

# DISTRICT INSTITUTE OF EDUCATION AND TRAINING KRISHNAGIRI

## Action Research Abstract-2023-2024

**Action Research Number (2023-24)**

**TN-KGI01**

**1.Name of the Investigator:** P.Madhu, Senior Lecturer

**2.Name of the DIET:** DIET, Krishnagiri

**3.Title** : Solving the difficulties of learning problem in  
organisation of plant tissues for ninth standard students

### **4.Objectives:**

1. To know the different types of tissues and their morphology.
2. To identify how tissues are organized in specific patterns to form organs.
3. To understand how tissues, perform life activities in plants.
4. To gain knowledge about the structural organization of tissues.

### **5.Sample:**

The study sample consisted of 34 students enrolled in the ninth standard at GHS,  
Karagur

### **6.Tool:**

Questionnaire for Pre-test and Post-test

### **7.Methodology:**

Single group experimental method

#### **INTERVENTION-Activity**

- Demonstration of simple experiments to teach plant tissue
- Microscopy Observation, Cross-Section Preparation and Tissue Dissection

### **8.Findings:**

- The mean value of the pre-test has increased from 59.17 to 86.79 to the post-test.

- IX standard students have understood the different types of tissues and their morphology.
- IX standard students have Identified how tissues are organized in specific patterns to form organs
- IX standard students have Understand how tissues perform life activities in plants.
- IX standard students have Gained knowledge about the structural organisation
- IX standard students have familiarized with the process, types and significance

## PHOTOS



Investigator handled hands on activity



Pre-test conducted by investigator



Practiced activity



Post-test conducted by investigator

**1. Name of the investigator:** S.K. SANTHI, Senior Lecturer.

**2. Name of the DIET:** DIET Krishnagiri

**3. Title:** Fostering creativity among primary teachers for supporting Ennum Ezuthum  
classroom activities

**4. Objectives:**

- To identify the areas of lessons in term 3 that requires more activities.
- To prepare teaching learning materials such as toys, art and craft works.
- To train the teachers on drawing techniques which are helpful in effective classroom practices of Ennum Ezhuthum.

**5. Sample:** 25 Teachers from Hosur block

**6. Tool:** An observation schedule to elucidate Teacher's performance

**7. Methodology:**

- Creating various art and craft works, toys from trash.
- Puppetry
- Drawing and painting

**8. Findings:**

- Creativity plays a major role in primary education, thus new ideas of teachers must be highlighted and disseminated among other teachers.
- Teachers can try out different ideas/techniques to engage students.
- Experiential learning helps students to attain a life long learning.
- Ennum Ezhuthum success stories should cover the teachers who are creative in their approaches and techniques in their classrooms with their own ideas.

**Photos:**











**1.Name of the Investigator:** Dr N. INDIRA

**2.Name of the DIET** : DIET-Krishnagiri

**3.Title:** Improving Physical and Mental Well-Being Through Pranayama among the IX-Standard Students

#### **4.Objectives**

- To identify the physical and mental well-being of the students.
- To improve physical and mental well-being through pranayama.
- To find out the effectiveness of physical and mental well-being of the students after the intervention.

**5.Sample:** 30 - IX-Standard students of Government High Schools in Kaveripattinam Block of Krishnagiri district were selected as the sample of the study.

**6.Tool:** A checklist was prepared by the action researcher to test the pranayama of IX-Standard students. A pre-test and post-test were conducted in the balloon blow activity and 30 seconds breathing exercise.

#### **7.Methodology: Pranayama Strategies Adopted by the Action Researcher**

The action researcher following the teaching pranayama strategies are

- Lecture Method
- Demonstration and Explanation Method
- Visual Aids Method
- Guided Practice Method
- Encourage Self-Exploration Method

#### **8.Findings**

- Students pranayama level was tested through a check list in balloon blow activity and 30 seconds breathing activity in which differences was resulted in both pre-test and post-test.



- Students had their highest mean score has 55% in post-test. There was a slight difference in gender-wise mean scores in which male' mean score was little higher than female' mean score in post-test.



**The action researcher demonstrated the foot reflex massage**



**The students practiced the nadi sudhi pranayama**



**The action researcher demonstrated the basthirika pranayama**



**The students practiced the basthirika pranayama**

**1.Name of the Investigator:** S.K. Saravanan

**2.Name of the DIET:** DIET, Krishnagiri

**3.Title** : Enhancing the knowledge in Generalisation of Patterns among upper Primary Students.

**4.Objectives:**

- To construct and justify generalisations of number patterns.
- To develop activity to enhancing knowledge in generalization of patterns among upper primary students.

**5.Sample:**

26 students from PUMS Puthumotur of Bargur Block in Krishnagiri District were taken as the sample for the study.

