ENHANCING THE TEACHING STRATEGY SKILLS AMONG ILLAM THEDI KALVI TEACHERS OF CUDDALORE BLOCK IN METRIC MEASURES CONCEPTS AT UPPER PRIMARY LEVEL.

ACTION RESEARCH REPORT

2023-2024

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Submitted to

STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING CHENNAI-600 006

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CERTIFICATE

This is to certify that the Action Research report entitled "**Enhancing the teaching strategy skills among Illam Thedi Kalvi teachers of cuddalore block in Metric measures concepts at upper primary level."** submitted by Dr. **G.PALANI**, Senior Lecturer, DIET, Vadalur is a record of research work done independently by him under my supervision during the period 2022-2023.

Vadalur **G.Kala**

Date : Principal, DIET

Vadalur – 607 303

Dr.G.PALANI
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Cuddalore District

DECLARATION

I hereby declare that the Action Research report for 2022-23,entitled "**Enhancing the teaching strategy skills among Illam Thedi Kalvi teachers of cuddalore block in Metric measures concepts at upper primary level."** submitted to SCERT, Chennai – 600 006 is my original work and that it has not previously formed the basis of the any other research works.

Date :
Place:

Dr.G.PALANI
Senior Lecturer
DIET,Vadalur

ACKNOWLEDGEMENT

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I express my heartfelt and profound feelings of gratitude to Thirumathi. Dr.**S.Shameem** Deputy Director cum Research Cell Head **, SCERT** for approving my research work to carry out.

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Dr.G.Palani,
Senior Lecturer
DIET, Vadalur

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CHAPTER I

1.1 Introduction

Education is a powerful instrument of social change, and often initiates upward movement in the social structure. Thereby, helping to bridge the gap between the different sections of society.Education is also mainly concerned with the ways and means of teaching and learning. Even of these two, the latter appears to be more vital as it is not only concerned with what the teacher does but also with what knowledge he transmits to the students and what the student does to assimilate the knowledge. The goal of our government is to provide quality education and equal opportunity to all children in their habitation itself with safety.

ITK Scheme (IllamThedi Kalvi)

"IllamThedi Kalvi" the Government of Tamil Nadu's ambitious endeavour, is robustly addressing the post-Covid learning gap among primary and middle school students. Despite running continuously since December 2021, it still hasn't attracted widespread national attention. This is a pity, because ongoing research has found that 67% of the initial learning gap in rural Tamil Nadu disappeared in less than four months after ITK's launch. Amidst a deluge of pessimistic findings on the pandemic's impact on education, this comes as a booster shot.

lllam Thedi Kalvi Scheme feature is that the volunteers will reach students in order to improve the condition of education, motivate parents to continue their children's education, work for the development of the local school.

The ITK calls itself "India's largest volunteer-based education program". Over 3.3 million students across 92,000 habitations are being taught by 200,000 women volunteers for 90 minutes every day. These are staggering numbers.

Notwithstanding its success, ITK runs on a simple model. Students are grouped into two cohorts – primary, for classes 1-5, and upper primary for classes 6-8 – and taught a purpose-built curriculum of basic skills in their habitation itself. Since the programme is volunteer driven, one might wonder whether the government faced challenges in finding good teachers. It did, but in short listing eligible ones: as per government data, four candidates applied for every position available.

ITK Volunteers create their own teaching and learning materials and student's participation.

School management committees (SMC) also deserve credit for the ITK. SMCs verified their volunteers' backgrounds and domiciles. Committee members also arranged spaces for delivering the evening lessons, which are mostly held in village community halls. These makeshift schools may not have the best infrastructure, but that matters less than we might think – education economists routinely find that increasing school inputs only has a small effect on learning outcomes **(Das *et al.* 2011).**

Mathematics education is referred to as the practice of teaching and learning of mathematics in a way of solving problems involving learning the algorithms and formulas necessary for computations. It is a platform to learn and

teach mathematics with better way. Mathematics provides an effective way of building mental discipline and encourages logical reasoning and mental rigor. In addition, mathematical knowledge plays a crucial role in understanding the contents of other school subjects such as science, social studies, and even music and art.

1.2 Need of the study

Teaching mathematics is similar to being a proficient athlete. A person must practice and practice, over and over, to improve skills in a sport, even after a particular skill has been mastered.

Practice reduces careless mistakes, increases understanding, speeds solutions on exams and quizzes, and builds confidence in one's ability to do math regardless of past performance.

. We tend to think of Mathematics as Metric measures , but there is actually quite a bit of language learning that goes on in the mathematics class too for basic measurements viz, Length, Mass and Volume. So it is the need of the hour not only to study about the awareness on Metric measures and conversion of the units in it among the ITK volunteers at upper primary level itself but also to search for the remedy which is needed at the scenario.

1.3 Problem Identification

On-site support to schools were given in Cuddalore block during 2023-24. At the time of visits, various components viz., utility of TLMs, Math vocabulary skills, CWSN centers, Illam Thedi centers etc., were given importance. It was inferred by the researcher in few ITK centers of the cuddalore block, on the usage of teaching strategy skills among ITK teachers were found to be lacking in specific with learning outcomes on Metric measures. So it is

decided to enhance the same among the ITK teachers of cuddalore block in relation with the mentioned learning outcomes at upper primary level

1.4 Probable Causes of the problem:

a) Teachers of the ITK centers may not be exposed in the teaching strategy skills keenly.

b) Opportunity would have not given to the teachers to utilize the innovative strategies in handling metric measures concept at upper primary level by proper time schedule.

c) Teachers may be felt in handicapped position in connection with the strategy to improve their Teaching strategy skills.

