ACTION RESEARCH ABSTRACT

CONSOLIDATED REPORT

Name of the DIET : DIET, PALAYAMPATTI, VIRUDHUNAGAR DISTRICT

No. of Action Research: 09

S.No.	Name of the Action Researcher	Title
1.	S. Manivannan,	Enhancing the understanding in the conceptual
	Senior Lecturer	questions in Physicsamong VI std students through
		Simple investigations based on LO S604
2.	வெ.ந.சடாச்சரவேல்,	ஐந்தாம் வகுப்பு மாணவர்களின் கதை எழுதுதல்
	முதுநிலை விரிவுரையாளர்	திறணைத்தொடர்ச்சித்திரங்களைப் பயன்படுத்தி மேம்படுத்துதல்
3.	G. Thanalakshmi,	Removing the obstacles in understanding the structure and
	Senior Lecturer	functions of cell and cell components among upper primary
		students through Word Wall
4.	அ.ந.வெங்கடசாமி,	எட்டாம் வகுப்பு மாணவர்களுக்கு வெப்பவியல் பாடத்தில்
	முதுநிலை விரிவுரையாளர்	புரிந்து கொள்வதில் ஏற்படும் இடர்பாடுகளை எளிய
		பரிசோதனைகள் மூலம் களைதல்
5.	PL.Alagappan,	Enhancing the English Reading Skills among 5th Standard
	Lecturer	Students through Activities.
6.	M.Parameswaran,	Developing Art Skill among Upper Primary Students through
	Lecturer.	Visual Art Practice in Aruppukkottai Block.
7.	T. ELANGO,	Fostering Scientific Temperament among Standard
	Lecturer	Eight Students through Science Subject using
		Participatory Approach.
8.	L.Rani,	Enhancing the understanding skill on Physical and Chemical
	Lecturer	changes of matter through visual and practical method
9.	Dr.D.Kasi	Enhancing the learning attainment of Identities in Algebra
	Lecturer	among class VIII children by using Jigsaw technique

- 1) Name of the Investigator: S. Manivannan, Senior Lecturer, DIET, Palayampatti, Virudhunagar District.
- 2) Name of the DIET: District Institute of Education and Training,
 Palayampatti, Virudhunagar District.

3) **Title**:

Enhancing the understanding in the conceptual questions in Physics among VI std students through Simple investigations based on LO S604 Learning Outcome Involved in the study: (LO S604)

Conducts simple investigations to seek answers to queries, example, what are the food nutrients present in the animal fodder? Can all the physical chances be reversed? Does a freely suspended magnet align in a particular direction?

4). Objectives of the study:

- To enhance the habit of conceptual learning in Physics
- To improve the scientific temper among students
- To develop the skill in finding the facts in every day Science
- To identify the misconceptions in Physics and to remove it.
- To strengthen the problem-solving skills of the students.
- To identify the best learning strategy for concepts in Physics

5). Sample:

The investigator has selected 19 Students from VI standard of Government Boys Higher Secondary School, Kariapatti, Kariapatti block as the sample of the study. These students were studying in VI standard during the year 2023-24

6) Tools:

The investigator has prepared a standardized tool for Pre and post-test to measure the understanding of the students in conceptual questions in Physics.

This tool contains 20 conceptual objective type questions.

7) Methodology:

Experimental method- for each conceptual question is planned with suitable teaching learning strategy is selected to the students. It helps the students to understand the subject Physics.

8) Findings:

Major findings of the study

- ✓ Simple investigations in the conceptual questions help the students to achieve the learning outcome.
- ✓ The average means score of the pre-test was 44 and the post-test was 71.
- ✓ It shows that the pre-test and post test scores differ significantly.
- ✓ This approach can be enhanced to all science learning outcomes

Photos



செயலாராய்ச்சி சுருக்கம் TN- VNR 02

- 1. **செயலாராய்ச்சியாளர் பெயர்** : வெ.ந.சடாச்சரவேல், முதுநிலை விரிவுரையாளர்
- 2. **நிறுவனத்தின் பெயர்**: மாவட்ட ஆசிரியர் கல்வி மற்றும் பயிற்சி நிறுவனம், பாலையம்பட்டி ,விருதுநகர் மாவட்டம்.

