கருத்து பார்வைகள், அமையாது குறிப்பிட்டு 24 கருத்து பிரிவுகளில் 36 கருத்து பார்வைகள் தம் கருத்து குறிப்பிட்டு 27 பிரிவுகளில் பார்வைகள். பிரிவுகளில் குறிப்பிட்டு பார்வைகளில் குறிப்பிட்டு காட்டப்படுகின்றது. நிலையில் பார்வைகளில் 6 பிரிவுகளில் 12 கருத்து பார்வைகள் பெறப்பட்டுள்ளன. இந்தக் காப்புற்றுக்கதற்கு குறிப்பிட்டு பார்வைகளில் 31 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது. அமையாது குறிப்பிட்டு பார்வைகளில் 17 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது. நிலையில் பார்வைகளில் 5 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது.

4. அக்காலத் பார்வைகளில் காப்புற்றுக்கதற்கு ஐத்தீன்களின் கரன்கள் குறிக்கும் 15 கருத்து பிரிவுகளில் 2 கருத்து பார்வைகள், அமையாது குறிப்பிட்டு 27 கருத்து பிரிவுகளில் 33 கருத்து பார்வைகள் தம் கருத்து குறிப்பிட்டு 41 கருத்து பிரிவுகளில் 0 கருத்து பார்வைகள், நிலையில் பார்வைகள் 17 கருத்து பிரிவுகளில் 66 கருத்து பார்வைகள் பெறப்பட்டுள்ளன. இந்தக் காப்புற்றுக்கதற்கு குறிப்பிட்டு பார்வைகளில் 31 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது. அமையாது குறிப்பிட்டு பார்வைகளில் 17 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது. நிலையில் பார்வைகளில் 5 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது.

5. பசுமை போதும் போதும் போது காப்புற்றுக்கதற்கு ஐத்தீன்களின் கரன்கள் குறிக்கும் 24 கருத்து பிரிவுகளில் 74 கருத்து பார்வைகள், அமையாது குறிப்பிட்டு 11 கருத்து பிரிவுகளில் 22 கருத்து பார்வைகள் தம் கருத்து குறிப்பிட்டு 41 கருத்து பிரிவுகளில் 0 கருத்து பார்வைகள் தம் கருத்து குறிப்பிட்டு பெறப்பட்டுள்ளது. நிலையில் பார்வைகள் 38 கருத்து பிரிவுகளில் 7 கருத்து பார்வைகள் பெறப்பட்டுள்ளது. இந்தக் காப்புற்றுக்கதற்கு குறிப்பிட்டு பார்வைகளில் 31 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது. அமையாது குறிப்பிட்டு பார்வைகளில் 17 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது. தம் கருத்து குறிப்பிட்டு பெறப்பட்டுள்ளது. நிலையில் பார்வைகளில் 5 பிரிவுகளில் குறிப்பிட்டு காட்டப்படுகின்றது.

6. முதல் பசுமையில் காப்புற்றுக்கதற்கு ஐத்தீன்களின் கரன்கள் குறிக்கும் 34 கருத்து பிரிவுகளில் 63 கருத்து பார்வைகள், அமையாது குறிப்பிட்டு 13 கருத்து பிரிவுகளில் 30 கருத்து பார்வைகள் தம் கருத்து குறிப்பிட்டு 49 கருத்து பிரிவுகளில் 0 கருத்து பார்வைகள் பெறப்பட்டுள்ளன. நிலையில் பார்வைகளில் 38 கருத்து பிரிவுகளில் 7
7. பாலாமுனைகள் கேள்வி வட்டாகத்தெரியச் செய்யும் கருவிகள் பல்வேறுபட்டும், பிள்ளையாரின் 0 கிலோமீட்டர், அத்துடன் பல்வேறுப்படிப்பு 33 கிலோமீட்டர் பிள்ளையாரின் 46 கிலோமீட்டர் பல்வேறுப்படிப்பு, கூடுதல் பல்வேறுப்படிப்பு 20 கிலோமீட்டர் பிள்ளையாரின் 31 கிலோமீட்டர் பல்வேறுப்படிப்பு, நீண்டு பல்வேறுப்படிப்பு 47 கிலோமீட்டர் பிள்ளையாரின் 23 கிலோமீட்டர் பல்வேறுப்படிப்பு மல்லிகைகள். இதைக்கும் பட்டியலுக்கு பாலாமுனைகள் கேள்வி (சாய்கர்) கேள்வி பல்வேறுப்படிப்பு 0 கிலோமீட்டர் தில்லியான் பல்வேறுப்படிப்பு, பல்வேறுப்படிப்பு கேள்வி குழுமம் பல்வேறுப்படிப்பு சுட்டு கேள்வி பல்வேறுப்படிப்பு. நீண்டு பல்வேறுப்படிப்பு 5 கிலோமீட்டர் கேள்வி பல்வேறுப்படிப்பு பல்வேறுப்படிப்பு கேள்வி பல்வேறுப்படிப்பு.

பாலிய சுட்டிக்கோயில்

அடர்த்தியான கேள்வி வட்டாகத்தெரியும் பல்வேறுப்படிப்பில் நம்பிக்கை 14 கிலோமீட்டர் பிள்ளையாரின் 40 கிலோமீட்டர் பல்வேறுப்படிப்பு, அத்துடன் பல்வேறுப்படிப்பு 18 கிலோமீட்டர் பிள்ளையாரின் 47 கிலோமீட்டர் பல்வேறுப்படிப்பு, கூடுதல் பல்வேறுப்படிப்பு 45 கிலோமீட்டர் பிள்ளையாரின் 23 கிலோமீட்டர் பிள்ளையாரின் 9 கிலோமீட்டர் பல்வேறுப்படிப்பு மல்லிகைகள். கூட்டுக்குத்தெரியும் கேள்வி வட்டாகத்தெரியும் பல்வேறுப்படிப்பில் நம்பிக்கை 20 கிலோமீட்டர் பிள்ளையாரின் 50 கிலோமீட்டர் பல்வேறுப்படிப்பு, அத்துடன் பல்வேறுப்படிப்பு 21 கிலோமீட்டர் பிள்ளையாரின் 38 கிலோமீட்டர் பல்வேறுப்படிப்பு, கூடுதல் பல்வேறுப்படிப்பு 34 கிலோமீட்டர் பிள்ளையாரின் 4 கிலோமீட்டர் பல்வேறுப்படிப்பு, கூடுதல் பல்வேறுப்படிப்பு 25 கிலோமீட்டர் பிள்ளையாரின் 9 கிலோமீட்டர் பல்வேறுப்படிப்பு மல்லிகைகள். கூடுதல் பல்வேறுப்படிப்பு நம்பிக்கை 6 கிலோமீட்டர் பிள்ளையாரின் 10 கிலோமீட்டர் பல்வேறுப்படிப்பு, அத்துடன் பல்வேறுப்படிப்பு 3 கிலோமீட்டர் பிள்ளையாரின் 8 கிலோமீட்டர் பல்வேறுப்படிப்பு அடர்த்தியான கேள்வி வட்டாகத்தெரியும் பல்வேறுப்படிப்பில் 9 கிலோமீட்டர் பல்வேறுப்படிப்பு மல்லிகை கேள்வி. கூடுதல் பல்வேறுப்படிப்பு 11 கிலோமீட்டர் பிள்ளையாரின் கேள்வியும் பல்வேறுப்படிப்பு 2 கிலோமீட்டர் பல்வேறுப்படிப்பில் அடர்த்தியான கேள்வி பல்வேறுப்படிப்பில் மல்லிகைகள்.

பாலிணவாயக் குடும்பம் (துர்கண்/2 மாத/சிறு வளை)

துர்கணவாச குடும்பங்களில் பல்வேறுப்படிப்பு நம்பிக்கை 18 கிலோமீட்டர் பிள்ளையாரின் 49 கிலோமீட்டர் பல்வேறுப்படிப்பு, அத்துடன் பல்வேறுப்படிப்பு 23 கிலோமீட்டர் பிள்ளையாரின் 41 கிலோமீட்டர் பல்வேறுப்படிப்பு, கூடுதல் பல்வேறுப்படிப்பு 44 கிலோமீட்டர் பிள்ளையாரின் 3 கிலோமீட்டர் பல்வேறுப்படிப்பு, கூடுதல் பல்வேறுப்படிப்பு 15 கிலோமீட்டர் பிள்ளையாரின் 7 கிலோமீட்டர் பல்வேறுப்படிப்பு மல்லிகைகள்.

2. மாத குடும்பங்களில் பல்வேறுப்படிப்பு நம்பிக்கை 7 கிலோமீட்டர் பிள்ளையாரின் 44 கிலோமீட்டர் பல்வேறுப்படிப்பு, அத்துடன் பல்வேறுப்படிப்பு 15 கிலோமீட்டர் பிள்ளையாரின் 57 கிலோமீட்டர் பல்வேறுப்படிப்பு
வாழ்கள் 53 இணையம் பொருளிக் கலந்தவர் 2 இணையம் பொருளானாந்தியது விளக்கங்கள் 24 இணையம் பொருளிக் கலந்தவர் 6 இணையம் பொருளானாந்தியது. 

மிகு துவார்ப்பானானாவியோர் குறுக்கு விளக்கமானவியோர் தோன்ற துவார்ப்பானானா பொருளிக் 25 இணையம் பொருளிக் கலந்தவர் 43 இணையம் பொருளானாந்தியது, ஏனென்று துவார்ப்பானா 27 இணையம் பொருளிக் கலந்தவர் 40 இணையம் பொருளானாந்தியது துவார்ப்பானாந்தியது 18 இணையம் பொருளிக் கலந்தவர் 5 இணையம் பொருளானாந்தியது, கிளமு துவார்ப்பானா 21 இணையம் பொருளிக் கலந்தவர் 12 இணையம் பொருளானாந்தியது.

அளவுதலைத் தொகுப்புதல் (RIGHT) என்றால் துவார்ப்பானா 9 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது 7 இணையம் பொருளானாந்தியது பொருளானாந்தியது 9 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது 7 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது 25 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது 16 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது 15 (WRONG) 9 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது 7 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது 16 (NONE) 9 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது 7 இணையம் பொருளானாந்தியது/2.பொருளானாந்தியது. 

அறிமுகப்படுத்துதலும்

தொலைத் தொடர்ச்சி பிறப்பு பொருளானா சுடும் குறுக்கு நிலவிக்கும் செய்யுறுத்தல் அளவுதலைத் தொகுப்புதலும். முதலில் 1. பொருளானா நிறைந்து குறுக்கு சுடு கொள்ளும் 2. பொருளானா நிறைந்து குறுக்கு சுடு கொள்ளும் 3. நிறைந்து குறுக்கு சுடு கொள்ளும் 4. பொருளானா நிறைந்து குறுக்கு சுடு கொள்ளும் 5. பொருளானா நிறைந்து குறுக்கு சுடு கொள்ளும் 7. பொருளானா நிறைந்து குறுக்கு சுடு கொள்ளும் 8. பொருளானா நிறைந்து குறுக்கு சுடு கொள்ளும் 9. பொருளானா நிறைந்து குறுக்கு சுடு கொள்ளும். 

செயல்பாடுத்தல்

1. பொருளானா பொருள் குறுக்கு வெவ்வேறு வகையில் உள்ள என்னும் செயல்பாடு? கொள்ளினால் ஒரு தொடர் என்னும் பொருளானா கருத்துக்கு முன்னணி கொள்ளினால் கொள்ளையளிக்கும் பொருளானா கருத்தின் வெவ்வேறு வகையில் கொள்ளில் குறுக்கு வெவ்வேறு வகையில். 

2. பொருளானா பார்வை தொடர்பு சுடும் குறுக்கு பொருளானா பொருளானா கருத்தின் வெவ்வேறு வகையில் 2. கொள்ளில் 4. கொள்ளினால் பொருளானா கருத்தின் வெவ்வேறு வகையில்.

3. பொருளானா பார்வை தொடர்பு குறுக்கு பொருளானா பொருளானா கருத்தின் வெவ்வேறு வகையில் 7. கொள்ளில் பொருளானா கருத்தின் வெவ்வேறு வகையில் பொருளானா கருத்தின் வெவ்வேறு வகையில்.

4. பொருளானா பொருளானா கருத்தின் வெவ்வேறு வகையில் கொள்ளில் குறுக்கு பொருளானா கருத்தின் வெவ்வேறு வகையில் கொள்ளில்.
5. பாதுகாப்புத் தீர்வுகளின் செயல்நிலைகளை செயல்நிலைகள் பாதுகாப்புத் தீர்வுகளின் முதல் பாதுகாப்புத் தீர்வுகள் கொண்டு பாதுகாப்புத் தீர்வுகளுக்கான தீர்வுகள்

காரணிப்பராயல்கள்

- அடையாளப்படுத்தும் பட்டமைப்புகள் திகழ்வு செயல்நிலைகள் பாதுகாப்புத் தீர்வுகளின் வேறுபட்டும் பாதுகாப்புத் தீர்வுகளின் வேறுபட்டும் பாதுகாப்புத் தீர்வுகள்
- அவளையில், பாதுகாப்புத் தீர்வுகள் வழக்கம் பின்னர் பாதுகாப்புத் தீர்வுகளின் வழக்கம் பல்லட்டும் முறையுடன் பட்டமைப்புகள் நேர்க்கத்து பந்தவேறும் தீர்வுகள்
- கருவர் தோற்றமு, நூற்று பல்வேறு தீர்வுகள். தீர்வுகள் பந்தவேறும் தீர்வுகள் பல்லட்டும் வழக்கில்
- பந்தவேறு செயல்நிலைகள் தீர்வுகள் வழக்கம் பந்தவேறும் தீர்வுகள் கருவர் தோற்றமு செயல்நிலைகள்
- அவளையில் பாதுகாப்புத் தீர்வுகள் வழக்கம் பந்தவேறும் தீர்வுகள் பந்தவேறும் தீர்வுகள்
- அவளையில், பந்தவேறும் தீர்வுகள் வழக்கம் பந்தவேறும் தீர்வுகள் கருவர் தோற்றமு

“அவளையில் செயல்நிலைகள் வழக்கத்தோடு” நூற்றை செயல்நிலை அவளையில் கருவர் தோற்றமு கொண்டு பந்தவேறும் தீர்வுகள் பந்தவேறும் வழக்கம், அவளையில் பந்தவேறும் தீர்வுகள் பந்தவேறும் வழக்கம்
- அவளையில் செயல்நிலைகள் வழக்கத்தோடு கருவர் தோற்றமு கொண்டு பந்தவேறும் தீர்வுகள் பந்தவேறும் வழக்கம்
- அவளையில் செயல்நிலைகள் வழக்கத்தோடு கருவர் தோற்றமு கொண்டு பந்தவேறும் தீர்வுகள் பந்தவேறும் வழக்கம்
- அவளையில் செயல்நிலைகள் வழக்கத்தோடு கருவர் தோற்றமு கொண்டு பந்தவேறும் தீர்வுகள் பந்தவேறும் வழக்கம்

- பாதுகாப்புத் தீர்வுகளின் செயல்நிலைகளை செயல்நிலைகள் பாதுகாப்புத் தீர்வுகளின் முதல் பாது காப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வுகள் முதல் பாதுகாப்புத் தீர்வு�ள்
Abstract – 13

Name of the DIET : Kothagiri, The Nilgiris
Name of the Principal Researcher : Dr. V. Subramanian, Lecturer
Name of the Co-Researcher : Mrs. Karpagam, H.M.
GTR School, Kunjapanai
Mr. Natarajan, SGT, PUPS,
Sholurmattam

Title of the Research Project : Enhancement of Communicative Skills in Tamil using Tamil Language Games

Need for the Study :

Listening, speaking, reading and writing in addition to that of vocabulary in language learning leads to the development of communicative skill. An integrative approach of using language games to enhance communicative skill will support the learners to attain expected outcomes in language learning.

Objectives :

➢ To promote pronunciation skill of learners.
➢ To develop language games for enhancing communicative skill of learners.
➢ To analyse different components of communicative skill existing among learners.

Methodology :

Pre-test, Post-test, Single group experimental design.

Intervention – Usage of language games.

Sample :

Fifth standard students of Kotagiri block were selected through Random sampling technique.

Tool :

Pre-test questionnaire for student’s Post-test questionnaire for student’s questionnaire for school student’s and teachers

Statistical Technique Used :

➢ Statistical techniques such as Mean, Standard Deviation, t’ test, ANOVA were used.
Language games are highly useful to enhance the communicative skills of the learners. Language cards and C.D. prepared by the researcher for the intervention are highly beneficial. The used materials can multiply and supplied to other schools.

**Interventions employed:**

**Findings:**

1. Over all Communication Skill Percentage (Pre-Test) = 67.50.

2. Over all Language Games Intervened Communication Skill Percentage (Post-Test) = 96.42.

3. There is a significant difference between Pre-Intervention (Pre-Test) and Post-Intervention (Post - Test) scores. (Paired Sample t’ test - $t_{(51)} = 22.54, \ p = 0.0001$.

4. Language Games intervened effectively in promoting Communicative Skills among Primary Learners. It is evident from the EFFECT SIZE of 1.17 for the POST TEST. When testing for significance of Experimental Design, the power of the test is reported as 0.992.

5. Language Games intervened effectively in promoting Communicative Skills among Primary Learners. It is evident from the EFFECT SIZE of 0.48 for the POST TEST – Basic Language Components. When testing for significance of Experimental Design, the power of the test is reported as 0.964

6. Language Games intervened effectively in promoting Communicative Skills among Primary Learners. It is evident from the EFFECT SIZE of 0.31 for the POST TEST – Audio-Visual Packages. When testing for significance of Experimental Design, the power of the test is reported as 0.819.

1. Language Games intervened effectively in promoting Communicative Skills among Primary Learners. It is evident from the EFFECT SIZE of 0.81 for the POST TEST – Innovative Games. When testing for significance of Experimental Design, the power of the test is reported as 0.999.

2. Language Games intervened effectively in promoting Communicative Skills among Primary Learners. It is evident from the EFFECT SIZE of 0.418 for the POST TEST – Proverbs and Riddles. When testing for significance of Experimental Design, the power of the test is reported as 0.944.

3. Language Games intervened effectively in promoting Communicative Skills among Primary Learners. It is evident from the EFFECT SIZE of
0.534 for the POST TEST – Traditional Games. When testing for significance of Experimental Design, the power of the test is reported as 0.983.

**Implication:**

1. Basic components of Tamil Language Skills coaching need audio visual support.
2. Innovative Games in Tamil may be included in Co-scholastic Components.
3. In Tamil Language Curriculum Frame Work the following five component of Language Games may be included. 
   (i) Basic Language Components 
   (ii) Audio-Visual Packages 
   (iii) Innovative Games 
   (iv) Proverbs and Riddles 
   (v) Traditional Games.
4. Effective Communication Skills through Play-way Method may be incorporated in all types of schools.

**Recommendations:**

1. Tamil Language Games can be introduced in all the schools in Tamilnadu.
2. Tamil Language Labs can be established in all Primary Schools.
3. Culture specific Traditional Language Games can be documented.
4. Curriculum based Multi media Language Games Kits for Tamil can be developed and introduced in all schools.
5. Local Specific Tamil Thesaurus can be developed and introduced in all the schools in Tamilnadu.
Subject: Mathematics

Abstract – 14

Name of the DIET : Triplicane, Chennai District
Name of the Principal Researcher : Dr. S. Malarvizhi, Senior Lecturer
Name of the Co-Researcher : 1. S. Babu, Lecturer.
2. N. Punithavathi, Lecturer
Title of the Research Project : ‘Enhancing logical thinking in Mathematics through laboratory activities among VIII standard students’

Need for the Study :

Upper primary students are expected to understand many abstract concepts in general in Mathematics and especially in Science subjects. Student completing VIII standard are expected to solve problems in Mathematics using logical thinking. This skill will enable students of VIII standard to learn abstract concepts easily. The logical thinking of the students can be improved substantially by giving constant practice through well designed Mathematics laboratory activities. With this purpose, the present study is undertaken by the investigators of DIET Triplicane in Chennai District.

Objectives :
The objectives of this study are the following :

❖ To assess the present status and use of Mathematics laboratory in government schools of Chennai District.

❖ To design and train the students of VIII standard in Mathematics laboratory activities.

❖ To enhance the logical thinking of VIII standard students through laboratory activities.

❖ To find out the impact of laboratory activities in logical thinking of VIII standard students in Mathematics.
**Methodology:**

The present study aims to enhance logical thinking in Mathematics through laboratory activities among VIII standard students. An experimental design is adopted with control and experimental groups.

**Sample:**

64 VIII Standard students studying in Government Higher secondary School are selected as sample. Among them 32 students are taken as control group and others are taken as experimental group. 43 teachers teaching mathematics in five government schools are taken as sample.

**Tool:**

The following tools are developed by the investigator and used for data collection

- Teachers’ checklist
- Pre-test and Post-test
- A package of laboratory activities for VIII standard students in Mathematics.
- Laboratory activities are implemented by the teacher for the experimental group for three weeks with the guidance of the investigator.

**Statistical Technique Used:**

The collected data are analyzed using the following statistical techniques

- Descriptive Analysis and
- Differential Analysis

**Findings:**

- Experimental group performed better than control group on post-test showing that Mathematics laboratory activities enhanced the logical thinking of VIII standard students.

- Significant difference was found between mean scores on logical thinking of the two groups (experimental and control) favoring
Mathematics laboratory activities.

- The need of Mathematics laboratory was found to be expected from all schools having Mathematics laboratory materials.

**Implication:**
The implications of the study are the following

- The findings of the study will help the trainer in designing a training package to improve the skills of the teachers to utilize the materials available in Mathematics laboratory

- The improved skills of the teacher will help them in effective classroom instruction leading better logical thinking and problem-solving skills among VIII standard students.

- When the logical thinking of the students improves, their problem solving skills get enhanced resulting in commendable achievement in Mathematics.

**Recommendations:**

- Replica of the present study may be conducted in other standard.

- Laboratory activities on Mathematics can be prepared for the Teacher Trainees and Training can be given to them.

- Laboratory activities on Mathematics can be prepared for the School Teachers and Training can be organized for them.

- A similar study may be conducted in all concepts, all subjects at Middle school level in other district also.
Abstract – 15

Name of the DIET : Uthamapalayam, Theni District.
Name of the Principal Researcher : P. Nagajothi, Lecturer
Name of the Co-Researcher : 1. Dr. M. Anantharaj, Lecturer
                            2. B. Manoharan, Lecturer
Title of the Research Project : Effectiveness of self learning package on the achievement of mathematical competencies at Primary level among hill – area Students in Theni district

Need for the Study :

During the school visits in Hill areas like Bodi, Cumbum and Mayiladumparai block, it has been found that the achievement in basic numeracy in these areas were very low. In order to develop this, primary level (I to V) was selected for improvement.

Self-learning materials are the boon for the development of the knowledge among the school students of the present century. The highly qualitative learning material enhances the learning outcome among the students. The well planned and prepared learning material boosts the achievement level of the students. Mathematics is one of the important subjects at school level. The self-learning materials in mathematics are very less in number compared to the basic subjects in school. So, the effectiveness of the self-learning packages on the achievement in mathematics will yield fruitful result for the teachers, policy makers, and so on. It also aims to develop the mathematical competency of the hilly area students of Cumbam, Bodi and Mayiladumparai blocks. So, the present study is much needed.

Objectives :

The investigator of the present study framed the following objectives:

- To find out whether there is any significant difference in the pre-test performance between the control group students and the experimental group students.
To find out whether there is any significant difference in the post-test performance between the control group students and the experimental group students.

To find out whether there is any significant difference between pre-test and post-test mean score of students in achievement of mathematical competencies in the control group without adopting self learning package.

To find out whether there is any significant difference between pre test and post-test mean scores of the students using self learning package in the experimental group.

To find out whether there is any significant difference in the post test gain scores of the students between the control group and experimental group after adopting the self-learning package.

**Methodology:**

Independent variable : Self-learning package

Dependent variable : Achievement of Mathematical Competencies

**Design of the study**

Pre-test Post-test Control group Experimental group design was suitably employed for the study. The time distribution for the pre-test was 1 hour. Treatment time for both the experimental and control group was 20 days. The post-test for 30 minutes. During the treatment period the experimental group was trained with the help of self learning package and the control group was trained traditionally using the same concept.

**Sample :**

The random sampling technique was followed. A sample consisting of 212 students of primary level from three blocks in 15 Hill – Area schools in Theni District, Tamilnadu was selected. Out of 212 students, 101 students were boys and 101 students were girls selected for the study. The control group has 106 students and experimental group has 106 students. The sample size consist of standard I-72 ,II-76 and III-64 students.

**Tool :**

- Achievement Test in Mathematics prepared and standardized by the investigator
Self-learning package prepared and validated by the investigator used for achievement of mathematical competencies at primary level among hill – area students.

Statistical Technique Used:
- Descriptive analysis–Mean, Measures of variability–standard deviation,
- Differential Analysis-paired sample‘t’ - test, ANOVA and Gain score analysis.

Intervention:
Pre test was conducted for both Control and Experimental group. After the pre test self learning package was used for the Experimental group to facilitate the Teaching Learning Process for 20 days. During the period of the study Control group learnt only through traditional methods. Then the post test was conducted for both Control and Experimental group.

Findings:
The study has come out with meaningful findings as follows:
- There is no significant difference between control and experimental groups in the pre-test scores.
- There is a significant difference between control and experimental groups in the post-test scores.
- There is no significant difference between the pre-test and post-test scores for control group.
- There is a significant difference between the pre-test and post-test scores for experimental group.
- There is a significant difference between control and experimental groups in gain score. The mean score shows that the experimental groups has better gain score than the control groups.

Implication:
- The gain score of Experimental group is more than that of the Control group of Primary level students. Hence it is clear that using Self learning package in Teaching Learning Process is effective for
Mathematical Competencies among the Primary level students in Hill area.

- Self-learning package is a very useful technique for teaching mathematics at primary level.

- It helps the children to learn through concrete concepts in a very efficient way.

- Self learning package was useful to the students who were poor in Subtraction

- It helps to save a lot of time of the child and arouses interest in mathematics.

- Students enjoy learning mathematics which otherwise is considered as a boring and dull subject.

- Self learning package was useful to the students who were poor in Subtraction

**Recommendations:**

- Self learning package on Mathematics can be prepared for the Teacher Trainees and Training can be given to them.

- Self learning package on Mathematics can be prepared for the School Teachers and Training can be organized for them.

- A similar study may be conducted in all concepts, all subjects at Middle school level in other district also.

- Replica of the present study may be conducted in the plains.
Abstract – 16

Name of the DIET : G. Ariyur, Villupuram District.
Name of the Principal Researcher : Dr. A. Srinivasan
Name of the Co-Researcher : --

Title of the Research Project : Availability And Utilization Of Self-Learning Kit Of Mathematics in Villupuram District

Need for the Study :

Though SLM kit for Mathematics was given to primary and upper primary schools in the year 2006 and after each primary and upper primary school was equipped with SLM kits for mathematics and every teacher handling standard I to V was trained through various training schemes to use SLM kits, the principal researcher observed that the SLM kits were kept idle, while he was on tour to schools on various purpose. Hence the researcher got involved in this venture to study how far the material have been saved and utilized.

Objectives :

1. To assess the level of Availability and Utilization of self-learning kit of Mathematics.
2. To assess the level of the awareness of teachers and students regarding utilization of self-learning kit of Mathematics.
3. To find out the significant difference in Availability of self-learning kit of Mathematics with respect to Location of the school and Type of school.
4. To find out the significant difference in Utility of self-learning kit of Mathematics with respect to Location of the school and Type of school.

Methodology :

The investigator adopted survey method for this study.
Sample:
The present descriptive research with survey techniques consists of 44 Primary and Upper Primary Schools among 22 blocks in Villupuram district 2 schools from each block was taken as sample.

Tool:
The investigator prepared “Observation Schedule” for collecting data. Data regarding general information, information related to Availability and Utilization of Self-Learning Kit of Mathematics are included in the observation schedule.

This tool has two parts, the first part consists of general information and the second part is information related to Availability and Utilization of Self-Learning Kit of Mathematics

Statistical Technique Used:
The investigator has made use of the following statistical techniques for analysing the data gathered.

Descriptive Analysis
   A) Mean
   B) Standard Deviation
Differential Analysis
   A) T-test
Association Analysis
   A) Chi square-test

Relational Analysis

Findings:
The present problem of investigation was taken on “Availability and Utilization of self-learning kit of Mathematics in Villupuram”. This research ascertains that 80% of primary and upper primary schools have the self-learning kit of Mathematics and as far as the Utilization is concerned, more than 60% of schools use them properly, appropriately and effectively.

Through observation the investigator observed that 52% of schools have the self-learning kit of Mathematics in complete setup. As far as the Utilization part is concerned, 63% of schools have working knowledge with self-learning kit of Mathematics.
Awareness of headmasters with self-learning kit of Mathematics plays a major role in the up keeping and Utilization of the same. 72% of headmasters are aware of the availability of self-learning kit of Mathematics and 62% of teachers are interested in using the self-learning kit of mathematics from class 1 to 4. This shows that there is a linkage between availability and utilization. There is a significant relationship between the working knowledge of teachers and the usage of self-learning kit of mathematics ($r=0.715$).

**Implication:**

The findings of the present study throw light on the state of affair with regard to the Availability and Utilization of self-learning kit of Mathematics. Based on this following educational implications were evolved:

Self-learning kit of Mathematics is the most powerful teaching method in the elementary level. Hence integration of Self-learning kit of Mathematics in teaching learning process is mandatory. The problems faced by the students in the traditional form of education system can be changed when the teachers start using Self-learning kit of Mathematics in their classroom. The assessment of Availability and Utilization of self-learning kit of Mathematics will also help the school students and teachers to improve their mathematical skills.

**Recommendations:**

1. During School visits and academic monitoring, the officers and DIET faculty need to find out if the facilities provided to schools are utilized to the optimum level and give required support for better utilization.

2. This study can further be carried out to all primary and upper primary schools in all over the state of Tamilnadu to ensure the Availability and Utilization of self-learning kit of Mathematics.
Subject: Science

Abstract – 17

Name of the DIET : Oddanchatram, Dindigul District
Name of the Principal Researcher : Dr.A.Prabakar Devaraj,
                                 Senior Lecturer
Name of the Co-Researcher     : 1. Mrs.K.Ramani, Lecturer,
                                 2. Mr.M.Anbarasan, Lecturer
                                 3. Mr.A.Javeed, Lecturer
Title of the Research Project : “Effect of computer supported
                               instruction on the cognitive learning outcomes of seventh standard
                               students in learning science”

Need for the Study :
The SSA has supplied desk-top & lap-top personal computers, DVD/CD
players, LCD-projectors and educational CDs to all Municipal and
Panchayat Union Middle Schools. A teacher may play the educational CDs
by using the computer, and guide learning through projected DVD/CD
visuals. Thus Computer Supported Instruction is a strategy of Information
Communication Technology (ICT), enabling visual-spatial learning. Visual
and spatial modes are prominent in promoting science-learning and still,
they have been relatively neglected in our schools and also in science
education research. Human physiology is a visual-spatial subject, and yet,
it is taught in schools largely in the verbal mode. We selected the lessons
on Human body systems & Respiration as the content-area and
experimented with samples of seventh standard students to study the
effect of Computer Supported Instruction on the cognitive learning
outcomes. A preliminary attempt has also been made to characterize the
academic outcomes in terms of brain systems and their associated
cognitive functions.
Objectives:

1. To study effectiveness of computer-supported instruction in facilitating visual-spatial learning of the content-area of human body systems in science among the samples of seventh standard students, separately in urban and rural areas.

2. To study the effect of computer supported visual-spatial learning and locale environmental factor across different neurocognitive systems.

3. To study the reaction of the students of the test-groups towards visual-spatial learning through computer supported instruction.

Methodology:

The effectiveness of computer-supported instruction was studied in comparison with the existing ALM teaching method, in the content-area of Human body systems in Science, among the samples of seventh standard students. Pre-test-Treatment-Post-test-Reaction-scale-Memory-retention-test-type of experimental study with control and test groups was followed. The pre-test was administered to the sample-groups before the application of the treatment. Then the test group was treated with the test factor.

The test factor is computer-supported instruction in teaching the content-area. This involved teacher-guided, computer-operated, LCD-projected, movie-talkie DVD/CD-visuals on the content-area. Thus the computer-supported instruction, in essence, is the technology blended visual-spatial learning.

The control group was treated with the control factor. The control factor is existing ALM method of teaching. After the treatment the post-test was administered to the sample-groups. The study was conducted separately in Urban and Rural sectors of Dindigul District.