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1.5 Statement of the problem :

In general, teachers were given so many in-service trainings and modules to update their knowledge not only in the handling subjects but also to enhance their teaching strategies. If so, it is wise to see on the other side that the ITK volunteers handling upper primary children also should be supported in their professional development . Hence the problem taken up for the study may be stated as **"Enhancing the teaching strategy skills among Illam Thedi Kalvi teachers of cuddalore block in Metric measures concepts at upper primary level".**

1.6 Objectives of the study:

a) To study the ITK teacher's knowledge on utilization of teaching strategy skills in the Metric measures.

b) To enhance the usage of innovative teaching strategy skills among ITK teachers on said topic.

c) To find out the effectiveness of the innovative strategy to be used in the above study.

d)To find out the ITK volunteers knowledge on their teaching strategies to their children with reference Metric measures and their conversion of units at the terminus level in comparison with the entry level.

1.7 Hypotheses of the study:

1. There is no significant difference between the ITK Volunteers in their teaching strategies to the children in the Metric Measures at the entry level.

2. There is no significant difference between the teachers in their usage of prepared TLMs with that of supplied kits in teaching Metric measures to the children at upper primary level.

3. There is no significant difference between the ITK Volunteers in their teaching strategies to the children in the Metric Measures at the terminus level.

4. There is no significant difference between the pre-test and post test with reference to ITK Volunteers knowledge in their teaching strategies to the children in the Metric Measures.

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CHAPTER II

2.1 Action Plan

The investigator has followed the stages as mentioned below:

1. Finalizing the topic and conceptualizing the variables.
2. Reviewing related literature.
3. Construction of a pre-assessment question paper to measure the entry behaviour of the special teachers in their teaching learning process.
4. Discussion on TLMs preparation for the learning outcomes with reference to Metric measures concept with the ITK Volunteers.
5. Treatment to the ITK Volunteers by an orientation on preparation of TLMs in arithmetic at upper primary level..
6. Assessing the progress of the teachers in their teaching learning process at their ITK centers.
7. Assessing the terminal behaviour of the teachers by administering the question paper in the form of assignment by whatsapp group.
8. Analysing and interpreting the data with the help of relevant statistical procedures.

2.2 SAMPLE

A population is any group of individuals that have one or more characteristic in common. The sample of the present study is 31 ITK Volunteers of schools associated to the their habitations in Cuddalore block of Cuddalore District.

LIST OF SPECIAL ITK VOLUNTEERS INVOLVED IN THE ACTION RESEARCH

Sl.No.	Name of the ITK Volunteers	ITK Center's Address
1	K.Kalaivani	PUPS, Kumalankulam
2	M.Poorani	PUMS, C.N. Palayam
3	S.Nathiya	PUMS, Vanamadevi
4	D.Mangayarkarasi	PUMS, U.C.Chavadi
5	K.Thenmozhi	MMS, Simon Garden ,OT
6	P. Maheswari	PUMS,, C.N. Palayam
7	R.Dhanalakshmi	PUMS,, C.N. Palayam
8	P.Kavitha	PUPS, Karaikadu
9	P.Padmapriya	PUMS, Sedapalayam
10	D.Porkalai	MMS, Reddichathiram
11	D.Kavitha	PUMS, Thottappattu
12	M.Visithra	PUMS, Thottappattu
13	A.Vidhya	PUMS, Thirumanikuzhi
14	J.Dhivya	PUMS, Kodukkanpalayam
15	M.Vijayalakshmi	PUMS, Kodukkanpalayam
16	S.Priya	PUMS, Kodukkanpalayam
17	N.Sharmi	PUMS,Thazhanguda
18	P.Jayanthi	PUMS, M.Phudur
19	S.Kalaivani	PUMS, Kodukkanpalayam
20	M.Priya	PUMS, Annavalli
21	G.Maragatham	PUMS, Suthukulam
22	R.Pramila	PUPS, Sonagan Chavadi
23	B.Sandhiya	PUMS,Karaikadu Colony
24	M.Jayasri	PUMS,Karaikadu Colony
25	A.Vishnupriya	PUMS, Semmankuppam
26	B.Madhubala	PUPS, Vellakarai colony
27	S.Elakkiya	PUPS, S.Phudur
28	B.Monisha	PUPS, Thookkananpakkam
29	I.Jayasri	PUPS, Rasappalayam
30	P.Kanishka	PUPS, S.Phudur
31	S.Suriya	PUMS, Vazhisothanaippalyam

2.3 TIME DURATION

1. To conduct Pre assessment and Post assessment tests -2 days
2. To give an orientation training on preparation of Teaching Learning materials on Metric measures concept and exposure over the same to the ITK Volunteers - 1 days
3. To prepare Mathematics TLMs collection by the ITK Volunteers in their centers after orientation at two intervals between the tests -30 days
4. To visit the ITK centers and monitor the volunteers to review their work of TLMs usage – 2 days
5. To prepare the document on Action Research Report -15 days.
6. Total number of days for the study - 50 days

2.4 TOOL VALIDITY

Initially the questions were analyzed with the Co-researcher / ITK component coordinator / BRTE from the BRC. The investigator had a friendly discussion with the ITK Volunteers regarding their strategy instructions. Based on their feedback, some items were modified and edited. Thus the tool possesses the content validity.

2.5 FINAL STUDY

The tool consists of two forms viz., the tool to measure the awareness of teachers towards ITK resources viz., Mathematics contents TLMs, teaching methods, skills at the entry level. And assessing the terminal behaviour of the ITK Volunteers by administering the question paper in the form of assignment by whatsapp group. The data so collected by the researchers were taken up for analysis.

