

## ACTION RESEARCH REPORT

**NAME OF THE TOPIC** : Improving the vocabulary of students of STD VI in English using **constructivist approach**

**NAME OF THE FACULTY** : Dr.A.Ananthi

Senior lecturer

DIET, Kalayarkoil

**SUBJECT** : English

**RESEARCH CONDUCTED IN** : G.H.S Kallal and PUMS Thalakovoor

**TARGET GROUP** : VI std, 25 students

### **PROBLEM IDENTIFIED:**

Learning is complex task that requires a student to use and apply a range of cognitive skills. A student's ability to retain information while performing concurrent processing, often referred to as working memory (WM), is critical to the acquisition of increasingly more complex knowledge and skills. 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. Language teaching profession has realized in time that the conventional method is not efficient to achieve communicative competence (Groot, 2000). Hence, an attempt was made to know to what extent the effect of constructivist learning were effective in improving vocabulary retention among students.

### **INTERVENTION**

The investigator reviewed a number of studies related to constructivist approach. Knowledge is constructed by learners through an active, mental process of development; learners are the builders and creators of meaning and knowledge (Sharma, 2014). It is based on interests, general and specific abilities, attitudes, achievement, aspirations and motivations of students. This

strategy offers flexibility, motivation, adaptation, creativity and versatility for the teacher and the students. It encourages students to learn through personal experiences along with others" help and suitable learning material (Grabe&Grabe, 1998). Based on the review the investigator designed the study as parallel group pre-test, posttest experimental design. The objectives are as follows, 1) to assess the level of vocabulary retention among the STD VI students.2) to develop constructivist strategies to enhance the vocabulary retention among the STD VI students.3) to implement the strategies to enhance the vocabulary retention among the STD VI students,4) to find out the effect of strategies in improving the vocabulary retention among the STD VI students. Next, the investigator selected the sample. The sample was drawn by purposive sampling technique. The sample was collected from selected two schools, students studying in standard of VI th at upper primary level. Twenty students from each school were selected. Totally 40 students were included for the study. 20 students were selected for Experimental group and 20 for Control group. The vocabulary test items tool were constructed by the investigator. Based on this, the investigator developed the innovative constructivist techniques to improve vocabulary retention through the following teaching learning strategies.

- a. Scaffold
- b. Eye Spy
- c. Word pair
- d. Linear Array
- e. Scavenger Hunt
- f. Vocabulary Photo Album
- g. Vocabulary Relay
- h. The Concept Cube

The pre-assessment was conducted and assessed by investigator for the control and the experimental group. After the pre-assessment the experimental treatment was given then the post –test was conducted.

## **OUTCOME**

- ❖ The pre -test mean score is **13.4** and the standard deviation is **5.9**. The post -test mean score is **23.6** and the standard Deviation is **14.5**. It is inferred that the post - test achievement is greater than the pre-test achievement in the experiment group.
- ❖ It is inferred that the increase of mean score in the experimental group is 57.2.
- ❖ The pre -test mean score is **16.8** and the standard deviation is **4.9**. The post -test mean score is **17.6** and the standard Deviation is **10.5**. It is inferred that the post - test achievement is equal with the pre-test achievement of the control group.
- ❖ It is showed that the increase of mean score in the experimental group is 0.80..
- ❖ It is implied that the obtained't' value 17.546 is greater than the table value of't' at 0.01 level of significance. It inferred that there is a significant difference in their vocabulary achievement through constructivist approach of VI std students.

## **RECOMMENDATIONS**

The present research can be disseminated in other schools, the following leaning process will be enriched to improve quality education

- a) Cognitive process of learning will be activated
- b) Practicing these strategies improves the retention among the students..
- c) Multiple representations for a single concept improve students' vocabulary.
- d) Learning environments emphasize knowledge construction instead of knowledge reproduction.
- e) Enriched environments provide real-world sense.
- f) Encourage thoughtful reflection on experience.

## **CONCLUSION**

In the present study, the investigator developed vocabulary among the students through constructivist approach. The findings revealed that there is a continuous improvement in all the dimensions of vocabulary retention. It further shows that every teacher needs to review / update his/her potential in all possible novel/new/ innovative strategies, so as to modify and improve his/her teaching in accordance with the changes envisaged in the educational system.