**6.Tool:**

Questionnaire for Pre-test and Post-test

**7.Methodology:**

Single group experimental method

**Intervention-Activity**

- Hands-on activity, Use Visuals and image, Math games, Tricky idea and Worksheets

**8.Findings:**

- ❖ The VII&VIII standard student's pretest and posttest mean scores on improving patterns skill were 47.69 and 88.85 respectively.
- ❖ Effective teaching strategies such as hands-on activities, visual representations, and real-life examples can enhance students' understanding of pattern generalization.

# PHOTOS



Investigator handled hands on activity



Presented activity by students



Practiced activity



Practiced activity



## **Action Research Number (2023-24)**

**TN-KGI06**

**1. Name of the Action Researcher** : B.Amutha, Lecturer

**2. Name of the DIET** : DIET, Krishnagiri

**3. Title:** ENHANCING THE SCIENCE PROCESS SKILLS AMONG VI STANDARD STUDENTS IN BARGUR BLOCK

### **4. Objectives:**

- ❖ To understand the basic concepts of science through science process skills.
- ❖ To improve science process skills among VI standard students.
- ❖ To explore the science process skills.

### **5. Sample:**

The Action Researcher selected 43 students from GGHSS Bargur in Bargur block were selected as sample for the study.

### **6. Tool:**

Questionnaire was prepared by the action researcher for Pre-test and Post-test

### **7. Methodology :**

Single group experimental design

### **8. Intervention:**

- Question box
- Teaching cum Demonstration
- Cooperative Learning Approach
- Learning by doing
- Hands on experience

### **9. Findings**

- ❖ There is significant difference between the pre-test and the post-test scores.
- ❖ The average scores in pre-test 53.81% and in post-test 70.30%. High mean score is found in Post-test.

- ❖ Majority of the students felt that science concept through activities retains for a longer period of time.
- ❖ Students have varied observing science process skills. Overall students have good observing skills.

## PHOTOS



Students involved Experimentation



Student presented science concept through Eclipse working model



Students involved group discussion facilitated by Action Researcher



Doubts clarified by Action Researcher

## **Action research Number (2023-24)                      TN – KGI 07**

**1. Name of the Investigator**                      : Mrs.S.SHANMUGAPRIYA, Lecturer

**2. Name of the DIET**                                      : Krishnagiri, Krishnagiri District

**3. Title** : INTENSIFYING PICTURE COMPOSITION DESIGNING SKILL  
WITH WRAP OF ICT TOOLS AMONG PRIMARY SCHOOL TEACHERS

### **4.Objectives of the study:**

- To enrich teachers' knowledge through practicing the basic shapes, forms and composition through Visual Thinking Strategies.
- To develop a skill to adapt different shading techniques, drawing of different pictures and creating picture composition through Progressive Skill Building Techniques.
- To intensify Picture Composition designing Skill through suitable selection of Interactive App as a supportive ICT tools.

**5. Sample** :18 Primary teachers from Kaveripattinam block in Krishnagiri district .

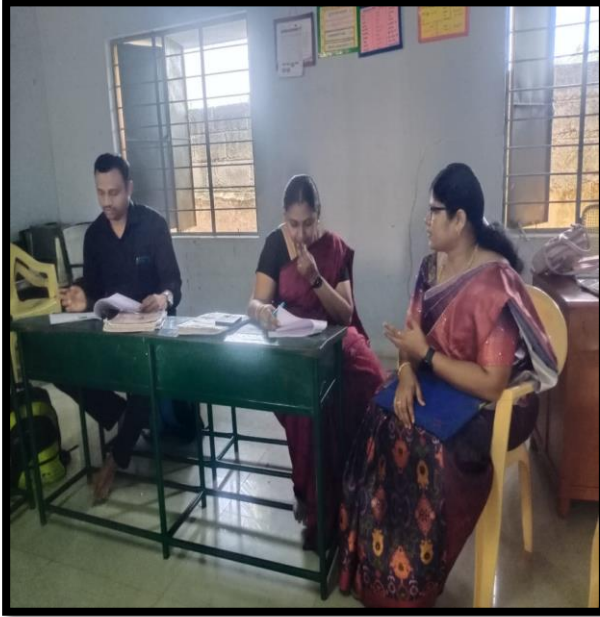
**6.Tool:** Question paper tool

**7.Methodology:** 1. Explore drawing through Paper Pencil method,2.Visual Thinking Strategies -Module1 3. Progressive Skill Building Techniques -Module 2 4 .Installation of 3 Interactive Apps -Module3(for each strategy 2,3&4 orientation given through face to face hands on activities through Microlearning Module)

### **8. Findings:**

- Post-test score 71.7 is higher than the pre-test score 25.9 in the level of picture designing and composition skill of primary school teachers. There is significant differences in both pre-test and post-test scores of Primary School teachers in all 5 schools of kaveripattinam block .Drawing techniques provide a tangible platform for the primary classes handling teachers because its an appropriate platform for them to grasp fundamental concepts such as lines, shapes, forms, compositions in drawing balance, and focal points.