2.6 Intervention Activities:

The Orientation training cum discussion were done to self interested ITK volunteers on the basic concepts in Metric measures and the conversion of units in it, which are as follows:

Arrange the prefixes of basic units of measurement from the largest to the smallest as given below.

Kilo	Hecto	Deca	Unit	Deci	Centi	Milli

In order to remember the proper basic measurement of 7 units, let us use the strategy of coining the words as to denote the above units as

K	**H**	**Da**	**Unit**	**De**	**Cm**	**Mi**

Now, let us discuss some of the units for length, volume and weight.

Length:

The most common units used to measure the length are as follows:

Kilometer (K)	**Hectometer (H)**	**Decameter (DA)**	**Meter (ME)**	**Decimeter (DE)**	**Centimeter (CM)**	**Millimeter (MI)**

Volume or Capacity

The most common units used to measure the capacity or volume of any object are as follows:

Kiloliter (K)	Hectoliter (H)	Decaliter (DA)	Liter (L)	Deciliter (DE)	Centiliter (CL)	Milliliter (MI)

Weight

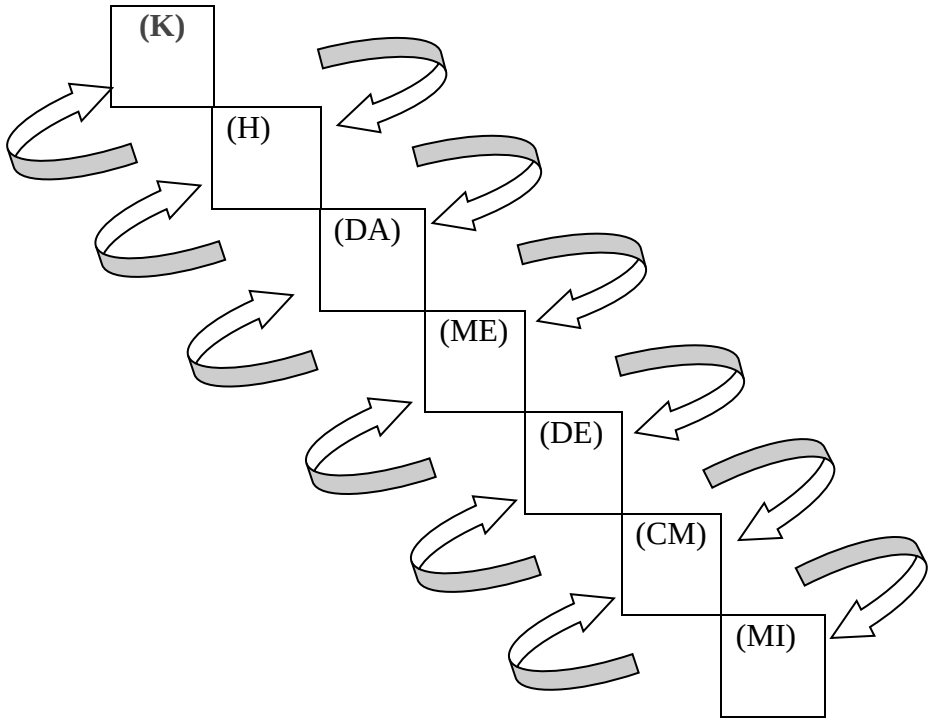
The most common units used to measure the weight of any object are as follows:

Kilogram (K)	Hectogram (H)	Decagram (DA)	Gram (G)	Decigram (DE)	Centigram (CG)	Milligram (MI)

The conversion from one unit to the other unit is done by multiplying or dividing the powers of 10

TLM for conversion of metric measures and units

Arrow mark will be used to indicate that there is decimal point after conversion of units.



CONVERSION FROM HIGHER UNIT TO LOWER UNIT :

From Kilometer to meter, there are 3 steps downward, so multiply with 10 thrice.

Hence 1kilo meter = 1000 meter

Strategy is stepping downward is meant for multiplication and number of steps downward means that many times of multiplication by10

Similarly we can try for other units

CONVERSION FROM LOWER UNIT TO HIGHER UNIT :

From centimetre to meter , there are 2 steps upward , so divide by 10 twice.

Hence 1 centimeter = 1/100 meter

Strategy is stepping upward is meant for division and number of steps upward means that many times of division by10

Similarly we can try for other units

Learning Outcomes: 403,414, 415

- Creates and solves simple real life situations/ problems including money, length, mass and capacity by using the four operations
- Conversion of metre into centimeter and vice versa., Estimates the length of an object/distance between two locations, weight of various objects, volume of liquid, etc., and verifies them by actual measurement .
- Solves problem involving daily life situations related to length, distance, weight, volume and time involving four basic arithmetic operations

Teacher Activity:

Activity -1 Know about metre & centimetre

Step 1: Convert to 456 m into cm

100 cm is 1 m

I.e. 1 meter is equal to 100 cm.

Step 2:

1 m = 1 x100 cm. = 100 cm.

2 m = 2 x100 cm. = 200 cm.

3 m = 3 x100 cm. = 300 cm.

456 m = 456 x100 cm = 45600 cm.

Teacher Activity:

Activity -1 Converting centimeters into meters

Step 1:

Convert to 800 cm.

1 m = 100 cm.

I.e. 100 cm. = 1 m

Step 2: 100 cm = 100/100 m = 1 m

200 cm = 200/100 m = 2 m

300 cm = 300/100 m = 3 m

800 cm = 800/100 m = 8 m

So concludes that 800 cm. = 8 m.

Evaluation:

400 cm. = ---------- m.

760 cm = ---------- m .---------- cm.

84 m = ---------- cm.

500 m = ---------- cm.