Evaluation of Neurocognitive functioning:

An academic achievement test consisting of questions from the content-area was developed by the investigators. These multiple choice
questions were designed in such a way as to measure the academic achievement and as well, evaluate the neurocognitive functioning, in a four-choice forced recognition, manipulation and discrimination paradigm. Most of the questions consist of figures of images, pictures, flow-charts, schematic diagrams and drawings.

These questions were designed and modeled on cognitive tasks from cognitive neuroscience literature in such a way that ‘answering each question’ is associated with ‘the display of specific cognitive abilities’, which is attributed, by neuroimaging data, to the predominant activation of selective neural substrata of brain. This is validated by anatomical and functional evidences from neuroimaging and lesion studies.

**Development of academic achievement test questions:**

There are five categories of questions. The first category of ten questions, from question no.1 up to question no.10, involves integrated functioning of multiple neurocognitive systems and does not test any specific neurocognitive variable.

The second category has ten questions, from question no. 11 to question no.20, which are modeled on the cognitive tasks that test the visual-spatial cognition. All these questions are in non-verbal pictorial-visual mode and they involve mental manipulation of spatial relations, pattern perception and visualization from memory to find answers. Thus answering these questions involve visual-spatial cognition, which is attributed by neuroimaging data to the predominant activation of occipitotemporal and parietal cortical regions. The ‘marks’ scored in this category measure visual-spatial cognition and hence the neural activation of occipitotemporal and parietal lobes.

In the third category there are, ten questions, from question no. 21 up to question no.30, which test the cognitive skills of language ability consisting of lexical semantics and syntax. The students have to choose among four choices the title/statement that best describes the given image or picture in each question. The sentence-picture matching task was first designed by Bishop [J Child psycho. Psychiatry, 23, 1-20, in the year
The neuroimaging studies show that the network of left Perisylvian cortical regions are centrally involved. The ‘marks’ scored in this category is a measure of the activation of left perisylvian cortical region and language skills.

Fourth category consists of ten questions, from question no. 31 to question no. 40, which test the cognitive control ability. When the students are able to label a category by associating a set of body structures or organs or functional statements through the identification of a specific biological & conceptual link and discriminate the odd ones by the same paradigm, they use the cognitive control abilities. These executive functional skills are attributed, by anatomical evidences from imaging and lesion studies, to the predominant activation of anterior cingulate cortex. The ‘scores’ obtained in this category measure the activation of anterior cingulate substrata and evaluate the functioning of cognitive control system.

Fifth category has ten questions, from question no. 41 to question no. 50, which test the ability to retain information and to manipulate remembered items in working memory, for which there is independent anatomical evidence from imaging lesion studies that lateral prefrontal cortex is centrally involved. The ‘marks’ scored in this category is a measure of the activation of lateral prefrontal substrata and indicate the level of functioning of the working memory system.

The questions of the academic achievement test were validated by experts in the field. The experts scrutinized all the MCQs and brought in required rectifications and modifications. Item-analysis was carried out through pilot study and the reliability was established through split-half method.

**Sample:**

Purposive Random Sampling Technique was used. Four Panchayat Union/Municipal Middle schools, two from urban sector and two from rural sector, in Dindigul District were selected on the basis that the
seventh standard students of the selected schools were of equal academic standing, determined by school records of academic achievement 'scores'. The following seventh standard students were selected as samples:

*Urban Control Group*: 28 students of MMS, Shanmugapuram, Palani.

*Urban Test Group*: 31 students of MMS, Adivaram, Palani.

*Rural Control Group*: 29 students of PUMS, Kodanginaickanpatty, Dindigul-rural.

*Rural Test Group*: 30 students of PUMS, Malaipatty, Vadamadurai taluk, Dindigul District.

**DVD/CD-visuals**

DVD-visuals were prepared by the investigators on the above content-area. This was validated by two subject experts, two educational experts and two software experts. Further, the DVD visuals were tested through a pilot study and the reliability was established.

**Tool**:

The academic achievement test was conducted as pre-test before the administration of treatment. After the administration of treatment, the academic achievement test was conducted as post-test.

In order to measure the attitude of the test groups towards computer-supported visual-spatial learning, a five-point reaction-scale on the format developed by Passi and Sansanwal (1986) was constructed by the investigators. The reaction-scale was validated through a critical and thorough analysis of the content and relevant objectives by a team of experts in the field. The reliability was established through the pilot-study. The reaction-scale was administered to the test-groups after the post-test.

After a period of one-month from the date of administration of post-test and reaction scale, the academic achievement test was conducted as memory-retention-test.

**Statistical Technique Used**:

The ‘marks’ scored by the subjects in the pre-test, post-test and memory-retention-test, and the responses obtained from the reaction-scale
were collected as data and analyzed using the following statistical procedures.

The null hypothesis was used as a tool in testing the significance of differences. The ‘t’ test was used to determine the significance of difference between two means, for the given degrees of freedom, at required level of significance with the help of Gosset’s ‘t’-table. Mean-score is a measure of academic achievement and as well, the level of functioning of a given neurocognitive system for a group as a whole. The 0.01 level of significance was adopted throughout this study. Chi-square method was used to test the null hypothesis of equal probability in the analysis of responses in the reaction-scale.

**Findings:**

The test-groups scored significantly higher ‘marks’ in the post-test than in the pre-test due to the treatment of the test-factor. The test-factor involves computer-supported, visual-spatial learning. The control groups also scored significantly higher ‘marks’ in the post-test than in the pre-test due to the treatment of the control factor of existing ALM teaching method. However, the mean gain scores attained by the test groups are far more significantly greater than the mean-gain scores obtained by the control groups. Gain is the difference between the pre-test score and the post-test score of a student. It is a measure of the academic attainment and neurocognitive development gained through the treatment.

This shows that the teacher-guided, computer operated, LCD-projected, movie-talkie, DVD/CD-visuals are far more significantly effective than the existing ALM teaching method in enhancing the academic achievement in the content-area, and in the furthering of neurocognitive development, among the tested samples of seventh standard students. The test-group-students were able to answer questions on the internal microscopic spatial structures & processes of human body systems, associate the functional statements and identify the conceptual link, among the various organs, and, relate activities with internal processes of body systems, whereas the control-group-students could not answer such questions.
The mean-gain scores of test groups are far more significantly greater than the mean gain scores of control groups in each of the following four categories of questions:

(i) Second category of questions, the answering of which require visual-spatial cognitive skills of visualization and mental imagery.

(ii) Third category of questions, that tests the ability to integrate semantic content into visual representation.

(iii) Fourth category of questions, that tests the cognitive control abilities. When the students are able to label a category by associating a set of body structures or organs or functional statements through the identification of a specific conceptual link and discriminate the odd ones by the same paradigm, they use the cognitive control abilities.

(iv) Fifth category of questions, that tests the ability to retain and process the verbal and visual information in the working memory.

This means that the computer-supported visual-spatial learning has been far more significantly effective than the existing teaching-practices in bringing in enhancement in the following neurocognitive systems through the activation of the concerned neural substrata of the brain as attributed by neuroimaging data:

i. Enhanced visual-spatial cognition through increased activation of occipitotemporal and parietal lobes.

ii. Enhanced lexical semantic & syntactic skills through increased activation of left perisylvian substrata.

iii. Enhanced cognitive control abilities through increased activation of anterior cingulate cortex.

iv. Enhanced functioning of working memory system through increased lateral pre-frontal activation.

The ‘decrease’ of MRT-score from post-test-score of a student measures his/her memory-retention-power. Less the ‘decrease’, greater is
the memory-retention-power.

In both the urban and rural sectors, the mean values of decrease of the MRT scores from the post-test score of test-groups are significantly less than that of the control groups. This means that the power of memory retention has been enhanced for both the urban and rural test groups through the technology-blended visual-spatial learning, facilitated by computer supported instruction.

The Chi-square analysis of the attitude of the students towards computer-supported visual-spatial learning tends to indicate that the students have a strong liking to learn through this ICT enabled visual-spatial mode of learning.

**Implication:**

It is interesting to note that the extent of activation across the four neurocognitive systems show significant variance among the urban and rural groups. Thus the locale environmental factor, viz., the urban factor and the rural factor is identified to play a significant role in influencing academic achievement and neurocognitive development.

The computer-supported DVD/CD visuals on the content area provide visual-spatial stimuli that make children get emotionally connected to the lesson-content. Such positive emotional connections cause the brain secretes neurotransmitters that facilitate more synaptic additions. This heightens the brain’s cognitive functioning and leads to the formation of long term memory systems. It is implied that the technology blended visual-spatial learning has been compatible with the brain’s natural learning systems.

**Recommendations:**

Educational DVD/CDs may be prepared by the teachers on selected lesson topic. In this process the students may also be involved. The lesson contents may be presented through DVD/CD visuals. This facilitates visual and spatial mode of learning. This enhances academic achievement through neuro cognitive development.
One important outcome of this investigation is that the locale environmental factor significantly influences the neurocognitive development. Locale factor is closely related to socio economic status of children. Thus the neurocognitive correlates of socio economic status in school children may be studied.

This empirical study has indicated that visual and spatial modes of learning contribute to verbal form of reasoning in the formation of mental imagery. It may be investigated to find out how best semantic content can be integrated into visual representations, in order to bring about meaningful learning.
Abstract – 18

Name of the DIET : Keelapaluvur, Ariyalur district
Principal Researcher : Mr.N. RAJENDRAN Lecturer
Co-researchers : R. Kamaraju & M. Mayilsany Lecturers
Title : Availability and utilization of laboratory equipment at upper primary level in Ariyalur District and Perambulur District

Need for the Study:
Science teaching should be interesting to develop scientific temper among the children. The objective of science teaching is to eradicate superstitions in the society by understanding the nature and natural phenomena. The researcher while visiting the school discussed with the science teacher, some of the teachers conducted science experiments in the classroom, but remaining did not. Some teachers do not know how to use some equipments. It is very important to know the status of the science laboratory equipments and how they are being used by them at upper primary level. As CCE was introduced last year, it essential to know the status of the science laboratory equipments and the utilization of the same at the upper primary level.

Objectives:
1. To study the availability of the Laboratory equipments at upper primary level.
2. To find out the significant difference in the utilisation of laboratory equipments at upper primary level in selected schools in Ariyalur and Perambalur districts.

Methodology:
Survey method was used for finding out the availability and utilization of laboratory equipments at upper primary level in Ariyalur and Perambalur districts.
Sample:
All middle schools, teachers working at middle schools and the students studying at this school in Ariyalur and Perambalur districts are population. In Ariyalur distict there are six blocks namely Ariyalur, Jayankondam, T.Palur, Andimadam, Sendurai and Thirumanur. There are four blocks in Perambalur namely Perambalur, Kunnam, Padalur and Veppanthattai. Fifteen middle schools (Totally 130 schools) in each block were taken for this study. Data was collected from each school one VIII Std Science handling teacher. Stratified random sampling technique was used for selection of schools. In each school, 5 students from VIII Std were taken for the study.

Tool:
Three tools were constructed by the researcher to collect the data.

i) Checklist-To collect information regarding the availability of the science laboratory equipments.

ii) Questionnaire for teachers: A questionnaire was constructed for collecting the data from the teachers regarding the utilization of laboratory equipments

iii) Focus group interview: In order to collect data regarding the utilization of laboratory equipments a Focus Group Interview was conducted among the students of VIII std.

Statistical Techniques Used:
Factor analysis and percentage analysis were used for analyzing the data.

Findings:
Data was collected from 130 Middle schools from Ariyalur and Perambalur districts. Out of 130 middle schools 105 schools (80.7%) have water facility. Out of 130 schools 116(89.2%) schools have Electricity. Out of 130 schools, 114 schools (87.7%) have safety
materials (Fire extinguisher, water and sand), 79 schools (60.7%) have drainage facility, 92 schools (70.2%) maintain Record, 104 schools (80%) have ventilation while doing practical. Regarding heating facility only 43.8% schools have spirit lamp. Out of 130 schools only 45 schools have demonstration table. Less than 25% of schools have separate room for conducting practical. Out of 130 schools 119 schools are have science Laboratory equipments whereas 11 schools are yet to supply laboratory equipments. Out of 130, 47 schools (36.15%) have more than 70% of laboratory materials. Out of 130, 18 schools (13.84%) do not utilize the laboratory equipments. From focus group interview, it is found that more than 75% of schools conduct practical influenced by Training on simple science experiments training but do not use laboratory equipments.

**Educational implications:**

Now a day, more importance is given to theory examination than the practical examinations. The available infrastructure and lab equipments have been underutilized. Mastery of Science, unlike other subjects, depends much on the hands on experience, exploration and infinite curiosity which need to be exploited by sensitive science teachers.

**Recommendations:**

- Training should be organized to use science laboratory equipments.

- While supplying materials to the schools, the competent authority concerned should discuss with the science handling teachers so that the material supplied is more useful.

- In order to develop a positive attitude towards science practical among students, the teacher has to spend more time with the students

- The facilities in the laboratory have to be enriched.

- Effective evaluation system should be introduced in the
practical examination.

- It is also recommended that in middle schools at least two teachers one for physical science and another for Biological science may be appointed so that the subject can be transacted effectively.

- The Science Practical experiments may be so designed that they help the learners overcome superstitions and develop scientific attitude.

**Suggestions for further study:**

- The research may be expanded to the study of Science labs in Higher Secondary Schools.

- There is a great scope to investigate the way in which science is being taught in primary and upper classes to find out if they really motivate children to explore the world of nature and scientific phenomena with unabated inquisitiveness.
Abstract-19

Name of the DIET : Palayampatti, Virudhunagar
Name of the Principal Researcher : A.N. Venkadasamy, Lecturer
Name of the Co-Researcher : D. Seenivasagam, Senior Lecturers
Title of the Research Project : “Effectiveness of Co-operative learning in achievement of Science among Upper Primary students in Virudhunagar district”

Need for the Study :

Co-operative learning is one of the method to develop the students’ interest in learning science. There is possibility for group participation, involvement, understanding, initiative to do assigned work etc., Science can create awareness, understanding and deep thinking skill in each and every student. The Science content is clarified and verified to the Upper Primary School through the different types of methodologies. But some students are not able to understand the Science concept and theory. It was found by researcher at the time of School visit. The research is based on the assumption that Cooperative learning will enhance the student’s achievement of Science in the class room situation. Hence the researcher has been decided study the effectiveness of Co-operative learning in Science among upper primary students.

Objectives :

- To develop a co-operative learning of Science among upper primary students.
- To find out whether there is any significant difference in the pre-test performance between the control group students and the experimental group students.
- To find out whether there is any significant difference between pre test and post-test mean scores of students in the control group without adopting co-operative learning.
- To find out whether there is any significant difference between pre-test and post-test mean scores of students in the experimental group.
adopting Co-operative learning.

❖ To find out whether there is any significant difference in the post-test means scores performance between the control group students and the experimental group students after adopting Cooperative learning.

Methodology:
The study employed the quasi experimental pre test – post test control group design. This design consisted of the experimental group – leaning together and control group – traditional classroom teaching. The independent variable was co-operative leaning while the dependent variable was achievement.

Sample:
The target population of this research was the 120 upper primary students in SBK Higher secondary school, Kaloorani, Virudhunagar District. From the population of 120 students, a sample of 60 students was randomly selected. The sample for Experimental group is made up of 30 students. This comprises of 15 males and 15 females, while the control group was made up of 15 males and 15 female students.

Tool:
Achievement test for science upper primary students was the main instrument to collect the data from the students.

Statistical Technique Used:
Mean scores, Standard deviation (SD) and ‘t’ test were analyzed.

Findings:

➢ There is no significant difference in the pre-test performance between control group students and experimental group students.

➢ There is significant difference between pre-test and post test mean scores of the Students in the control group without adopting Co-operative learning.

➢ There is significant difference between pre test and post test mean scores of the students in the experimental group.

➢ There is significant difference in the post test performance of the
students between control group and experimental group after adopting the co-operative learning strategy.

**Implication:**

Since the findings of this study showed that students who worked cooperatively performed better than those who worked singly, students should be encouraged to develop social interaction in the class room situation.

**Recommendations:**

- The present study is confined only to upper primary student’s students in SBK Higher secondary school, Kaloorani.
- It would be studied other area also.
- The study can be extended to high school and higher secondary students. It would be studied among undergraduate students too.
- It would be done with other subjects also.
- A study can be conducted to know the environmental awareness activities which have been given importance in various school and colleges.
- Cooperative learning approach should be implemented in the upper primary school curriculum for improving intellectual and social development of pupil.
Abstract – 20

Name of the DIET : DIET, Theroor, Kanyakumari District
Name of the Principal Researcher : Dr. J. Jeena James, Senior Lecturer
Name of the Co-Researcher : Dr. S. Godwin, Lecturer
Title of the Research Project : Availability and Utilization of Science Lab Equipments at Upper Primary and High School levels in Kanyakumari District.

Need for the Study :

It is a common experience that one can remember a thing or a matter for a long time, if seen directly. That is, retention is more with direct experiences. Learning through multi senses is more permanent than mechanical hearing. Usually, the teachers do not feel the importance of doing experiments in science teaching. They are satisfied with simple explanation. The newly implemented Continuous and Comprehensive Evaluation technique emphasizes the importance of practicals at High school level science teaching and 10 marks has been allotted to science practicals as internal assessment. As a DIET faculty, the investigator observed the teaching-learning activities in science classes during school visits. In many upper primary schools the teachers are not demonstrating the experiments properly. They have so many excuses such as unavailability of sufficient equipments for experimentation, lack of time for experimentation due to other duties and inability to do experiments by non science teachers. These situations affect science learning badly. So with intention to conduct a survey, the present topic was selected by the investigator to find out the availability and utilization of science lab equipments at upper primary and high school levels in Kanyakumari district.

Objectives :

1. To study and compare the availability of science laboratory equipments with regard to Level of schools (Upper primary / High school), Type of Management (Govt. / Aided) and Locality of the schools (Urban / Rural) in Kanyakumari District.
2. To find out the Level of utilization of lab equipments by the science teachers with regard to Gender (Male / Female), Experience (below 5 yrs/5 to 10 yrs/above 10 years), Qualification (Graduate/Secondary grade training), Category of schools (UPS/HS), Management of schools (Govt./Aided) and Locality (Rural/Urban).

3. To find out the difference in the utilization of science lab equipments with regard to Gender of teachers, Category of teachers (GT & SGT), Major subjects studied, Experience of teachers, Level of schools, Type of Management and Locality of the schools.

4. To study the correlation between the Availability and Utilization of lab equipments by the science teachers and students in Upper primary and High schools.

**Methodology:**

In the present study, the investigator has followed Survey method to collect data. The samples were selected through stratified random sampling technique.

**Sample:**

A total number of 20 Upper primary and 20 High schools in Kanyakumari District from rural and urban areas were selected for the study. 65 science teachers working in these schools and 500 students (250 VIII standard students and 250 X standard students) constitute the sample of this study.

**Tool:**

The Research tool consists of Checklists to find out the availability of science lab equipments and separate Questionnaires for the science teachers and students to study its utilization. In addition to this, Catalogues of pictures of science lab equipments were used for identification by the students of VIII and X standard students.

**Statistical Technique Used:**

The collected data of the study was analysed through Percentage, Standard Deviation, t-test, ANOVA and Pearson's Product Moment
Correlation analysis to derive conclusions.

**Findings:**

- The availability of science lab equipments is more in High schools (91.1%) than in Upper primary schools (64.9%) in Kanyakumari District.
- In Aided Schools, the availability of science lab equipments is more (82.9%) than in Government Schools (73.25%).
- The availability of science lab equipments is slightly more in Urban schools (78.5%) than in Rural schools (76.8%).
- The Level of utilization of science lab equipments by the teachers is found to be ‘moderate’ at Upper primary and High school levels with regard to Gender, Experience of the teachers, Type of Management and Locality of the schools.
- The level of utilization of lab equipments by secondary grade trained teachers is found ‘low’.
- The utilization of the science lab equipments by the High school teachers is more than the Upper primary school teachers.
- The science lab equipments are more utilized by the Graduate teachers than the Secondary Grade trained teachers in Upper primary schools.
- The teachers who have studied non science subjects in Higher secondary and Degree courses show lack of confidence in utilizing the lab equipments since they have insufficient laboratory skills.
- It is found that, the Gender, Experience of the teachers, Type of Management and Locality of the schools have no influence on the utilization of science lab equipments.
- None of the upper primary schools in Kanyakumari District is with science laboratory facilities.
- There is positive relation between the availability and utilization of science lab equipments by the ‘Teachers’ in Upper primary and High schools.
- There is no relationship between the availability and utilization of lab equipments by the ‘Students’ at Upper primary and High school levels in Kanyakumari District.
**Implication:**

This study has established the fact that availability of science lab equipments have positive influence on the effective utilization by the teachers in Upper primary and High schools. It further revealed that the availability has no significant relationship with the utilization of lab equipments by the students since the teachers are giving more importance to demonstration rather than involving the students in experimentations. The less performance in upper primary schools is directly related to the lack of science laboratory, unskilled non science subject teachers and insufficient supply of science lab equipments. The implications of this study can be summarized as follows.

- If the Upper primary schools are provided with science labs with adequate facilities the utilization of laboratory equipments can be improved from ‘low’ level.
- The teachers will utilize the lab equipments more if sufficient number of equipments are provided in schools. Thus the level of utilization of lab equipments can be enhanced from ‘moderate’ to ‘high’.
- Demonstration of experiments by the teachers alone is not enough for science learning. If the students are allowed to do experiments, their manipulative skill will be improved and they will get deep understanding of science concepts.
- Trainings on laboratory skills are needed for the Upper primary school teachers. This will increase the utilization and efficiency of teachers in handling lab equipments.

Improvisation of science lab articles from locally available materials is an alternate mode when sufficient number of equipments are not available.

**Recommendations:**

On the basis of the findings of this research project, the investigators make the following recommendations.

- In every upper primary there must be a science laboratory or a separate room with adequate facilities for doing practicals.
- Sufficient number of necessary lab equipments must be provided in
upper primary schools for maximum utilization by teachers and students since availability and utilization are positively correlated.

- It is recommended that science subject must be handled by the teachers who have studied science subjects in their higher secondary and degree courses.

- The laboratory skills of the science teachers should be enhanced through inservice training programmes.

- Onsite support and regular monitoring by the resourceful persons and authorities are advisable for the better use of science labs in schools.

- Demonstrations by the teachers alone is not sufficient for science learning. Hence the students must be allowed to do experiments for direct experiences. Hands on experience will naturally improve the quality of learning science and also promote transfer of learning to day to day life.

The teachers should be taught and motivated to improvise certain laboratory articles from locally available materials.

Scope for Further Research:

On the basis of the present study, the following areas are suggested for further research.

1. A study on the laboratory skills of science teachers at upper primary and high school levels.

2. Problems faced by the non science subject teachers in utilizing science laboratory equipments at upper primary level.

3. Effect of availability and utilization of laboratory equipments in students' academic achievement.

4. Students' involvement in practicals and their academic achievement in science at high school level.

5. Attitude and awareness of science teachers towards science practicals in upper primary and high schools.

It is hoped that the present study will provide inspiration for further research in the above areas.

The results of this study would help the educational practitioners to
identify the gaps and issues which hinder the academic performance of the students in science. This will further enhance science learning at the upper primary and high school levels with qualitative achievements in Kanyakumari District. It is hoped that, this study become a valuable and useful one in planning in-service programme design and implementing the strategies in the system of upper primary and high school education.
Abstract – 21

Name of the DIET : Aduthurai, Thanjavur district

Name of the Principal Researcher : Dr. Vidhyageetha N, Lecturer, DIET-Aduthurai

Name of the Co-Researcher : Mr.L.Palraj, Lecturer, DIET-Aduthurai

Title of the Research Project : “Attitude and Practices of Science Teachers towards Handling Practical Sessions at Secondary Level in Thanjavur District”

Need for the Study :

Laboratory is generally perceived as a place specially built for teaching by demonstration of certain theoretical phenomena in Science into practical terms. All the stakeholders of education would agree that the laboratory experiences given to the students will create the ability among the students to translate what they have read in their texts to practical realities, thereby enhancing their understanding of the learned concepts. The use of practical sessions is recognized as important in teaching of science by teachers. Yet, there is growing debate surrounding the effective and affective value it has on students and their learning. Teachers face certain problems in carrying science through practical activities; they also find practical sessions as a method of behaviour management and so practical sessions are not consequently be used to effectively enhance the learning process for students (Abrahams & Millar, 2008).

Objectives :

The following are the objectives formulated for the present study:

i. To study the level of attitude and practices of teachers towards handling practical sessions at secondary level in Thanjavur district

ii. To study the extent of availability of infrastructure and other resources available in secondary schools of Thanjavur district
iii. To study the underlying support system enjoyed by the secondary level science teachers of Thanjavur district
iv. To study the significance of the difference between various categories of the sub-samples of teachers in respect of their attitude and practice towards handling practical sessions.

**Methodology :**
Descriptive Research with Survey technique has been adopted in the study

**Sample :**
Three hundred and ninety science teachers working in certain selected secondary schools of Thanjavur district in Tamilnadu serves as sample for the present study and it is selected by simple random technique. In order to get equal representation from all the blocks of the district, the researchers have collected data from twenty-six science teachers working in each of the fifteen blocks coming up to a total of three-hundred and ninety teachers as the sample of the study.

**Tool :**
Attitude and practices towards practical sessions scale are containing forty statements which evoke teachers’ attitude towards handling practical sessions have been used. Item analysis has been done to the data obtained in the pilot study with the procedure given by Edwards’ method of summated ratings. The reliability of the tool has been found by Cronbach’s Alpha and it is 0.866, the value of intrinsic validity is 0.9306.

An observation schedule to determine the available infrastructure, facilities and resources available in secondary schools of Thanjavur district in Tamilnadu, India has also been used. The demographic variables of the study are gender, age, number of years of teaching experience, qualification, locale, management type of the school and gender of learners.

**Statistical Technique Used :**
- Percentage Analyses
- Descriptive Statistics
Findings:

The important findings of the study are slated as follows:

1. Only 11% of entire sample of teachers show a unfavourable attitude and practices towards practical sessions, 58.2% of them show a neutral attitude and practices towards practical sessions, 30.8% of them show a favourable attitude and practices towards practical sessions. On this basis, entire sample was divided into three groups.

2. It has been found in the present study that 53% of the schools have science laboratory to carry out the practical activities to all their learners. It is also been found in the present study that 57.83% of the secondary schools have adequate infrastructure like chemicals, specimens and other instructional materials needed to conduct practical activities at secondary level.

3. From the analysis made in the present study, it has been found that 68% of the teachers feel that they get the necessary support system to carry out the practical activities during instruction. It is also been found that only 20.77% of schools do have a technician to co-ordinate the laboratory activities; yet teachers have a better perception of the support system.

4. Means are found to range from 98.06 to 113.10 for entire sample and its sub-samples. It is inferred from the analysis of the study, which the standard deviation ranges from 7.37 to 27.35.

5. The Mean of scores secured by entire sample in Attitude and Practices of science teachers towards handling practical sessions Scale is 108.34. Its median is 108 and its mode is 109. The value of mean and median is 108 and the value of mode is 109 which indicate that the values do not vary much and so the distribution can be considered nearly normal.

6. Significance of difference between Means of scores in Attitude and Practices towards practical sessions Scale of sample and pairs of sub-samples have been found using test of significance after having framed suitable null hypotheses. There is a significant difference between Male
and Female teachers in their attitude and practices towards practical sessions.

7. There is a significant difference between teachers working with 1 – 5 years & 11 – 15 years, 1 – 5 years & above 20 years, 6 – 10 years & above 20 years, 16 – 20 years & above 20 years in their attitude and practices towards handling practical sessions.

8. There is no significant difference between Teachers possessing U.G degree and P.G degree in their attitude and practices towards practical sessions.

9. There is a significant difference between Teachers working in Urban schools and Teachers working in Rural schools in their attitude and practices towards practical sessions.

10. There is no significant difference between Teachers working in High schools and Teachers working in Higher Secondary schools in their attitude and practices towards practical sessions.

11. There is a significant difference between teachers working in Government schools & teachers working in Government-Aided Schools and between teachers working in Government-Aided schools and teachers working in Self-financing schools in their attitude and practices towards handling practical sessions.

12. There is a significant difference between teachers working in Boys’ schools & teachers working in Girls’ schools in their attitude and practices towards handling practical sessions.

13. There is a significant difference between the teachers who have science lab in their schools and the teachers who do not have science lab in their attitude and practices towards practical sessions.

14. There is significant difference between teachers conducting practical activities in classroom, in lab and both in classroom and lab towards their attitude and practices towards handling practical sessions.

There is a significant difference between teachers who had not attended Lab skills training and teachers who do have not attended Lab skills training in their attitude and practices towards practical sessions.

**Implication:**
1. In the present study, nearly 60% of teachers lie at neutral level of attitude and it is not a welcoming note to enthusiastic science learning. A positive and favourable attitude helps teachers to gain confidence to carry the instructional objectives at secondary level with full zeal. It implies that the State is at the urgent need of understanding the reasons for neutral level of attitude of teachers.

2. It has been found in the present study that only 53% of the schools have adequate infrastructure required to carry out the practical activities to all their learners. Adequate infrastructure in the schools would certainly help teachers to design practical activities for the learners and hence it can be found that the existing conditions with regard to the availability of infrastructure and other facilities need improvement.

3. It has been found in the present study that only 68% of the teachers feel that they get the necessary support to carry out the practical activities during instruction. It is also been found that though many schools do not have a technician to co-ordinate the laboratory activities; however it has been reported by the that their co-teachers help them to carry practical activities in the absence of lab technician making teachers have a better perception of the support system.

4. It has been found in the present study that 70% of the teachers maintain stock and issue registers. 30% of non maintenance of issue registers by teacher needs proper monitoring.

5. Female teachers (mean = 110.29) are seen to be better than Male teachers (mean = 106.24) in their attitude and practices towards practical sessions. There has been a gap between male and female teachers in their attitudes. Initiatives must be taken to increase the level of attitude of male teachers as well.

6. The rating of attitude and practices towards handling practical sessions belonging to different age groups show teachers in ages 31 – 40 years and 41 – 50 years are found to be comparatively better (mean = 110.04 and mean = 108.59) respectively as against mean values of teachers in other age groups such as upto 30 years (mean = 106.64) and above 50 years (mean = 107.73). It implies that age plays a dominant role in the
attitude of teachers.

7. Teachers possessing U.G degree (mean = 108.38) do not vary significantly from Teachers possessing P.G degree (mean = 108.30) in their attitude and practices towards practical sessions. It implies that the educational qualification does not make any difference in the attitude of teachers.

8. Teachers working in Rural schools (mean = 109.78) are better than Teachers working in Urban schools (mean = 104.73) in their attitude and practices towards practical sessions. Urban schools have higher strength and so it may be the reason for the lesser attitude of teachers than their rural counterparts.

9. Teachers working in High schools (mean = 109.59) do not differ from Teachers working in Higher Secondary schools (mean = 107.56) in their attitude and practices towards practical sessions. So it can be concluded that teachers working in different type of schools have similar attitude towards handling practical sessions.

10. The rating of attitude and practices belonging to Government, Government-Aided and Self-financing schools show teachers of Government-Aided Schools to be comparatively less (mean = 104.37 as against 109.67 and 112.81 respectively). The findings show that teachers working in government-aided schools are not willing to carry out practical activities at secondary level. It implies that Government-Aided schools concentrate on theoretical aspects of science more than practical sessions which is not helpful to the development of students.

11. The rating of attitude and practices belonging to Boys’ schools, Girls’ schools and Co-Education schools show teachers of Girls’ schools to be comparatively high (mean = 110.44 as against 105.55 and 108.58 respectively). This finding shows that teachers working in Boys’ schools and teachers working in Co-Education type schools feel difficult to handle practical sessions. There is scope for further research that studies the impact of type of school and the attitude of teachers towards handling practical sessions.

12. Teachers who have science lab (mean = 107.47) in their schools are better than teachers who do not have science lab (mean = 103.08) in
their attitude and practices towards practical sessions. This finding proves that teachers get more enthusiasm when they have an organized place to conduct practical activities.

13. The rating of attitude and practices belonging to teachers who conduct practical activities in Laboratory, Classroom and Both in Lab & Class show teachers who conduct practical activities Both in Lab & Class is found to be comparatively high (mean = 110.00 as against 103.81 and 101.23 respectively). This finding proves that teachers who conduct practical activities both in the classroom and laboratory are competent to disseminate the instructional objectives of the science lesson.

14. Teachers who had attended Lab skills training (mean = 104.93) are better than teachers who had not attended Lab skills training (mean = 99.89) in their attitude and practices towards practical sessions. This finding implies that training plays a main role in improving the perception of teachers in carrying forward the educational objectives linked with the practical activities.