3. செயலாய்வுத் தலைப்பு:

ஐந்தாம் வகுப்பு மாணவர்களின் கதை எழுதுதல் திறனைத் தொடர்ச்சித்திரங்களைப் பயன்படுத்தி மேம்படுத்துதல்

4. ஆய்வு நோக்கங்கள் :

- ் சொல்லாட்சி திறனை வளர்த்தல்
- ் தொடர் அமைக்கும் திறனை வளர்த்தல்
- 🔾 நிறுத்தக்குறிகளை பயன்படுத்தும் திறனை வளர்த்தல்
- ் முறையான பத்தி அமைத்து எழுதும் திறனை வளர்த்தல்
- ் கதை நிகழ்வுகளை நிரல்பட எழுதும் திறனை வளர்த்தல்

5. ஆய்விற்கு உட்படுவோர் :

விருதுநகர் மாவட்டம், அருப்புக்கோட்டை ஒன்றியம், செட்டிகுறிச்சி, ஊராட்சி ஒன்றிய தொடக்கப்பள்ளியில், ஐந்தாம் வகுப்பு பயிலும் 15 மாணவர்கள் மற்றும் 10 மாணவியர் ஆக மொத்தம் 25 பேர்.

6. ஆய்வுக்கருவிகள் :

1. முன் சோதனை, 2. பின் சோதனை

7. ஆய்வு முறை

ஒற்றைக் குழு பரிசோதனை முறை

8. ஆய்வு முடிவுகள் :

மாணவர்களுக்கு பொருத்தமான சொல்லை பயன்படுத்துதல், சரியான சொற்றொடர் அமைத்தல், நிறுத்தக்குறிகளைச் சரியாக கையாளுதல், கதை நிகழ்வுகளை நிரல்பட முழுமையாக எழுதுதல் ஆகிய திறன்கள் அதிகரித்து கதை எழுதும் திறன் மேம்பட்டுள்ளது.





ஆய்வாளர் தொடர் சித்திரங்களைப் பார்த்து கதை எழுதும் முறையை விளக்குதல்





பின்சோதனை - மாணவர்கள் தொடர் சித்திரங்களைப் பார்த்து கதை எழுதுதல்

1. Name of the Investigator: G. Thanalakshmi, Senior Lecturer

2. Name of the DIET: DIET, Palayampatti, Virudhunagar

3. Title:

Removing the obstacles in understanding the structure and functions of cell and cell components among upper primary students through Word Wall

4. Objectives

• To investigate the impact of a Word Wall on upper primary students' understanding of cell structure and function.

• To identify specific cell-related concepts where the Word Wall demonstrably improves student comprehension.

 To examine the impact of the Word Wall on students' vocabulary acquisition in cell biology.

5. Sample:

All the Upper Primary students (16) of Municipal Middle School, Vellakarai Road, Sattur

6. Tool:

Pretest and post-test questionnaire

7. Methodology

Experimental - This action research investigates if a visual and interactive Word Wall can improve understanding of challenging science concepts and ignite a passion for cell biology in young learners, empowering educators.

9. Findings:

Pre-test scores averaged 30.3%, jumping to 73.5% after the intervention. Class 7 performed best (87.8%), suggesting the Word Wall holds promise for boosting learning in cell biology. Further research is needed, but this project offers valuable insights for educators seeking to improve student success.



The investigator is administering a post-test to the students.



Students proudly show off their completed activity sheets.



Students learn about cell parts from a detailed diagram.



Investigator introduces a new intervention approach.

செயலாராய்ச்சி சுருக்கம் TN- VNR 04

- 1. செயலாராய்ச்சியாளர் பெயர்: அ.ந.வெங்கடசாமி, முதுநிலை விரிவுரையாளர்,
- 2. நிறுவனத்தின் பெயர்: மாவட்ட ஆசிரியர் கல்வி மற்றும் பயிற்சி நிறுவனம், பாலையம்பட்டி, விருதுநகர் மாவட்டம்.

3. செயலாய்வுத் தலைப்பு:

எட்டாம் வகுப்பு மாணவர்களுக்கு வெப்பவியல் பாடத்தில் புரிந்து கொள்வதில் ஏற்படும் இடர்பாடுகளை எளிய பரிசோதனைகள் மூலம் களைதல்

4. ஆய்வு நோக்கங்கள் :

- மாணவர்கள் வெப்பவியல் பாடத்தை புரிந்து கொள்வதில் இருக்கும்
 இடர்பாடுகளை களைதல்.
- எளிய பரிசோதனைகள் புரிந்து கொள்வதை அதிகப்படுத்துகிறதா என அறிதல்
- பாட ஆசிரியர்களுக்கு புதிய முறைகளைக் காட்சிப்படுத்துதல்.