48 m = ---------- cm.

4000 m = ----------km

55mm = -------- cm

Construct your own problem

CHAPTER III

3.1 Evaluation Procedures

The following assessments were carried out in order to know not only the awareness of the ITK volunteers on Metric measures concept and conversion of units in it including their apt TLMs but also the suitable remedy to do for them.

3.1.1 Assessment of the sample teachers in pre-test:

Question paper was prepared by the Principal researcher covering the features of strategy instructions and utilisation of TLMs at ITK centers and was used for pre-assessment of the teachers to assess their awareness of the same.

3.1.2 Assessment of the sample teachers in post test:

To find out the efficacy of the orientation training and hands on experience in preparing the TLMs developed for Metric measures concept and conversion of units in it, the final performance of the ITK volunteers were assessed by the tool in the online mode after the intervention period... The main purpose of the post- assessment was to find out the terminal behaviour of the teachers.

3.2 Pre-Test Question Paper

மாவட்ட ஆசிரியர் கல்வி மற்றும் பயிற்சி நிறுவனம்,

வடலூர் – 607 303

செயலாய்வு (2023 -2024) - முன் தேர்வு

கணிதம்- உயர் தொடக்க நிலை - மெட்ரிக் அளவைகள் இனமாற்றம்

இல்லம் தேடிக்கல்வி தன்னார்வலர் பெயர்:

வாட்ஸப் அலைபேசி எண்:

பள்ளி முகவரி:

அனைத்து வினாக்களுக்கும் விடையளி : மதிப்பெண்:10×5=50

1. அளவைகளின் வகைகளை குறிப்பிடுக.
2. திட்ட அளவைகள், திட்டமற்ற அளவைகள் வேறுப்படுத்துகஉதாரணம் தருக .
3. நீட்டலளவைகளில் உள்ள அலகுகள் எத்தனை? அவை யாவை?
4. நீட்டலளவைகளின் வாய்ப்பாடு எழுதுக
5. அளவைகளில் கீழின மாற்றம் என்றால் என்ன? உதாரணம் தருக
6. அளவைகளில் மேலின மாற்றம் என்றால் என்ன? உதாரணம் தருக
7. கீழான அலகாக மாற்றுக .1.7கிமீ ஐ மீட்டரில், செமீட்டரில்
8. மேலின அலகாக மாற்றுக .8567மீ ஐ டெக்காமீட்டரில்.மீ மற்றும் கி.
9. நிறுத்தலளவையில் கீழின மாற்றம் , முகத்தலளவையில் மேலின மாற்றம் -உதாரணம் தருக.
10. அளவைகளில் இனமாற்றக் கருவி-குறிப்பு தருக.

3.3 Post-Test Question Paper

மாவட்ட ஆசிரியர் கல்வி மற்றும் பயிற்சி நிறுவனம், வடலூர் – 607 303

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3. நீட்டலளவைகளில் உள்ள அலகுகள் எத்தனை? அவை யாவை?
4. நீட்டலளவைகளின் வாய்ப்பாடு எழுதுக
5. அளவைகளில் கீழின மாற்றம் என்றால் என்ன? உதாரணம் தருக
6. அளவைகளில் மேலின மாற்றம் என்றால் என்ன? உதாரணம் தருக
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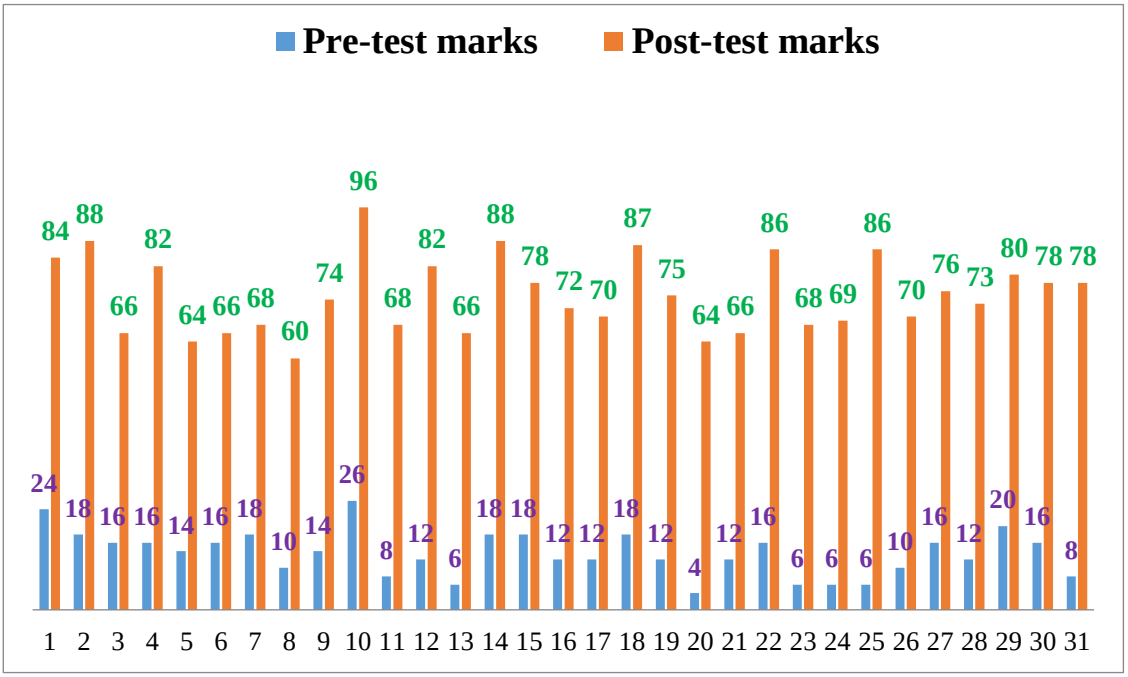
9. நிறுத்தலளவையில் கீழின மாற்றம் , முகத்தலளவையில் மேலின மாற்றம் -உதாரணம் தருக.
10. அளவைகளில் இனமாற்றக் கருவி-குறிப்பு தருக.