**Recommendations:**

1. Based on the interpretation of the findings and its implications, the investigator recommends the following suggestions in order to improve the attitudes of teachers working at secondary level.

2. *Female* teachers are seen to be better than *Male* teachers in their attitude and practices towards practical sessions. Special In-service programmes that promote the interests and attitudes of male teachers can be conducted.

3. It is suggested to educational planners to plan and give refresher programmes that establish the need of practical activity with the underlined educational objectives relating to cognitive, affective and psycho-motor domain objectives for the teachers who handle secondary science classes.

4. *Teachers working in rural schools* are better than *Teachers working in urban schools* in their attitude and practices towards practical sessions. This finding made the researcher to suggest that teachers of both locale groups should get exposure to educational software packages that
strengthen teaching of science concepts in classroom via varied teaching methods.

5. The rating of attitude and practices belonging to *Government, Government-Aided and Self-financing schools* show teachers of *Government-Aided Schools* to be comparatively less. This finding prompts the researcher to suggest to educational administrators to conduct seminar to the school management in order to help them to understand the need and significance of practical sessions in teaching of science thereby get encouraged to allow their teachers to carry the science lessons with suitable practical activities.

6. The rating of attitude and practices belonging to *Boys’ schools, Girls’ schools and Co-Education schools* show teachers of *Girls’ schools* to be comparatively high. This finding shows that teachers working in Boys’ schools and teachers working in Co-Education type schools feel difficult to handle practical sessions. This finding leads the researcher to suggest teacher educators to include classroom management techniques during practical sessions as one of the components in the training given to Secondary level science teachers.

7. In the present study, the results of the percentage analysis show that only 53% of the secondary schools in Thanjavur district have a science laboratory and therefore it is suggested to the administrators to take necessary steps to establish science laboratory to all the secondary schools of the district.
Subject: Social Science

Abstract – 22

Name of the DIET : Vanaramutti
Name of the Principal Researcher : Mr. S. Mohamed Rabeek, Lecturer, Vanaramutti
Name of the Co-Researcher : 1. Mr. G.K. Murughesun, Lecturer, Vanaramutti
                      : 2. Mr. D. Bharathirajan, Lecturer, Vanaramutti
Title of the Research Project : Effectiveness of video clips – fused teaching on enhancement of the concepts of geography among std VII Std students of Kovilpatti Educational District

Need for the Study :

Majority of the students show less interest in understanding geographical concepts. Upper Primary students, even they don’t know simple basic concepts related to geographical terms. In the Upper Primary level, majority of the teachers use conventional method of teaching. They rarely follow the new strategy imparted during in-service programmes. Individuals differ in their levels of concept formation on the basis of their age and intelligence. For their better working purposes each and every child need development of concepts. This can be enhanced through experimental treatment. This motivated the Investigator to do Research project in the area “Effectiveness of Video clips-fused teaching on enhancement of the concept of geography among the standard VII Std students.”

Objectives :

❖ To develop the teaching – learning video – clips package in Geography for VII standard students.
❖ To find out the level of performance of the control group students in their gain score.
To find out the level of performance of the experimental group students in their gain score.

To find out the difference between control and the experimental group students in their gain score.

**Methodology :**
Experimental method with control group, experimental group. Pre-test and post test design was selected to use control group was taught by traditional method. Experimental group was taught by using video-clips. Intervention was given to a period of two weeks.

**Sample :**
The investigator has selected Panchayat Union Middle School, Elambuvanam, Thoothkudi District to serve as both the control and experimental groups. There are 20 students in each group. These students are studying in VII standard in the year 2013-2014.

**Tool :**
The following tools are used for data collection

- Teaching – Learning video – clips package in Geography developed by the investigator, Mastery test in Geography developed by the investigator.

**Statistical Technique Used :**
Mean, Gain score, Standard Deviation, ‘t’ – test, ‘F’ – test (ANOVA), Chi-square analysis and Product Moment Correlation.

**Findings :**
- In the control group 20% of the students have low level, 65% of them have average level and 15% of them have high level of performance in their gain score.
- There is significant difference between pre – test and post – test scores of the control group students.
- In the experiments group 15% of the students have low level, 70% of them have average level and 15% of them have high level of performance in their gain score.
There is significant difference between pre–test and post–test scores of the experimental group students.

There is significant difference between control and experimental group students in their gain score.

The ‘t’ test result reveals that, there is significant difference between experimental and control group students in their gain score. That is, the experimental group students are better than the control group students in their gain score.

This may be due to the fact that the Teaching – Learning video – clips package is more effective than the traditional method of teaching Geography. Further, the learning package in Geography using video – clips with multimedia effects, impress the students to keep watch. Also it induces the students learning Geography with interest.

The ‘t” – test result reveals that there is significant difference between pre – test and post – test scores of the control group students. This may be due to the fact that the traditional method has influenced the control group students in learning Geography.

The ‘t” – test result reveals that there is significant difference between pre – test and post – test scores of the experimental group students. This may be due to the fact that the teaching learning video – clips package has influenced the experimental group students in learning Geography.

**Implication:**

The findings of their study shows that the teaching learning video – clips fused method is useful aid as well as tool to the teacher to attain all the aims and objectives of teaching Geography to the students.

**Recommendations:**

- All schools could be equipped with VCD player, Televisions for the use of video lessons.
- Videoclips may be used judiciously to make teaching learning process interesting in all the subjects.
➢ Relevant videoclips could be used to explain geographical concepts.

➢ Use of videos could be tried in secondary and Higher secondary level.

➢ This present study is limited to Thoothukudi district only. It could be done in all the districts.

➢ This study could be experimented in all classes.
GENERAL AREAS

Continuous and Comprehensive Evaluation

Abstract – 23

Name of the DIET: Triplicane, Chennai District
Name of the Principal Researcher: Dr. S. Shameem, Senior Lecturer
Name of the Co-Researcher: ---

Title of the Research Project: A study on Continuous and Comprehensive Evaluation

Need for the Study:

Continuous and Comprehensive Evaluation (CCE) and Trimester Pattern have been introduced by the Government of Tamil Nadu, in a pioneering initiative to reach the goal of quality in education. CCE was introduced in 2012-13 for classes I to VIII; subsequently, in class IX from the year 2013-14 in all the High and Higher Secondary Schools of Tamil Nadu. It is the need of hour to study the view points of Teachers, School heads and Parents about CCE. Hence the researcher has carried out the research study with the title “A Study on Continuous and Comprehensive Evaluation”.

Objectives:

The research study about Continuous and Comprehensive Evaluation (CCE) had been carried with the following objectives.

- To study the view points of the Teachers about CCE.
- To study the view points of the School heads about CCE.
- To study the view points of the Parents about CCE.
- To study whether there is significant difference in the view points of the Teachers towards CCE gender wise, type of school wise, educational qualification wise, teaching experience wise, mode of studies of their B.Ed., course wise, locale of their school education wise and locale of their collegiate education wise.
- To study the Teacher’s classroom practices related to CCE.
➢ To study the Questioning skill of the teacher in CCE.
➢ To study the Recording of evaluation of students done by the teacher in CCE.
➢ To study the Reporting of their child’s evaluation by the teacher in CCE.
➢ To study the Challenges encountered by the Teachers in the implementation of CCE.
➢ To study whether any significant relationship exists between the Teachers and School heads regarding their view points about CCE.
➢ To study whether any significant relationship exists between the Teachers and Parents regarding their view points about CCE.
➢ To study whether any significant relationship exists between the School heads and Parents regarding their view points about CCE.
➢ To make suggestions for facilitating fruitful execution of CCE in schools.

**Methodology :**

Survey Research was employed for the study involving the use of questionnaires. The ex post facto research design was followed by the researcher, thereby testing the hypotheses, which is an empirical inquiry in which the researcher does not have direct control over independent variables, because their manifestations have already occurred or because they are not manipulated. Survey was cross-sectional, as the information of the research was collected at one point of time.

**Sample :**

There are ten zones in the Chennai District; the sample has been drawn randomly from all the zones of Chennai District. The Stratified Random Sampling technique was followed in the Study. The sample consists of hundred and sixty seven Teachers, sixty seven school heads and seventy eight parents. It was drawn from Government, Corporation, Government aided and self-finance Schools.

**Tool :**

The following Research tools were designed and validated by the investigator and used for collecting the relevant data.
Tool 1 : CCE Questionnaire for the Teachers
Tool 2 : CCE Questionnaire for the School Heads
Tool 3 : CCE Questionnaire for the Parents

Statistical Technique Used :
Mean, Standard Deviation, ‘t’ test or F test, skewness, kurtosis, percentage and Pearson’s Correlation Coefficient were the statistical techniques suitably used for the study.

Findings :
A. Findings of the view points of the Teachers about CCE.
1. The scores of the variable, Teachers’ awareness on CCE in general were normally distributed and the mean of the entire 15 items was 54 for a total of 75, which was moderately high. It indicates that the teachers have understood the concept of CCE.

2. The high scores show that teachers have high level of awareness on CCE, particularly about evaluation of a learner comprehensively, and scope for evaluating co-scholastic aspects of the learner and its flexibility.

3. Almost three fourth of the responses of the teachers have showed that the teachers were not able to complete the curriculum within the specified time and it has become essential for them to carry over the lessons not learnt by a student in the previous term to the next term.

4. It was indicated by sixty percent of the teachers that there is only a little scope in FA(a)to give their feedback to students for enhancing their performance.

5. About seventy percent of the teachers have expressed that they were not able to write descriptive and comprehensive feedback to their students.

B. Findings about the view points of the School heads about CCE.
1. About two third of the school heads (66%) had average level of
awareness on CCE and seventeen percent had high level of awareness on CCE. Adding this, 83% of the school heads have awareness on CCE.

2. Altogether four fifth of the School heads had a clarity about FA deals with ‘How’ of learning of students, SA is blue print based, it focus on Knowledge, Understanding, Application and Skill.

3. About eighty percent of the School heads motivate teachers to give feedback to students to enhance the performance of the students.

4. About three fourth of the school heads strongly agreed that they supervise and monitors the teachers to complete curriculum within the specified time.

C. **Findings about the view points of the Parents about CCE.**

1. Parents expressed that they can feel a difference in the learning tasks assigned to their wards in these two years.

2. Almost ninety percent of the parents were not aware of the different techniques of evaluation adopted by the teachers.

3. More than three fourth of the parents revealed that grades do not reflect about their wards specifically.

4. Nearly ninety percent of the parents opined that evaluation is the comparison made between the ‘smart child’ and the ‘slow learning child’ by the teacher.

5. About ninety three percent of the responses from the Parents have showed that they need to be with their wards to complete their projects or they need to buy ready made things or pictures to be submitted to school.

6. Almost three fourth of the Parents opined that the descriptive remarks were not given to their wards comprehensively by the teacher.

D. **Findings about the Differential Analysis among teachers about CCE.**

1. There is no significant difference in the view points of the Teachers towards CCE gender wise, type of school wise, educational qualification wise, teaching experience wise, mode of studies of their B.Ed., course wise, locale of their school education wise and locale of their collegiate
education wise.

**E. Findings about the Classroom practices of teachers related to CCE.**

1. The scores of the ‘Teacher’s classroom practices related to CCE’ were 53.7 out of 75 which was moderately high. It indicates that the Teacher’s classroom practices related to CCE are conducive for learning.

2. The scores from seventy percent of the teachers have shown that the teacher facilitates the participation of their students in a variety of activities in their classrooms, found to be practiced by the teachers.

3. It was found that the Learning tasks are according to the choice of the students by almost eighty percent of the teachers.

4. The classroom practices of about eighty percent of the teachers have been aimed towards transacting the textbooks and they limit themselves with that. The classroom practices of teachers do not necessitate themselves to go beyond the textbooks.

5. It was revealed that though the teachers are familiar with the term CCE they have to internalize the meaning of continuous and comprehensive evaluation yet. About eighty percent of the teachers have been focusing on the achievement of students instead of improvement.

**F. Findings about the Questioning skills of the teachers in CCE.**

1. It was revealed from the highest score that the teachers have acquired better knowledge and practice of questioning skills due to their practice of Continuous and Comprehensive Evaluation.

2. Almost eighty percent of the teachers ask questions in the class to develop curiosity in learning among their students.

3. About eighty five percent of the teachers encourage questions from their students.
4. It was found from three fourth of the teachers that their questioning has been limited to evaluate the students’ learning activities alone. It rarely acknowledges the abilities, values of the children by giving equal importance in the assessment of co-curricular areas of the student.

G. Findings about the Recording the evaluation of students done by the teacher in CCE.

1. About eighty percent of the responses of the teachers have shown that they record the marks for the FA(a) activities of the students even for whom they have not observed in the class.
2. It was revealed that about eighty percent of teachers can identify learning progress of students at regular time intervals in small portions of content in CCE.
3. Teachers rarely evaluate the life skill, attitude, interest; values and physical well-being of students; which was shown by the almost seventy five percent of their responses.
4. It was shown from the three fourth of the responses of the teachers that they have not been provided with evaluation indicators.
5. Teachers make entries in the FA(a) register based on their opinion without having any evaluation criteria, as it was shown by almost seventy percent of the responses of the teachers.
6. Equal number of responses have been obtained from the teachers for the item 1 and 5, which shows that teachers record their evaluation about the learners on a daily basis and equivalent number of teachers record their evaluation only once in a month.

H. Findings about the Reporting of their child’s evaluation done by the teacher in CCE.

1. About eighty percent of the teachers strongly agreed that the reporting about the students’ performance to the parents is helpful.
2. It has been shown that fifty percent of the teachers report about curricular areas been given more importance than co-curricular areas.
3. About three fourth of the teachers have revealed that when a
teacher reports his/her evaluation about a student he/she often compares it with another child in the class. This practice need to be addressed.

I. Findings about the challenges encountered by the Teachers in the implementation of CCE

1. About three fourth of the responses showed that the teachers are not able to write descriptive statements about their students.

2. Nearly seventy percent of the responses of the teachers have shown that they express that there is no scope for practicing any novel idea in their classroom. This may be due to that the teachers limit their teaching only to transact the contents of the text book. Teachers should be motivated to implement novel ideas and should be encouraged to go beyond text books.

3. Nearly three fourth of the responses have shown that the teachers have not yet prepared any blueprint for evaluation. This may be due to that the teachers limit the evaluation by making use of the exercises and follow up activities which are prescribed in the textbook.

J. Findings about the Correlational Analysis among teachers about CCE

1. There is significant relationship exists between the Teachers and School heads regarding their view points about CCE.

2. There is no significant relationship exists between the Teachers and Parents regarding their view points about CCE,

3. There is no significant relationship exists between the School heads and Parents regarding their view points about CCE

Implication:
This research study was an attempt by the investigator to reflect the ground realities of CCE by studying the view points of the Teachers, School heads and Parents about CCE.
The study reflects the perception of CCE among school teachers belonging to different types of schools with respect to their Gender varying with Educational Qualification, Teaching Experience, and Mode of studies of B.Ed., course, Locale of school education and the Locale of collegiate education.

The study has revealed the Teacher’s classroom practices related to CCE.

The study had brought into light the Recording of evaluation of students done by the teacher in CCE. It has also identified the reporting of their child’s evaluation by the teacher in CCE.

This research study has identified the challenges encountered by the Teachers in the implementation of CCE and take up the appropriate steps in the areas where teachers seek help.

The study was able to elucidate the suggestions and the remedial measures from the teachers to overcome the barriers that come in the way of proper execution of CCE.

The study was able to prove that the teachers have acceptability regarding CCE; they have understood the concept of CCE.

This study has proved that the training on CCE was very effective.

The study has brought into light that there is no significant difference in the view points of the Teachers towards CCE gender wise, type of school wise, educational qualification wise, teaching experience wise, mode of studies of their B.Ed., course wise, locale of their school education wise and locale of their collegiate education wise. It shows that the teachers have understood CCE and the effective implementation of CCE. The method of evaluation CCE has been introduced new and every teacher has been benefited in a similar way.

The study has shown that the school heads have understood CCE. They had a clarity about the concept of CCE, techniques of assessment, rationale of CCE. It was further reflected a significant relationship exists between the Teachers and School heads regarding their view points about CCE. It is associated with the effectiveness of the training programme.

The study has shown that the Parents expressed that they can feel a
difference in the learning tasks assigned to their wards. They were in an opinion that grades do not reflect about their wards specifically. They opined that evaluation is the comparison made between the ‘smart child’ and the ‘slow learning child’; this practice in assessment need to be addressed.

**Recommendations:**

It was found that the teachers have understood the concept of CCE very well which is associated with the effectiveness of the in service training programme about CCE. Thus, the mode of training can be replicated in further programme.

The implementation of the training has benefited all the teachers in spite of their differences. The modalities could be replicated in future.

There found to be a need to train the teachers to write descriptive and comprehensive feedback to their students; a suitable training may be given to the teachers.

There is a felt need among teachers to get trained on the assessment in social and personal qualities of the students. Best practices in these assessments may be shared among the teachers during the trainingprogrammes.

Parents strongly agree that they need to be with their wards to complete their projects or they need to buy ready made things or pictures to be submitted to school. Teachers may accordingly be oriented to enable the students to make projects themselves by using the no cost materials.

Community has to be effectively involved in the school development programme.

Teachers should focus on the improvement of the students as total personality development, instead of focusing only on academic achievement of students.

Teachers should evaluate the FA(a) activities using the specific evaluation indicators.

Classroom transactions need not be limited to the transaction of the textbooks. Teachers should implement innovative practices in the classrooms.
Teachers should be weaned from the habit of comparing ‘smart child’ and the ‘slow learning child’.

It was found that the teacher rarely facilitates the participation of their students in a variety of activities in their classrooms. Teachers should be motivated to go beyond text books to disseminate any novel idea and to provide additional information.

Though the teachers are familiar with the term CCE they have to internalize the meaning of continuous and comprehensive evaluation yet. They have been focusing on the achievement of students instead of improvement. Thus, a capacity building training programme may be imparted to teachers.

Teachers need to be trained in the techniques of developing reflective thinking among their students through questioning. The skill of questioning has been limited to evaluate the learning activities alone. It should acknowledge the abilities, values of the children by giving equal importance in the assessment of co-curricular areas of the student.

Thus, indicators for evaluation of learning tasks, co-curricular areas have to be provided to teachers and a training to be conducted on this. Thus, existing supportive materials to be strengthened.

The training on CCE was found to be very effective. Through reinforcement training it should be sustained. Teacher development programmes may be organized for all teachers.
Abstract – 24

Name of the DIET : Palayampatti
Name of the Principal Researcher : T. Elango, Lecturer
Name of the Co-Researcher : --

Title of the Research Project : Effect of Formative Assessment in Science on Scientific Attitude among Eighth Standard Students in Virudhunagar District

Need for the Study :

Educators suggested that CCE is the paradigm shift in evaluation. It is a mile stone in the History of Education. Almost all the commissions & committees on School education which were formed after independence recommended the development of scientific attitude in the students. Accordingly development of scientific attitude of mind has been given an important place in school education. The teacher will have to make efforts to point out these aspects. Scientific attitude required is not only in pursuit of scientific problems but also in solving problems at home & in the society. In science education, the Formative Assessment provides attitudinal change among the learners with the help of different kinds of activities and hands on experiences. Hence, it is essential to study the effect of Formative Assessment in scientific attitude among the learners.

Objectives :

1. To find out the level of scientific attitude among eighth standard students in Virudhunagar district
2. To find out whether there is any significant difference in the scientific attitude of VIIIth standard students in terms of their gender
3. To find out whether there is any significant difference in the scientific attitude of VIIIth standard students in terms of locale of school
4. To find out whether there is any significant difference in the scientific attitude of VIIIth standard students in terms of type of schools
5. To find out whether there is any significant difference in the scientific
attitude of VIII\textsuperscript{th} standard students in terms of type of management.

6. To find out level of Formative Assessment activities of Eighth standard students with reference to gender.

7. To find out Level of Formative Assessment Activities of Eighth standard students with Reference to Locale of school

8. To find out Level of Formative Assessment of Eighth standard students with Reference to Type of school.

9. To find out Level of Formative Assessment Activities of Eighth standard students with Reference to Type of Management.

10. To find out Dimension wise relationship of scientific attitude and formative Assessment activities of the eighth standard students.

**Methodology:**

The investigator adopted survey method for the present study. In order to realize the above said objectives, normative survey method was employed. Normative survey method describes and interprets what exists at present. They are concerned with existing conditions or relations, prevailing practices, beliefs and attitudes etc

**Sample:**

The sample of the present study comprised of VIII standard students studying in Virudhunagar District. In the present study random sampling technique was used to select the samples. Samples of 150 students were selected from the schools of all the Blocks in the District

**Tool:**

The data for the present study were collected using a scientific attitude questionnaire constructed by the investigator. The Dimensions of the tool were taken from the scientific attitude scale of J.K.Sood and R.P.Sandhya. This tool consists of 30 statements on scientific attitude of VIII standard students. The researcher also ensured the experts’ opinion, Reliability and Validity of the Tool

**Statistical Technique Used:**

The data analysed by using the statistical techniques like mean, t-test, F-test, and Pearson correlation
Findings:

- It is inferred from the analysis, most of the eighth standard students have an average level of Scientific Attitude.
- There is no significant difference between the Scientific Attitude of eighth standard students in terms of their Gender.
- There is significant difference among the scientific attitude of eighth students in terms of Type of Schools, type of management and locale of the students.
- There is no significant relationship between the six dimensions of scientific attitude and Formative Assessment activities of Eighth Standard Students.

Implication:

- Rural and urban area students differ significantly in their Scientific Attitude. Hence steps may be taken to improve the scientific attitude towards science among the urban located schools and Private schools of eighth standard students.
- Discovery approach should be encouraged in science teaching.
- Class room activities should be managed in such a manner that students understand and learn syllabus completely and have more time for individual activities. This would help them to have a positive feeling about science.

Recommendations:

1. This study may be conducted with large number of samples in Virudhu District
2. Enhancement of scientific attitude through formative assessment techniques can be carried out.
3. This study may be conducted in other districts of TamilNadu.
Abstract – 25

Name of the DIET : Pulikkarai, Dharmapuri District
Name of the Principal Researcher : T. Kuralmathi, Lecturer
Name of the Co-Researcher : S. Senthilkumar, R. Mythili, Lecturers
Title of the Research Project : An appraisal of Co-scholastic areas in CCE of teachers and students at Upper Primary level in Dharmapuri District

Need for the Study :

CCE is a new method in assessment of students which has been introduced by the Government of Tamil Nadu in all classes from 1st to 9th in 2011-12. SCERT introduced Teachers' Manual on Continuous and Comprehensive Evaluation that contains detailed guidelines on the methodology of evaluation, school based assessment, assessment of scholastic and co-scholastic areas, techniques and tools of evaluation and the implications for schools. Training on CCE is given by SCERT to all officials of education department and teachers. Hence it is required to assess the effectiveness and behavioral modification among students by the influence of CCE method. The findings of the study will be useful to strengthen CCE in schools. The investigator is interested to find out the ground realities of CCE implementation in Government schools.

Objectives :

- To explore the overall awareness of CCE among students with regard to co-scholastic areas.
- To find differences if any in awareness of CCE between boys and girls and types of schools with respect to co-scholastic areas.
- To find the perception of teachers about the CCE with respect to co-scholastic areas.
- To investigate the differences if any in perception of teachers about Co-scholastic areas of CCE with respect to types of schools.

Methodology :

Survey method is adopted to appraise the awareness of students and
the perception of students about Co-scholastic areas of CCE.

Sample:

The researchers applied purposive sampling procedure. Data for 300 students were collected from 22 schools (Middle 10, High school 5, HSS 7) and for 100 teachers from 31 schools (Middle 16, High school 7, Higher secondary 8) in Morappur block. Teachers who are teaching for the classes VI, VII and VIII were taken as sample for the study.

Tool:

The questionnaire was prepared and administered with the guidance and help of experts. It contained 40 items which covered the co-scholastic areas mentioned by the SCERT. There are four components in the co-scholastic areas such as, 1. Life skills, 2. Attitude and Values, 3. Wellness and Yoga and 4. Co-curricular activities. 10 questions from each component were prepared separately for the teachers and students.

Statistical Technique Used:

The data were analyzed using various statistical techniques - mean S.D and t-value. etc.,

Findings:

- The overall average awareness of students in Co-scholastic area is 77.4%.
- The awareness is more than average in Life skill (83.7%), and Attitude & Values (78.9%).
- The students have less awareness in Wellness & Yoga (75.3), and Co-curricular activities (71.7).

1. The perception of teachers about all components is just above average (64%), Hence they have to improve in all components of Co-Scholastic activities especially in Wellness & yoga (62.67%) and Attitude & values (58.45%).

2. There is no significant difference between the awareness of students of Middle school and high school, Middle school and Hr.Sec.School, High school and Hr.Sec.School, and Boys and
Girls.
3. There is no significant difference between the Perception of Teachers of Middle school and high school, High school and Hr.Sec.School and Male and Female.
4. There is significant difference between the Perception of Teachers of Middle school and Hr.Sec.School in co-scholastic areas.

Implication:
- The result of the study revealed that currently the awareness of students in co-scholastic area is appreciable.
- The perception of government school teachers is above average which indicates moderate acceptability of CCE by the teachers.
- The research findings may contribute to the policy makers to strengthen co scholastic areas in CCE in Tamil Nadu
- The researchers who are interested in studying the components of co scholastic areas in CCE.

Recommendations:
The knowledge of teachers and their attitude to the implementation of CCE may be enhanced by the following strategies:
- Teacher development programmes may be organized for all teachers on CCE
- Existing support materials may be strengthened in the light of the findings of the study.
- Teachers can involve community in organizing activities relating to co-scholastic areas.
Abstract – 26

Name of the DIET : Oddanchatram, Dindugal

Name of the Principal Researcher : Dr. P. Parimala, Lecturer, DIET, Oddanchatram

Name of the Co-Researcher : i) A. Krishnamoorthy, Lecturer, DIET, Oddanchatram  
ii) M. Ashok Kumar, Lecturer, DIET, Oddanchatram

Title of the Research Project : “Scholastic and Co-scholastic Activities of Primary School students with regard to select variables”

Need for the Study :

Evaluation practices carried out in schools aim to measure the knowledge and understanding outcomes of the learners, neglecting the application skills and higher mental abilities. Least attention is paid to the personal development and all round development of the child. While in CCE, all learning experiences, scholastic and co-scholastic activities are evaluated such as cognitive abilities as well as health habits, work habits, cleanliness, values etc., CCE is a holistic approach. But ‘Education for All’ assessment studies indicated that due to the following reasons. i) Poor and the disadvantaged people in interior places ii) gender disparity iii) inadequate quality improvement in institutions they did not receive benefits. Hence this study has been undertaken

Objectives :

- To find out the level of academic achievement (scholastic area) of primary school students with regard to gender, locale of the school and type of the school.
- To find out the significant difference between academic achievement (scholastic area) of primary school students with regard to Gender, Locale of the school and type of school.
- To find out the level of achievement (co-scholastic area) of primary school students with regard to Gender, locale of the school and type of school.
To find out the significant difference between achievement (co-scholastic area) of primary school students with regard to Gender, Locale of the school and type of the school

**Methodology:**

In the present study, the survey method was used for data collection. The achievement questionnaire for V std was constructed and validated by the investigator. The refined tool was used for data collection. The co-curricular questionnaire for V std was constructed and validated by the investigator. The refined tool was used for data collection. The reliability of the tool was found by split half method. **Pilot study:** The sample for the pilot study consisted of 20 students from primary school of Dindigul District. **Final Study:** It was administered to 100 students in V standard.

**Sample:**

In the present study, 10 schools in Dindigul selected by means of stratified random sampling technique. The stratification was done on the basis of Gender, Locale of the school and type of the school. The data were collected from students studying in these schools. Thus 100 students from 10 schools in Dindigul District formed the sample of the study.

**Tool:**

i) Achievement questionnaire for scholastic area

ii) Co-curricular questionnaire for co-scholastic area

**Statistical Technique Used:**

i) Percentage Analysis  
ii) ‘t’ test,  
iii) ‘F’ test

**Findings:**

- There is no significant difference between boys and girls in level of academic achievement (scholastic area)
- There is no significant difference between Rural and Urban students in level of academic achievement (Scholastic area)
- There is significant difference between types of schools (Govt. Aided, Matric, Self finance, Welfare) in level of academic achievement
There is no significant difference between Boys and Girls in level of achievement in Co-Scholastic Area.

There is significant difference between Rural and Urban Student in level of achievement in Co-Scholastic Area.

There is significant difference between types of schools (Govt. Aided, Matric, Self finance, Welfare) in achievement in Co-scholastic area.

**Implication:**

- Special efforts are to be taken to encourage high achieves in Government schools (50%)
- We have to identify lackness and accordingly steps are to be taken to convert average achievers to high achievers in Aided schools 80% average welfare schools and self finance school 70% average.
- We need special programmes to eradicate low achievers in Government schools.

**Recommendations:**

- Special orientation training in co-scholastic areas are to be conducted for government school teachers.
- Packages of co-scholastic areas are to be developed so as to guide classroom learning.
- Periodical training on Yoga by the concerned experts is to be arranged and conducted.
Abstract – 27

Name of the DIET : Perundurai,
Erode District – 638 052

Name of the Principal Researcher : N. Lakshminarasimhan,
Senior Lecturer

Name of the Co-Researcher : Dr. P. Jayaraman, S.L
Dr. A. Arivudiyappan, S.L
Dr. G.N. Vadivambal, S.L
M. Sekaran, Lecturer

Title of the Research Project : Utilization of Science Learning
Materials for the Successful Implementation of CCE

Need for the Study :

CCE is aiming to make a radical change in the system of evaluation. It evaluates the holistic development of a learner. When we evaluate learners and their achievement, it also reflects the efficacy of teachers. Science teaching and learning involves theoretical or conceptual transactions with practical support. It is expected to develop conceptual, problem-solving and creative skills among learners through hands-on experience. Practicals conducted using Science Learning Materials provide firsthand experience to the learners to handle the equipments and promote operational skills. Effective Learning Material supported transactions can lead to make the classroom more learner-friendly. It is expected from the teachers to promote the usage of Learning Materials to the core. In CCE, a separate assessment criterion has been allotted for practical. Indirectly it expects the teacher to ensure the usage of application-oriented and problem-solving learning Exercises to the fullest of the possible means. Thus, it leads the student’s achievement to the level of expected outcome. Hence a study on the utilization of Science Learning Materials for the implementation of CCE is essential.

Objectives :

- To enlist the availability of Science Learning Materials in IX classes.
- To analyse the utility level of Science Learning Materials in IX classes.
To suggest appropriate intervening strategies for effective utilization of Science Learning Materials in IX classes.

**Methodology:**
Survey Method

**Sample:**
A sample of 90 High and Higher Secondary Schools of Erode District were selected by Random Sampling of schools.

**Tool:**
- Science Learning Materials Availability and Utilization Scale.
- Interview Schedule on CCE for Class IX handling Science Teachers.
- Interview Schedule on CCE for Class IX Learners.

**Step 1:** The above mentioned tools were developed and validated by conducting a Pilot Study.

**Step 2:** The tools for the Final Study were developed by pruning the instruments used in the Pilot Study.

**Step 3:** The research tools for data collection were administered by the Principal Investigator and the Co-Investigators in the selected schools.

**Statistical Technique Used:**
Statistical techniques such as Median, Standard Deviation, t-test, F-test, correlation, were used.

**Findings:**
1. Science Learning Materials utilization level in Erode District is 75.52%
2. Utilization of Science Learning Materials is 46.10% of Experimentation and 12.54% of Application level by Students.
3. Lack of Field Trips in most of the Schools. Only 32.22% of schools arranged a Field Trip.
4. Non-availability of Science Dictionaries in most of the Schools were
observed. 54.44 % of Non-availability of Science Dictionaries shows the lack of the usage of Science Dictionaries.

5. Lack of MS Power-Point utilization in class room transactions was evident by 32.22% of Availability in the District.

6. There is no significant difference in the Utilization Level of Science Learning Materials with respect to following variables of the Study...
   a. School Administration – F (2,87) = 1.61, p=0.206
   b. Nature of School - F (2,87) = 1.64, p=0.200
   c. Location of School - t (88) = 1.351, p=0.498
   d. Gender of Student - t (897) = 0.575, p=0.787
   e. Community of Student- F (4,894) = 1.522, p=0.194

7. Availability and Utilization level comparisons of Science Learning materials helped to evaluate the present status of CCE implementation at the school level.

**Implication:**

1. Science Learning Materials utilization level in Erode District is 75.52% It reveals High utilization of Science Learning Materials.