**1.Name of the Investigator:** Dr. N. Nisha

**2.Name of the DIET:** Krishnagiri

**3.Title:** DEVELOPING THE ACTIVITY BASED LEARNING IN SCIENCE CONCEPTS THROUGH EXPERIMENTS FOR UPPER PRIMARY STUDENTS.

**4.Objectives:**

- ❖ To ensure that the learning shifts away from the rote methods.
- ❖ To engage the students and enhance their scientific knowledge and skills through the activity based learning.
- ❖ To enrich the students' long term memory through the activity based learning.

**5.Sample:**

- ❖ The practitioner selected PUMS, Chinna Karapattu, Uthangarai block as the sample 22 students studying class VIII in that school 12 boys and 10 girls in that class.

**6.Tool:**

- ❖ Pre-test and Post –test questionnaire

**7.Methodology:**

Pre test was conducted to 22 students using the constructed tool. Activities was framed by the Practitioner and it was implemented in the class room environment. Treatment is given to the students by the concerned subject teacher. After the treatment post test was conducted using the same tool to study the effect of the treatment. Scores are analyzed statistically.

**8.Findings:**

- ❖ The developing the knowledge of activity based learning in science concepts through experiment of the student is found to be high.
- ❖ There is significant mean difference between pre test and post test achievement score of the students studying in the VIII standard were 25.0 and 58.36 respectively.





The students were Practicing the Experiment Light Reflection in Learning by doing method.



The Action Researcher was demonstrated about the atmospheric pressure Experiment.



The Action Researcher demonstrated the surface Tension Experiment to the students.



The Action Researcher was demonstrated with lectured about the Light Reflection Experiment.

**1.Name of the Investigator : S.RAMYA**

**2.Name of the DIET : DIIET-KRISNNAGIRI**

**3.Title :** Improving handwriting skill in English among VI standard students through effective strategy.

**4.Objectives:**

The students should be able

- To practice writing each letter properly
- To learn on correct spacing between words
- To know about basic punctuation rules in writing
- To practice copying without any spelling mistake
- To write legibly

**5. Sample:**

36 VI Standard students of RVGBHSS Hosur in Hosur block were selected as the sample of the study.

**6. Tool:**

In this action research, assessment scale was prepared by the action researcher to test the handwriting skill among VI standard students. This tool was used in both pre test and post test.

**7. Methodology:**

Single Group Experimental Design

**Intervention:**

Free Hand style, Awareness of Lines, Word-finger-word, A Day a Page, Touching the lines, Bottom to Top line and Peer Support activities were given to students

**8. Findings:**

- ★ The VI standard student's pretest and post test mean scores on improving handwriting were 36.86% and 61.44% respectively.
- ★ Awareness of Lines activity helped them to write alphabets without any confusion.
- ★ Word-Finger-Word activity transformed the students' spacing between words with uniformity
- ★ For maintaining uniformity and legibility, Touch the lines activity played vital role.



- ★ Consistency of writing Four-ruled note with proper guidance had great impact on the students handwriting in English

**Photos:**



**Awareness of Lines activity was elucidated by Action Researcher**



**Pair Activity was performed by the students to improve handwriting**



**Touching the lines activity was illustrated by Action Researcher**



**Feedback on handwriting was provided by Action Researcher**

**1.Name of the Investigator :M.KALAI GNANASELVI**

**2.Name of the DIET : DIIET-KRISNNAGIRI**

**3.Title :** Resolving the difficulties in solving LCM and HCF problems among VI standard students

**4.Objectives:**

- ❖ To resolve the difficulties of students in solving LCM and HCF problems.
- ❖ To explore the new strategies in teaching LCM and HCF problems.
- ❖ To find out the difficulties of students in solving LCM and HCF problems.

**5. Sample:**

VI<sup>th</sup> standard 31 students from GBHSS-Rayakottai in Kelamangalam block are selected as sample for this study.

**6. Tool:**

A Questionnaire was prepared by the practitioner for Pre-test and Post-test. The tool consists 20 one mark questions. Questions based on teaching strategies in classroom transaction. Questionnaire was prepared in Tamil language .

**7. Methodology:**

Single Group Experimental Design

**8. Findings:**

- ★ The intervention significantly improved students' performance in solving LCM and HCF problems, as evidenced by a substantial difference between pretest and post-test scores.
- ★ On average, students scored 11.7% in the pretest and 63.06% in the post-test, indicating a remarkable improvement.
- ★ Students demonstrated enthusiasm and receptiveness towards learning in reformed classroom environments.

**Photos:**





Practitioner was conducting activity for finding LCM and HCF using beads



ICT activity-Geogebra class conducted by Mrs.Kalaignanselvi.,Lecturer

DIET –Krishnagiri



Play way activity conducted by the Practitioner -factors game



Classroom practice by peer group leaders