3.4 PRE-TEST & POST-TEST SCORES ANALYSIS TABLE

Sl.No.	Name of the ITK Volunteers	ITK Center's Address	Pre-test marks	Post-test marks
1	K.Kalaivani	PUPS, Kumalankulam	24	84
2	M.Poorani	PUMS, C.N. Palayam	18	88
3	S.Nathiya	PUMS, Vanamadevi	16	66
4	D.Mangayarkarasi	PUMS, U.C.Chavadi	16	82
5	K.Thenmozhi	MMS, Simon Garden ,OT	14	64
6	P. Maheswari	PUMS,, C.N. Palayam	16	66
7	R.Dhanalakshmi	PUMS,, C.N. Palayam	18	68
8	P.Kavitha	PUPS, Karaikadu	10	60
9	P.Padmapriya	PUMS, Sedapalayam	14	74
10	D.Porkalai	MMS, Reddichathiram	26	96
11	D.Kavitha	PUMS, Thottappattu	08	68
12	M.Visithra	PUMS, Thottappattu	12	82
13	A.Vidhya	PUMS, Thirumanikuzhi	06	66
14	J.Dhivya	PUMS, Kodukkanpalayam	18	88
15	M.Vijayalakshmi	PUMS, Kodukkanpalayam	18	78
16	S.Priya	PUMS, Kodukkanpalayam	12	72
17	N.Sharmi	PUMS,Thazhanguda	12	70
18	P.Jayanthi	PUMS, M.Phudur	18	87
19	S.Kalaivani	PUMS, Kodukkanpalayam	12	75
20	M.Priya	PUMS, Annavalli	04	64
21	G.Maragatham	PUMS, Suthukulam	12	66
22	R.Pramila	PUPS, Sonagan Chavadi	16	86
23	B.Sandhiya	PUMS,Karaikadu Colony	06	68
24	M.Jayasri	PUMS,Karaikadu Colony	06	69
25	A.Vishnupriya	PUMS, Semmankuppam	06	86
26	B.Madhubala	PUPS, Vellakarai colony	10	70
27	S.Elakkiya	PUPS, S.Phudur	16	76
28	B.Monisha	PUPS, Thookkananpakkam	12	73
29	I.Jayasri	PUPS, Rasappalayam	20	80
30	P.Kanishka	PUPS, S.Phudur	16	78
31	S.Suriya	PUMS, Vazhisothanaippalyam	08	78

3.5 COMPARISON OF PERFORMANCES IN THE TESTS



Interpretation

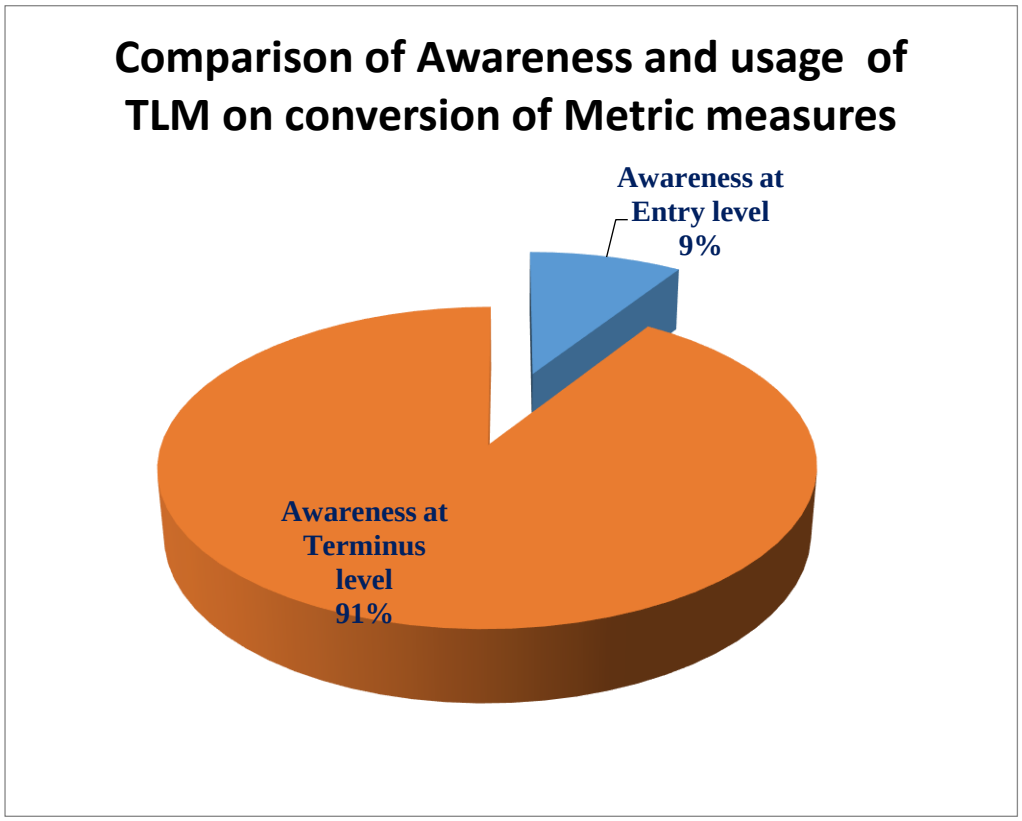
From the above table and graph**,** though the ITK volunteers know about the metric measures concept and strategies of teaching them to some extent with the given readymade TLMS through schemes from their own past experiences of practicing**,** their pre-test performance average marks happened to be only 14% and so it is trivial that 100% of the sample volunteers in the study expects the support from DIET Principal Investigator in the way of getting an orientation of preparing TLMs for the Conversion of Metric measures concepts, that too by providing the raw materials viz., chart, crayons, flashcards, , etc.,

So from the above table it is concluded that the first hypothesis ” There is no significant difference between the volunteers in their teaching strategies on conversion of metric measures concept at the entry level” is accepted.