2. Students actively participate and prepare Science Learning Materials on their own, which is evident from 46.10% of Experimentation and 12.54% of Application level of Utilization of Science Learning Materials by Students.

3. Teachers facilitate Learner Centred Class-rooms effectively. It is evident by 22.86% of Lecture cum Demonstration, 46.10% of Experimentation and 12.54% of Application level of Utilization of Science Learning Materials by Students.

4. In-Service Training can be arranged for the following components:

5. Lack of Field Trips in most of the Schools. Only 32.22% of schools arranged a Field Trip. Field Trips arranging guidelines are needed.

6. Non-availability of Science Dictionaries in most of the Schools were observed. 54.44 % of Non-availability of Science Dictionaries shows the lack of the usage of Science Dictionaries. Supply of Science Dictionaries is needed.
7. Lack of MS Power-Point utilization in class room transactions was evident by 32.22% of Availability in the District. Computer Practice is needed.

**Recommendations:**

- Supply of Science Dictionaries at free of cost may be granted.
- Field Trip Arrangement Guidelines may be given.
- Computer Usage for classroom Practices - Training can be given.
- Impact of Formative assessment on Summative assessment in Science at IX Std Level can be studied.
- CCE Mediated Scientific Attitude can be studied.
- A Correlative Study on Formative assessment and Scientific Temper can be conducted.
- Teacher Efficacy in implementing CCE for Effective Class Room Transactions can be studied.
- Effective utilisation of Educational Technology for successful implementation of CCE can be studied.
Abstract – 28

Name of the DIET : Keelapaluvur, Ariyalur district
Name of the Principal Researcher : P. Elavarasu, Senior Lecturer
Name of the Co-Researcher : M. Karuppiah, Lecturer, C.Gunasekaran, Lecturer
Title of the Research Project : “Problems Faced by the Teachers in Implementing CCE at the Upper Primary level in Perambalur District”

Need for the Study :
Continuous and Comprehensive Evaluation (CCE) is one of the major changes in the Indian education system. It is said that the CCE is a revolution in school education. The introduction of CCE is considered as one of the major steps taken in this regard to improve and strengthen the quality of learner evaluation. Continuous evaluation is an approach that would capture the full range of learners’ performance. CCE will need to diagnose and cause, remediation and enhancement of learning. According to National Curriculum Framework (NCF, 2005), CCE has frequently been cited as the only meaningful kind of evaluation and it also requires much more careful thinking when it is to be employed in a system effectively. CCE is implemented in Tamilnadu by Government for Classes I to VIII standard from 2012-13 academic year. When the teacher educators visited the schools they found that the teachers are facing problems in implementing CCE. By keeping in mind, the above mentioned problem the study has been carried out.

Objectives :

- To study the problems faced by the teacher in implementing CCE at Upper primary level.
- To find out the significant difference between the male and female teachers in facing problems in implementing CCE at Upper primary level.
- To find out the significant difference between the government and
aided school teachers facing problems in implementing CCE at Upper primary level.

- To find out the significant difference between the teachers working in rural and urban areas in implementing CCE at upper primary level.
- To find out the significant difference between the secondary grade teachers and B.T. Assistants in implementing CCE at upper primary level.
- To find out the significant difference between teachers whose is experience above 10 years and below 10 years in implementing CCE at Upper primary level.
- To give the solutions to the problem faced by the teachers in implementing CCE at Upper Primary Level.

To provide suitable suggestions for the effectiveness of implementation of CCE.

**Methodology:**

The survey method was used for the present study.

**Sample:**

The study was carried out in Perambalur district. It has four blocks. There are totally 190 schools including Middle school, High school and Higher Secondary School. There are 1500 teachers working in these schools. 270 teachers have been selected by using simple random technique for this study.

**Tool:**

Problems faced by the teachers in implementing CCE questionnaire was developed by the investigator along with the help of teachers. It contains 68 questions under five dimensions. The tool was validated by the expert committee.

**Statistical Technique Used:**

The data collected using questionnaire was analyzed using percentage and ‘t’ test.

**Findings:**
➢ Implementation of CCE in the classroom with more than 40 students has made it difficult for the teachers.

➢ There are difficulties in the evaluation of physical education along with curricular activities.

➢ There are difficulties in the evaluation of scholastic activities by the teachers.

➢ The obsession with the completion syllabus is detrimental to real learning in the classrooms.

➢ There are difficulties in giving the tasks of formative assessments to the students.

➢ There are difficulties in the assessment of aggregated grade for each subject to the students at the end of the year.

➢ Most of the teachers are facing difficulties in the maintenance of CCE records.

➢ All the teachers are experiencing difficulties in the evaluation of co-scholastic activities.

In order to solve the above problems refresher training programs and on-site support programs may be practiced.

Implication and Recommendations:

- This research conducted over CCE can be extended to primary level and secondary level also.

- This can be further extended by analyzing the problems faced by the students while carrying out the activities of CCE inside the classroom.

- The teachers should be given refresher training in giving activities to the students an formative assessments for all subject.

- All the teachers should be given a manual about the formative assessment for giving the activities relevant to each subject.
Abstract – 29

Name of the DIET : Manjur
Name of the Principal Researcher : S. John Silvester
Name of the Co-Researcher : S. Senthil Kumar, A. Philomine Bala

Title of the Research Project : The Effectiveness of CCE on the Achievement of Educational Objectives of Elementary School Education Recommended by NCF, 2005

Need for the Study :

The investigator from his few years of teaching learning experience finds that education as such has become a source of burden and stress to children. The unthinking world has derailed the education system completely. This system has completely failed to achieve the primary objectives based on creative thinking and generous Joy. The failure of education system is crystal clear from the suicide rate going very high among students. The learning has become painful instead of joyful. The investigator attributes this failure to summative evaluation that we have as final examination of school education. This system has produced high academic achievers, not life achievers. A recent study showed that eighty percentages of successful people of our country are people who had failed in our education system, in the same way eighty percentages of high achievers in our education system have ended as low achievers in life.

Objectives :

To find out the level of effectives of CCE on the achievement of educational objectives of elementary education recommended by NCF, 2005 with regard to Gender, Locality, Type of School, Type of Management and Nature of school.

Methodology :

In this present study, the investigator has used the survey method to study the Effectiveness of CCE on the achievement of educational objectives of Elementary school education recommended by NCF 2005.
Sample:
The investigator used simple random sampling technique to select the samples from 10 schools in Ramnad District. The sample consists of 200 students of VI, VII and VIII standards.

Tool:
CCE Scale was prepared by investigator and validated by the experts. It has 21 items, Each item in the scale has 4 alternatives’ namely always, some time, rarely and never, they are scored as 3,2,1, and 0.

Statistical Technique Used:
I. Mean, Standard Deviation, ‘t’ test, ANOVA
   II. Pearson Product Moment Correlation.

Findings:
The investigator through the present survey has studied the effectiveness of CCE on the achievement of educational objectives of elementary education recommended by NCF, 2005 in Ramnad District. The findings of the study are based on the analysis of data collected through the administration of scale on a sample of 200 elementary school students. Findings and suggestions of the present study are given below

- There is no significant difference between boys and girls in the effectiveness of CCE on the achievement of educational objectives of elementary education recommended by NCF, 2005.
- There is no significant difference between village and town school students in the effectiveness of CCE on the achievement of educational objectives of elementary education recommended by NCF, 2005.
- There is no significant difference between government and government aided school students in the effectiveness of CCE on the achievement of educational objectives of elementary education recommended by NCF, 2005.
- There is no significant difference among middle, high and higher secondary school students in the effectiveness of CCE on the
achievement of educational objectives of elementary education recommended by NCF, 2005.

There is significant difference among boys, girls and co-education school students in the effectiveness of CCE on the achievement of educational objectives of elementary education recommended by NCF, 2005. While comparing boys, girls and co-education schools, the co-education schools (48.58) are better than boys’ school (44.05) and girls’ school (46.59) in the effectiveness of CCE on the achievement of education objectives of elementary education recommended by NCF, 2005.

Implication:

i. The teachers may be trained to design more activities to implement CCE at school levels.

ii. The teachers may be exposed to usage of ICT on the administration of CCE at class room teaching-learning process.

iii. Government school teachers may be encouraged to use the available facilities and opportunities for the practice of CCE activities.

iv. The implementation of CCE activities in schools may be regularly monitored by educational officials.

v. The teachers may be assisted for the effective implementation of CCE in the schools by DIET faculties and BRTEs.

Recommendations:

The present study is limited to elementary school students of Ramnad District. The same study could be extended to other districts of Tamil Nadu through DIET faculties.

The same study could be done at high school level of all the districts of Tamil Nadu.

The study could be done to know the effectiveness of CCE on the achievement of language skills among elementary school students.

The study could be done to know the effectiveness of CCE on the achievement of other subjects’ skills among elementary school students.
Abstract – 30

Name of the DIET : Munanjipatti, Tirunelveli District
Name of the Principal Researcher : D. Shanthi, Lecturer, DIET, Munanjipatti.
Name of the Co-Researcher : 1. J. Ramani, Lecturer, DIET, Munanjipatti
                                      2. M.Gnanasoundari, Lecturer, DIET, Munanjipatti
Title of the Research Project : Personality of High School Students in Relation To Scholastic Achievement in English through Continuous and Comprehensive Evaluation

Need for the Study :

In the past our schools had left whole areas of the pupils’ personality untouched and their emotional life, their social impulses, their constructive talents, their artistic tastes. Age, sex, area, attitudes, aptitudes and other physical make-up and mental potentialities have an immense impact on it. This ultimately results into a set of reaction habits which is known as a personality trait. Hence the researcher viewed these personality variables that may have an effect on the scholastic achievement of the students and took necessary steps to study the Personality of High School Students in relation to Scholastic Achievement in English through Continuous and Comprehensive Evaluation.

Objectives :
- To find out the Personality construct of high school students
- To find out the level of Scholastic Achievement of high school students in English
- To find out the construct of Personality of high school students with reference to its dimensions
- To find out whether there is any significant difference in the Personality of high school students with reference to background variables
To find out whether there is any significant difference in the Scholastic Achievement of high school students in English with reference to background variables

To find out whether there is any significant relationship between Personality and its dimensions and Scholastic Achievement of High School Students in English through Continuous and Comprehensive Evaluation

Methodology:
The method adopted in the present study is the survey method.

Sample:
The sample consists of 300 students studying in Std.IX in 20 High and Higher Secondary Schools in Tirunelveli District.

Tool:
- General Information Sheet (Student Questionnaire) prepared by the Principal Investigator.
- Multi-dimentional personality Questionnaire for High School Students. (Student Questionnaire) was prepared by the Principal Investigator. It has six dimensions. The reliability co-efficient calculated by split half method is 0.349 and validity is 99.
- A quarterly Examination mark was taken as scholastic achievement score.

Statistical Technique Used:
1. Descriptive Analysis – Measures of central Tendency (Mean).
2. Measures of Variability - (Standard Deviation)
4. Pearson’s Product Moment Correlation (r).

Findings:
- In general, the level of Personality of High School students with reference to the total sample is Average 63%. This may be due to the fact that high school students would have been exposed to minimum opportunity in developing personality in the school level.
- The level of Scholastic Achievement of High School students in English with reference to Gender for the total sample is Average
59.3%. This may be due to the result of basic exposure of English subject to high school students in schools.

- The level of Personality of High School students with reference to all its dimensions are Average. It shows that the Independence–Dependence remains higher than the other dimensions in their level of Personality.

- There is no significant difference in the Personality of high school students with reference to Gender and Locality but significant difference exists with reference to type of management. This may be due to the fact the Government school students nowadays get more facilities by using lap top computers etc.

- There is no significant difference in the Scholastic Achievement of high school students in English with reference to Locality and Type of Management but significant difference exists in the Scholastic Achievement of high school students in English with reference to Gender. This may be due to the fact that female students stay at home and concentrate on their studies.

- There is significant inter correlation between Personality and Scholastic Achievement of High School Students in English through CCE. This may be due to the fact that personality has an effect on the Scholastic achievement of the students.

**Implication:**

1. The study shows that the construct of personality and scholastic achievement of high school students is average for both the genders 63 per cent and 59.3 per cent. So, the study will certainly help to enhance the high school students’ total development in their personality and scholastic achievement.

2. The study will help the policy makers to take decision on implementing the CCE for Std. X.

3. The study reveals that the adjustment level of high school students is average 53 per cent. There is inter correlation among the dimensions. Adjustment depends on the other dimensions of personality such as
Extroversion-Introversion, High Self concept – Low Self concept, Independence – Dependence, Balance – Imbalance Temperament and Scholastic Achievement. It will pave way for the learners to achieve progress in learning. They will learn to adjust themselves to the environment.

Recommendations:
1. The study can be further extended other non scholastic areas.
2. A comparative study can be done to examine the students personality of State Schools and Matriculation Schools.
3. Experimental studies can be conducted to investigate the students achievement level.
Abstract – 31

Name of the DIET : DIET, Munanjipatti, Tirunelveli District

Name of the Principal Researcher : Grace Sophia, M.Sc., M.Ed., M.Phil Lecturer

Name of the Co-Researcher : C. Srinivasan, M.Sc., M.Ed., M.Phil Lecturer
M.T. Manjula Devi, M.Sc. M.Ed. M.Phil Lecturer

Title of the Research Project : Perception of Elementary Teachers on Continuous and Comprehensive Evaluation in Tirunelveli District

Need for the Study :
Continuous Comprehensive Evaluation is very effective new scheme of evaluation. CCE is to evaluate every aspect of the child during their presence at the school. It also recommended the elimination of the pass / fail system at the primary level. The focus was on identifying the talents of the learner and empowering with positive input. There have been many innovation like semester system, grading system, assessment system for the effective implementation of new examination system in evaluation. These efforts would not turn to be effective and successful until unless our teachers are not willing whole-heartedly to implement such evaluation system in right manner and spirit. The evaluation skill of the teacher is very important competence expected of them to raise the standards of achievement in pupils by giving constant feedback, remediation strategies based on evaluation system. The need is to bring a favourable change in teachers towards this scheme. The need is to bring a favourable change in teacher’s perception towards CCE through different means of training, orientation, incentive and other alike. Hence, there is great need to check teacher’s perception towards Continuous Comprehensive evaluation.

Objectives :
• To study the level of Elementary School teachers perception on CCE.
• To study the difference in the perception of male and female teachers towards CCE.
• To study difference among the teachers perception on CCE with varying age groups.
• To study the difference among teachers perception on CCE with varying religion.
• To study the difference among teachers perception on CCE with varying Educational Qualifications.
• To study the difference between teachers perception on CCE on the basis of designation.
• To study the difference between teachers perception on CCE with regard to number of Years spent in teaching.
• To study the difference between teachers perception on CCE with regard to the locality of school.
• To study the difference between teachers perception on CCE with regard to the type of school.
• To study the difference among teachers perception on CCE with regard to the Revenue Educational District.
• To study the difference between teachers perception on CCE with regard to the category of school.
• To make suggestions for facilitating smooth execution of CCE in schools

**Methodology :**

In the present Research Project the investigator has used the descriptive method of research i.e., survey method to collect data from teachers. The data are to be systematically collected from the population through questionnaire and interview schedule.

**Sample :**

Sample consists of 280 teachers working in Tirunelveli District at Elementary level. The sample is selected using the stratified random sampling technique.
Tool:

i) Teacher Perception Questionnaire.
ii) Execution of CCE - Interview Schedule.

Statistical Technique Used:

The collected data is analysed by using Mean, Standard Deviation, Percentage Analysis, t-test, ANOVA and Pearson Moment Correlation

Findings:

- The perception of Elementary teachers on Continuous and Comprehensive Evaluation in Tirunelveli District with respect to their sex, age, religion, qualification, designation, experience, location of school, type of school, revenue educational district and category of school are moderate.
- There is no significant difference between male and female teachers perception on CCE.
- There is no significant difference among 30-40, 41-50 and 51-58 age group of teachers Perception on CCE.
- There is no significant difference among Hindu, Christian and Muslim teachers perception on CCE.
- There is no significant difference among SG, UG and PG teachers perception on CCE.
- There is no significant difference between Head and Assistant teachers perception on CCE.
- There is significant difference among 1 to 10, 11 to 20 and 21 to 30 year experienced teachers perception on CCE.
- There is significant difference between Urban and Rural teachers perception on CCE, the dimension activity except scholastic and co-scholastic dimensions.
- There is significant difference between Government and Aided school
teachers perception on CCE except the dimensions scholastic and activity.

- There is significant difference among Tirunelveli, Tenkasi and Cheranmahadevi educational district teachers perception on CCE except the dimensions scholastic and activity.

- There is significant difference between Primary and Middle school teachers perception on CCE.

- Further results revealed that the major problems faced by the school teachers in the execution of CCE were large number of students in the classes, increased volume of work lack of seriousness amongst parents and students.

- The study was able to prove that the teachers have moderate acceptability regarding CCE

- Teachers are capable of executing CCE in an effective manner if adequate training guidance, financial support, teaching materials and infrastructure are provided to them.

- The study clearly reflects the perception of CCE among Elementary teachers with respect to their varying educational background teaching experiences, teaching levels and sex.

- The study identified the major problem that the elementary teachers encounter while executing CCE.

**Implication:**

- The study was able to elucidate the suggestions and the remedial measures from the teachers to overcome the barriers that come in the way of proper execution of CCE.

- The study can further help the state and the school administration to identify the major problems that the teacher encounter in the classes while executing CCE and take up the appropriate steps in the areas
where teachers seek help.

- CCE role in teaching – learning process will provide feedback to teachers.
- It will be helpful in improving their methodology.
- The curriculum developers will be able to develop the curriculum, keeping in view the
  o results of the study based on CCE strategy.
  o As CCE gives feedback to teachers as to how children learn and how effective their own instruction has been it would help them in improving their instruction and make them reflective practitioners

**Recommendations:**

- Orientations, workshops should be managed to all the personnel who are involved in the process of evaluation.
- The principal and the teachers should develop an action plan indicating the scheme of evaluation
- The administrative body like NCERT, SCERTs, and DIETs may prepare diagnostic and criterion Referenced tests for different classes.
- Question Banks may be developed to assist the teachers in making tests for frequent testing.
- Formative feedback is a must for providing remedial instruction classes.
- Updated appropriate materials on CCE i.e. Guidelines and manuals should be given to teachers.
- The number of students in a class is to be reduced by increasing the number of divisions
- The appropriate tools and tests needed for assessing students in CCE can also be designed by a panel of experts and be given to teachers.
- Students and parents should also be given proper awareness on CCE. The concept of CCE and its implementation procedures should be clearly explained to them
• Record keeping is also one of the biggest challenge of the teachers, so teachers are insisted to use computers for record keeping.
• EDUSAT Programmes regarding CCE may be arranged at Block levels so that all teachers get uniform instructions. Different teaching and learning materials should be provided for helping teachers and successful implementation of CCE.
Abstract – 32

Name of the DIET : Kilpennathur, Tiruvannamalai District

Name of the Principal Researcher : Dr. R. Sivakumar, Lecturer

Name of the Co-Researcher : --

Title of the Research Project : Attitude of Teachers towards Implementing CCE in Relation to their Interest in Teaching

Need for the Study :

The teacher has to play multiple roles such as surrogate parent, compassionate disciplining task master, stimulating actor and informative resource person. They should realize the necessity of maintaining it. Education is revolving around the four pivotal resources like the teachers, the student, the curriculum and the classroom conditions. Of these four the teacher is the potential force since he is going to influence the development of the future architects of the nation. So, it is an imperative need on the part of the teaching community to have favourable disposition towards their teaching and the soundness of mind in implementing CCE in relation to their interest in teaching.

Objectives :

The following were the objectives formulated for the present study

- To find out whether there is favourable attitude of teachers towards implementing CCE.
- To study if there is any significant difference between the men and women teachers in their attitude towards implementing CCE.
- To study if there is any significant difference between the teachers belonging to joint family and nuclear family in their attitude towards implementing CCE.
- To study if there is any significant difference in their attitude towards implementing CCE among the teachers who belong to the religions namely Hindu, Muslim and Christian
To study if there is any significant difference between the teachers SGT and BT teachers in their attitude towards implementing CCE.

To study the level of Interest in Teaching of teachers.

To study if there is any significant difference in Interest in Teaching between Male and Female teachers.

To study if there is any significant difference in Interest in Teaching among teachers who belong to the religions namely Hindu, Muslim and Christian.

To study if there is any significant difference, if any, in interest in teaching between teachers who belong to the joint family and nuclear family.

To study if there is any significant difference between the teachers with under SGT and BT in Interest in Teaching.

To study if there is any significant relationship between the teachers’ attitude towards implementing CCE and Interest in Teaching.

Methodology:

The investigator constructed an attitude scale in the present study. Pilot study conducted to assess the tool. Final tool was prepared and utilised in final study by using normative survey method for the data collection. In this present study, 330 Teachers selected by using the random sampling technique from PUPS, PUMS, High and higher secondary schools in Tiruvannamalai District of Tamil Nadu. The data analyzed using Descriptive analysis, Differential analysis and Correlation analysis.

Sample:

In this present study, 300 Teachers selected by using the random sampling technique from PUPS, PUMS, High and Higher secondary schools in Tiruvannamalai District of Tamil Nadu.

Tool:

The following tools used in the study:

- Teachers’ Attitude towards implementing CCE scale - constructed and validated by the investigator with the help of experts.
Interest in Teaching Scale (ITS) was constructed and standardized by Suresh Kumar. M (2010)

Statistical Technique Used:
- Descriptive analysis
- Differential analysis and
- Correlation analysis.

Findings:
- Teachers’ attitude is favourable towards implementing CCE.
- Teachers exhibit more interest in teaching.
- There is a significant difference between men and women teacher in attitude of teachers towards implementing CCE.
- There is no significant difference between the teachers working in different Types of schools, SGT and BT, teaching Experience, the teachers who belong to religions, the teachers who belong to Nuclear family and Joint family in attitude of teachers towards implementing CCE.
- There is no significant difference between men and women teacher, PUPS and HS, PUMS and HSS, HS and HSS, SGT and BT teacher, teaching experience, religions, nuclear family and Joint family in their interest in teaching.
- There is a significant difference between the teachers working in different Types of schools namely PUPS and PUMS, PUMS and HS in their interest in teaching.
- There is a positive and significant relationship between the attitude of teachers towards implementing CCE and their interest in teaching.

Implication:
On the basis of the findings the following educational implications are derived
- Teachers irrespective of cadre wise BT teachers or SGT, show favourable attitude towards implementing CCE. This attitude needs to be further enhanced and sustained so that the classroom process would be in time with the holistic development of children.
Since teachers exhibit higher level of interest in teaching, it can be expected that their teaching would have significant and positive influence on children's learning.

**Recommendations:**

The following are the recommendations given by the investigator based on the study:

- Booster learning programmes may be organised for teachers on CCE. Additional support materials may be developed to conducting CCE activities for children.
Abstract – 33

Name of the DIET : Ranipet, Vellore District
Name of the Principal Researcher : Mrs. G. Madhusudhana
Name of the Co-Researcher : 1. Mrs. N. Valarmathi, 2. Mr. C. Kumar
Title of the Research Project : A study on kinesthetic Intelligence among upper primary students in Vellore block

Need for the Study :

Continuous and Comprehensive Evaluation puts up a lot of groundbreaking intrusions in the field of teaching and learning. The CCE comprises of Formative Assessment and Summative Assessment. Formative Assessment has a wide scope for tapping out kinesthetic intelligence in students of upper primary schools. Earlier to CCE, where the traditional classroom teaching was followed, such activities were not implemented which lead to a lopsided development of multiple intelligence.

This project would bring into limelight the development of kinesthetic intelligence, which has been enhanced due to Formative Assessment activity, which is followed in upper primary classes.

Objectives :

1. To study the components of kinesthetic Intelligence namely Physical Agility, Manual Dexterity, Drawing Ability exhibited during a FA activity in Mathematics and Science of upper primary students in Vellore block.

2. To find out if there is any significant difference in components of kinesthetic Intelligence namely Physical Agility, Manual Dexterity, Drawing Ability in Maths and Science in between

   a. Boys and girls,   b. rural and urban

3. To find out if there is significant relationship between Physical Agility, Manual Dexterity and Drawing Ability in Maths and Science among upper primary students in Vellore block.
Methodology:

An existing FA activity was assigned to 30 students of sixth/seventh/eighth standard students in Maths/Science. This activity was so chosen to elicit the kinesthetic intelligence from the students. The investigator and the teacher observed the activity and filled up the observation schedule and opinionnaire respectively. The Observation Schedule and Opinionnaire was validated after conducting a pilot study. They were then converted to numerical scores and analyzed using suitable statistical technique.

Sample:

Stratified Random Sampling Technique was followed to select the samples. 30 students from sixth, seventh, eighth standard respectively were selected from Government Schools, four each from Vellore Urban and Rural Block.

Tool:

- A observation schedule to be filled by the Subject Teacher to study each component of Kinesthetic Intelligence namely Physical Agility, Manual Dexterity and drawing Skill among Upper Primary students in Vellore (Rural and Urban) block in Maths and Science.

- A opinionnaire to be filled up by the Investigator to study each component of Kinesthetic Intelligence namely Physical Agility, Manual Dexterity and drawing Skill among Upper Primary students in Vellore (Rural and Urban) block in Maths and Science.

Statistical Technique Used:

- Frequency table, Independent sample test (t test)
- One way variance (ANOVA), Post hoc tests, Correlations

Findings:

- All the students of Vellore Rural and Urban Block exhibited kinesthetic Intelligence.

- When the components of Kinesthetic Intelligence exhibited in Science and Mathematics were compared between the two gender it was found
that there exists no significant difference between Boys and Girls in Physical Agility.

- When the components of Kinesthetic Intelligence exhibited in Science there exists a significant difference between Rural and Urban students in Physical Agility and in Manual Dexterity no difference in Drawing Skill. In addition, in Mathematics there is no significant difference in Physical Agility and Drawing Skill and a significant difference in Manual Dexterity.

- When comparing all the components of kinesthetic intelligence between all the classes, in Mathematics and Science based on the descriptive (anova) statistical quantitative analysis is was found that there is difference in all the components.

- Since One-way variance (ANOVA) has shown the existence of significant difference, Post-Hoc tests has been carried over by the Investigator to find out the relationship between two standards.

- During comparison of all the components of kinesthetic intelligence between any two classes based on the descriptive (anova) statistical quantitative analysis it was derived that except in Manual dexterity between Sixth and Seventh standard, all other classes showed a significant difference in Physical Agility, Manual Dexterity and in Drawing Skill in both the subjects.

- During correlation measurements between subjects in all the components of kinesthetic intelligence in all classes, it was derived that there exists a positive correlation between both the Subjects in all Classes. But there is a negative correlation between Physical Agility and Drawing Skill.

**Implication:**

- Howard Gardners’multiple Intelligence theory has identified six types of intelligence. Out of these Kinesthetic Intelligence is usually given less priority in classroom learning. Moreover it is proved that 85% of School age children are natural Kinesthetic Intelligence learners. Since this
study has proved that FA activity elicits Kinesthetic Intelligence from students, learning process should be activity oriented

- All the sub components of Kinesthetic Intelligence can be developed from early childhood so that students/teachers can cater to this type of learners and help them to focus on that specific intelligence.

- Training may be given to teachers to identify the type of intelligence in the students.

- Training may be given to teachers to conduct/develop activities to teach abstract concept in all subjects.

**Suggestions for Further Research:**

- Design Activities to decide which one is best in tapping out each sub component of Kinesthetic Intelligence separately

- Studies to modify activity/methodology which will extract Kinesthetic Intelligence out of students

- Conduct studies/researches which will prepare suitable activities to cater to Kinesthetic Intelligence solely.

- Conduct studies/researches to find the Factors which influence Kinesthetic Intelligence

- Conduct study to identify Areas/components of Kinesthetic Intelligence which will help in choosing their career, interest/hobby

- Prepare Tools, which will narrow down the search for the path to choose their career based on their potential in specific area of Kinesthetic Intelligence.

- Conduct case study among students to find out which activity helped them to understand abstract concepts/difficult content area. Then to find out if those activity comprised of any scope to tap out Kinesthetic Intelligence

- Conduct study to find out the difficulties faced in the classroom/school in conducting these specific activities and to suggest suitable remedial measures for the same.

- Prepare other tools to measure Kinesthetic Intelligence in other areas.
Abstract – 34

Name of the DIET : Kumulur, Tiruchirappalli district.

Name of the Principal Researcher : Dr.M.Anbuchelvan, Lecturer,

Name of the Co-Researcher : --

Title of the Research Project : Enhancing Club activities among upper primary Schools in Tiruchirappalli district.

Need for the Study :

Continuous and Comprehensive Evaluation (CCE) pattern was successfully followed in the school education department of Tamil Nadu. CCE has both scholastic and co-scholastic areas. Even though skill and Knowledge based activities were done under CCE, Club activities are not much concentrated in schools. Formation of clubs in schools and identifying the activities in clubs are essential for better functioning. During his school visits, the researcher observed that club activities are not done in schools in a full fledged manner. So it is the need of the hour to initiate club activities among teachers in turn to students in schools.

Objectives :

The objectives of the study are to find out the level of functioning of club activities in upper primary schools before conducting workshop among teachers.

- Organize a workshop among the teachers regarding club activities for improving its functions in schools.
- To find out the level of functioning of club activities in upper primary schools after conducting workshop among teachers.
- To compare the level of functioning of club activities in upper primary schools before and after conducting the workshop.
- To suggest measures for improving the functioning of clubs
Methodology:

The present research study comes under Experimental type, as the study deals with cause and effect relationship. It is a single group pre-test and post-test design. Treatment through workshop to teachers on club activities is the independent variable. Improvement in the functioning of club activities is the dependent variable.

Interventions:

18% of teachers did not have a deep grounding in the functions of different clubs and their relevance to improvement of skills. Hence the researcher evolved the following intervention. Intervention was given through workshop among teachers. Two days workshop was organized by the researcher to the sample school teachers. Two teachers from each school attended the workshop. Formation of club in schools, Activities done in various clubs, Role of Head masters in club functioning, Role of teachers in club functioning and record maintenance regarding club activities were clearly explained in the workshop. Doubts raised by teachers were cleared then and there. Workshop was conducted in a participatory approach.

Sample:

Among three hundred and twenty three middle schools in Tiruchirappalli district, twenty five schools were selected as sample for this research study. Using random sampling technique, the schools were selected. The sample consisted four corporations, seventeen panchayat unions and four aided middle school. In these schools, eight are in urban area and the remaining seventeen from rural side.

Tool:

As there is no standardized tool for the selected topic, Researcher made Check List was used as tool. This tool was developed and validated by the researcher. It is used for measuring the level of functioning of club activities in upper primary schools both before and after treatment to teachers through workshop.
**Statistical Technique Used:**

In Descriptive analysis mean, standard deviation and percentage are calculated among pre and post test scores. In inferential analysis ‘t’ test is used to find out the significance of difference between the scores obtained by the schools in pre and post tests.

**Findings:**

Pre test score of the schools regarding club activities is 19%. Post test score of the schools regarding club activities is 78.9%. There is significant difference between the pre test and post test scores (t value = 35.5) at 0.05 level. It is found that post test scores are more than the pre test scores. It shows that the impact of treatment to teachers through workshop on club activities was significantly effective.

**Implication:**

Initially the functioning of club activities in schools was not at the satisfactory level (18%). Interventions were given to teachers through workshop on club activities by the Researcher. Schools scored more in post test than pre test. It is due to the intervention given by the Researcher to the teachers in club activities. Intern intervention on club activities influences the performance of the students in club activities in school.

**Recommendations:**

1. As the study reveals favorable effect on treatment through workshop on club activities, training on club activities must be given to teachers in the district.
2. Schools must be encouraged to initiate club activities among students at the maximum level possible.
3. Head masters and Teachers must be instructed to initiate club activities at the maximum level possible in schools.

AEEOs, DIET faculties and Block Resource Teacher Educators can take steps to initiating and ensuring the functioning of clubs in schools in a full pledged manner.
Abstract – 35

Name of the DIET: Perundurai, Erode District

Name of the Principal Researcher: A. Mathivanan, Lecturer

Name of the Co-Researcher: J. Anburaj, V.R. Murugesan, K. Sakthivel, J. Sumathi, S. Punithavathi and V. Murugesan, Lecturers

Title of the Research Project: Life skills of upper primary children in tribal area schools.