#### ACTION RESEARCH REPORT

**NAME OF THE TOPIC:** Resolving the obstacles in learning mathematics for the students with learning disability at VI std level using Brain Based Learning

**NAME OF THE FACULTY :** P.Narumanam

Senior lecturer

DIET, Kalayarkoil

**SUBJECT** : Mathematics

**RESEARCH CONDUCTED IN:** G.Hr.S.SMaravamangalam

**TARGET GROUP** : VI std, 25 students

**PROBLEM IDENTIFIED**

Today's students are demanding a change in the classroom because of their ability to gather information faster than any other generation. With some foundational knowledge about the physiology of the human brain, supported by neurocognitive principles of how the brain learns and cognitive translations of what those brain-friendly strategies look like in the classrooms, teachers are armed with an astonishing arsenal of tools for reaching and teaching all children. Hence the investigator realized that any meaningful attempt in this regard will help teachers as well as students to keep them abreast so she selected the topic effectiveness of brain based learning intervention for students with learning disabled in mathematics among VI thstd in kalayarkoil block

### **INTERVENTION**

The investigator reviewed a number of studies related to brain based learning. The term 'Learning Disabilities (LDs)' emerged from a need to identify and serve this later group of children. The term learning disabilities was first coined by Samuel Kirk in 1963 to describe children who have serious learning problems in schools but do not fall under other categories of handicap. Naturally, the learning process depends on the effective functioning of the brain. Clearly, teaching will be more effective if it uses methods which are aligned with how the brain best attends to understand and retain information (John J. Ratey M.D 2008). Based on the review the investigator designed the study a single group pre-test, posttest experimental design. The objectives are as follows, 1) to design Brain based learning intervention in mathematics. 2) to find out the effectiveness of Brain based learning intervention in mathematics for learning disabled students. 3) to arise the curiosity of the students. 4) to obtain maximum participation of the students. Next, the investigator selected the sample. The sample was drawn by purposive sampling technique. The sample was collected from selected G.Hr.SSschool, Maravamangalam, 15 students were selected for the study. The achievement tool were constructed by the investigator. Based on this, the investigator developed the innovative brain

based learning techniques to Resolving the obstacles in learning mathematics for the students with learning disability through the following teaching learning strategies.

- i. Visual Blending
- j. Categorization
- k. Mnemonics
- l. Chunking
- m. Mind Mapping
- n. Focus on strength
- o. Synchronization

The pre-assessment was conducted and assessed by investigator for the experimental group. After the pre-assessment the experimental treatment was given than post –test was conducted.

## **OUTCOME**

- ❖ The pre -test mean score is **12.3** and the standard deviation is **6.2**. The post -test mean score is **20.1** and the standard Deviation is **10.5**. It is inferred that the post - test achievement is greater than the pre-test achievement.
- ❖ The obtained t' value 13.246 is greater than the table value of 't' at 0.01 level of significance. It inferred that there is a significant difference in their achievement. This showed the teaching through brain based learning has increased the achievement of VI std students.
- ❖ Creativity can be developed and innovation benefits both students and teachers.
- ❖ The brain-based learning as a teaching strategy it brings the shift from teaching to learning, student - centered approach, construction of learning environments, active learning and learning strategies. It also provides scope for self-organized and self-directed learning along with interactive and collaborative learning and learning become authentic and situated learning.
- ❖ The use of brain-based learning strategies in educational institutions has the potential not only to improve education, but also to empower people,

strengthen governance and galvanize the effort to achieve the human development goal for the country.

## **RECOMMENDATIONS**

The research study will be disseminate for all the schools and all the classes the following process will be improved and give quality education to future citizens.

- Teachers should design meaningful and challenging activities that invoke students' curiosity and search for meaningful learning.
- Teachers use appropriate strategies for instruction to shift from memorizing information to meaningful learning.
- Teachers should present content through in real life situation so the learner can identify patterns and connect with previous experiences.
- Create a relaxed alertness -low in threat, high in challenge to enhance learning and also teachers should employ various teaching strategies to attract individual interests and let students express their auditory, visual, tactile, or emotional preferences.