COMPARISON OF AWARENESS OF TLM

ON

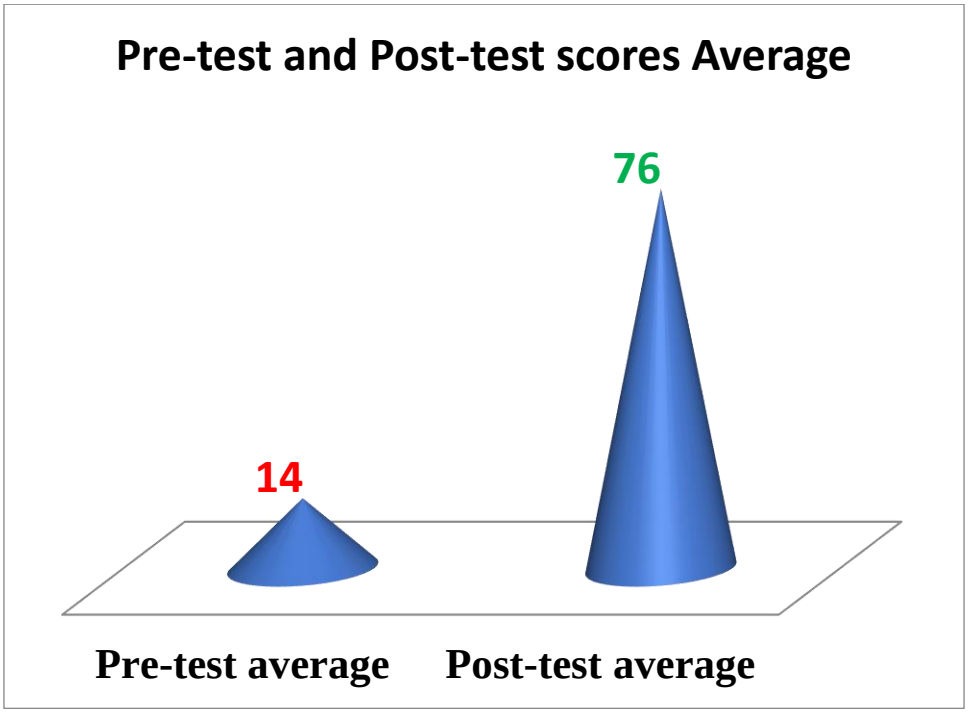
CONVERSION OF METRIC MEASURES



Interpretation

So from the above graph it is concluded that the second hypothesis " There is no significant difference between the ITK volunteers in their usage of prepared TLMs with that of supplied raw materials in teaching Metric measures to the children at upper primary level" is rejected

COMPARISON OF PRE-TEST AND POST-TEST PERFORMANCE OF TEACHERS



Interpretation:

From the above graphs volunteer's performance in the post test is found to be significant positively with reference to the specific Learning Outcomes, ie., Conversion of metric measures than the pre test. However teacher's performance in the post test is found to be significant with free minded responses .So the third hypothesis that "There is no significant difference between the ITK Volunteers in their teaching strategies to the children in the Metric Measures at the terminus level" is rejected.

Also, it is trivial that the ITK sample volunteers understood that the given TLM on Conversion of metric measures and its usage is apt for the said concept for Length, Mass and Volume. Also they added that the support rendered by the research cum DIET faculty in reference with the raw materials distributed for preparing the TLMs is much helpful in their teaching strategies. Finally they all added that the journey with the researcher in the period of intervention under the Action Research is unforgettable and were interesting. And this experience makes them to say that all they will do their service with more enthusiasm, if

orientation trainings could be given in future periodically by government. Hence the last hypothesis " There is no significant difference between the pre-test and post test with reference to ITK Volunteers knowledge in their teaching strategies to the children in the Metric Measures " is rejected..

CHAPTER IV

4.1 FINDINGS

From the above interpretation and figures we arrive at the following findings of the study:

- "There is no significant difference between the ITK Volunteers in their teaching strategies to the children in the Metric Measures at the entry level." is accepted as the pre-test performance of ITK volunteers in the awareness of conversion of metric measures concept is mere 14%.
- "There is no significant difference between the teachers in their usage of prepared TLMs with that of supplied kits in teaching Metric measures to the children at upper primary level" is rejected as the awareness of conversion of metric measures concept among the sample is 91% at terminus level with that of the entry level being 9%.
- "There is no significant difference between the ITK Volunteers in their teaching strategies to the children in the Metric Measures at the terminus level" is rejected as the post-test performance of ITK volunteers in the awareness of conversion of metric measures concept is positively 76%.
- "There is no significant difference between the pre-test and post test with reference to ITK Volunteers knowledge in their teaching strategies to the children in the Metric Measures" is rejected as the awareness of conversion of metric measures concept among the sample is 76% at terminus level with that of the entry level being 14%.