Need for the Study:

Being an essential part of CCE, co-scholastic components impart life skills and help students to cultivate social, moral, emotional and total personality development. Citizenship impinged with appreciable virtues together will bring the application of life skills. Irrespective of the locality, cultural variations the learners should be evaluated with a sense of equality. Values, morals, skills and aspirations of the tribal school children are to be addressed and assessed in an unbiased manner. Co-scholastic components enlisted in the CCE guidelines given to the teachers provide a framework of different psychological attributes. These psychological attributes are to be inculcated and assessed. Thus it is essential to conduct a research on the status of co-scholastic components in CCE.

Objectives:

- To observe the life skill practices of tribal area schools
- To find out the present status of the transactions of life skill components.
- To identify situational analysis materials of life skill applications.

Methodology:

Survey Method

Sample:

A sample of 45 Middle, High and Higher Secondary Schools from
4 Blocks of Erode District were selected by Random Sampling of schools

**Tool:**
- School Observation Schedule for CCE Co-Scholastic life skills.
- Interview Schedule on CCE Co-Scholastic life skills for Upper Primary Teachers.
- Interview Schedule on CCE Co-Scholastic life skills for Upper Primary Learners.

**Step 1:** The above mentioned tools were developed and validated by conducting a Pilot Study.

**Step 2:** The tools for the Final Study were developed by pruning the instruments used in the Pilot Study.

**Step 3:** The research tools for data collection were administered by the Principal Investigator and the Co-Investigators in the selected schools

**Statistical Technique Used:**
Statistical techniques such as Median, Standard Deviation, t-test, F-test, and correlation were used

**Findings:**
1. It is found that the Learners of Tribal Area Schools have high level of Life Skill Practices. It is evident from the Research Tool Based and Teacher Assessment Based Life Skill Practices Percentage Scores of the Total Samples (665 Nos.) is 78.6% and 84.4% which are much higher than the District Average of 50%. (evident from the above table 7.1)

   (i) From which it is evident that the learners of Tribal Area Schools are highly Self Aware in Nature (80.8% and 89.0%).

   (ii) The Students are deliberate to respond either Assertively or Negatively to the appropriate situations (77.8% and 89.2%)

   (iii) The Communicative Skills of the Students is appreciably high (86.6% and 82.2%)
(iv) Team Work Score of the Learners is (78.6% and 93.8%) which is very high. It reflects the cooperative learning and peer group impact in the early Adolescent Stage.

(v) Among the Mean Percentage Scores of all the five components mentioned above Rational Thinking with its 72.4% of RTB -LSPS and 67.6% of TAB -LSPS signifies the need for Guided Life Skill Practices by the Learners.

2. Conventional Life Style and Spoon-fed growth may be a cause for the slight down fall in the Rational Thinking (72.4% and 67.6%). The Learners have to be trained logically and sequentially. Objectivity, Balancing Action and Emotional Balance are the focal points to be strengthened for promoting Rational Thinking.

3. Inter relationship among all the five major components of Life Skills were analysed and found to be inter linked with each other.

4. It is found that the Teachers of Tribal Area Schools have high level of Life Skill Practices. It is evident from the Researcher Assessment Based Life Skill Transactions Percentage Score of the Total Sample (665 Nos.) is 80.0%, which is much higher than the District Average of 50%. (evident from the above table 7.2)

From the Statistical Analysis the following results are found:

5. Taken together these result suggests that the Learners of Tribal Areas do not differ in their Life Skill Practices with respect to the variable School Administration where they study i.e. the Learners studying in Government, Aided and Self Finance Schools in Tribal Areas are equal in their Life Skill Practices. This may be due to the uniform, effective and successful implementation of CCE Co-Scholastic Components, especially the Life Skills irrespective of the Administration Type of Schools. [F (2, 44) = 1.599, p = 0.214 > 0.05 evident from Table.7.3]

6. Taken together these results suggest that the Learners of Tribal
Areas do not differ in their Life Skill Practices with respect to the variable Type of Schools where they study i.e. the Learners studying in Middle, High and Higher Secondary Schools in Tribal Areas are equal in their Life Skill Practices. This may be due to the uniform, effective and successful implementation of CCE Co-Scholastic Components, especially the Life Skills irrespective of the Type of Schools. \[ F (2, 45) = 0.127, \ p = 0.881 > 0.05 \] evident from Table.7.4)

7. Taken together these results suggest that the Learners of Tribal Areas do not differ in their Life Skill Practices with respect to the variable Nature of Schools where they study i.e. the Learners studying in Co-Education, Boys and Girls Schools in Tribal Areas are equal in their Life Skill Practices. This may be due to the social mobility, gender bias do not arise among the present day students. \[ F (1,46) = 1.199, \ p = 0.280 > 0.05 \] evident from Table.7.5]

8. Taken together these results suggest that the Learners studying in Rural and Urban Schools of Tribal Areas differ in their Life Skill Practices i.e. the Learners studying in Rural and Urban Schools in Tribal Areas are not equal in their Life Skill Practices. This may be due to the specific Traditional Life Skills of the pupils, Non-Interrupted Cultural Mobility of Tribal Areas.\[ t (46) = 2.142, \ p = 0.038 < 0.05 \] evident from Table.7.6]

9. Taken together these results suggest that the Learners of Tribal Areas do not differ in their Life Skill Practices irrespective of their Genders i.e. the Girls and Boys studying in Tribal Area Schools are equal in their Life Skill Practices. This may be due to the social mobility, gender bias do not arise among the present day students.\[ t (46) = 0.414, \ p = 0.679 > 0.05 \] evident from Table.7.7]

10. Taken together these results suggest that the Learners of Tribal
Areas do not differ in their Life Skill Practices irrespective of their Age Groups i.e. the Learners of different Age Groups studying in Tribal Area Schools are equal in their Life Skill Practices. This may be due to the Age Group difference having no strong impact or influence on Peer Group Effect. \( t (663) = 0.0414, p = 0.256 > 0.05 \) evident from Table.7.8

11. Taken together these results suggest that the Learners of Tribal Areas do not differ in their Life Skill Practices irrespective of the Communities which they belong i.e. the Learners of different Communities studying in Tribal Areas are equal in their Life Skill Practices. This may be due to Social Mobility, Social Equity and Social Adjustability of the present day society. \( F (4,660) = 1.177, p = 0.214 > 0.05 \) evident from Table.7.9

**Implications**

1. A Status report of Life Skill Practices among Tribal area children is elucidated.
2. The rural and urban Tribal area school children differ in their Life Skill Practices, which may be due to specific Traditional Life Skills of the pupils, Non-interrupted Cultural Mobility of the Tribal Areas.
3. The Communicative Skills of the Students is appreciably high (86.6% and 82.2%) Team Work Score of the Learners is (78.6% and 93.8%) which is very high. It reflects the cooperative learning and peer group impact in the early Adolescent Stage.
4. Among the Mean Percentage Scores of all the five components mentioned above Rational Thinking with its 72.4% of RTB-LSPS and 67.6% of TAB-LSPS signifies the need for Guided Life Skill Practices by the Learners.
5. Due to very high Self Awareness (80.8% and 89.0%), the Assertion or Refusal Skill of the learners has significantly contributed in their Life Skill Practices.
6. Communicative Skill at the higher level (86.6% & 82.2%) contributes to Leadership Qualities and may be a possible cause to develop Team Spirit.
7. Social Grouping and Joint Family system existing in the families of these learners may be a local specific factor of influence for higher scores in the component, Team Work.
8. Conventional Life Style and Spoon-fed growth may be a cause for
the slight down fall in the Rational Thinking (72.4% and 67.6%). The Learners have to be trained logically and sequentially. Objectivity, Balancing Action and Emotional Balance are the focal points to be strengthened for promoting Rational Thinking.

9. Inter relationship among all the five major components of Life Skills were analysed and found to be inter linked with each other.

10. It is found that the Teachers of Tribal Area Schools have high level of Life Skill Practices. It is evident from the Researcher Assessment Based Life Skill Transactions Percentage Score of the Total Sample (665 Nos.) is 80.0%, which is much higher than the District Average of 50%. (evident from the above table 7.2)

Recommendations

1. Co scholastic Mediated Life Skill Training can be given to the Tribal Area Children to uplift their life style.

2. Training on the Co- Scholastic Life Skill Practices, especially with respect to Psychological Attributes can be arranged for Tribal Children.

3. Self Development Workshop can be conducted

4. With the help of status report of Life Skill practices among Tribal area Children Policy interventions can be made to develop their life style.

5. Local Specific Cultural Activities can be developed digitally.

6. Community Participation can be promoted to the Tribal Area Children to effectively utilize the environment in a safe and sustainable way.
RTE

Abstract – 36

Name of the DIET : Pudukkottai District
Name of the Principal Researcher : Dr. S. Thangarasu, Lecturer
Name of the Co-Researcher : Mr. G. Murugan, Senior Lecturer
                             Mr. G. Anandaraj, Senior Lecturer
                             Mr. P. Palanisamy, Lecturer
                             Mr. S. Muthukaruppan, Lecturer
Title of the Research Project : The Awareness on RTE Act, 2009 among Elementary School Teachers in Pudukkottai District

Need for the Study :

Sixty years after India adopted the Constitution; Indian children finally got the right to free and compulsory education as indicated in its Directive Principles. The Right of Children to Free and Compulsory Education Act 2009 guarantees to all children within the age-group 6-14 years the right to education in proper schools with trained teachers. It was a long, long time coming, but this historic legislation, despite many loopholes, has the power to transform the lives of millions of poor Indian children who have so far been deprived of the opportunity to make their lives better than those of their parents. Enacting and releasing rulings alone won’t bring changes in the school system. Really the teachers who are the real implementers are the reformers in the school system. Teachers should be aware of the RTE act, then only they can implement and bring the desirable changes in the quality of education. But the review of studies clearly shows that only very few studies have been done on teachers’ awareness on RTE act. So the researcher has felt that it is very essential to study the awareness on RTE Act 2009 among the Elementary School Teachers. This study will throw some light on the ways of implementing RTE Act 2009.
Objectives:

➢ To find out the level of awareness on RTE Act 2009 among the Elementary School Teachers of Pudukkottai District

➢ To find out whether there exists any significant difference in the level of awareness on RTE Act 2009 among the Elementary School Teachers of Pudukkottai District with respect to Block, Type of School, designation, Gender, Age, Educational Qualification, Professional Qualification, Teaching Experience, Types of School Management, Locale and number of in-service training programmes attended on RTE Act, 2009.

Methodology:

In the present study, the investigator has followed Survey method to collect data. The samples were selected through stratified random sampling techniques

Sample:

There are 13 Blocks in Pudukkottai District. From Each Block 10 schools each in Primary and Middle were considered for data collection. Two teachers from Primary and 3 teachers from Middle schools (Each one from Primary section and Upper Primary Section) was selected and thus a totaling of 642 teachers was the sample for the study.

Tool:

RTE Awareness Scale was constructed and validated by the Researcher. It consists of 25 questions which are of multiple choice type.

Statistical Technique Used:

The collected data of the study was analyzed through Mean, Standard Deviation, t-test, and ANOVA to derive conclusions.

Findings:

➢ Elementary School Teachers of Pudukkottai District have around 60% of Awareness on RTE Act, 2009.

➢ Elementary School Teachers of Pudukkottai District differ significantly in their Awareness RTE Act, 2009 with respect to their Blocks where they are working. Teacher of Manamelgudi have the
highest level of awareness (67%) on RTE Act, 2009. Teachers of Viralimalai have the lowest level of awareness (53%) on RTE Act, 2009.

- Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to the Type of Schools where they are working. Teacher of Middle schools have the highest level of awareness (65%) on RTE Act, 2009. Teacher of Private Nursery schools have the lowest level of awareness (49%) on RTE Act, 2009.

- Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE with respect to their Designation. Headmasters of Middle Schools have highest level of awareness (65%) on RTE Act, 2009. Headmasters of Primary Schools have lowest level of awareness (57%) on RTE Act, 2009.

- Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to their Gender. Male teachers have higher level of awareness (65%) than Female teachers (58%) on RTE Act, 2009.

- Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to their Age. Teachers whose age is equal and greater than 39 have higher level of awareness (62%) than teachers whose age is less than 39 (58%)

- Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to their Educational Qualification. Teachers having PG Degree have the highest level of awareness (62%) on RTE Act, 2009 whereas teachers having +2 have the lowest level of awareness (58%) on RTE Act, 2009.

- Elementary School Teachers of Pudukkottai District do not differ significantly in their Awareness on RTE Act, 2009 with respect to
their Professional Qualification. Teachers possessing M.Ed degree, B.Ed degree and Diploma are having equal level of awareness on RTE Act-09

- Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to their years of Teaching Experience. Teachers who have experience equal and more than 12 have higher level of awareness (61%) than teachers who have experience less than 12 (59%)

- Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to the various Types of School Managements under which they are working. Teachers of Government schools have the highest level of awareness (64%) on RTE Act, 2009 whereas teachers of Private unaided schools have lowest level of awareness (54%) on RTE Act, 2009.

- Elementary School Teachers of Pudukkottai District do not differ significantly in their Awareness on RTE Act, 2009 with respect to their Locale. Teachers of Rural, Town Panchayt and Municipal areas have equal level of awareness on RTE Act, 2009

- Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to the number of in-service training programmes attended on RTE Act, 2009. Teachers who have attended 2 and more than 2 training programmes on RTE Act, 2009 have the highest level of awareness (63%) on RTE Act, 2009. Teachers who have not yet attended training programmes on RTE Act, 2009 have the lowest level of awareness (53%) on RTE Act, 2009

**Implication:**

Elementary School Teachers of Pudukkottai District have around 60% of Awareness on RTE Act, 2009. This clearly shows that their awareness on RTE Act, 2009 needs to be increased. Elementary School Teachers of
Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to the variables Blocks, Type of Schools, Designation, Gender, Age, Educational Qualification, Teaching Experience, Types of School Management and number of in-service training programmes attended on RTE Act, 2009. In order to implement uniformly and effectively RTE Act, 2009 in the District, all the Elementary School Teachers of Pudukkottai District should have 100 Percent awareness on RTE Act, 2009. The findings namely Elementary School Teachers of Pudukkottai District differ significantly in their Awareness on RTE Act, 2009 with respect to the number of in-service training programmes attended on RTE Act, 2009 is worth mentioning. The teachers who have undergone training on RTE Act, 2009 have more awareness than the teachers who have not attended training on RTE Act. Hence Elementary School teachers of all types of Management, levels, designation of Pudukkottai District should undergo an intensive training on RTE Act, 2009.

**Recommendations:**

In preparing AWPB for the DIET, under District Specific Programme, a training programme on RTE Act, 2009 may be designed and implemented.
ICT

Abstract – 37

Name of the DIET : Mayanur, Karur District
Name of the Principal : S.Lavanya, Lecturer
Researcher
Title of the Research Project : Availability and Utilization of ICT Materials at elementary level.

Need for the Study :

ICT materials are supplied to all the schools. In the present study, the investigator aimed to find out the availability of ICT resources in working condition, to establish the extent to which ICT is used in schools, integrating ICT with school subject, utilization of ICT materials and students interest in using ICT and their knowledge about ICT materials.

Objectives :

1. To study the availability of ICT materials at elementary (upper primary) level.

2. To assess the utilization of ICT materials at elementary (upper primary) level.

3. To find out the difference if any between the utilization of ICT materials with respect to the selected variables
   a) Gender
   b) Locality
   c) Types of school
   d) Management of schools

Hypotheses:

1. The ICT materials are not adequate in schools at the elementary level.
2. The utilization of ICT materials at the elementary level is not satisfactory.
3. There is no difference between the utilization of ICT materials and the gender. (Teachers and students).
4. There is no difference between the utilization of ICT materials and the locality of schools.
5. There is no difference between the utilization of ICT materials and the types of schools.
6. There is no difference between the utilization of ICT materials and the management of schools.

**Methodology:**
Normative Survey Method and Stratified Random sampling technique were used.

**Sample:**
- There are 8 blocks in Karur district. Five schools from each block and 2 matric schools totally forty two schools were selected for the study.
- 2 teachers from each school totally 84 teachers were selected for the study.
- 12 students from each school totally 504 students were selected for the study.

Schools were selected based on three categories, namely locality, types and management of the schools.

**Tool:**
The following research tools were implemented and the data were collected for analysis.

a) Checklist, Questionnaire for teachers, Questionnaire for students.

b) Picture identification of ICT materials

**Statistical Technique Used:**
Descriptive and Chi square analysis were used.
Findings:

- 58% of schools have high availability of ICT materials and 42% of schools have low availability of ICT materials. More than 50% of ICT materials were available in 58% of the schools selected for the sample.
- Utilization of ICT materials by teachers was 44% and by students was 61%.
- Utilization of ICT materials by male teachers (52.1%) was greater than female teachers (36.5%).
- Utilization of ICT materials by boys was 62.7% and by girls was 58.2%.
- Utilization of ICT materials by urban school teachers was 39.9% and rural school teachers were 36.1%.
- Utilization of ICT materials by urban school students was 82% and by rural school students was 31.2%.
- Utilization of ICT materials by middle school teachers, high and higher secondary school teachers were 43%, 31.1%, and 29.7% respectively.
- Utilization of ICT materials by middle school students, high and higher secondary school students were 68%, 50.7% and 52.5% respectively.
- Utilization of ICT materials by matric school teachers, Government school teachers, aided school teachers and ADW school teachers were 60%, 37%, 26% and 16% respectively.

Utilization of ICT materials by matric school students was 82%, by aided school students were 64.7%, by Government school students were 61.5% and by ADW school students were 48.3%

Implication:

- The ICT materials were adequate in schools at the elementary (upper primary).
- Utilization of ICT materials by teachers and by students was
Utilization of ICT materials by male teachers (52.1%) was greater than female teachers (36.5%).

Utilization of ICT materials by boys (62.7%) was greater than girls (58.2%).

There was no difference in the Utilization of ICT materials by boys (87%) and girls (86.8%) of matric schools.

There was only a slight difference in the utilization of ICT materials by urban school teachers (39.9%) and rural (36.1%) school teachers.

Utilization of ICT materials by urban school students (82%) were much greater than rural school students (31.2%).

Utilization of ICT materials by middle school teachers (43%) was higher than high (31.1%) and higher secondary (29.7%) school teachers.

Utilization of ICT materials by the middle school students were high (68%) while by high (50.7%) and higher secondary (52.5%) school students were nearly the same.

Utilization of ICT materials by teachers was highest in matric schools (60%). Second comes the Government schools teachers (37%), third comes the aided school teachers (26%) and the last was ADW school teachers (16%).

Utilization of ICT materials by matric school students was high with 82% while ADW school students’ utility was only 48.3%. Utilization of ICT materials by aided (64.7%) school students and Government (61.5%) school students were nearly the same.

**Picture Identification of ICT materials by Students:**

- 90% of the schools have scored more than 55% of marks in Picture Identification of ICT materials.
- Boys’ performance (71%) was better than girls (66%) in Picture Identification of ICT materials.
- There is no difference in the performance of matric boys (93%) and
matric girls (93%) in Picture Identification of ICT materials.

- The performance of urban school students (74%) was better than the rural school students (66%) in Picture Identification of ICT materials.
- The performance of middle school students (70%) was a little better than high (67%) and higher secondary (66%) school students while the performance of high and higher secondary school students were the same in Picture Identification of ICT materials.
- Nearly 95% of the students have identified cell phone, laptop, television and cell phone charger.
- More than 80% of the students have identified CD/DVD, DVD player, head phone, computer, keyboard, microphone, cell phone battery, SIM card and speaker.
- Pendrive, mouse, printer and telephone have been identified by more than 60% of the students.
- Nearly 50% of the students have identified UPS, CPU, web camera, monitor and scanner.
- The least identified ICT materials were floppy disc, bar code reader and bar code.

Out of 25 ICT items, 22 ICT items have been identified by most of the students and it is a good sign towards ICT

**Discussion of the Findings:**

- Computers were available in good condition in 72% in Government schools in Karur district. (86% in Delhi Government school, Siddique and Abraham, 2010).

- Laptops were available in 82% of the Government schools in Karur district. Laptops were not supplied to aided and ADW schools of Karur district. (No laptops were available in Government school of Delhi, Siddique and Abraham, 2010).

- 90% of the LCD projectors supplied to the Government schools were
in good condition. (In Delhi, only 13% of total schools selected for the sample had an LCD projector, Siddique and Abraham, 2010).

95% of the CDs supplied to the Government schools were in good condition in Karur district. (60% of the total schools selected for study and just 2% of the Government schools had General Knowledge CDs in Delhi, Siddique and Abraham, 2010).

**Implications of the Study:**

The implications based on the findings of current investigation are as follows.

- The findings have shown that use of ICTs and its integration in the teaching and learning in school education is getting more widespread.
- There is a need for training to the teachers and the students so that they acquire skills and implement those for better utilization of ICT materials available in schools.
- Internet facility must be enhanced so that it will be easier for teachers and students to acquire and accumulate more knowledge in their related field of study.

Feedback is essential to rectify errors, to update technology, to disseminate information etc

**Recommendations:**

- The investigator suggests creating Google Groups based on internet for teachers and students. They can create and share self-developed learning materials, tools and resources in different subjects. Widespread sharing and dissemination of digital content will promote infusion of ICT into classroom practice.
- The investigator suggests the teacher to award marks (a small portion) for the utilization of ICT gadgets by students and add to the subject marks.

The investigator suggests the management or the head of the institutions to explore the possibility of partnerships and sponsorships with banks.
and charitable institutions to make available computers and digital reference for learners

**Suggestions for further Research:**

- Other independent variables which are not used in this study can be conducted in future.
- Comparative studies may be undertaken on the impact of different ICT tools on learning.
- In depth study of the obstacles faced by the teachers while using ICT in education is needed.

Comparative research is needed to evaluate the cost effectiveness of ICT
Abstract – 38

Name of the DIET : Vanaramutti, Thoothukudi district.
Name of the Principal Researcher : A.Jeba, Lecturer
Name of the Co-Researcher : 1. G.Thanalakshmi, Lecturer
                               2. D. Kasi, Lecturer.

Title of the Research Project : “Effectiveness of Multimedia Package in Promoting Environmental Awareness among the students of std VIII in Kovilpatti Educational district.”

Need for the Study :

This millennium is characterized not only by population explosion but also by galloping advancement of Science and Technology. In modern age of Science and Technology besides print media, audio, video, broadcast teleconferences, computers etc., are used for communication and educational usage of various multimedia techniques is rapidly increasing. Today more emphasis is laid upon the experience rather than rote learning. In learning or acquiring concepts, strategy plays an important role. For qualitative improvement in the teaching learning process in VIII students to make them aware of the environment, Multimedia can prove to be a big breather as it is capable of sustaining the interest of the learners, through visuals and audio inputs. It also brings in the elements of the outer world into the classroom.

Objectives :

1. To develop Multimedia Package for teaching Environmental education among the students of standard VIII.

2. To find the difference between the pre-test scores of Control and Experimental group students of standard VIII on Environmental awareness.

3. To find the difference between the post-test scores of Control and Experimental group students of standard VIII on Environmental
4. To find the difference between the pre-test and post-test scores of Control group students of standard VIII on Environmental awareness.

5. To find the difference between the gain scores of Experimental group students with respect to the background variables.

6. To find the difference between the gain scores of Control and Experimental group students on Environmental awareness.

To find the difference between the gain scores of Control and Experimental group students in various dimensions of Environmental awareness.

**Methodology:**

Experimental method with control group, experimental group, pre-test and post-test design was selected to use. Control group was taught by traditional method. Experimental group was taught by using Multimedia package. Intervention was given for a period of 15 days.

**Sample:**

The sample consisted of 40 students of standard VIII in Municipal High School, Gandhinagar, Kovilpatti, Thoothukudi District. Control group consists of 20 students and experimental group consists of 20 students.

**Tool:**

Multimedia package was prepared and validated by the investigator. Multimedia package includes text, sound effects, animation and video-clips. The content area covered air pollution, water pollution, land pollution and noise pollution.

Investigator constructed and standardized a tool to measure the environmental awareness.

**Statistical Technique Used:**

Mean, Standard deviation, Gain score and “t” - test were used for data analysis.
Findings:

1. There is a significant difference between the post-test mean scores of Control and Experimental group students of standard VIII on Environmental awareness. That is the experimental group students performed better than the control group students.

2. There is a significant difference between the pre-test and post-test scores of control group students of standard VIII on Environmental awareness. That is the traditional method of teaching increases their achievement.

3. There is no significant difference between the gain score of Experimental group students with respect to the variables like Gender, Community, Number of siblings and educational qualification of parent. That is the background variables do not influence their achievement.

4. There is a significant difference between the gain scores of Control and Experimental group students of standard VIII. That is the experimental group students performed better than the control group students.

5. (i) There is a significant difference between the gain scores of Control and Experimental group students of standard VIII in various dimensions like Air Pollution, Water Pollution, and Noise Pollution. That is teaching environmental education through multimedia package increases their awareness about air pollution, water pollution, and noise pollution.

(ii) There is no significant difference between the gain scores of Control and Experimental group students in dimension like Land Pollution.

Implication:

- The gain-score of experimental group is more than that of the control group students of std VIII. Hence it is clear that Multimedia method of instruction is effective for promoting Environmental awareness among
the students of standard VIII.

- It provides an opportunity for the learners to visualize the concepts and get motivated for learning.

- Multimedia package facilitates active learning.

- The students who have scored low marks in the pre-test have scored high marks in their post-test due to the teaching intervention of using multimedia package. Thus it is proved that multimedia package promotes the learning abilities of the slow learners to higher level.

**Recommendations:**

- The use of multimedia strategy is found effective in environmental education. Hence the researcher puts forth the following recommendations for effective use of multimedia for imparting environmental education at school level.

- Teachers should be well versed with the development of multimedia package and operation of electronic gadgets. Hence it is recommended that SCERT should organize in-service programme to train teachers in developing and using appropriate multimedia for promoting environmental awareness.
Abstract – 39

Name of the DIET : Kilpennathur-604 601, Thiruvannamalai District.

Name of the Principal Researcher : G.Palani , Senior Lecturer

Title of the Research Project : A study on Computer awareness of Tribal children of Jawadhu hills block at upper primary level in Thiruvannamalai district

Need for the Study :

Among the welfare schemes of government of Tamil Nadu, one of the components is focusing on education of tribal children at all hill places. Provided they have been motivated by providing Computer, Laptop and Educational CDs with proper training to teachers through SSA. Unless the students use the technology resources consistently they cannot utilize the applications of ICT in future. So it is the need of the hour to study about the awareness of ICT among the tribal students of Jawadhu hills at upper primary level in Tiruvannamalai district.

Objectives :

- To find out the availability and utility of ICT equipments and the existing level of awareness of the tribal children towards ICT in the Middle schools of the block.
- To analyse the awareness of the children towards MS-Word and MS-Paint with regard to the selected background variables namely Sex, Management of the School, Parental Education, Parental Occupation, Usage of media in home, Usage of computer in school and Favorite entertainment in computer

Methodology :

Normative survey method has been employed for the study.

Sample :

A sample of 173 tribal students consisting 95 boys and 78 girls from three different type of schools viz., Panchayat Union Middle School (PUMS), Forest Middle School ( FMS) and Government Tribal Residential Middle
School (GTRMS) of Jawadhu hills block.

**Tool:**

Checklists, Semi-structured Interview Schedules for students and teachers, Awareness scale for students on MS-Word and MS-Paint were constructed by the researcher and used for the study.

**Statistical Technique Used:**

The data have been suitably analyzed through frequencies and % responses. T-test and F-test were also appropriately employed for data analysis.

**Findings:**

- Though, all schools of different types namely PUMS, FMS and GTRMS in the Jawadhu hills block has electricity connection, educational CDs / DVDs and ICT equipments viz., Laptop, Desktop, DVD player and LCD projector, only 44% of the sample schools are following proper time schedule in utilizing them in their schools.
- Students’ awareness of ICT is moderate (Mean: 4.03) in MS-Word and is low (Mean: 3.55) in MS-Paint.
- Only about one-fifth (19%) of the sampled schools are maintaining separate register for recording the usage of ICT equipments by their school children.
- Only students from 44% of the sampled schools reported that they use computer in their school. However students studying in PUMS are found to be better users, whereas students of FMS are found to use computers less. Similarly, students of GTRMS are found to be very poor in utilizing the computer.
- All the teachers including the computer instructors felt that the students may be supplied with computer books on basic aspects as it being in practice among Matriculation / CBSE schools. And also they were found to be handicapped in technical and financial support towards the maintenance of ICT equipments in their schools.
- The boys and girls of all the three type of schools do not differ
significantly in their awareness towards MS-Word and MS-Paint. Students from the sample schools differ significantly in their awareness towards MS-Word and MS-Paint with reference to the background variables viz., management, usage of computer in school and favorite entertainment in computer, but they do not differ significantly with respect to their parental education, parental occupation and usage of media at home.

**Implication:**

- ICT awareness of students needs to be increased as is evidenced from the study. Their knowledge on MS-Word and MS-Paint relatively moderate and less respectively. They have a long way to go computer savvy.

- Problem is not of availability but of utility. So use of computers by students should be considered seriously.

- Computer literacy always needs support materials to supplement hands-on-learning.

- Since there is no gender gap in ICT awareness, new strategies on computer education should be gender-free.

- The technical dimension of ICT advisor’s role could be provided by having a commercially supplied ICT maintenance and support for the schools.

- The pedagogical role of ICT coordinators within schools could be enhanced and supported with appropriate training and materials.

- Schools and teachers should regularly review the usage of ICT by their students and try to promote the student’s attitude towards ICT positively.

**Recommendations:**

1. Schools should endeavor to provide all their students with an appropriate and equitable level of experience of ICT at all class levels
with computer books on basic aspects.

2. SSA should organize suitable ICT training for teachers and should endeavor to establish mechanisms to facilitate the sharing of good practices.

3. Schools should plan for the maintenance and upgrading of their ICT systems periodically.

4. ICT-enabled educational services could be a great boon to learners in hilly areas and proper orientation to students through proper hands-on training. There is a great scope for enabling self-learning and exploration using Computers and educational CDs / DVDs.
Abstract – 40

Name of the DIET : Thirumoorthy Nagar, Tiruppur
Name of the Principal Researcher : C.Anbarasan
Name of the Co-Researcher : C.Mahalakshmi & V.Suguna
Title of the Research Project : Enhancing Reading Ability in Tamil among the Primary School Children of Narikoravars Community through Multimedia in Pollachi Educational District

Need for the Study :

➢ Their language is Vagiriboli, but they are not following in written script, they are speaking this language in their day to day life. So they are feeling very hard to speak the Tamil language.

➢ Parental cooperation is not good in Narikuravar Community child. They are not at all care for their children education. So they are not sending their children on time to the school.

➢ Language problem plays a vital role in learning the education. So the children can’t able to understand the lessons.

➢ Even though they learn in Tamil. Soon they forget it and say at in their language.

Objectives :

➢ To find out level of reading ability in Tamil among Narikoravars community children
➢ To improve reading ability of children through multimedia package.
➢ To find out whether multimedia approach increases Narikoravars community children attendance
➢ To find out whether influence of multimedia approach on reading ability of Narikoravars children
➢ To find out difference between boys and girls in improving their reading ability
Methodology:

Sample:

The Narikuravas community peoples are mainly living in the area of MGR Colony (Kollupalayam) and Sathyaraj Nagar (R.Ponnapuram) in Pollachi educational District. The Narikurava communities children belong to this area are mainly studying in the Panchayat Union Primary School, MGR Colony and Panchayat Union Primary School Sathyaraj Nagar. So the researcher has selected all the students from standards I to V of 51 students of both these schools were taken for this study as sample.

Tool:

The tool containing 23 questions was used to collect the data. Each question carries maximum of score 2 was allotted. Each item had three option-good(2 mark), average(1mark) and poor(0mark). The questions contains Fill in the blanks, indicate the letters, reading through pictures and passage reading.