## **CONCLUSION**

In the present study, the investigator found that scores on achievement in mathematics was gradually increased, due to the brain based learning process. Teachers today have to 'Manage' rather than 'control' their classrooms. They have to 'facilitate' learning rather than 'instruct' their students. They have to 'Motivate' rather than 'discipline' the learners. For this, a range of brain based learning strategies has to be explored in the light of providing tomorrow's solutions for today's young.

## **ACTION RESEARCH**

Name of the Topic :

**"Enhancing the VIIIth Standard students understanding of the function of hear through self regulated learning (SRL)"**

Name of the Faculty :

**A.Sevarkodiyon**

Senior Lecturer

District Institute of Education and Training

Kalaiyarkoil

Sivagangai District

Subject :

Education

Research conducted in :

PRN Municipality middle school

Karaikudi

Target group ( sample) :

VIII th Std. No. 10

Problem identified :

Class room teaching is selection, sequencing and structuring of curricular aids and the transaction of the same to the student Learning which is considered as expected end result of teaching. Students learning is the performance of individualized tactics, techniques and strategies in learning in the elementary level. The end result of teaching is not only the direct academic effect in the form of students achievement but also it will produced some kind of natural effects - indirect effects on the students mainly take place in the affective domain. Such strategies are not adopted in the Class room teaching especially biology teaching (functioning of Heart). Hence the investigator identified and adopted one such strategy called self regulated learning (SRL) for the effective teaching of Heart functioning . Self regulated learning (SRL) is an active , constructive process whereby learner set goals for their learning and then attempt to monitor, regulate, and control their cognition, goals, and contextual features in the environment .

Hence the investigator selected a topic as **Enhancing the VIIIth Standard students understanding of the function of hear through self regulated learning (SRL)**

## **Interventions :**

### **a. Administration of pre test**

The pre test was given to the students of class VIII to assess prior knowledge on pressure

### **b. Teaching Design**

#### **Activities**

1. Motivation
2. Introduction
3. Activities
  - a. Activities with the help of picture card technique (PCT)
  - b. Group Activity with games (AWG)
  - c. Individual Activity with self evaluation card (SEC)
  - d. Activities with the help of self instructional materials (SIM)
  - e. Activities with the help of e learning sources (ELS)

### **c. Administration of post test**

The post test was given to the students of class VIII to assess knowledge on functioning of heart

## **Out comes :**

The following are the findings of the study

- The average mean scores of pre test was 8.7 and post test 13.2
- The standard deviation varies 1.7 to 3.2 for pre and post test
- The self regulated learning enhances the achievement level of individual learning process.

## **CONCLUSION**

Self regulated learning (SRL) is very effective and useful strategy in achieving the concept of heart functioning . This creates interest on the topic among students. From the study the investigator conclude that the new Strategy is an effective tool to learn the concept and remember longer.

**Name of the Topic**      Enhancing utilization of Atlas reading skill through play way method among VIII standard students.

<b>Name of the Faculty</b>	Mrs.D.Shiyamala, Lecturer, DIET – Kalayarkoil.
<b>Subject</b>	Geography.
<b>Research Conducted in</b>	The Investigator conducted this action research in Punchaayatt Union Middle School, Kannamangalam, Ilayangudi Union, Sivagangai District .
<b>Target Group</b>	16 students of male and female studying in VIII Standard .
<b>Problem Identified</b>	<ul style="list-style-type: none"> <li>➤ Education is a dynamic process and schools need to look for fresh ideas, innovative methods and learner specific pedagogies.</li> <li>➤ The curiosity of the learner is at its peak with never ending questions “ Why, What, Where, When and How” . He wants to experience and learn.</li> <li>➤ In sivagangai district most of the Social Science teachers are qualified in History degree. So they find difficult to handle the TLM like Globe, Maps and Atlas reading skill in geography .</li> <li>➤ The VIII standard students are not able to understand the utilizing skill of Atlas.</li> <li>➤ Hence the present study is attempted by the investigator.</li> </ul>
<b>Intervention</b>	<p>The investigator adopted pre-test and post-test for this study. The following Strategies were adopted by investigator in various stages.</p> <p><b>Motivation Stage</b></p> <ul style="list-style-type: none"> <li>➤ Atlas – Puzzle ( Questions for Groups)</li> <li>➤ India states along with Boundaries ( Map with Students )</li> <li>➤ Importance of Latitudes and Longitudes ( Location of the Place)</li> <li>➤ Physical Features by Colours ( Importance of Landforms)</li> </ul>