4.2 RECOMMANDATIONS

a. ITK Volunteers must be given opportunity to have an orientation on not only in Metric measures concept but also in other hard spots in Mathematics.

b. ITK Volunteers must be trained periodically by the quality wing of Samagraha Shiksha in the basic aspects of utilization of TLMs at No cost and Low cost, not only in Mathematics subject but in other handling subjects also.

c. The strategy of transacting the specific Learning Outcomes in all the subjects viz., Metric measures concepts in Mathematics, etc., with its appropriate TLMs must be oriented at regular intervals by means of TLMs preparation workshops at BRC, Cuddalore.

d. TLM grant @ Rs500/- can be provided every year by Samagraha Shiksha to each ITK volunteer for preparing Teaching Learning Materials of their own in the handling subjects with an allotment of proper time schedule with frequent reviews.

e. DIET faculties in their discipline can be the best resourceful persons to give orientation on Learning outcomes and preparation of TLMs in the respective subject and hence Samagraha Shiksha and DIET can address the grievances of ITK volunteers in their service.

4.3 CONCLUSION :

So it could be concluded that the piece of attempt done by researchers with the orientation material and the strategy adopted in this study improved the ITK Volunteer's teaching strategy in Metric measures and conversion of unit in it overall while solving their respective standard mathematical problems.

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- www.k-5mathteachingresources.com
- thirdspacelearning.com
- www.researchgate.net

PHOTOS GALLERY

ACTION RESEARCH

2023-24

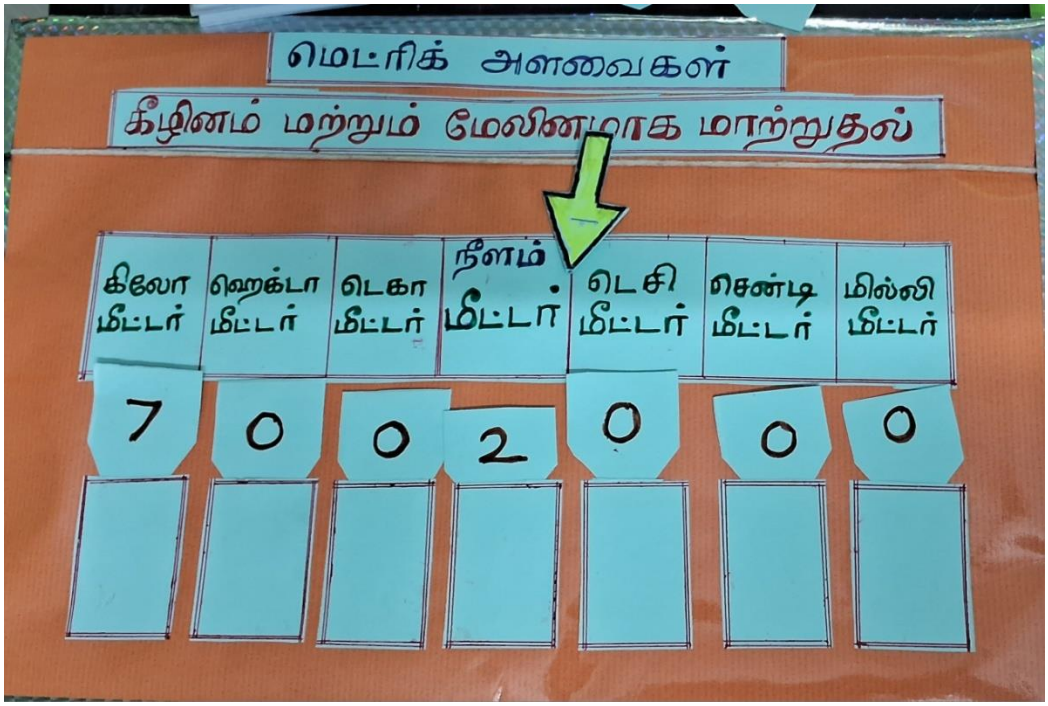
INVESTIGATOR DR.G.PALANI, SENIOR LECTURER ADDRESSING ITK VOLUNTEERS ON THEIR TEACHING STRATEGIES IN METRIC MEASURES at CORPORATION PRIMARY SCHOOL, VANDIPALAYAM ROAD, THIRUPPADIRIPULIYUR ON 13.12.2023

District coordinator Mr.Mathan addressing the gathering during the visit to the orientation training on 13.12.23

Block level ITK component BRTE cum Co-Investigator of the study Mrs.B.Vijayalakshmi addressing the gathering during the inaugural of the orientation training Programme on 13.12.23

Block level ITK coordinator Mr.Iyyappan Felicitating the gathering during the inaugural of the orientation training Programme on 13.12.23

Principal Instigator demonstrates how the Conversion of units TLM can be prepared and properly utilized for the understanding the concepts to the ITK volunteers in the programme.



Conversion of units in Metric measures- TLM

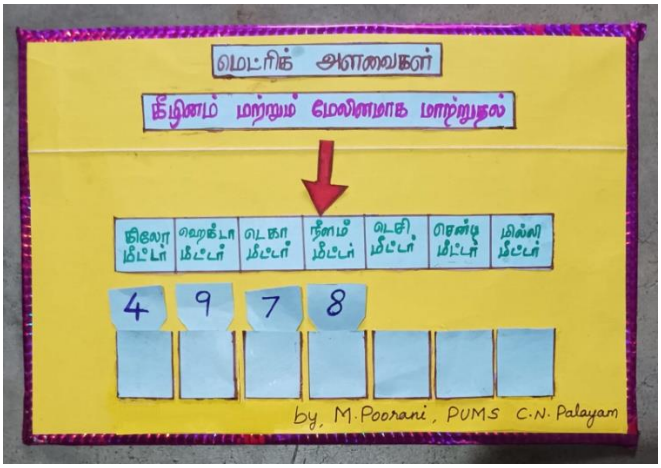
Raw materials to ITK Volunteers for preparing the TLM on conversion of units in Metric measures