Statistical Technique Used:

Mean and t-test used in this study

Findings:

- It is identified that the calculated ‘t’ value 3.85 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores of children for standard I of PUP School Sathyaraj Nagar.
- It is identified that the calculated ‘t’ value 7.86 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores of children for standard II of PUP School Sathyaraj Nagar.
- It is identified that the calculated ‘t’ value 9.01 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores of children for standard III of PUP School Sathyaraj Nagar.
- It is identified that the calculated ‘t’ value 7.2 is greater than the table value at 0.01 level and which indicates that there is significant
difference between the Pre Test scores and the Post Test Scores and of children for standard IV of PUP School Sathyaraj Nagar

- It is identified that the calculated 't' value 6.1 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores and of children for standard V of PUP School Sathyaraj Nagar

- It is identified that the calculated 't' value 5.65 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores and of children for standards from I to V of PUP School Sathyaraj Nagar

- It is identified that the calculated 't' value 8.91 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores and of children for standard I of PUP School, MGR Colony, Kollupalayam

- It is identified that the calculated 't' value 5.76 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores and of children for standard II of PUP School, MGR Colony, Kollupalayam

- It is identified that the calculated 't' value 9.94 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores and of children for standard III of PUP School, MGR Colony, Kollupalayam

- It is identified that the calculated 't' value 1.21 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores and of children for standard IV of PUP School, MGR Colony, Kollupalayam

- It is identified that the calculated 't' value 3.01 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores and of children for standard V of PUP School, MGR Colony, Kollupalayam

- It is identified that the calculated 't' value 2.27 is greater than the table value at 0.01 level and which indicates that there is significant difference between the Pre Test scores and the Post Test Scores and of
children for standards from I to V of PUP School, MGR Colony, Kollupalayam

Implication:

Using the multimedia in the classroom seen to be very efficient in Tamil reading skill as well as they can master all the sounds. The students from Narikoravar community can able to enhance the reading ability through multimedia package compared to that of traditional way of learning. This multimedia package can be extended to other subjects for easy learning. The multimedia package seems to be very expensive; when it is affordable it can be used by all the students. The result is to be using the advanced technology like computer, television, animation, audio, video made the students to learn easily the concepts. It helps them to learn easier and, faster. They can able to master the shapes of the Tamil alphabets through multimedia package. This package really helps them in their learning the Tamil letters. It is a boon for their education. Pre-test and post-test was conducted for the students, the result was the students score was more than the pre-test. Overall the research was successful because it leads them to the next level of learning.

Suggestion for further research:

- The same multimedia teaching strategy may be used for the Middle schools and High Schools also where the Narikuravars community children are studying.
- The same multimedia teaching strategy may be used for the Kattu Naicker Community children studying in the primary and Middle Schools. Because they are also poor in reading Tamil.
- The same multimedia teaching strategy may be used for the Primary schools Children of Narikuravars community in the neighbor Educational District like Coimbatore and Tiruppur.
- The same multimedia teaching strategy may be used for the Primary schools Children of any other socially backward community or Socially Weaker com
Abstract – 41

Name of the DIET : Dhamrampuri, Dharmapuri District.
Name of the Principal Researcher : Mr. N. Asokan, Lecturer
Name of the Co-Researcher : Mr. T. Srinivasan, Senior Lecturer, Mrs. V. Suganya, Lecturer
Title of the Research Project : Effectiveness of ICT in Enhancing Geographical Knowledge among Social Science Teachers at Upper Primary Level in Dharmapuri District

Need for the Study :

It was observed that the teachers found it difficult to teach Geography because most of the teachers are non-geographers. Hence they must enhance their knowledge in Geographical areas. Students in Hr.sec level show poor performance in the public exam due to lack of a strong foundation at the secondary level in understanding various concepts in Geography. Not only that, when the students face the competitive exams in future, a weak grounding in Geography subject makes their preparation challenging and performance poor. So the teachers should be encouraged first of all to teach Geography effectively utilizing modern ICT. So the researcher had decided to take up this project.

Objectives :

❖ To assess the Geographical knowledge of Social science teachers.
❖ To assess the effectiveness of ICT programmes in transacting Geographical concepts
❖ To enhance the Geographical knowledge among Social science teachers

Methodology :

Pre-test-treatment-Post test method was adopted in this study. A two day training was given to 50 teachers through ICT. The scores of pre-test and post-test were compared.

Sample :

Out of 8 Blocks in Dharmapuri District, Harur Block was selected for
the study. Out of 72 schools 50 schools (68%) were taken for the study. The researcher carried out the study by taking 50 social science handling teachers. Teachers from Middle, High and Higher secondary schools were selected as 27, 13 and 10 respectively as sample.

**Tool:**

Pre-test questionnaire consisting of 25 items of Geographical concepts from upper primary level were prepared and administered. Modern ICT package of Geographical concepts related to upper primary syllabus was developed and two days in-service training was given to the teachers. Then the post-test was conducted after conducting training. In order to establish the content validity of the questionnaire the prepared tool was submitted to the experts of state project committee and some experts in the field and got their suggestions. Some items were modified, and added all necessary subjects connected to the geographic concepts and then the validity of the questionnaire was established.

**Statistical Technique Used:**

The data were analysed using various statistical techniques - mean S.D and t-value etc.,

**Intervention employed.**

It was decided to make use of a multimedia package for enhancing the knowledge and awareness of teachers handling social science subjects. Animated and non animated visual materials were developed covering the following areas.

- Origin of the earth
- Hydrosphere, lithosphere, atmosphere, volcanoes and earthquakes
- Movement of the earth, solar system, different seasons, monsoons and different climatic zones
- Lunar and solar eclipse, full moon and newmoon
- Different landforms produced by river, wave, glacier and wind.

The package having the above topics are representative of the
syllabus prescribed for the upper primary classes. This package was validated with help of expert and teachers handling upper primary social sciences.

**Findings:**

- Overall mean of achievement post-test scores of the teachers who are working in different types of schools is greater than (18.14) that of pre-test mean scores (10.52). The researcher therefore concludes that the ICT package prepared for improving the knowledge of the teachers in geography is very useful and effective. The calculated ‘t’ test value is also significant (4.8) at 0.5% level.
- The mean of achievement post-test scores (18.4) is greater than the pre-test (10.6) scores of middle schools teachers.
- The mean of achievement post-test scores (18.2) is greater than the pre-test (10.5) scores of high schools teachers.
- The mean of achievement post-test scores (17.5) is greater than the pre-test (10.2) scores of higher secondary schools teachers.
- The mean of achievement post-test scores of male teachers (18.2) who teach geography at middle schools level is greater than the pre-test (11.0) scores.
- The mean of achievement post-test scores of female teachers (18.0) who teach geography at middle schools level is greater than the pre-test (9.6) scores.

The study is an attempt to find out the effectiveness of ICT for teaching geographic concepts at middle schools level. As the geographical visual pictures helped the practicing teachers to visualize the geographical facts and understand it, they found it very useful; and their academic performance, after viewing it was better and appreciable. Since the package is based on the lessons given in classes VI, VII and VIII in the Tamil Nadu text book it can be used by the teachers in their schools.

**Implication:**

The study is an attempt to find out the effectiveness of ICT for teaching geographic concepts at middle schools level. As the package containing geographical visual pictures helped the practicing teachers to
visualize the geographical facts and understand it. It is useful to the teachers and their academic performance, after viewing it was better and appreciable. Since the package is based on the lessons given in classes VI, VII and VIII in the Tamil Nadu text book it can be used by the teachers in their schools.

Now at present, most of the teachers handling upper primary geography lessons are non-geography graduates. The package so developed was highly useful for them and they could equip themselves in developing the knowledge of geographical concepts.

**Recommendations:**

- Package is based on the lessons given in classes VI, VII and VIII in the Tamil Nadu text book, it can be used by the teachers in their respective schools.
- Most of the social science teachers at upper primary level, are non-geographers. So they may be given training every year in geography concepts.

Similar multimedia package may be developed for all the topics covered in the syllabus.
D.El.Ed., Student-teacher related Research

Abstract – 42

Name of the DIET : Mannargudi
Name of the Principal Researcher : S. Baskar
Name of the Co-Researcher : S. Balasubramanian
Title of the Research Project : Enriching the lab skills of Art and Vocational group D.El.Ed., students in Thiruvarur District

Need for the Study :
During the classroom interactions in second year D.El.Ed course, it is felt by the researcher that the Arts and Vocational group students are faces problems in doing the science experiments. Hence the special practice should be given to the students.

After getting two years of training, if the trainees leave the institution without the lab skills, it will affect their attitude of doing science experiments in school classroom. Hence in order to increase the level of attitude in doing experiments the researcher has taken up this project

Objectives :
- To assess the lab skills of Arts and Vocational group D.El.Ed., students (2nd year only)
- To conduct the survey on availability of lab materials in DIET and TTI’s.
- To compare the achievement marks in first year science education with science and non science (arts and vocational)groups students.
- Enriching the lab skill of Arts and Vocational group D.El.Ed., students in Thiruvarur District

Methodology :
Pre-test- Treatment-Post test experimental study with simple group was adopted. The pre test was administered to the group. The group consisted of 41 second year D.El.Ed Arts and vocational group students. Then the group was treated with the intervention. The intervention
consisted of making the students gain sufficient hands on experience in the lab skills. After the intervention post test was conducted. Data collected from the pretest and post test were analysed using relevant statistical procedures. The inferences and implications are obtained.

**Sample:**

Puposeive random sampling technique is adopted. Arts and vocational group D.El.Ed students (second year) of the following institutions in Thiruvarur District.

1. DIET (19 students)
2. Aided TTI (8 students)
3. Private TTIs (14 students)

**Tool:**

- Check list on the availability of lab materials.
- Pre test and post test consist of lab skills related questionnaire on the same blue print.

**Interventions:**

- Provide hands on experience in lab materials and doing experiments in special class.
- Demonstration of experiments to the Arts and vocational students.
- Module on experimental activities were distributed to the Arts and vocational students

**Statistical Technique Used:**

The collected data was analyzed by using Mean and Standard deviation ‘t’ test

**Findings:**

Arts and vocational students lack labskills in doing science experiments, its quite evident from the table that only 15.8% of students know how to handle lab equipments. more than four-fifth of students (84.2%)
are not competent enough to do simple science experiments which are mandatory for elementary school students.

**Implication:**

- Since Art and vocational group student do not have required labskills for handling science experiments. This inefficiency will have a telling effect on the quality of science teaching in Elementary education.
- Arts and vocational group D.El.Ed students requires guidance while doing science experiments.
- All the Elementary teacher education institutions must develop lab skills of Arts and vocational group D.El.Ed student.

Bridge course related to science has to be given to those group studied(Arts and vocational in +2) students

**Recommendations:**

- Short term bridge course related to labskill for arts and vocational group studied D.El.Ed students has to be given every year.
- Science orientation training to primary school teachers who studied may be given periodically to nurture positive science attitude and aptitude.
Abstract – 43

**Name of the DIET**
: Tirur, Thiruvallur District

**Name of the Principal Researcher**
: V.T. Shanthi, (SL), M.Sc., M.Ed., M.Phil.,

**Name of the Co-Researcher**

**Title of the Research Project**
: Assessment of Life Skills among Pre-service Students in Thiruvallur District.

**Need for the Study :**
The progress of a country depends upon the quality of its teacher. The teacher plays a vital role in the overall social development, wholesome individual uplift through the process of schooling. Life skills training is being given through department of school Education at various levels. Curriculum and Evaluation reforms are made for achieving quality Education. In recruitment procedure of secondary grade teachers, TET is mandatory and weightage of marks is given for achievement levels in D.El.Ed., Examination. “Every teacher and Educationist of experience knows that even best curriculum and the most perfect syllabus remain dead unless quickened into life by the right kind of teachers”. (Mudaliar. 1953, p.84.). Professional effectiveness of teachers is determined by how they deal with problem situations. Student-teacher must be trained and empowered with all necessary teacher capabilities to meet their own life challenges as well as to their children. Life skills approach develops skills to build the needed competencies i.e., for human development and to adopt positive behavior that enable them to deal effectively with the challenges of everyday life. Life skills based approach in teacher Education can bring out balance of three components i.e., 1. Knowledge or information 2. Attitudes and values and 3. Life skills.
Review of literature shows that life skills training at any level can create positive changes in the trainees. With this intent, the researcher has an initiative taken this study to understand the levels of life skills acquired by the student-teacher during the D.EL.ED., course in Thiruvallur district in Tamilnadu. Life skills help student-teachers deal effectively with real life situations. Student-teacher require analytical skills to make decisions, solve problems, become aware of their strengths and weaknesses, set certain goals for themselves, and to gear their efforts towards achieving these goals. Social skills help student-teachers establish positive relationships with other people and help them in communicating effectively with students, peers, adults and others in the society. Negotiating skills are required for student-teachers to resist peer pressures, temptations and to make mutual compromises. With this idea five sub life skills i.e. self awareness, Interpersonal relationship, Creative thinking, Problem solving and coping with the emotion skills taken for research project.

**Objectives:**

- To study the level of acquisition of life skills among student-teachers in Thiruvallur district.
- To compare the level of acquisition of sub-components of life skills of student-teacher with regard to gender and locality of the Institution

**Methodology:**

Based on the objectives, logistics and types of samples, the Investigator has applied Survey Design for this study

**Sample:**

For this study, the Investigator has applied stratified random sampling technique to elicit necessary information from the student-teachers of DIETs TTI in Thiruvallur district. The measuring Instrument “Life skills assessment scale” was distributed to about 500 student-teachers of different type of managements spread all over in Thiruvallur district. 404 respondents (25 male and 379 females, 252 rural and 152 urban) were collected and used for this study.
Tool:
Investigator used “LIFE SKILLS ASSESSMENT SCALE”, a standardized tool prepared by Rajiv Gandhi National Institute for Youth Development (RGNIYD, 2010), Sriperumbudur. The tool was translated to Tamil version. 50 items representing five sub-components of life skills i.e., 11 for self-awareness, 11 for inter-personal relationship, 8 for creative thinking, 9 for problem-solving and 11 for coping with emotion were taken. It is a 3 point scale consisting “always true of me, sometimes true of me and not all true of me”. All the operating items used are said to have content validity and the internal consistency was estimated using a reliability coefficient (Cronbach, 1950).

Statistical Technique Used:
Data was computed and analysis done by SPSS. Descriptive statistics like mean and standard deviation were computed. The samples was divided into two sub- groups based on gender and locality of the Institution. t-test was conducted to find if there is significant difference between the two groups. All the proposed objectives and hypothesis framed were tested and the results were obtained.

Findings:
For the five dimensions, the study has established that the level of life skills is at an appreciable level (2.4 in 3.0 point scale) that is 78.5%. Among the five life skills dimensions, the student-teacher possess self-awareness having top core of 2.53 in a 3.00 point scale followed by Inter-personal relationship (2.47) and problem solving (2.43). Among the five life skills creative thinking occupies the fourth position (2.28) and coping with emotions the last position (2.07). The study has established that there is no significant difference between male and female student-teacher for all the five life skill dimensions (p> 0.05). The study has established that there is no significant difference in the level of life skill dimension, creative thinking between rural and urban Institutions. The study has also established that there is significant difference in the level of life skill dimension, coping with emotions between rural and urban Institutions. The study has established
that there is no significant difference in the life skill dimensions self-awareness, Inter-personal relationship and problem-solving between student-teacher from rural and urban Institution.

**Implication:**

The study can be extended to high and higher Secondary schools, poly technique colleges, B.Ed., Colleges. A comparative study can be made between teacher training institution and other type of Institutions. The study can be extended to different states and culture to study the importance of life skills among different culture.
Abstract – 44

Name of the DIET : Vadalur, Cuddalore district
Name of the Principal Researcher : P. Mallika, Senior Lecturer.
Name of the Co-Researcher : 1. R. Amudha, Lecturer,
                          2. R. Stellamarymaliga, Senior Lecturer
Title of the Research Project : Causes for the Low Performance of Students in SSLC Standard in Cuddalore District

Need for the Study :

For better performance in higher education of a student a strong base is needed at the school level. SSLC and HSC results may be excellent indicators of the overall academic performance of an individual. In the last two years Cuddalore district has slipped from 27th (81.10 %) to 32nd (75.21 %) in the state in SSLC exam result held in March 2013. Many parents showed concern about the poor performance of their wards in the final examinations and their inability to gain admission for further education. So the present study is to find out the reasons for the low performance of the students. The study would provide scope for improving new strategies. So the present study has been taken up to improve educational development of the district.

Objectives :

1. For the study, the following objectives were formulated;
2. To find school-related factors contributing to the low academic performance of students
3. To investigate teacher-related factors contributing to the low academic performance of students
4. To examine students’ characteristics being responsible for their low performance.
5. To investigate parent-related factors to the low academic performance of students.
6. To design the strategies for improving the performance of students in SSLC Examination in Cuddalore district.
**Methodology:**

The descriptive survey research was adopted for this study. To develop the tools, required ten Government secondary schools were visited. In the next stage eight Government secondary schools were involved for pilot study and twenty four schools formed the sample for the main study. The variables covered are schools in terms of school environment, teacher, student and parent. These variables include different dimensions namely, availability of minimum materials, regularity in school, availability of subject teachers and provision of infrastructure facilities and multiple methods of teaching to achieve the purpose of the study. The tools were administered to the headmasters, teachers, failed students and their parents.

**Sample:**

Stratified random sampling technique was used for selecting the participants for the study. Twenty four schools (14 GHSS and 10 GHS) were selected which obtained less than 55% in SSLC Exam held in April 2013. And the purposive sampling technique was used for selecting failed students and their parents. The sample size was 272 participants. This included 24 headmasters, 89 (Xth subjects handling) teachers, 80 failed students and 79 parents.

**Tool:**

The researcher designed two questionnaires and two opinionnaires. Tool 1 and Tool 2 were meant questionnaires for headmasters and teachers. Tool 3 and Tool 4 were meant opinionnaires for parents and students’. In questionnaire, three point scales ranging from “Agree”, “No comments”, “Disagree”, in opinionnaire, two point scales indicating “Yes”, “No” were used. Overall the four tools contain fifty two (52) factors related to headmaster, teacher, parent and student seeking information about the causes of students’ low performance in SSLC examination.

**Statistical Technique Used:**

The analysis was computed through SPSS package. The statistics
involved Chi-square analysis to find out the association between the variables in considerations.

**Findings:**

- The respondents (42% of headmasters and teachers) agreed that the teachers for English and Social Science subject were not available.
- Almost all the respondents (96% of headmasters and 91% of students) accepted that the tests were conducted periodically in the Government High/Higher Secondary schools.
- More than half of the failed students said that the teachers didn’t recognize their individual difference and point out the mistakes in test papers.
- Teachers (91%) and detained students (62%) accepted that the parents were not literate enough to clarify the doubts at home.
- From the results, more number of headmasters (71%) and teachers (69%) said that failed students absented themselves often.
- Nearly half of the students (49%) reported that the continuous practice in simple questions was not given for every day.
- Majority of the teachers (87%) said that the students’ basic literacy and arithmetic skills were poor. But the parents (67%) didn’t agree with teachers’ opinion

**Implication:**

**Requirement of Teachers**

Since 41% of the administrators reported that the English and Social Science subjects’ teachers are not available in school is the reason for the failure. It implies that availability of teacher is essential to improve the pass percentage. Teacher vacancy may be filled to achieve the results in
SSLC standard. So, teachers for all subjects are necessary for improving the performance of the students.

**Recognize Individual differences and Pointing out the mistakes**

More than half of the failed students said that the teachers didn’t recognize their individual difference and point out the mistakes in test papers. This implies that individual differences of pupil may be taken into account by headmasters and teachers. Teachers could recognize individual difference among the students and improve the performance. According to the learning capacity of students they have to be identified and given special coaching to get pass or to reach high achievement.

**Continuous practice in simple questions**

Around 50% failed students reported that the continuous practice in simple questions has not been given. Hence the study reveals periodical and planned unit tests in short answers will be conducted so as to make easy their recapitulation and recollection process.

**Regularity of students**

One of the findings namely absenteeism of students from the class activities is the main cause of failure. The school may take steps to improve the attendance.

**Basic skills**

Teachers and parent differ in their views with respect to failures of the students/wards in almost all the dimensions of the study for example. This finding reveals that the stakeholders (teachers and parent) are blaming each other for the failure of the student. It implies that there should be cordial relationship among teachers and parent

**Recommendations:**

**Educational Authorities**

Department of education should may ensure the filling of vacancy post in the secondary schools.
**Headmasters**

- Workshops shall be coordinated by the SMC, facilitated by Government officials to encourage parents to become involved and make them realize the importance of their participation.

**Teachers**

- Teachers may take into consider individual differences of students while teachers providing feedback and also giving comments and suggestions while correcting the answer scripts.
- Teachers can do the joyful learning activities in the classroom, paying individual attention to the students, using different approaches in teaching and by giving positive reinforcements.
- For slow learners the teacher can provide adequate help through remedial classes, proper guidance and counseling, classroom activities like checking their work, paying individual attention to them etc., which will enhance their academic performance.

**Parents**

Parents should visit their children’s school once in a month and consult with the teacher about the studies of their children. They come to know about the weakness of their child and can try to improve accordingly. The results of education are many folded. It requires support from school, teacher, parent and student’s responsibility. In the light of findings it has been substantiated. So the investigator gives the request interventions and suggestions to the educational authorities, headmasters, teachers and parents for the betterment of the students. It is the joint responsibility to develop the performance of the students in future. Students tend to perform well in subjects that they understand well. When parents and teachers keenly observe and follow the education of the children closely, they tend to note their children’s gaps of knowledge in specific subjects. Addressing these gaps in time, both at home and in school will help children to achieve better understanding on those subjects and eventually score good marks.
Abstract – 45

Name of the DIET: Thirumoorthy Nagar, Coimbatore District

Name of the Principal Researcher: Mrs. N. Christal, Lecturer

Name of the Co-Researcher: 1. Mr. M. Saminathan, Lecturer
2. Mr. S. Saravana Kumar, Lecturer

Title of the Research Project: Parental Involvement in among the secondary school children of Coimbatore District

Need for the Study:
A parent is the primary helper, monitor, coordinator, observer, record keeper and decision maker for child (Mishra, 2005) Parental involvement is engaged participation by parents of students in a consistent, organized and meaningful way in the consultation, planning, implementation and evaluation of programs and activities to increase student achievement (Morrision, 1997). In Coimbatore District, in spite of the various constitutional safeguards and all the different schemes by the state government, literacy level is found to be much lower. This may be caused by various factors. Among these factors, Educational qualification, parental attitude, their interest to give education to their children, their awareness regarding education and so on plays a vital role. The present study aims to examine the Parental involvement among the secondary school children of Coimbatore District.

Objectives:
The objectives of the study are

- To study the level of parental involvement among the secondary school children of Coimbatore district.
- To study the significant difference of the parental involvement among the secondary school children in selected Blocks of Coimbatore District with reference to kind of school, locale of school, locale of residence, gender of students, educational qualification of parents and parental occupation.
Methodology:
The Survey method was done by this study.

Sample:
The study has been conducted on 493 students of secondary schools from three blocks (Perur, Thondamuthur and Madukkarai) in Coimbatore District.

Tool:
Parental involvement tool developed by Dr. S. Vincent De Paul and Dr. S. Thangarasu was modified and used in this study.

Statistical Technique Used:
To analyze the collected data, various statistical techniques were used such as mean, S.D, t-test, F-test and ANOVA. Data analysis was done through SPSS package.

Findings:
Based on the descriptive analysis, the following are the major results:
- The level of parental involvement among secondary school children in Coimbatore district is average.
- There is a significant difference in the parental involvement among secondary school children in terms of Gender.
- There is no significant difference in the parental involvement among secondary school children in terms of type of management.
- There is no significant difference in the parental involvement among secondary school children in terms of locale of school.
- There is no significant difference in the parental involvement among secondary school children in terms of type of school.
- There is no significant difference in the parental involvement among secondary school children in terms of locale of students’ residence.
- There is no significant difference in the parental involvement among secondary school children in terms of fathers’ occupation.
- There is no significant difference in the parental involvement among secondary school children in terms of mothers’ occupation.
• There is no significant difference in the parental involvement among secondary school children in terms of mothers’ education.
• There is no significant difference in the parental involvement among secondary school children in terms of fathers’ education.
• There is a significant positive correlation between the dimensions of parental involvement among secondary school children.

Implication:
1. As parenting and parental involvement practices require training, school counselors can organize seminars and workshops where parents were exposed to parenting skills and practices. This study is limited to only 493 students of three blocks in Coimbatore district. Further this study can be extended to all the students in Coimbatore district.

2. Male students having less importance in their family due to economic gain. It should be avoided.

3. In the family and school relationship, parents should create an environment in which children can express their feelings and share their emotions with them.

The healthy relationship of parents with the students should create a powerful influence on the all round development of the students.

Recommendations:
• Awareness programme on eradicating child labour on male students.

• PTA meeting can be conducted to improve the family and school relationships.

Suggestions for further research
• This study may be extended to the other districts or the other blocks of Coimbatore District.

• The study may be conducted parents attitude and involvement among secondary school children achievement in Coimbatore District.
# Abstract – 46

**Name of the DIET** : Tirur, Tiruvallur District  
**Name of the Principal Researcher** : V. Ramaprabha, S.L., M.Sc. (M), M.Sc. (Psy), M.Phil, M.Ed.,  
**Name of the Co-Researcher** : P. Malarvizhi, M.A., M.Phil, M.Ed, Lecturer  
**Title of the Research Project** : A study on the relationship between the teacher commitment and the academic achievement of students at primary level in Tiruvallur district

**Need for the Study :**

**EDUCATION IS THE MANIFESTATION OF PERFECTION ALREADY IN MAN**  
=Swami Vivekananda

The teacher is the backbone of education. From Vedic period to the digital period teacher plays a vital role in imparting quality education. In this digital era there are immense resources for knowledge other than teachers. But without Guru, Realization is not possible for any individual. Likewise without teacher, education cannot be complete. Though the children are gaining knowledge from so many resources, utilization of the resources will be effective and useful for the self and the society can be made possible only by the guidance of teacher. The teacher who inspires the learner is called as the best teacher. A committed teacher makes remarkable changes among the students.

As per NCF 2005 the subject learnt inside the four walls of the classroom has to be linked with the real life situations. This vision can be materialized with the teachers who are committed towards their profession. ASER study 2013 reveals that performance of children is far from the expected level. The Government has provided with all the infra-structure facilities to all schools. Apart from the infra-structure facilities, it has been provided with qualified teachers and the best curriculum. After providing all
the requirements for quality education, there is problem in achieving the target. So the researcher proposed to find the relationship if any between the teacher commitment and academic achievement of primary students in Tiruvallur District. Reviews on related to this topic suggests that the teacher commitment plays a vital role in academic achievement of children at school level.

**Objectives:**

1. To study the level of Teacher commitment of primary teachers in Tiruvallur district.
2. To study the relationship between two educational districts, gender, different types of schools, academic qualification and teaching experience in teacher commitment.
3. To study the level of Academic Achievement of primary students in Tiruvallur district.
4. To study the relationship with regard to gender, different locality and types of schools in academic achievement of students at primary level.

**Methodology:**

The investigator has followed the survey method of collecting data from the sample taken from Tiruvallur district to do her research.

**Sample:**

30 primary schools were selected by simple random sampling technique from Tiruvallur District by the researcher to carry out the study. Three blocks from each of the two educational districts have chosen to collect data. Five schools from each block consisting of Government, Government Aided and Welfare schools have chosen by the researcher to make the data more representative in nature. Data were collected from 120 Teachers & 560 Students.

**Tool:**

1. A standardized tool on Teacher Commitment by J.C. Goyal has modified.
2. A tool has developed by the researcher to measure the achievement of the children
Statistical Technique Used:
The data collected were analyzed employing mean, standard deviation, F-test (ANOVA), t-test and correlation analyses.

Findings:
1. Based on the analysis of the data collected from the sample, the following major findings have been made.
2. The level of Teacher commitment is among primary teachers nearly 85% in Tiruvallur district.
3. There is no significant difference between both the educational districts in the commitment of teachers. In five dimensions of the tool, there is a significant difference in three dimensions namely commitment towards profession, Institution and students. Pooneri has higher rate of commitment than Tiruvallur educational district.
4. There is no significant difference in the commitment of teachers with regard to gender and different types of schools they are working.
5. There is no significant difference in the commitment of teachers with regard to their academic qualification and their teaching experience.
6. The average achievement of primary students is nearly 67% in Tiruvallur District.
7. There is no significant difference in the achievement of students with regard to gender.
8. There is no significant difference in the achievement of students based on their locality. But between urban and rural alone there is significant difference in achievement.
9. There is no significant difference in the academic achievement of students studying in different types of schools.

The study gives the implications to the authorities and officials that the teachers are committed and the level of achievement has no variations due to locality, type of school and educational districts they belong to. The study can be extended to Upper primary, High and Higher secondary schools.

Implication:
1. The reason for the lower commitment of primary teachers towards
profession and institution in l Tiruvallur Educational district than that of Ponneri Educational district may be probed

2. The reason for the lower Academic Achievement on Government school students than that of Government aided schools may be identified by the monitoring authorities.

3. This study gives directions to the authorities concerned to improve the academic achievement of primary students by giving suitable orientation to the teachers

Recommendations or Scope for Further Research:

1. Based on the identified reasons, a refresher course on teacher commitment may be given to increase the level of commitment.

2. Programs may be conducted for the Government school teachers with the success stories of Government aided schools.

3. Periodic block level competitions may be conducted and best performing school may be given a rolling shield.

4. The research may be extended to Secondary and Higher Secondary schools of the district.
Name of the DIET : Mayanur, Karur District
Name of the Principal Researcher : P.Narumanam, Lecturer
Name of the Co-Researcher : R.Subramanian, Senior Lecturer
Title of the Research Project : Interpersonal relationship in inclusive classrooms as perceived by the teachers and students of Karur District.

 Need for the Study :

Relationships are vitally important in all spheres of life. Interpersonal relationship skills are the ability that helps us to relate in positive ways with others constructively. It provides students with essential knowledge, skills and competencies to interact with their friends, teachers and other people. So it is necessary to shape a pleasing interpersonal relationship in inclusive education setup. Hence the investigator made an attempt to study the existing level of interpersonal relationship in the inclusive classroom as perceived by the teachers and students.

Objectives :

1. The objectives of the study are as follows:
2. To study the level of interpersonal relationship in inclusive classroom as perceived by the teachers and students
3. To study the difference in the interpersonal relationship in inclusive classroom as perceived by the teachers based on their a) Type of school b) Management of school c) Location d) Gender e) Experience in teaching.
4. To study the difference in the interpersonal relationship in inclusive classroom as perceived by the students based on their a) Type of school b) Management of school c) Location d) Gender.

Methodology :

The investigator used survey method to study the interpersonal relationship in inclusive classrooms as perceived by the teachers and
students of Karur district.

**Sample:**

The investigator used convenient and random sampling technique. Teachers handling inclusive classes for Sixth, Seventh or Eighth Standard from Middle School, High School and Higher Secondary Schools of Karur District and the children with special educational needs studying in their classes were selected. Totally 100 teachers and 165 students were included in this study.

**Tool:**

Questionnaire was constructed by the investigator based on the important basic components (Communication, Adjustment, Care, Trust and Confidence) needed to develop the skills to improve the interpersonal relationships in inclusive classrooms. Based on the reflections of the subject scholars, some of the items are modified and some of the items are deleted. The present questionnaire consists of forty statements with a personal data format.

**Data Collection:**

The tool was implemented to the sample of 70 inclusive schools from Middle, High and Higher Secondary Schools in Karur District. 100 Teachers handling inclusive classrooms and 165 students (Children with Special Educational Needs and Disabilities) from their classes responded to the tool, some of the students could not response to the tool. The collected data were scored for analysis.

**Statistical Technique Used:**

The data collected were analyzed by using descriptive and inferential analysis. The statistical technique-‘t’ test was employed for analysis and interpretation of data.

**Findings:**

- The mean score and SD of interpersonal relationship in inclusive classroom perceived by male teachers (119.14) are differing from the female teachers (104.93). It is showed that the male teachers’
perception towards interpersonal relationship in inclusive classroom is greater than the female teachers.

- The mean score and SD of interpersonal relationship in inclusive classrooms as perceived by rural teachers (113.166) are differing from the urban teachers’(101.035). It is showed that the rural teachers’ perception towards interpersonal relationship in inclusive classroom is greater than the urban teachers.

- The mean score and SD of interpersonal relationship in inclusive classrooms as perceived by Aided school teachers (124.900) are differing from the Government school teachers (108.08). It is showed that the Aided school teachers’ perception towards interpersonal relationship in inclusive classroom is greater than the Government school teachers.

- The mean score and SD of interpersonal relationship in inclusive classrooms perceived by below 10 years’ experience teacher (112.107) are differing from the above 10 years experienced teacher (105.428). It is showed that the below 10 years experienced teachers’ perception towards interpersonal relationship in inclusive classrooms is greater than the above 10 years experienced teachers.

- The mean score of interpersonal relationship in inclusive classroom perceived by female students (111.76) differ from the male students (115.98). It is showed that the female students’ perception towards interpersonal relationship in inclusive classroom is greater than the male students.

- The mean score and SD of interpersonal relationship in inclusive classrooms perceived by rural students (114.13) are differing from the urban students (118.81). It is showed that the urban students’ perception towards interpersonal relationship in inclusive classroom is greater than the rural students.