5. **ஆய்விற்கு உட்படுவோர்** :

விருதுநகர் மாவட்டம், திருச்சுழி ஒன்றியம், ம.ரெட்டியாபட்டி அரசு மேல்நிலைப் பள்ளியில் எட்டாம் வகுப்பு இரிவில் பயிலும் அனைத்து மாணவ மாணவிகள்.

6. ஆய்வுக்கருவிகள் :

செயலாய்வாளரால் வடிவமைக்கப்பட்ட 20 புறவய வினாக்கள்

7. ஆய்வு முறை

முன் தேர்வு, விளைவுறு செயல்பாடுகள், பின் தேர்வு, பகுப்பாய்வு, அறிக்கை இடுதல்.

ஆய்வு முடிவுகள்

மாணவர்களின் முன் தேர்வு, பின் தேர்வு சராசரிகளில் வேறுபாடு 42.2. எனவே பயன்படுத்தப்பட்ட விளைவுறு செயல்பாடுகள் எட்டாம் வகுப்பு மாணவர்களுக்கு வெப்பவியல் என்ற பாடத்தைப் புரிந்து கொள்வதில் உள்ள இடர்பாடுகளை களைகிறது என்று கண்டறியப்பட்டது.



மாணவர்களுக்கு முன் சோதனை நடத்தப்பட்டது



மாணவர்களுக்குப் பின் சோதனை நடத்தப்பட்டது

1. Name of the Investigator: PL.Alagappan, Senior Lecturer

2. Name of the DIET: DIET, Palayampatti

3. Title:

Enhancing the English Reading Skills among 5th Standard Students through Activities.

4. Objectives:

- To develop students' ability to understand simple English texts.
- To help students recognize letter-sound relationships, blend sounds to read words, and decode unfamiliar words independently.
- To introduce new words in context, teach sight words, and provide opportunities for students to practice using new vocabulary in sentences and short passages.
- ❖ To focus on developing basic reading fluency. This includes reading aloud with accuracy, appropriate pacing, and expression.

5. Sample:

11 Boys and 11 Girls of fifth standard students totaling 22 students of Panchayat Union Middle School, Villipathiri, Kariapatti Block.

6. Tool:

A questionnaire of 50 marks were taken from the areas like word reading, sentence reading, paragraph reading, advertisement reading and comprehending, paragraph reading and comprehending. This questionnaire is given to the students as Pre-test and Post-test. Pre-test was conducted to the students and the papers were evaluated.

7. Methodology:

Improving English reading skills among primary students in class 5 requires a combination of structured instruction, engaging activities, and ongoing support. Some effective strategies such as Phonics Instruction, Word Chain, Bingo game, Read Along App and Jumbled word tailored specifically for English language development.

8. Findings:

The means post-test scores differ significantly (0.01 level) with the pre-test mean. The implication of that is that the level of acquiring of the basic reading skills in English has increased due to the strategies adopted by the investigator during the research.



Students were involved in Read along activity with investigator



Students were involved in Phonics Instruction activity



Students were involved in Jumbled word activity with co-investigator



Students were involved in Word Chain activity with co-investigator

- 1. Name of the Researcher: Mr.M.Parameswaran.
- 2. Name of the DIET : Palayampatti Virudhunagar District.

3. Title:

Developing Art Skill among Upper Primary Students through Visual Art Practice in Aruppukkottai Block.

4. Objectives:

- (a) To investigate the relationship between participation in visual arts activities and students' academic performance in upper primary schools.
- (b) To examine the influence of visual arts education on students' creativity, critical thinking, and problem-solving skills.
- (c) To explore the effects of integrating visual arts into the curriculum on students' motivation, engagement, and enjoyment of learning in upper primary schools.

5. Samples:

The investigator selected 40 upper primary students of Panchayat Union Middle School Villipathiri Aruppukkottai Block.

6. Methodology:

As the problem selected for the present study is concerned with one of the current problems, the investigator described to employ the survey method for the collection of the data. Through various activities like 1. Object tracing 2. Drawing on popsicle stick 3. Observational Drawing 4. Doodling 5. Finger painting 6. Pavement art. Pre - test Post - test drawing skill checking questionnaire percentile analysis

7. Major Findings:

The finding of this study showed that, there were improvements in drawing skills of the students after 6 weeks of intervention. The result showed that significant improvement in the performance of the students. The intervention proved that the students achieved the expected learning outcomes. The data collection and tabulation were the evidence of the successful intervention.





Orientation

Students Practice



- 1. Name of the Investigator: T. ELANGO, Senior lecturer,
- 2. Name of the DIET: DIET, PALAYAMPATTI

3. Title:

Fostering Scientific Temperament among Standard Eight Students through Science Subject using Participatory Approach.