### **Implementation Stage**

- Mini Atlas ( Collection of Maps )
- Like a Dictionary ( My Name in World Countries , My Name in States and My Name in Districts )
- Page Number Activity ( Pair Activity )

### **Evaluation Stage**

- Find out the Capitals ( Small Group Activity)
- Atlas Scavenger Hunt
- World countries in Indian Flog

### **Findings**

- ❖ The students and teacher gain the knowledge of Atlas reading skill.
- ❖ It also implies that the teacher and students of Upper Primary level should realize the importance of utilization of Atlas reading skill.
- ❖ It is inferred that the percentage in the Post-Test level (83.28) is higher than the Pre-Test (34.53%) level. So it was determined there is a improvement of students level in utilizing of Atlas reading skill.
- ❖ In the absence of teaching aids geography lesson becomes dry and ineffective. So the Utilization of Atlas should make teaching concrete, effective and interesting.
- ❖ Atlas puzzles excited the students may lead to the curiosity of learning and helpful their achievement also.

### **Conclusion**

- ★ This investigation reveal that the learners understanding ability have been improved and enhanced by applying the innovative techniques .
- ★ Utilization of Atlas reading skill will be useful to the students for their higher studies.
- ★ Teaching profession which also useful for the better understanding of Location of countries and Various landforms in different regions of the world.

## **Action Research**

### **1. Name of the Topic :**

Enhancing the understanding of VII standard students about Acids through hands on experiments.

### **2. Name of the faculty :**

S.Kavikuil Charumathi, Senior Lecturer , DIET – Kalayarkoil

### **3. Subject :**

Chemistry

### **4. Sample School :**

Panchayat Union Middle School, Meathuraiyur, Ilayangudi Union.

### **5. Target group :**

VII standard students, 22 in nos.

### **6. Problem Identified:**

One of the objectives of teaching science is to develop skills of scientific inquiry to design and carryout scientific investigations and evaluate scientific evidences to draw conclusion. It is very essential to teach the concept acids through hands on experiments which is lagging in the classroom teaching. Hence the investigator selected a topic “Enhancing the understanding of Vii standard students about Acids through hands on experiments” in the research work.

### **7. Intervention:**

The following intervention were adopted

1. The pretest was given to the students of class VII to assess prior knowledge on “Acid”.
2. Teaching Design:
  1. Motivation:

Students were motivated through simple play activities by asking simple questions related to the topic acid.

## 2. Activities

- (a) Different fruits were tasted and observed the acidic nature.
  - (b) Identifying the solution whether it is acid or base by using litmus paper
  - (c) Phenolphthalein test was used to test acidic nature of different solution.
  - (d) Methyl orange test was demonstrated by the investigator and the same was given to the students for their practice.
  - (e) Natural indicators were prepared by the students with the help of the investigator and the same is used to test acidic nature of solution.
  - (f) Turmeric paste test was demonstrated among VII std students were allowed to do this test for their practice.
  - (g) The students were clearly understand the acidic nature through neutralization process.
3. The post- test was conducted among VII std students and data were collected and analysed.

## 8. Findings:

There is significant mean difference of the scores of students in pre and post test. That is the post test mean scored of the students 73 is found to be an increase from pretest mean scores of 68.

This increase in mean score shows that the usage of hands on experiments for teaching chemistry concepts was effective in developing scientific skills in terms of achievement.

## 9. Recommendations:

- ❖ Hands on experiment is an effective method that directly involves the learner to the active participation in the teaching learning process.
- ❖ Hand on experiment allows students to engage in kinesthetic learning.

- ❖ It allows students to do experiment to minimize the gaps between theory and practice.
- ❖ This practice engages the children in active participation.
- ❖ Hand on experiments can have a profound on learning in schools particularly on science teaching.

**10. Conclusion:**

The main objectives of science teaching learning process is enhancing mastery of Science subject increasing understanding of the complexity and ambiguity of empirical work, developing the nature of science, cultivating interest in science and learning and improving team work abilities.