- The mean score and SD of interpersonal relationship in inclusive classrooms as perceived by Government school students (113.53) are
differing from the rural school students (121.00). It is showed that the aided school students’ perception towards interpersonal relationship in inclusive classroom is greater than the government school students.

The mean score and SD of interpersonal relationship in inclusive classrooms as perceived by the students above the age of 12 years (111.260) are differing from the students up to the age of 12 (119.063). It is showed that the students’ (of age above of 12 years) perception towards interpersonal relationship in inclusive classroom is greater than the students (of age up to 12 years).

The test of significance explained that the calculated ‘t’ value (1.371) of Government and Aided schools. The Govt teachers don’t differ significantly than the Aided school teachers in the perception of interpersonal relationship in the inclusive classroom.

Implication:

- The classroom is a social system in which the teacher and the teachers and the students interact as organizational members. The quality of classroom interaction is dependent on the activities of both teachers and the students.
- Interpersonal relationships in inclusive classrooms develop the students’ innate potential to cope up with classroom challenges created by more competent peers.
- Students develop trust and confidence among themselves, successful interaction and facing difficult situations.
- An improved interpersonal relationship develops the quality to see things from other peoples’ point of view in order to understand how they think and feel.
- Inclusive programming benefited the normal children, since it allows them to experience ways to cope with adversity and be sensitive to the needs of the differently abled peers.
- Care and Adjustment taken by the teachers in the regular classroom increase the self-esteem of the special children.
- Male teachers show more care and have more trust with the special
children due to their social values. It helps the student to improve the classroom climate and their academic achievement.

**Recommendations:**

- Providing orientation programmes for normal children and their parents to have children with special educational needs and disabilities in their classroom.
- Training programmes may be organized for teachers to give their full support in making classrooms inclusive and treat children with disabilities on par with normal children.
- Guidance and counseling workshop maybe organized for special children with their parents and similarly for normal children to adapt in inclusive classrooms.
- Review meetings may be arranged for the teachers and parents to improve the interpersonal relationships in inclusive classrooms at block level.
- Child care committee may be formed in each school for the betterment of the activities related to interpersonal relationship in inclusive classroom.

**Suggestion for further Research**

To extend the scope of the research findings of this study, a few suggestions are given below for further research.

- The present study was confined to the sample, of elementary students, karur district. It is suggested that the above study may be undertaken with secondary and Hr,secondary students.
- Other independent variables which are not used in this study can be included for research in future.
- The study may also be conducted separately for boys and girls.
- Similar study could be conducted on other psychological variables.
Abstract – 48

Name of the DIET : DIET - Krishnagiri
Name of the Principal Researcher : Dr.V.Usharani, Senior Lecturer
Name of the Co-Researcher : V.Hemalatha, Senior Lecturer
Dr.A.Subramanian, Lecturer
N.Indira, Lecturer
Title of the Research Project : “Enhancing Teachers’ Academic Performance Through Teacher Motivation At Upper Primary Level”

Need for the Study :
Motivation guide people’s actions and behaviours toward achievement of some Goals. Teaching is a formidable job. Teaching is a formidable job. Teacher motivation is important for the advancement of educational reforms. Teacher motivation is important for the satisfaction and fulfilment of teachers themselves. Satisfied teachers are generally more productive and can influence students’ achievement. Teacher motivation has become an important issue given their responsibility to impart knowledge and skills to learners. That our education system needs motivated staff. Their performance is to be enhanced at maximum level. This study is of importance in this era of Universal Elementary Education (UEE), especially now. Therefore, the study seeks to explore possible strategies for enhancing the motivation level of teachers as well as their academic performance.

Objectives :
The major objective of the research is to improve the academic performance of teachers through teacher motivational activities. The other objectives are

- To find out the level of motivation and academic performance of teachers in their schools.
- Enhance the motivation level of teachers through various motivational activities in the form of training.
- To find out the impact of the training, among teachers in their motivation.
- To find out the relationship between the teachers’ motivation and
their academic performance

**Methodology:**

The present study comes under experimental type research. Control group and experimental group, Pre-test, Post-test design was followed in this research.

**Sample:**

Teachers who were handling upper primary classes in middle, high and higher secondary schools in Krishnagiri district were the population of the study. The sample contains 60 teachers from four blocks. (Five teachers from middle schools, Five teachers from high schools and Five teachers from higher secondary schools per block). Simple Random Sampling technique was follow to select the sample from the population.

**Tool:**

The investigator used two types of tools. The investigator prepared Teacher Motivation Questionnaire to find out the Motivation level of teachers and interview cum observation schedule to find out their academic performance.

**Treatment for Experimental Group:**

The experimental group was given two day training. Motivational speakers, role model officials, enthusiastic HMs and special talented students were the resource persons of this training. They express their experiences and create great enthusiasm among the teachers of experimental group. The teachers of the experimental group were given chance to express their hurdles, talents and achievements. Theories of motivation and techniques of motivation dealt in this training.

**Statistical Technique Used:**

The collected date from the teachers in their schools were analyzed by using Percentage, Mean, Standard Deviation ’t’- test, and ‘r’ test to find out the significant difference and relationship among the variables.

**Findings:**

- Both control and experimental groups are having similar (85%) level
of motivation in the pre-test.

- There is no significant difference between the teacher motivation scores between male and female teachers, younger and elder teachers and junior and senior teachers.
- The gain score (5%) of experimental group is higher than the control group (1%).
- The treatment given to the experimental group through intervention training programme enhances the motivation level of teachers.
- The teachers of urban blocks (Krishnagiri & Hosur) score higher than the rural blocks (Uthangarai & Thally) teachers in their academic performance.
- Middle school Teachers’ academic performance percentage is higher than the high school and higher secondary school teachers.
- Female Teachers’ academic performance score is higher than the score of male teachers.
- Younger Teachers’ academic performance score is higher than the score of elder teachers.
- Junior Teachers’ academic performance score is higher than the score of senior teachers.
- The academic performance score of experimental group is higher than the control group.
- There is a positive correlation (0.019) between Motivation level of teachers and their academic performance.

Teacher Motivation and Teachers’ Academic performance scores are positively correlated.

**Implication:**

- We are continuously seeking a better learning environment with academic success for all students. This research finding will be helpful to the field of education to improve the teachers’ academic performance and students’ achievement through teacher motivation. It will be also helpful to sustain their motivation thereby leading to quality schooling.
• It will be useful to other teachers, educational officers, trainers and policy makers also to enhance their performance in the education field.

• Teachers especially working in high and higher secondary schools need training on affective dimensions.

Techniques of motivation that were practised in this research will be useful to enhance the performance of people in all walks of life

**Recommendations:**

• The study is important to the policy makers and administrators to, identify major strategies that will help to improve Teacher Motivation and at the same time counteract the factors that de-motivate them.

• Administrators can help teachers realize that they are the valued members of the education system, and motivate them to continuously strive for success, by implementing variety of activities designed to sustain Motivation among them.

• Committed teachers should be given due recognizing things like Awards, rewards, incentives etc.
Abstract – 49

Name of the DIET : DIET, T.Kallupatti
Name of the Principal Researcher : Mr.M.Ranjith kumar, Lecturer
Name of the Co-Researcher : Mr. R.Ganapthy, Lecturer
Mrs.T.Jeyagandhi, Lecturer
Title of the Research Project : “Mental Stress Of Elementary School Teachers In Madurai District Related To Their School Environment”

Need for the Study :

The nature of work is changing at whirlwind speeds. Perhaps now, more than ever before, teacher stress poses a threat to the health of workers. The primary sources of teacher stress within an organization originate from four areas. These areas include task demands, physical demands, role demands, and interpersonal demands. A separate class of stress research has emphasized the determination of how stressors develop in organizations, as opposed to the identification of additional stressors, or the assessment stressor quality or quantity. Improving communication is another critical step in preventing teacher stress. If workers are given the opportunity to participate in decisions and actions affecting their jobs, uncertainty about career development and security may be reduced. Work schedules that are compatible with demands and responsibilities outside the job should also be established.

Stress of the teacher is caused by many factors in which school environment, lack of relationship with coworkers and negative opinion about higher authorities in the work place, etc. the investigator of the study interested in know these factors and its influence on the stress level of the teachers working in school situated in Madurai District. The findings of the study will yield fruitful result to the government, teachers, parents and society. So, the present study has high need and importance.
**Objectives:**
The investigator of the present study framed the following objectives

1. To find out the level of teacher stress among school teachers working in Madurai district.
2. To find out the level of school environment among school teachers working in Madurai district.

3. To find whether the Teachers belonging to different groups based on gender, Types of school, types of management, Experience of the teachers the significantly in
   1. Teacher Stress.
   2. School Environment

4. To find out the significance of the relationship between teacher stress and school environment of teachers in Madurai District.

**Methodology:**
The present investigation has been undertaken by using normative survey method. The survey method gathers data from a large number of cases.

**Sample:**
The present study consists of 300 teachers working in schools in selected blocks Thirupparanguntram, sedapatti, Kallupatti,Thirumangalam, Madurai North in Madurai District, Tamil Nadu. The samples were selected by using simple random sampling technique. The sample forms a representative sample of the entire population.

**Tool:**
The investigator of the study used the following research tools to the present study.

a) Teacher Stress Scale was constructed by the investigator [2013]
b) Working Relationship inventory was constructed and standardized by the investigator [2013]

**Statistical Technique Used:**
In this present investigation the following statistical techniques have
been used. Descriptive analysis - Measures of central tendency (Mean), Measures of variability (Standard Deviation), Differential Analysis - Independent sample ‘t’. Co-relation analysis – coefficient of correlation ‘r’.

Findings:
Based on the data analysis and interpretation by the investigator, the following findings are arrived.

- School teachers are found to have average level of stress in Madurai District,
- School teachers are found to have low level of school environment in Madurai District.
- The sub sample of locality and management only shows significant difference between the sub samples of the present study but the remaining variables of the study do not show any significant difference.

There is a significant relationship found between teacher stress and school environment in Madurai District

Implication:

- The findings of the study, point out that the school environment differs significantly based on locale and types of management,
- The school environment and attitude about school are largely shaped by their teachers’ energy and attitude. when they are relaxed it will reflect in their achievement. School environment plays a vital role in influencing their stress.
- Supportive friends and colleagues are very important. Teachers need to be trained to look at the positives of their colleagues and appreciate them.
- Teachers like to be in control of our day, they spend a lot of time planning to ensure that their classes go smoothly. They often get stressed about the things which are outside their control.
- Teachers need to keep themselves motivated, if they want to keep their pupils motivated.

And finally peacefulness of mind, supportive school environment and
positive teacher attitude would produce high level of achievement and also help teachers to lead an un stressed healthy life.

**Recommendations:**

The present study gives a clear-cut view about the teacher stress level of school teachers in Madurai district. Based on the important findings stated earlier the following recommendations were made.

Some practical strategies are suggested below to keep the school environment healthy.

That is (i.e.,)

- Focus on what is in the control of teachers.
- Be their own best friends first
- Write down at least six highlights of the day,
- Off load the unhealthy ideas and negative emotions in a safe way.

So how about if,

- Instead of trying to be perfect, they acknowledge that mistakes can do good and point to paths of development
- Instead of trying harder, they need to try something different.
- Instead of trying to be strong, they need to be human especially when handling issues which affect children’s lives directly or indirectly.
Abstract – 50

Name of the DIET : Kurukkathi
Name of the Principal Researcher : Dr. S. Thirugnanasambandam
Name of the Co-Researcher : T. Saraswathi
Title of the Research Project : “Awareness On Natural Disasters Among High School Students In Nagapattinam District”

Need for the Study :

The study highlights the different types of Natural Disaster that have divested the different parts of the world, with special reference to Indian continent. It has suggested ways and means of the steps to be taken to prevent them to the extent possible. A good numbers of investigations have been taken to study the Natural Disaster and their effects in the different countries of the world. It is absolutely necessary for the public, specially the youth, the students in schools to have an awareness about the Natural Disaster and the devastating results left behind by them.

Objectives :

The following are the objectives :

1. To measure the level of awareness of high School Students with regard to Natural Disasters.
2. To assess the level of awareness of High School Students with regard to the preventive measures to be taken.
3. To find out whether there is any significant difference between awareness of Natural Disasters and the biographical variable selected for the study, namely sex, locality, management and type of school.
4. To findout Whether there is any significant behavior awareness of Natural Disaster and the biographical variable selected for the study, namely. Sex, locality, management and type of school.

To study the correlation between awareness of Natural Disasters and the awareness of preventive measures to be taken in respect of Natural Disasters.
Methodology:
Normative survey method is adopted.

Sample:
The sample consists of four hundred students studying in IX th standard of high and hr.sec.schools in Nagapattinam educational districts. The sample has been selected using stratified random sampling techniques.

Tool:
- The following tools are used in the study.
- Tool-1 Awareness of Natural Disasters among the high school students.
- Tool -2 Awareness of the prevention measures to be taken for Natural Disaster.

Statistical Technique Used:
The following statistical measures have been employed in this study for analysis of data and for drawing conclusion.
1. Descriptive analysis
2. Inferential analysis
3. Correlation analysis

Findings:
The followings are the findings of the investigation:
1. The Awareness of students of IX standard with regard to Natural Disasters is at moderate level.(72.8%)
2. The Awareness of IX standard students with regard to preventive measures to be taken during Natural Disasters is at moderate level.(86%)
3. There is a positive and high correlation between their Awareness of Natural Disasters and the Awareness of the preventive measures to be taken during Natural Disasters. (0.446)
4. Significant difference is found (at 1% level) in their Awareness on Natural Disasters with reference to the following variables:
Sex

Boys Vs Girls (t value -3.04)

Management

Government Vs Municipal (t value -3.61)
Private Vs Municipal (t value -4.43)
Municipal Vs Adidravida (t value -3.74)

Type of schools

High school Vs Hr. sec. schools (t value -3.61)

5. No significant difference is found (even at 0.05% level) in their Awareness on Natural Disasters with reference to the following variables:

Locality

Urban Vs Rural

Management

Government Vs Private Aided
Government Vs Adidravida
Private Vs Adidravida

6. Significant difference is found (at 0.05% level) in their Awareness on the preventive measures to be taken during the Natural Disasters with reference to the following variable:

Management

Government Vs Adidravida (t value -2.23)

7. No significant difference is noticed in their awareness on the preventive measures to be taken during the Natural Disasters with reference to the following variables:

Sex

Boys Vs Girls

Locality

Urban Vs Rural

Management

Private aided Vs Municipal

8. Significant difference is found (at 0.01% level) in their Awareness on the preventive measures to be taken during the Natural Disasters with reference to the following variable:

Management

Govt Vs Private aided (t value -3.32)
Govt Vs Municipal (t value -3.57)
Private aided Vs Adidravida (t value 5.68)
Municipal Vs Adidravida (t value -5.65)

Type of School High School Vs Higher Secondary school (t value 4.26)

**Implication:**

The study reveals that the students’ level of Awareness on Natural Disasters as well as the Awareness on preventive measures to be taken with regard to Natural Disasters is only moderate. Hence there is a definite need for raising the level of awareness of the students in respect of both the awareness on natural disasters as well as the awareness on preventive measures to be taken.

1. Since there is a high correlation between the students’ Awareness on Natural Disasters and their awareness on the preventive measures to be taken during Natural Disasters, if we concentrate on improving the level of the former, it will automatically improve the level of the latter.

2. The study reveals that girl students are at a higher level than the boy students in their awareness on natural disaster. It implies that more attention should be paid to the boy students so that their level of awareness on natural disaster could be increased. It could be achieved through the measures more suitable to the boys.

4. The study reveals that the students of Municipal schools are at a lower level than the students of Government, Aided and Adidravida schools in their awareness of natural disasters. Since the students residing at municipality towns have more access and exposure to updated information, it is quiet natural to expect them to have higher level of awareness on natural disaster. But the finding is quiet contrary. The students of other schools are from rural areas and they have direct experience of Tsunami in the year 2004. But the students of municipal schools are not directly affected as much as their counterparts. It may be the reason for this phenomenon. So it becomes necessary for the teachers of municipal schools to help their students to be more aware
of the natural disasters and the measures to be taken for prevention.

5. The study reveals that the students of high schools are at a higher level in their awareness on Natural disasters than the students of higher secondary schools. The reason stated above seems to hold good here also. So the teachers of higher secondary schools should take more effort to make their students to be more aware of the natural disasters and the measures to be taken during the disasters.

6. The study reveals that the knowledge of the students of Aided and Municipal schools about the preventive measures is at a lower level than that of the students of government schools. This finding also confirms the fact that the students from rural areas have more awareness than those from urban areas. So the same measures suggested above could be applied here also.

7. The study reveals that the knowledge of the students of Adidravida schools about the preventive measures is at a higher level than that of the students of Government schools. Comparing the areas where government and Adidravida schools are situated, the latter are more rural than the former. This finding strengthens the fact that more the rural are the students the more will be their awareness. The same truth is applicable to the following findings:

8. Awareness of Adidravida students on Preventive measures to be taken during the natural disasters is at a higher level than that of the private Aided Schools Students.

9. Awareness of Adidravida students on Preventive measures to be taken during the natural disasters is at a higher level than that of students of municipal schools.

10. Awareness of high schools students on Preventive measures to be taken during the natural disasters is at a higher level than that of the Hr.Sec. School Students.
**Recommendations:**

On the basis of the findings of this study, the investigator offers the following recommendations:

**SCHOOL LEVEL**

The teachers of social science should take the responsibility of teaching in detail the different types of Natural Disasters, the countries and places where they have occurred. How people and property were affected by them and the remedial measures taken by the government and Non Governmental organizations in helping the affected people and the rehabilitation programmes under taken by them to relieve the victims of the panic caused by the Natural Disasters.

The teachers of Geography are in a better position to teach the students about how the Natural Disaster are caused, the various reasons for the disasters and how at least to some possible extent the preventive measures, if taken effectively can minimize the catastrophically out comes of the disasters.

The teachers of Moral Science and Value Education should inform and interact with the students to develop a sense of responsibility to help those victims of the Natural Disasters at the time of their precarious hour of need. Students should be made to realize that it is a moral as well as social obligation to render all possible help to those in their sufferings and that ‘The love in need is the love indeed’.

Teachers should enthuse and encourage the students to participate in the Awareness programme such as Awareness rallies, Seminars etc. on Natural Disasters.

Some persons who were affected by Natural Disasters may be invited to schools and share their experiences with students and have interaction with them.

Students should be taken on educational tours to the places affected by Natural Disasters, such as Tsunami, floods and landslides, wherever and whenever possible to enable them to have a firsthand experience by seeing the places and having interaction with the persons suffered from the
disasters.

Teachers should encourage and motivate the students to view TV programmes in channels like Discovery, National Geographic, Animal Planet etc. which will enrich their knowledge about the Natural Disasters of different types and how human beings, other living creatures and the environment and atmosphere are affected by them. Students may also learn how economy and social life of people of different nations suffer on account of the disasters. This will also provide them a vicarious experience touching their feelings and emotions.

The students, who go through Trimester pattern of education, may be assigned the topic on Natural Disasters for individual and group projects. Students may also be encouraged to prepare picture albums and if possible, DVD cassettes connected with different types of Natural Disasters. This can be part of their practical work.

Activities like swimming, hiking etc. may be made compulsory for all students at high school level and they must be provided with sound knowledge of First Aid. For this the school can take the assistance from St. John’s Ambulance organization, Bharat Scout Movement etc.

Demonstration of Fire fighting escape from Tsunami may be arranged by the schools with the assistance of the concerned departments.

II. DEPARTMENTAL LEVEL

The state Education Department may organise programmes in Natural Disaster Management for school teachers at District levels. At least one teacher preferably the Social Science teacher from each school should be made to participate in the programme. This is in view of enriching the knowledge and understanding of the participant teachers regarding Natural Disasters management. The resource persons for the programme may be invited from the Directorate of Natural Disaster Management at State level.

III. UNIVERSITY LEVEL

The Tamilnadu Teacher Education University could take necessary steps to include Natural Disasters Management in the B.Ed., curriculum to enable the prospective teacher to learn about Natural Disasters and their
causes, destructive effects, preventive and remedial measures to be taken etc.

The Teacher Education University may also encourage and make necessary provision for colleges of Education to undertake research programme on Natural Disasters, its Awareness and Management at M.Ed., M.Phil., and Ph.D levels.

The other Universities in Tamil Nadu may take necessary effective steps to introduce Natural Disaster Management as a subject of study at the first degree level for both Arts and Science students.

The teachers, the head of schools and the management could come forward with whole heartedness and co-operate with the Department of Education in the state to provide effective Natural Disaster Management education to the students of the high schools.
Abstract – 51

Name of the DIET : DIET KalayarKovil
Name of the Principal Researcher : Dr.A.ananthi, Lecturer
Name of the Co-Researcher : M.Ranjani, Senior Lecturer
Title of the Research Project : “Effect of Neurocognitive Strategies in Improving the Retaining Capacity amongchildren at Elementary Level inSivagangai Dist”.

Need for the Study :

Considering “teaching as a noble profession” the Indian society calls the teachers as ‘guru’ and the teachers are considered as the remover of darkness. Teachers are capable of leading humanity to divinity (Rajput,J.S and Walia,K(2002).

There are so many innovative strategies in teaching learning and retaining the concept but teachers are not able to bring desired changes among the students. The reasons for that may be many but the investigator thinks that the lack of awareness on brain compatibility functions in learning and reading may be one of the reasons.

A teacher must know both psychological distress and concrete problems in teaching. The neurocognitive strategies help the teachers to interrelate the thoughts, emotions and behaviours. Hence, an attempt was made to know to what extent the effect of neurocognitive strategies were effective in improving retaining capacity among students. So the investigator has taken an attempt to study the effect of neurocognitive strategies in improving retaining capacity among students

Objectives :

➢ To assess the level of retaining capacity among the STD VIII students.
➢ To find out the effectiveness of neuro cognitive strategies (NCS) in improving the retaining capacity among STD VIII students.
➢ To find out the significant difference in the achievement score, and the neurocognitive intervention score if any, between the pre-test and post-test.
➢ To find out the effect of neuro cognitive strategies (NCS) in improving the retaining capacity and their achievement test score among STD VIII students between the selected intervening variable

**Methodology :**

The present project study is based on parallel group experimental design. It provides a systematic and logical way of answering the research questions.

**Sample :**

The sample was drawn by purposive and convenient sampling method. The sample was collected from 10 schools, under three categories – management, status of the school and locale. 20 Students studying in standard VIII at upper primary level were selected from these ten schools.

**Tool :**

In the present study, the investigator used two types of tools.

**Tool: 1** A Questionnaire for NeuroCognitive Intervention Strategy which is a modified tool for Memory assessment of ADHD children from NIMHANS( National of Mental Health and NeuroScience)

**Tool: 2** Achievement Test for Standard VIII

**Intervention Process:**

Pre-test was conducted to both the control and experimental group.

Based on this assessment, Experimental group students were identified and classified as

➢ The sensory information does not reach the relevant part of the cortex.
➢ The sensory information reached the relevant part of the cortex and the signals have been weekend and the learning process is incomplete.
➢ The sensory stimuli reach the cortex but the learning process is in a distorted manner.
➢ The investigator played a vital role in molding the minds of the students in classroom activities.

The investigator focus on what we need to learn and what we need to
help us to repair their ability to learn. It is a cognitive initiative by the researcher to bring awareness on brain function and brain based activities that helped them to retain the information successfully. The investigator selected the following techniques to strengthen the memory functions of the students.

- Understanding and Remembering
- Activation of Prior Knowledge
- Maintenance Rehearsal Versus Elaborative Rehearsal
- Multiple Sensory and Multiple Format Instruction
- Interference & Metamemory
- Episodic and Semantic Memory Systems
- Perceptual and Conceptual Priming
- Encoding and Retrieval Practice
- Retrieval Cues and the Encoding Specificity Hypothesis

These techniques are classified into schema, implicit memory, explicit memory, sensory memory and cognitive scaffolding. The investigator introduced various cognitive activities like Mnemonics, Association, Chunking, etc. A particular task was introduced and practiced to the experimental group. Based on these techniques many different activities were given for eight weeks.

Brain based activities were given to standard VIII students in their subjects and the students practiced these activities in their classes. After the complete of the treatment post assessment was conducted and the data were scored for analysis.

**Statistical Technique Used:**

The data were collected and the analysis of data was carried out in the following steps.

- Descriptive analysis
- Differential Analysis
- Regression Analysis

**Findings:**

- The experimental group Neurocognitive intervention strategies in pre-
assessment mean score and the SD are 35.73 and 4.72 and the post-assessment mean score and SD are 56.40 and 8.80 respectively.

- The experimental group Neurocognitive intervention strategies score in post-test is higher than the level of pre-test. It implied that the Neurocognitive intervention strategies (NCS) have started working to improve the retaining capacity of the students.

- The experimental group of Academic achievement in pre-assessment mean score and the SD are 28.50 and 17.37 and the post-assessment mean score and SD are 49.74 and 15.63 respectively.

- The experimental group there is no mean difference between boys and Girls in their level of improvement in the retaining capacity through Neurocognitive intervention strategies.

- The experimental group levels of improvement in the retaining capacity through Neurocognitive intervention strategies in rural school children are greater than the urban school children.

- The experimental group levels of improvement in the retaining capacity through Neurocognitive intervention strategies in High School students of the experimental group are greater than the other two groups. Middle schools and High Schools are greater than the Hr. Sec. Schools.

- The levels of improvement in the retaining capacity through Neurocognitive intervention strategies in aided school children of the experimental group are greater than the government school children.

- Regression on the post assessment scores of the male inferred that the every corresponding increase in the unit on retaining capacity through Neurocognition was contributed by the variables.

- The following regression equation has been formed to predict tested Neurocognitive intervention process in terms of the five variables.

\[ Y = -1.054 + 0.260 x_3 + 0.241 x_5 + 0.234 x_1 + 0.224 x_4 + 0.205 x_2 \]

Where

- \( y \) = Post assessment total of male.
- \( x_3 \) = Schema,
- \( x_5 \) = Implicit Memory,
Thus, the predictability on the teaching competence is mainly contributed by the dimensions, Schema, Implicit Memory and Explicit Memory in the order of weights.

- Regression on the post assessment scores of the female showed that the every corresponding increase in the unit on retaining capacity through Neurocognition was contributed by the variables.
- The following regression equation has been formed to predict tested Neurocognitive intervention process in terms of the five variables.
  
  \[ Y = -1.054 + 0.229 x_3 + 0.229 x_4 + 0.220 x_2 + 0.216 x_5 + 0.211 x_1 \]

Thus, the predictability on the teaching competence is mainly contributed by the dimensions, Schema, Cognitive Scaffolding and Sensory Memory in the order of weights

**Implication:**

From the findings of the present study, the post assessment mean score was increased by 56.04%.

- Knowing how the brain works best allows educators to create an environment that gives the student a higher probability of success in learning. Using the following brain-based learning principles can improve our students’ performance in class.
- Students have different learning styles. • 50% are visual learners and prefer pictures, charts, and written text over lectures. • 30% are kinesthetic learners and need more tactile (hands-on) and movement-based activities. • 20% are auditory learners and do best when they talk about what they are learning.
- Teachers must make use of the classroom space to arouse all senses.
- Brain-based learning helps students relax in order to improve alertness.

Stimulate skills to improve the experience

**Recommendations:**
Central and State Governments have taken a number of initiatives to improve the learning process, retention and achievement of children. There is a need to introduce this technique to students to improve their learning process.

Theoretical aspects of Neurocognitive strategies can be introduced as a unit of the core subject in the teacher education curriculum (core subject-teaching-learning process).

Awareness programmes on Neuro Cognitive Strategies is recommended in AWPB of the year 2014-2015 for administrators.

The practical inputs regarding Neurocognition should be taken up through subject specific programmes such as lesson plan writing, observation classes and practice teaching for DTEd students in Sivagangai district.

The same can be tried at various levels and also in in-service teacher training programmes.

Suggestions for further Research:

The present study was confined to the sample, of elementary students, Sivagangai district. It is suggested that the above study may be undertaken with secondary and Higher secondary school students.

The present investigation was carried out to find out the role of neurocognitive intervention strategies on improving retaining capacity of the students. It could be replicated with other variables such as retrieval capacity, creativity ability etc. And also, it could be replicated with other variables namely personality, motivation and emotion of learning etc.,

The present investigation was carried out to find out the role of neurocognitive intervention strategies in improving retaining capacity of the students. It is suggested that the above study may be conducted for B.Ed, trainees.

The study may be carried out to compare the impact of neurocognitive intervention strategies on hyperactivity disorder students.
Abstract – 52

**Name of the DIET**: DIET, Uthamapalayam

**Name of the Principal Researcher**: P. Justinmary, Lecturer

**Name of the Co-Researcher**: K. Ramachandran, Lecturer
R. Bagdhavatchalaperumal, Lecturer

**Title of the Research Project**: “Punctuality behaviour and Academic Achievement among VIII Standard students in Theni District”.

**Need for the Study**:

Punctuality being very important, although some people don’t value it as much as others. Being punctual shows common courtesy and respect to others. It is especially important in the workplace. Though there is no systematic training for young pupils to be punctual in their day-to-day life, they themselves should have been trained intrinsically or extrinsically. Otherwise they could not achieve academically to a desirable level. This study attempts to know the Upper Primary school pupils punctuality behavior. The researcher wants to suggest ways and means to become a punctual person. This is the prime need of this study which will be highly useful for all pupils at Upper Primary school level.

**Objectives**:

The specific objectives of the study are listed below:

- To measure the Punctuality behaviour and academic achievement among VIII standard students.

- To find out whether there is a significant difference in their academic achievement in relation to Punctuality behaviour VIII standard students in terms of selected independent variables viz. Gender, Domicile, Extra-curricular activities and Sports & Games.
Methodology:

Design: Descriptive, Method: Normative, Technique: Survey

Sample:

A random sample of 500 VIII standard students from Theni district with due representation of the variables Viz. Gender, Domicile, Extra-curricular activities and Sports and Games were chosen.

Tool:

The tools used for data collection are as follows:

1. General Information sheet structured by the Investigator.
2. Punctuality Behaviour Inventory constructed and standardized by the Investigator.
3. First term aggregate marks.

Statistical Technique Used:

1. t’- test for significance of difference between the means of large independent samples.
2. Significance of Pearson’s Product Moment Correlation.

Findings:

The major conclusions arrived at from the study are listed below:

- The results show that there is a significant difference between Male and Female in possession of punctuality behaviour among VIII standard students.
- The results show that there is no significant difference between rural and urban pupils in possession of punctuality behaviour among VIII standard pupils.
- The results show that there is a significant difference between the co-curricular activity of participant and non-participant pupils in possession behaviour of punctuality among VIII standard students.
- The results show that there is no significant difference between rural and urban pupils in possession of punctuality behaviour among VIII standard students.
- The results show that there is no significant difference between the
sports and games of participant and non-participant pupils in possession of punctuality behaviour among VIII standard students.

There is a significant high positive relationship between Punctuality Behaviour and Academic Achievement among VIII standard students.

**Implication:**

This study states that punctuality behaviour among VIII standard students is found independent of Domicile and Sports & Games. The necessity of doing our work punctually should be felt more keenly because we live today in a complicated society where each work is dependent on the other. The smooth working of the modern world is due to an increasing recognition of the necessity of doing our work punctually. Punctuality being so important in life, it is necessary for every man to cultivate this habit from the very beginning. Once we are punctual, our labors will be lightened, our mind disciplined and our life will be much easier and brighter.

**Recommendations:**

- This study is limited to Theni District. It could be extended to other districts.
- This study could be extended to High school and Higher Secondary schools also.
- This study may be conducted with other values and variables. A comparative study of students’ Behaviour of punctuality and other variables may be extended.
Abstract – 53

**Name of the DIET** : Kumulur, Trichy District

**Name of the Principal Researcher** : K.S. Mozhiyarasi, S.L

**Name of the Co-Researcher** : 1. Helen Edward, Lecturer,
                              2. P. Sri Renganayaki, Lecturer,

**Title of the Research Project** : Functioning of School Management Committees in Thiruchirappalli District

**Need for the Study** :

The school Management Committee shall meet at least once in two months in the school premises, discussing about the regularity students in attendance, ability to learn, progress made in learning, relevant information about the child. The minutes and decisions of the meeting shall be properly recorded and made available to the public. The SMC shall perform the functions such as monitoring the working of the school, prepare and recommend school development plan, monitor the utilization of the grants received from the appropriate Government or local authority or any other source and perform such other functions etc. So the functions of SMCs are one of the essential parts to improve the quality in education. As the prescribed functions of SMCs are so vital to the effectiveness of schooling, the investigator proposed to find out the involvement of SMCs in developing SDP and effective functioning of schools

**Objectives** :

i. To know the level of functioning of SMC with respect to its components such as awareness of RTE-act, meeting of the committee, preparation of school development plan and utilization of grants.

ii. To find out the significant difference between the level of functioning of SMC and its components with respect to their demographic variables.

iii. To find out the significant relationship between the level of functioning of SMC and its components.

iv. To know the level of functions of school activities.