4. Objectives:

- To identify present level of scientific temperament and promote it among students.
- To Foster the Scientific Temperament among Standard Eight Students through Science Subject using Participatory Approach.
- To Promote and help students learn science differently. Disseminate information on Action research dissemination workshop to teachers.

5. Sample:

All the Students of Standard Eight from 8th ward Municipal middle school, Rajapalayam, are taken for the study. Student's medium of instruction is English medium.

6. Tool:

The tool was the scientific temper five-point rating scale developed by the investigator. Five point rating scale contains the statements taken from the lesson conservation of plants and animals. But in this study, Scientific Temper Dimensions such as 1. Questioning 2. Curiosity, 3. Observation, 4. Analysis 5. Rationality 6. Reasoning were only used to construct the tool.

7. Methodology:

Pre-test, intervention, post-test model of Experimental method. Single group experimental method was followed in this study. Hence the students of whole class are included as a single group for this study. The statistical measures such as Mean, and Average were applied.

8. Findings:

The Post Test mean score(75) is higher than that of pretest mean score value(30) and it is evident for the promotion of scientific temperament among students of 8th standard.



Field Trip to Western Gates



Riddles Activity on Deforestation Effect



Viewing Blue Cross Activity Video



Post Test Conduction

1. NAME OF THE INVESTIGATOR: L.Rani

2. DESIGNATION :Lecturer, DIET Palayampatti

3. TITLE:

Enhancing the understanding skill on Physical and Chemical changes of matter through visual and practical method

4. OBJECTIVES:

At the end of the activities, students were expected to be able to:

- define chemical and physical reactions
- give an example of an event that changed only the appearance of the substance
- give examples of events in which material changes into another substance.
- differentiate between physical and chemical properties of matter.

5. SAMPLE:

The sample for this study is 23 Students (English medium) of VIII standard students from GHS, Kalkuruchi, Kariyapatti block.

6. TOOL:

Pre - Test & Post Test Questionnaire

7. METHODOLOGY:

The investigator has selected a Paper Questionnaire tool to collect the data. The tool consists of 20 questions related to the basic knowledge of physical and chemical changes. This tool is prepared by the investigator and concerned science teacher. After the Pre-test, the treatment was given by the investigator. After treatment the investigator has checked the content knowledge through Post-test

8. FINDINGS:

- 1. The average scores of students in the Pre-test is 60.16% and in the Post-test is 74.2% respectively. This shows that the performance of the Post test is better than Pre test.
- 2. Practical personal learning get the students involved, and motivated by connecting what has learnt with what is experienced.
- 3. With experiential learning, students had given the opportunity to apply concept and ideas in a real-world situation where they too play an active role. As the student interacted with the information, it becomes real to them.
- 4. This model linked the knowledge to everyday experiences, students have a chance to see the topic's usefulness in daily life. Therefore, students' interest and attitudes are increased







1. Name of the Investigator : Dr.D.Kasi Lecturer (Mathematics)

2. Name of the DIET : DIET, Palayampatti, Virudhunagar District,

3. Title:

Enhancing the learning attainment of Identities in Algebra among class VIII children by using Jigsaw technique.

4. Objectives:

- 1) To identify common misconceptions and areas of difficulty among class VIII students regarding identities in algebra.
- 2) To Implement differentiated instruction strategies, including tiered assignments, small-group activities, and personalized learning pathways.
- 3) To facilitate collaborative learning experiences

5. Sample:

Municipal Muslim Middle School, Virudhunagar,. There are 27 students involved in this action research in the year 2023-2024.

6. Tool:

Investigator constructed Tool

7. Methodology:

- ➤ Pre-test Intervention Post test
- ➤ Teaching Jigsaw technique approach of lesson packages for VII standard concepts of algebraic identities developed by the investigator to the experimental group for 15 days.

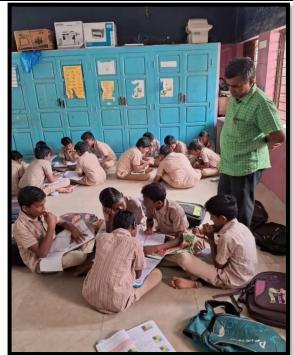
8. Findings:

Since Mean, Median and average scores are increased in Post-test comparing with Pre-test, it ensures that there is an improvement in acquisition of knowledge in algebraic identities could be seen

PHOTOS







Four groups interaction on their identities (Jigsaw)



Post – Test at Municipal Muslim Middle School, Virudhunagar