The researches suggests that hands on experiments will be more likely to achieve these goals if they are designed with clear learning outcomes in mind and are thought fully sequenced into the flow of classroom science instruction. It also leads to learning to be permanent and applicative to life situation in a creative way.

1	Name of the Topic	Effect of selected aerobic exercise on cardio respiratory endurance among VII Standard students
2	Name of the faculty	Dr.T.Susai Arockia Malar
3	Subject	Physical Education
4	Research conducted in	Kalayarkoil, Sivagangai DIET
5	Target group	Students (VIII standard), No of sample : 13
6	Problem Identified	Directorate of school education of Tamilnadu has allowed middle schools to participate in zonal and district level athletic meet this year. Boys and girls from various middle school eagerly participated in zonal level tournament, but they could not win and select for district tournament due to lack of physical fitness. Physical fitness is very important to

		<p>perform any sports activities in which cardio respiratory endurance is one of the most important component in physical fitness. Many of the researchers have studied that physical exercises are important for the development of all physical fitness. Nevertheless, limited researches were done in the area of how much aerobic exercises are effective for the improvement of cardio respiratory endurance. Hence the investigator selected a research work to improve cardio respiratory endurance among VIII<sup>th</sup> std students.</p>
7	Intervention	<p>In this study, the researcher employed a single experimental group and standard norms. There was no a control group in this study. A single experimental group was used for providing pre-test and post-test in order to identify the effect of selected aerobic exercises on improvement of cardio respiratory endurance. The training schedule was given three days per week i.e., Monday, Wednesday, and Friday and hence, a total of 18 days was given in six week time (Feb and march) for training sessions in which 30 minutes were allotted for each session. The purpose of the study was to examine the effects of Aerobic exercises in improving cardio respiratory endurance performance of selected subjects in Panchayath Union Middle School of class 8 students. To achieve the purpose of the study 13 students from Panchayath Union Middle School were selected as sample and their age was 13 years. They were assigned in one group and the selected exercises were given for 6 weeks. In this study, 6 minute run/walk test was conducted as an assessment to measure cardio respiratory endurance. Pre, and post tests were conducted for all 13 subjects and the test results were recorded. The collected data were analyzed</p>

		by t-test
8	Outcome/ Finding	The finding of this study showed that, there were improvements on cardio respiratory endurance performance of the students after 6 weeks exercises . When we compared six minutes run of pre and post test results of the students after six weeks exercise program, it was found significant improvement on the performance of the subjects. The result showed that significant improvement in the performance of students had cardio respiratory endurance.
9	Recommendation	<p>The following are the possibilities for future research based on the findings of this study</p> <ul style="list-style-type: none"> <li>• Apply to both genders to see whether which one give better results.</li> <li>• Add more subject to make data more precise.</li> <li>• Perform in longer period, so that we can see the effectiveness of the training, for example 8 – 12 weeks of interventions.</li> <li>• As effects of aerobic exercises on cardio respiratory endurance performance of students was crucial, so any football, Hand ball and other sport coaches may consider aerobic exercise as a part of main work out.</li> <li>• Further researchers may conduct their studies on more different types of strength and endurance exercises that could improve students performances.</li> </ul>
10	Conclusion	Based on the finding of this study, aerobic exercise program is recognized to be an effective way in promoting cardiovascular endurance.

**ANNEXURE-III-FACULTY DEVELOPMENT PROGRAMME(B.ACTION RESEARCH)**

NAME OF THE TOPIC : ENHANCING STUDENTS' ACHIEVEMENT IN SENTENCE PATTERN THROUGH SELF- LEARNING AT THE VI STANDARD LEVEL.

NAME OF THE FACULTY: : S.KALIMUTHU

SUBJECT : ENGLISH

RESEARCH CONDUCTED IN : GHS,Poovanthi,SIVAGANGAI DIST.

TARGET GROUP(SAMPLE) : VI Std 19students

PROBLEM IDENTIFIED : inability of the students to understand different components used in sentence and also fail to use sentence pattern in given sentence. They can not read and write English.