235
v. To find out the significant difference between the level of school activities with respect to their members.

To find out the significant difference between the level of school activities with respect to their locality.

**Methodology:**

Survey method was adopted for the present study.

**Sample:**

The population of the study is the Headmasters, Teachers in SMC and parents in SMC, parents in non-SMC among primary and upper primary schools in Thiruchirappalli District.

There are sixteen educational blocks in Thiruchirappalli District. Among them four schools (two Primary and two upper primary) are randomly selected from each block. From sixty four schools, sixty four Headmasters and sixty four Teachers in SMC and ninety-four parents in SMC, ninety-six parents in non-SMC, totally three hundred and eighteen respondents are selected as sample for the present study. Stratified random sampling technique was adopted for the sample selection. Survey method was adopted for collecting the information from relatively small sample of a much larger population.

**Tool:**

- Semi-structured interview schedule to the Headmasters and Teachers in SMC about the functioning of SMC.
- Semi-structured interview Schedule to the parents in SMC / Non-SMC about the activities of the school.

**Statistical Technique Used:**

Mean, standard deviation, t-test and correlation co efficient

**Findings:**

Based on the analysis the findings are

**Section A**

Level of the Functioning of school Management Committee with respect to
components
i. The level of functioning of school Management committee with respect to awareness of RTE act among Headmasters and Teachers in SMC is high.

ii. The level of functioning of school Management committee with respect to meeting of the committee is high.

iii. The level of functioning of school management committee with respect to preparation of school Development plan is high.

iv. The level of functioning of school management committee with respect to utilization of grants is high.

v. The level of functioning of school management committee is high.

Section B
Significant difference between the levels of functioning of SMC with respect to Demographic variables

i. There is no significant difference in the level of functioning of school management committee and its components with respect to their Designation.

ii. There is a significant difference between the level of functioning of school Management committee in total and awareness of RTE with respect to type of school.

iii. The functioning of school Management committee in awareness of RTE-act corporation schools are better than the panchayat union schools.

iv. There is no significant difference in the level of functioning of school Management committee in meeting of the committee, preparation of school development plan and utilization grants with respect to their type of school.

v. There is no significant different in the level of functioning of school Management committee in total awareness of RTE act, meeting of the committee, preparation of school Development plan, utilizations of grants with respect to their level of school.

vi. There is a significant difference in the level of functioning of school Management committee in total and awareness of RTE act with respect to their locality
vii. The functioning of school Management committee in urban schools are better than the rural schools.

viii. There is no significant difference in the level of functioning of school Management committee in meeting of the committee, preparation of school Development plan, utilization of grant with respect to their locality.

Section C

Significant relationship between the level of functioning of School Management committee and its components

i. There is a significant relationship in the level of functioning of school Management committee in awareness of RTE act and utilization of grants, meeting of the committee and preparation of school Development plan.

ii. There is no significant relationship in the level of functioning of school Management committee in awareness of RTE act and preparation of school Development plan, meeting of the committee and utilization of grants, preparation of school Development plan and utilization of grants.

Section D

Level of the functions of school activities with respect to the members and locality.

i. The level of functions of school activities is high.

ii. There is no significant difference in the level of school activities with respect to their members.

There is no significant difference in the level of school activities with respect to their locality

Implication:

From the discussion of the above findings, trained HMs and teacher have made significant development on the functioning of the SMC and its components such as awareness of RTE, meeting of the committee, preparation of SDP and optimum utilization of grants. Corporation and urban school HMs and teachers having awareness of RTE is significantly higher than the panchayat and rural school. Awareness of
RTE is significantly associated with optimum utilization of grants, meeting of the committee is significantly associated with preparation of SDP. From separate interview conducted among the parents, SMC and NOn-SMC parents having the same knowledge of school activities, rural and urban parents also having the same knowledge of school activities. SMC having deep knowledge of the functions of SMCs envinced keen interest in the schooling processes

**Recommendations:**

All the HMs and teachers can be given training about the function of SMC with current or new amendments. The RTE Act must be shared in “gram sabha” village education Committee)meetings organized from time to time. once in two months intervention meetings or discussions can be made, SMC parents to non-SMC parents in the view of enhancing the level of knowledge about the functions of school activities. SMCs may be encouraged for mobilizing funds for school development
Abstract – 54

Name of the DIET : DIET, Kaliyampondi, Kanchipuram.

Name of the Principal Researcher : S. Arumbumozhi, Lecturer,

Name of the Co-Researcher : C. Brintha, Lecturer,
S. S. Venkatesan, Lecturer,

Title of the Research Project : Personal and Social Values of Upper Primary Students in Kanchipuram District.

Need for the Study :
There is hardly a daily newspaper today that carries news pertaining to deterioration of values, reflecting the trends in society such as political and economic corruption, scandals and scams, antisocial and anti-national activities etc. We are constantly reminded about the erosion or deterioration of values. This highlights the need for an enlightened and fresh approach to value education. Education not only transmits knowledge and skills but is also a forceful tool for the cultivation of social and moral values. The National Policy on Education 1986 has rightly emphasized the need for strengthening a system of values oriented education. Such a value based education would help in elimination of violence, superstition, castes and corruption etc and make good citizens.

Objectives :

- To find out whether there is significant difference between boys and girls in their value pattern.
- To find out whether there is significant difference between Municipal and rural schools towards personal and social values.
- To find out the significant difference between father’s qualification and their children value pattern.
- To find out the significant difference between mother’s qualification and their children value pattern.
- To find out the significant difference between parental income and their
Methodology:
Descriptive survey method was used for the study.

Sample:
Random Sampling was adopted for the study. The sample consisted of 200 students from 20 schools of Kanchipuram Block. (100 sample were drawn from municipal and 100 rural schools).

Tool:
The investigator herself developed a situational tool containing 10 questions on personal values and 10 questions on social values. The tool was corrected and validated by the experts.

Statistical Technique Used:
Mean, Standard Deviation, ‘t’ test, correlation and One-way Anova were the statistical techniques used for carrying out the analysis and interpretation of the data.

Findings:
The present study shows that there is no significant difference between gender, locality of school, father’s qualification, mother’s qualification and parental income. It reveals that the present curriculum has induced the children to possess value patterns at large. The correlation between personal and social values is highly positive at 1% level of significance. Hence it is evident that, when personal value increases naturally social value also increases.

Implication:
“Education without ethics is blind and soulless”. Since the study reveals no significant difference between personal and social values, it is essential to maintain the rich value pattern among the younger generation. This can be maintained through the following measures among the students. Moral stories may be included as a regular component in the school assembly and class prayer. More importance may be given to...
attitudes and values of co-scholastic area in CCE. Dramas expressing the importance of values during the celebration of national days, national festivals and school annual day programmes. Since yoga and meditation is a proven tool to inculcate the values, it may be conducted properly done in the allotted time in an effective manner.

**Recommendations:**

The study can be extended in other dimensions of values which are commended by NCERT. The same study can be carried out for different age groups, locality, and categories. It could be extended to other districts also. More importance may be given to value education in evaluation system in all levels. The study reveals adequate awareness of value among the largest population (VIII std students). But the knowledge needs to be translated into active and responsible behaviour among the student community. Teachers need to be oriented to activities that would motivate students to inculcate values and be principled in their lives.
Abstract – 55

Name of the DIET : DIET, Kaliyampoondi, Kanchipuram.

Name of the Principal Researcher : Sharmila D.
Lecturer, DIET, Kaliyampoondi

Name of the Co-Researcher : Kalaiselvi B.
Lecturer, DIET, Kaliyampoondi

Title of the Research Project : Students’ Awareness and Attitude towards Environmental Issues at Upper Primary Level in Kanchipuram District

Need for the Study :

One in every seven persons on this planet lives in India. With 16% of the world’s population and only 2.4% of its land area, there is a heavy pressure on the natural resources including land. Apart from them, human activities towards environment lead to unexpected gigantic hazard for the whole creature in the coming few years. Day by day human is consuming these natural resources in an unsustainable way. The main behind this is the non co-operative thinking with nature. Awareness and involvement of the civil society is a precondition of checking environmental degradation. So for that we should create environmental awareness in between people for the sake of our green planet. Here, the researcher is convinced that, it is important to study Awareness and Attitude towards Environmental Issues among Upper Primary students because they the future and protector of the environment. Thus it is reasonable that behavioral change towards the environment will not be difficult and more effective if students are environmentally well informed, aware, initiated and had attitudinal change. Due to the excessive and rapid spread of consumer culture, the natural resources of the entire world are dwindling fast.
Objectives:

- To assess the student’s awareness of environmental issues at upper primary level.
- To study the attitude of upper primary students towards environmental issues.
- To find out whether there is significant difference between boys and girls, government and private schools students and students residing in urban and rural areas towards environmental awareness and attitude.
- To find out whether there is significant relationship between environmental awareness and attitude

Methodology:

Descriptive survey method was used for the study.

Sample:

A sample is any group drawn from a population. A sample is a small proportion of a population that is selected for observation and analysis. In the present study the sample was drawn by Random Purposive Sampling method. Eight government and six private schools were taken for carrying out the present investigation. The investigator has taken three background variables for the present study. They are gender, type of school and locality.

Tool:

Two set of questionnaires, i.e., Environmental Awareness Checklist (Yes/No) and Attitude Scale (Always, Sometimes, never) was developed by the investigator on the topics included in seventh standard text book. A pilot study was conducted with that questionnaire. After finding item analysis, tool was standardized. The tool consisted of 25 items each. Totally the tool comprised of 50 items including 26 positively and 24 negatively worded were used. The test has content validity and reliability value is 0.77 for attitude and 0.80 for awareness by Split-Half Method by using Spearman Brown Formula.
**Statistical Technique Used:**

Mean, Standard Deviation, ‘t’ test, Pearson Product Moment Correlation were the statistical techniques used for carrying out the analysis and interpretation of the data collected.

**Findings:**

Students have higher level of awareness and significant positive attitude towards environmental issues. Both Boys and Girls have the attitude of conserving the environment \((t=0.485, P<0.6281)\). But they differ in environmental awareness \((t=4.915, P>0.0001**)\).

On the other hand, government and private school students differ in their attitude towards environmental issues \((t=2.274, P>0.24*)\) and there exists association towards environmental awareness \((t =0.586, P<0.559)\). The residence does not have any affect on students’ awareness and attitude towards environment \((t=0.586, P<0.559 \& t=1.385, P<0.167)\) finally, there is a positive correlation between awareness and attitude towards environmental issues.

**Implication:**

In order to enhance awareness and attitude of upper primary students towards environment can be developed through various activities related to environmental education like essay writing, painting competition, debates, mime etc. can be arranged in schools. On the other hand, awareness towards environment among boys is comparatively low \(\text{Average Mean score is 36.88 than the calculated Mean score of 36.08}\). To strengthen the environmental awareness among boys, role assigned for maintaining cleanliness should be implemented. Separate dustbins for non degradable and bio-degradable wastes should be maintained. Schools should maintain plastic-free environment. Eco-clubs need to be actively involved. A multimedia campaign which utilizes conventional and non-conventional methods of communication for disseminating environmental messages should be organized
Recommendations:

Region-specific instructional material regarding environmental education should be developed. Monitoring Check List of the higher officials should have the component of environmental issues. For instance, Disposable of waste both bio-waste and non bio-waste in the schools should be incorporated. SMC meetings, VEC meetings, PTA meetings agenda should have the component of Environmental Awareness. All Government machinery should be geared towards paper less offices (e.governance).
Abstract –56

Name of the DIET : DIET, T.Kallupatti, Madurai District
Name of the Principal : Mrs. D. Packiam, Lecturer
Researcher : M.Sc.,(Maths)M.Sc.,(Psy),M.Ed.,M.Phil,
Name of the Co-Researcher : 1. Mrs. H. Arockia Nirmala, Lecturer
                                        2. Mrs. S. Punithamary, Lecturer
Title of the Research Project : Parents’ Attitude towards Schooling and Education of Girl children in select blocks of Madurai District

Need for the Study :

The educated parents feel that education of girls should be encouraged, while the illiterate parents differ in their attitudes. Some are interested in sending the girls to schools. Others feel that education for girls is not needed because they have to learn Household work. So it is a waste to spend money on girl’s education. According to statistics of the Census of India, the graphs reveal that the percentage of educated women is lower in our country than men. Generally there is a negative attitude towards education of girls. But the girl’s education is the need of the hour. A UDISE 2012-2013 shows that a number of girl-children dropped out in some blocks of Madurai District. Even though there are educated girls in Madurai District recently, the number can be much higher if adequate attention is given to eradicate the problem. Hence this study on the Parents’ attitude of girls’ education is undertaken.

Objectives :

The objectives are

- To find out the level of the parents’ attitude towards schooling and Education of Girl children in select blocks of Madurai District
- To find out the significant difference of the parents’ attitude towards Girl children’s schooling and Education of girl children in select Blocks of Madurai District with reference to Gender, age, locale of residence, Educational qualification and occupation.
To find whether there is any significant relationship between dimensions and attitude towards Girl children’s schooling and Education of girl children in select Blocks of Madurai District.

**Methodology :**

The Survey method has been suitably employed for the study.

**Sample :**

The study has been conducted on 320 parents from three (Kallikudi, Thirupparankundram and Madurai East and) blocks of Madurai District.

**Tool :**

A self constructed tool consisting of 31 questions with six dimensions was used.

**Statistical Technique Used :**

Descriptive and inferential statistical techniques were used.

**Findings :**

The study has come out with meaningful findings as follows:

Parents have average attitude towards schooling and education of girl children in the selected blocks of Madurai District.

There is no significant difference in the parents’ attitude towards schooling and Education of girl children in terms of age. (F-value 0.909 < 3.00 table value at 5% level of significance)

No significant difference between the attitude of male and female parents towards schooling and Education of their girl children. (t-value 0.0828 < 1.96 table value at 5% level of significance)

But there is significant difference in the parents’ attitude towards schooling and Education of girl children in terms of **occupation of the parents**. (F-value 31.617 > 3.00 table value at 5% level of significance)

There is significant difference in the parents’ attitude towards schooling and Education of girl children in terms of **number of children** in the
family.

(F value 4.924 > 3.00 table value at 5% level of significance)

There is significant difference in the parents’ attitude towards schooling and Education of girl children in terms of number of girl children in the family.

(F value 4.812 > 3.00 table value at 5% level of significance)

- On the other hand, there is no significant difference in the parents’ attitude towards schooling and Education of girl children in terms of locale of residence. (t-value 1.599 < 1.96 table value at 5% level of significance)
- In terms educational qualification, there is significant difference in the parents’ attitude towards schooling and Education of girl children. (F value 8.810 > 3.00 table value at 5% level of significance)
- There is no significant difference in the parents’ attitude towards schooling and Education of girl children in terms of marital status. (t value 1.055 < 1.96 table value at 5% level of significance)
- Finally, there is positive correlation between the dimensions (educational outlook, social awareness, gender difference, panic attitude, parents’ occupation) and parents’ attitude towards schooling and Education of girl children. (The table value of ‘Y’ for df 320 at 5% level of significance 0.088 < ‘Y’ value of the dimensions.

**Implication and Recommendations:**

1. Results indicated that the mean score of the parents cannot be termed as high level attitude. The attitudes of the parents were found to be average level towards schooling and education of their girl children. Despite the government’s endeavour in providing free schemes to promote girls education, the attitude of the respondents is found to be average towards schooling and education of their girl children.
2. Guidance and Counseling services could be strengthened in schools in order to advise both parents and the girl children in schools.
3. Our teachers, particularly female teachers can motivate the parents
towards schooling and education of girl children.

4. Parents need to be sensitized on the availability of welfare schemes in support of girl schooling.

This research work may be replicated but may include more blocks of Madurai district for wider generalization of findings on whether parents have changed their attitudes towards girl-child education or not as it is still a persistent problem. Further research of this kind can be conducted to cover more blocks of Madurai district as this research work is limited only to three blocks. The study raises many questions, such as, do all parents have same attitude towards girls education? and what could be the other variables which might influence parents’ attitude towards girls education?
**Abstract – 57**

**Name of the DIET** : Kurukkathi  
**Name of the Principal Researcher** : T. Saraswathi  
**Name of the Co-Researcher** : Dr. S. Thirugnanasambandam  
**Title of the Research Project** : Awareness on Health and hygiene among the upper Primary students in Nagappatinam district.

**Need for the Study :**

School is a place which not only provides education to children but also learning environment for children and stimulate or initial change. After stepping out from house, it plays crucial role in development of a child. It includes cognitive as well as creative developing of child. The old saying ‘Healthy mind in a healthy body’ is absolutely correct. No one can achieve any considerable measure of success without sound health. Health is of paramount importance for a student. A physically weak student is always weak in his studies too. Therefore a student must always be healthy, physically and mentally. Because he has to shoulder heavy responsibility of the nation in his life ahead. It is only during his school and college days he has to equip himself adequately for facing the bigger challenges of life ahead.

But during the school visit the investigator observed in many schools, particularly in rural schools and the schools in which the fishermen areas the investigator observed the following problems.

- Poor awareness of school children over sanitation and hygiene
- Lack of waste disposal arrangement in schools
- Poor maintenance of available facilities
- Inappropriate hand washing and toilet facilities
- Malnutrition

A survey among school children in India revealed that about half of the ailments found are related to unsanitary conditions and lack of personal hygiene. Only it is estimated that 88% of diarrheal disease is caused by unsafe water supply, and inadequate sanitation and hygiene.

Many schools serve communities that have a high prevalence of disease related to inadequate water supply, sanitation and hygiene and where child malnutrition and other health problems are common in schools particularly those in rural areas.

Also, it is generally recognized that childhood is the best time for children to learn health and hygiene behaviors. Because children are future parents and what they learn is likely to be applied in the rest of their lives. So our study is to assess the students awareness about growth, food habits, diseases and awareness on hygiene in Eighth standard students.

**Objectives:**

- To assess the level of awareness on health and hygiene of Eighth standard students in Nagapattinam district.

- To find out the significant difference if any in the awareness of the students on health and hygiene with respect to gender, type of management and locality of the school, educational status of parents and level of schools.

- To assess the level of awareness about the causes of various diseases, injuries and arrangements of their prevention or check like mass inoculation and first aid.

- To assess the level of knowledge on prevention and control

**Methodology:**

Survey method is adopted for the present study.

**Sample:**

The random sampling techniques was used for this study. The data were collected from 400 Eighth standard students from 30 schools. The
The sample consisted of 188 boys and 212 girls. The schools taken for study belonged to two categories namely government (Municipal and welfare) and aided schools.

**Tool:**

The present research is based on survey method, it is necessary to construct a tool for collecting the viable data. For the construction of the tool the investigator studied number of related reports, journals, books and researches then to follow the methodology used by the previous researchers in this field. Then the investigator find out the awareness on health and hygiene among the respondents in the study area.

The objectives of the present study seeks the following Research tools

- Instrument to collect Respondents Personal Profile and School Environment profile in part - A
- Instrument to measure respondents response on Health and Hygiene in part –B classified into four dimensions, namely awareness our body, diseases, nutritional food and hygiene

**Statistical Technique Used:**

The following analysis was used for this study.

1. Descriptive analysis
2. Inferential analysis

**Findings:**

1. Awareness on health and hygiene among the upper primary students is at moderate level (56.74%)
2. There is no significant difference between eighth standard students in their awareness on health and hygiene with regard to their gender (Male and Female)
3. There is no significant difference between eighth standard students in their awareness on health and hygiene with regard to their area (rural and urban).
4. There is a significant difference between eighth standard students in the awareness on health and hygiene with regard to their parental qualification (Educated and uneducated) (p-value= 0.005)
5. There is no significant difference between eighth standard students in their awareness on health and hygiene with regard to their government and aided schools.

6. There is a significant difference between eighth standard students in the awareness on health and hygiene with regard to their panjayat union middle schools and government high schools (p-value = 0.004).

7. There is a significant difference between eighth standard students in their awareness on health and hygiene with regard to their panjayat union middle schools and government higher secondary schools (p-value = 0.000).

8. There is a significant difference between eighth standard students in the awareness on health and hygiene with regard to their government high schools and government Hr. sec schools (p-value = 0.004).

9. There is no significant difference between eighth standard students in the awareness on health and hygiene with regard to their aided middle schools and aided high schools.

10. There is no significant difference between eighth standard students in the awareness on health and hygiene with regard to their aided middle schools and aided higher secondary schools.

11. There is no significant difference between eighth standard students in the awareness on health and hygiene with regard to their aided high schools and aided higher secondary schools.

12. There is a significant difference between eighth standard students in the awareness on health and hygiene with regard to their municipal middle schools and municipal higher secondary schools (p-value = 0.034).

13. There is a significant difference between eighth standard students in the awareness on health and hygiene with regard to their panchayat union middle schools and aided middle school (p-value = 0.000).

14. There is a significant difference between eighth standard students in the awareness on health and hygiene with regard to their panchayat union middle schools and municipal middle schools (p-value = 0.003).

15. There is no significant difference between eighth standard students in
the awareness on health and hygiene with regard to their aided middle schools and municipal middle schools.

16. There is no significant difference between eighth standard students in the awareness on health and hygiene with regard to their government high schools and aided high schools.

17. There is a significant difference between the students of their government high schools and welfare high school in their awareness on health and hygiene (p-value = 0.000).

18. There is a significant difference between eighth standard students in the awareness on health and hygiene with regard to their government higher secondary school and aided higher secondary schools (p-value = 0.048).

19. There is no significant difference between eighth standard students in the awareness on health and hygiene with regard to their aided higher secondary schools and municipal higher secondary schools

**Implication:**

- Uneducated parents have less awareness about the importance of health of their children. So, the community should be involved while creating awareness on health and hygiene.

- Students of Aided schools have better health and hygiene awareness than the students of government schools. This may be due to the fact that poverty, poor maintenance of the available facilities and poor awareness of parents over health and sanitation

- The students of high and PUMS schools need more exposure to health and hygiene programme

**Recommendations:**

- Every year Modified School Health Programme and other health related programmes should be strictly given to teachers and students. Programmes regarding the importance of health, diseases, preventive measures and students' rearing techniques should be given.
Every year in a particular period or the month, medical camp should be conducted in schools and check up the students’ parts of the body like eye examination, ear discharge, common dental conditions, congenital heart defects, disabilities, screening and assess the prevalence of anemia in adolescents girls and deworming.

As part of the overall record, there should be a health record which contains a complete appraisal of the students’ health. This should include such items as health history, vision and hearing data and teacher’s observations, results of various medical psychological dental and other examinations that are given.

The health record should follow the student, wherever he goes when he moves from one community to another or when he is transferred from one school to another.

The teacher should pay individual attention towards habit formation rather than theoretical knowledge of facts to the students.

The subject of health education may be co-related while teaching other subjects in the class room.

A health room for first aid and emergency care should be available. It should posses the necessary equipments and supplies; have good lighting; be clean; be in adequate size and always available for emergency cases.

The school authorities should conduct health awareness programs for the parents and students and organize health clubs in their schools.

Health and sanitation programmes and activities may be expanded at village level schools for its full – fledged implementation.
**Abstract – 58**

**Name of the DIET** : Namakkal.

**Name of the Principal Researcher** : Dr. N. Subramaniam

**Name of the Co-Researcher** : P. Chinnagounder & A. Sivaprakasam

**Title of the Research Project** : “Promoting health awareness among Tribal area School students”.

**Need for the Study**:

During the team visits and school visits of Educational officials to GTR school of Bodamalai Hills of Namakkal District, the children were looking very poor in Health and Hygienic habits. The children in and around Bodamalai consisting of three areas viz., GTR school Melur, GTR School Keelur, GTR School Kedamalai were found to be poor Health Awareness, Hygienic disorders and not aware of Health skills for better Healthy living. Hence this study is proposed to undertake for the upliftment of this Tribal children.

**Objectives**:

1. To study the Health and Hygiene awareness among Tribal school students of Bodamalai Hills.
2. To promote Health and Hygiene awareness among tribal school students through Health awareness programmes.
3. To investigate the effectiveness of Health and Hygiene awareness programme

**Methodology**:

In this study the investigator followed single group pre and post-test experimental method. The study was conducted by the investigator through interview and observation method.

**Sample**:

The sample consists of 28 students of GTR school Melur, 7 students
of GTR School Kedamalai and 7 students of GTR School Keelur and their parents. These three schools are located in Bodamalai (Vennandur Block) of Namakkal District.

**Tool:**

In this project, the investigator developed a tool called “Health Awareness Inventory (HAI)” to assess the performance of the tribal students and their parents by conducting Pre and Post-test.

**Statistical Technique Used:**

The data were collected and analysed by using parametric and non-parametric test such as mean, percentage and “t” test.

**Interventions:**

To promote the health awareness among tribal students the following interventions were carried out; Conducting Medical camp and rally, displaying posters and slogans of health awareness and frequent visits of teacher educators will enhance health and hygienic habits of tribal students.

**Findings:**

Health Awareness among tribal students of Bodamalai Hills of Namakkal District enhanced, due to the Health Promoting team’s post treatment activities from 38.72% to 79.9% in Health awareness, 40.5% to 80.4% in Hygienic awareness, 32% to 72.3% in General Health Awareness 31.7% to 72% in mental Health skills. Health Promoting teams awareness activities improved considerably from both the opinion of the students and parents about Health related skills. There is no significant difference found between boys and girls in Pre and Post-test in their Health Awareness skills.

**Implication:**

Findings of this study reveal vast improvement in knowing Health awareness and health related issues of Bodamalai tribal primary school students. Village ‘health mela’ can be arranged by village health committee. Myths and mis-conceptions of tribal people on health issues can be
surveyed. A sound knowledge of health awareness improves the preventive health care practices of students studying in Tribal schools. Hence this study may be suggested to implement in Middle, High and Higher secondary school students of other tribal areas.

**Recommendations:**

Health awareness programme impact study can be extended to other areas and districts also. Local specific health and hygiene practices can be documented and disseminated. Health life modification training can be arranged for Tribal people.
Abstract – 59

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Title of the Research Project : Effectiveness of Mobile Teaching in
Enhancing the Achievement Levels of Tribal Students Studying in 9th
Standard of Alangayam Block

Need for the Study :

Vellore District is the Northern most district (Next to Tiruvallur) in Tamil Nadu which is surrounded by Kacheepuram, Thiruvallur, Krishnagiri and Dharumapuri. Puliyur Part of Javadhu Hills falls under tribal category and above 1000 feet. The access to the Tribal school by the teacher in the plains is very difficult. Those teachers who are appointed in this school get transfer from that school and move down to the plains, because the culture of the teachers and culture of the tribals do not match. They take more time to go along with the culture of the tribals. Those who cannot accommodate themselves with the culture of the Tribals move to the plains. The roads to the Tribal Schools are not in good condition to access the school in correct time. It is bottleneck to the Department of Education to serve the tribal children at par with those who study in the plains. At this juncture, the Researcher has planned to serve the Tribal students in a unique method known as Mobile Teaching. This Mobile Teaching tried to combat the Distance, Social difference, Teacher Absenteeism, Monotonous teaching by the same teachers etc., So this Mobile Teaching suits the situation to solve the hurdles in Government High School, Puliyur. This research aims to prove that there is no disparity in learning ability of tribal children with that of those children in the plains and tries to prove that anyone can go and work in tribal schools. The Variety of Teachers and Teaching Methodologies
could be supplemented by mobile method and enhance the learning of the Tribal Children.

**Objectives:**

- To study the problems faced by the students in learning English and Science.
- To find out the causes for Low Achievement.
- To prepare Supplementary Materials.
- To give orientation of teachers in Mobile Teaching.
- To introduce Mobile Teaching to students.
- To find out the effectiveness of Mobile Teaching among the students.
- To assess the learning levels of the students.
- To improve the learning level of the students of Government High School, Puliyur in learning English.
- To improve the learning level of the students of Government High School, Puliyur in understanding Science.

Definitions of the term used in the study

**Mobile teaching:** the terminology of mobile teaching state that the teaching process is done with mobility, that is the teaching process is carried out with moving the teachers from one place to another. The term teaching explains that the students studying in GHS Puliyur, English and Science is taught with the help of the external teachers.

**Tribal students:** Irrespective of their category it refers students living in that area which is a tribal area.

**Methodology:**

- The Teachers suitable for Mobile Teaching were selected on the basis of their Access, Dedication, Interest in teaching the subject and Creative Thinking.
- The selected teachers were given orientation about Tribal Children, Teaching Methodology and caring the Children.
- They were informed to attend the school in time on the dates in which they were deputed.
- The Government High School, Puliyur was Continually Monitored by
the researcher and supervised by the BRC, Supervisor Alangayam.

- The impact of Mobile Classes was studied by administered Suitable remediation

**Sample:**

All the students (Boys – 34, Girls – 31) studying 9\textsuperscript{th} Standard in Government High School, Puliyur were taken as Experimental Group, and the students studying 9\textsuperscript{th} Standard in High School Nellivasal were taken as the Control group.

**Tool:**

- The researcher developed the tool in consultation with Practising Subject Teachers in accordance with their Subjects English and Science.
- The tool used for Pre-test in Control group was used for Experiential Group also.
- A Separate Post-test tool was developed for Science.
- Since the English Pre-test tool determines the Skill the same tool was used for Post-test also

**Statistical Technique Used:**

- The Pre-test and Post-test score were tabulated and subjected to ‘t’ test.

**Intervention:**

In order to enhance the achievement level of tribal students studying in IX std of Alangayam Block. Mobile team teaching was put forth. The project was executed in Alangayam Block as its stands last in the X std result. In alangayam block, most of the schools are situated in hilly terrain which is inaccessible out of these schools GMS, Puliyur had no teacher in English, science and social science for the past 2 years. social science is handled by Tamil teacher. But English and science remained without a teacher. Due to this the results of X std was very low in the last academic year. so GHs pulliyur school of Alangayam block was selected.

This project was executed with valuable suggestion from principal, with proper permission from CEO, DEO, DEEO and RMSA
Findings:

The outcome of the statistical analysis are summarized as below,

- There is significant difference between the pretest scores of male and female students of IX std, GHS, puliyur in English. This shows that the female students have the natural tendency to learn a language.

- There is no significant difference between the posted scores of male and female students of IX std, GHS, puliyur in English. This shows that the learning level of male students is on par with the learning level of female students due to mobile teaching in English.

- There is significant difference between the male pretest scores and male post test scores of IX std, GHS, puliyur in English. This shows that the mobile teaching has enhanced the performance of the male students.

- There is significant difference between the pretest and posttest scores of female students of IX std, GHS, puliyur in English. This shows that the female students learning English has improved due to mobile teaching intervention.

- There is significant difference between the pretest and posttest scores of students of IX std, GHS, puliyur in English. This shows that the learning level in English has improved a lot due to mobile teaching.

- There is no significant difference between the pretest scores of male and female students of IX std, GHS, puliyur in Science. This shows that the achievement level of boys and girls are same in learning science.

- There is significant difference between the posttest scores of male and female students of IX std, GHS, puliyur in Science. This shows due to mobile teaching understanding of science among female students is greater the male students.

- There is significant difference between the male pretest scores and male posttest scores of IX std, GHS, puliyur in Science. This shows that the achievement level of male students have increased due mobile teaching.

- There is significant difference between the pretest and posttest scores
of female students of IX std, GHS, Puliyur in Science. This shows that
the understanding level of the female students has improved due to
mobile teaching.
There is significant difference between the pretest and posttest scores of
students of IX std, GHS, Puliyur in Science. This shows that the mobile
teaching has improved the overall performance of the students.

**Implication:**

- The students on interview revealed that this was the first time they were
  exposed learning English with dictionary.
- The content knowledge and achievement level of students are enhanced
due to mobile teaching.
- Mobile teaching can be utilized in schools where vacant positions are
  more.
- Teaching by external teachers creates more attention and attraction.

The cost-effectiveness calculations show that this programme is less
economical and more efficient.

**Recommendations:**

- The mobile team teaching is crisp and complete it gave more attention
  and attraction.
- The mobile team teaching proved the improved learning levels among
  the tribal children.
- This study could be more effective and implemented in accessible
  schools.
- The mobile team teaching strategy can be used continuously as a
  proper content enrichment programme.
- The tribal schools need special attention to improve the learning levels.
- A similar study may be undertaken among students in plains.
  + this methodology can be applied to all the hill area schools.
- This study could be applicable in the schools where the teachers go on
  medical/maternity leave.