INTERVATIONS :

- Students became familiar with different sentences so as to learn sentence pattern.
- Using small story books, students were instructed to underline subject as first word or noun phrase in the sentence
- With a view to make the students understand auxiliary verbs, and main verbs students are asked to fill up suitable auxiliary verbs given in bracket
- The investigator asked many 'yes' or 'no' type questions and students answered yes or no so that they can understand modal Auxiliary verbs first word in the given sentence.

- To understand object (o) investigator asks the questions what or whom. What is for things and whom is for person. Persons may be nouns or pronouns
- Students were asked to answer the questions by filling up the blanks with complement.
- Having used small story books and newspaper cuttings, students were asked to pick up adjunct and complements with the direction of investigator.
- To make the students use sentence pattern, working sheets were provided.

#### OUTCOME/FINDINGS :

- Students understood the importance of self learning as joyful
- Students gained the knowledge in the construction of sentences with their concerned elements namely (S,V,O IO and DO) A and C
- Students became free from rote memory as Traditional method
- Students could learn anything by themselves as self directed learning (SDL)
- Students might have understood the importance of group learning for achievement in sentence pattern
- Students gained the ideas of preparing teaching and learning materials, used by the investigator
- Students felt this research signifying the student centered education, in all achievements of school academic settings

#### RECOMMENDATIONS :

- This same research can be conducted for teaching Sentence pattern for other classes.
- This action research recommends teachers to give more importance for self learning.
- It further recommends to make the students prepare self learning materials for learning English grammar.

## CONCLUSION

:

This action research focused more attention to learn English grammar through self learning. It concluded that this action research may be more useful for both Teachers and Students.

## ACTION RESEARCH

1	<b>Name of the Topic</b>	Resolving the obstacles in learning the periodic table among the IX standard students using constructivist approach
2	<b>Name of the faculty</b>	PR.MEYYATHAL,LECTURER,DIET – KALAYARKOIL.
3	<b>Subject</b>	Science
4	<b>Research conducted in</b>	Government Higher Secondary School, Kirungakottai, singampunari block, Sivagangai District.
5	<b>Target group</b>	Students (IX standard)
6	<b>Problem Identified</b>	Periodic table is essential part of the atoms. From that table students are know about order of the elements and their atomic number. Also most of the students failed in much competitive examination because students fail to apply their knowledge. The investigator also has discussed with the Class teacher regarding periodic table. Most of the IX standard students lack the very fundamental knowledge of the chemistry.
7	<b>Intervention</b>	<u>GIVING ORIENTATION:</u>  Before the students learn the periodic table the investigator introduction about the periodic table. The significance of order of the elements and their atomic number ect.....  <u>DEVELOPING INTEREST OF THE STUDENTS BY ADOPTING SHORT (TRICKY) WAY METHOD:</u>  There is lack of interest on the part of the learner in the study of periodic table. so short (tricky) way activity was carried out by the investigator to stimulate interest among the students. In order to develop interest in atomic number

of the element the following short (tricky) way activities were performed by the investigator. This short (tricky) way activity reduces the rote learning.

SHORT (TRICKY) WAY ACTIVITY:

With a view to make the student understand the elements and their concern atomic number, the investigator took an efforts to illustrate and demonstrate the above through short (tricky) way method with the help of video clipping.

The tricky video series the investigator used, consists of name of the element and their concern symbols and there by students were asked to list the suitable and apt words denoting the elements and their symbols as follows.

In that video consists Tricky video series how to remember periodic tables? This video shows we will talk about '**S**' block elements only. To remember IS group

This phrase

**His Last Son Plays Rugby Cricket and Football.**

Here,

His	stands for Hydrogen	-H
Last	stands for Lithium	-Li
Son	stands for Sodium	-Na
Plays	stands for Potassium	-K
Rugby	stands for Rubidium	-Rb
Cricket	stands for Cesium	-Cs
Football	stands for Francium	-Fr

Students are very easy and clearly understand and recall the elements through this way. Every students create own sentence making for their own experience. For this tricky way , students are first making words and then merged words to

		<p>form sentence depends on s block elements order. So the students vocabulary skill and creativity increased by this tricky way technique.</p> <p>Students are to know the atomic number difference between the group and series order. In series level ,the elements are difference with only one atomic number. But in group it follow some standard difference such as 2,8,8,18,18,32.....</p>
8	<b>Outcome/ Finding</b>	<ul style="list-style-type: none"> <li>• The advantages of using this short (tricky) way method is that it will create a good relationship between the teacher and the students the high school level.</li> <li>• The concept on “Periodic Table” learnt by the IX standard students through short way method is permanently affixed in the mind of the children.</li> <li>• Other skills like each students create own sentence depends on short (tricky ) way method to easily recall the vertical order of the element and their atomic number.</li> <li>• In turn this research study paves the way for improving the understanding of the basic concept of periodic table.</li> </ul>
9	<b>Recommendation</b>	<ul style="list-style-type: none"> <li>• This study will continue many school</li> <li>• This technique will apply higher level.</li> <li>• This approach will apply other subject area also.</li> </ul>
10	<b>Conclusion</b>	<ul style="list-style-type: none"> <li>✚ Short (tricky) way strategy is more effective when compared to the traditional lecture method in improving the periodic table concept at the IX standard level.</li> <li>✚ The students enjoy the class room atmosphere.</li> <li>✚ Short (tricky) way strategy enhanced the understanding capability of the students.</li> <li>✚ From the above research study, it can be concluded that indicators like good teaching generates higher quality education.</li> <li>✚ It is necessary to design teaching learning strategies to make learning creativity level at high school level. This research study will surely help to improve the quality</li> </ul>

		of teaching chemistry concept.
--	--	--------------------------------

### Action Research

1 Name of the Topic	Enhancing the understanding of students of std VII on energy flow through puppetry
2 Name of the faculty	Dr. R. Gobalakrishnan, Lecturer
3 Subject	Science
4 Research conducted in	PUMS, Warappur, S.Puthur block, Sivagangai.
5 Target group	Students (VII standard)
6 Problem Identified	<p>The investigator has discussed with the Class teacher (co-investigator) regarding the difficult concept in science of class VII in Panchayat Union Middle School Warappur, S. Pudhur Block, in Sivagangai District. Most of the students find difficult to understand the concept "Energy flow" The investigator discussed with the teacher concerned and identified this concept for analysis. Make the students to attain the complete achievement in that competency the investigator selected puppetry technique for an easy way of understanding the competency.</p> <p>Motivation      Colorful puppets were introduced to the students in the class room</p> <p>Introduction      The investigator introduced the puppetry show to the students</p> <p>Learners activity (Knowledge)</p> <p>Puppetry show was shown the students to enrich the knowledge on the concept "Energy Flow" with the ecosystem and their components including:</p> <ul style="list-style-type: none"> <li>• Knowledge about the producer, consumers and decomposers.</li> <li>• Give the knowledge environment along with food chain.</li> <li>• Give the knowledge the environment along with food web.</li> </ul> <p>Learners activity (Concretization)</p> <p>Work sheets given to the each student to concretize the concept</p> <p>Learners      Evaluation card was given to each</p>
7 Intervention	

activity student to evaluate the (Evaluation) achievements

## 8 Outcome/ Finding

- Puppetry method helps the students to achieve more and also help to understand the concept.
- The average means score of the pre-test was 33.25 and that he post-test was 90.
- The pre-test and post-test differs significantly in their achievements.
- It helps to cultivate the scientific attitude among students.
- The students achieve their academic objectives by this teaching learning strategy.
- The students find learning easy. As a result students learn faster, remember longer and understand the concept easier.
- It helps to develop their curiosity and creativity.
- It helps to train the students to acquire the habit of observation.
- It compels more attention.
- Due to child centered teaching performed by the teacher concerned, the students are able to understand the senses and effort relationship of each activity.
- Qualitative expansion and quantitative improvement can be facilitated and accelerated. It modified the learner's environment and learning activities.

## 9 Recommendation

- Students show their interest and curiosity.

## 1 0 Conclusion

The findings of this investigation reveal that the learners understanding ability and level of academic achievement have been improved and enhanced by applying the specially designed innovative technique. The present day traditional method of teaching has failed to achieve the required out comes. Hence be we conclude that the innovative technique would help to learn the concept effectively and would their academic achievement and meaningful learning.