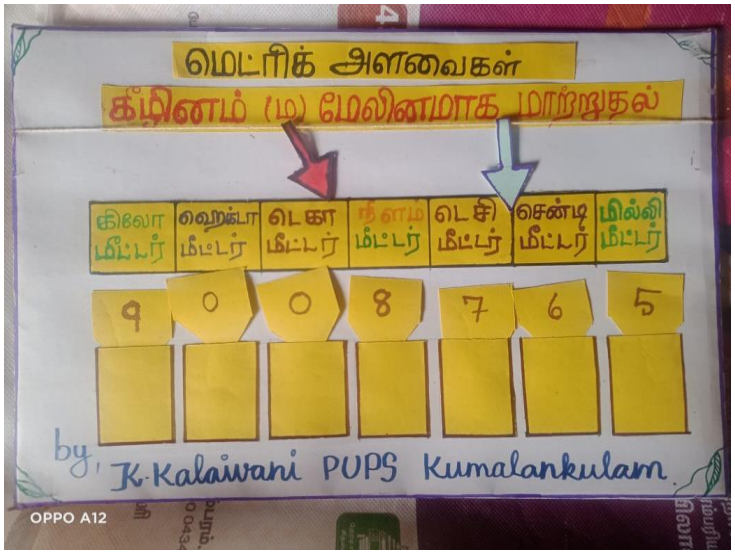
Distribution of TLM preparation Materials to all the ITK volunteers who attended the orientation training programme

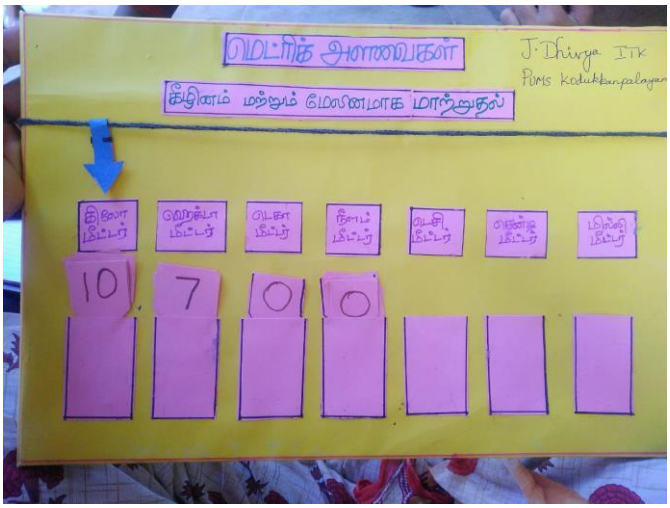
ITK Volunteer's TLM

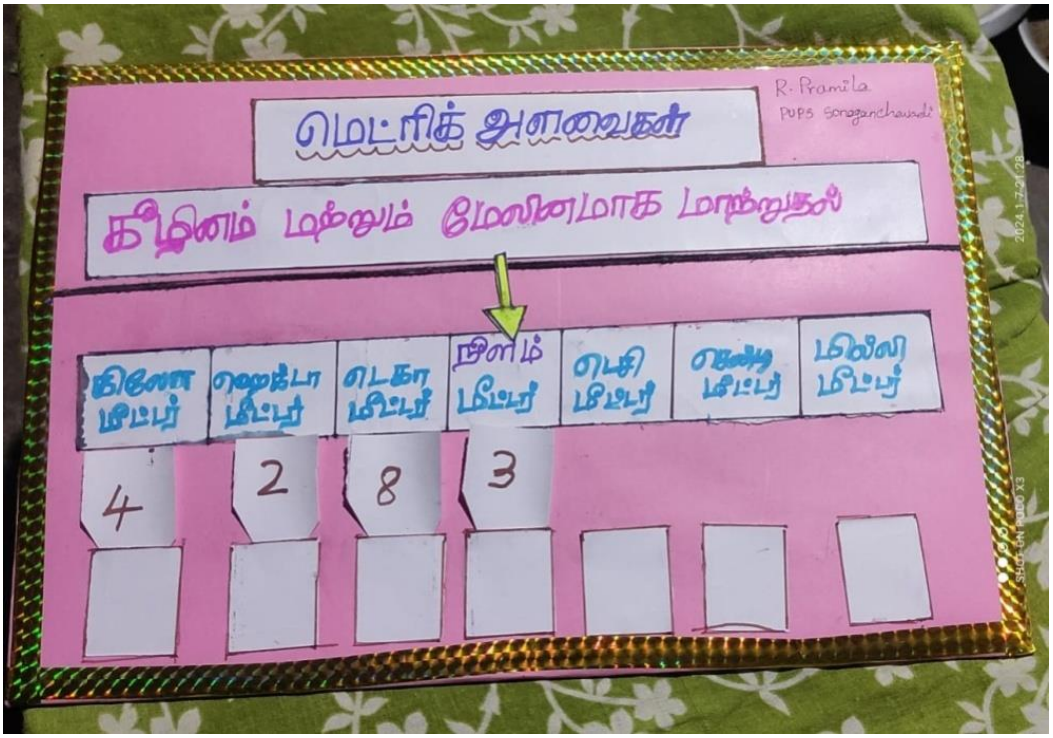
Feed back by the ITK volunteers at the valediction time of the programme on 13.12.23

SAMPLE OF THE TLMS PREPARED BY THE ITK VOLUNTEERS AFTER THE ORIENTATION TRAINING ON METRIC MEASURES





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PUPS Sonagunchavadi
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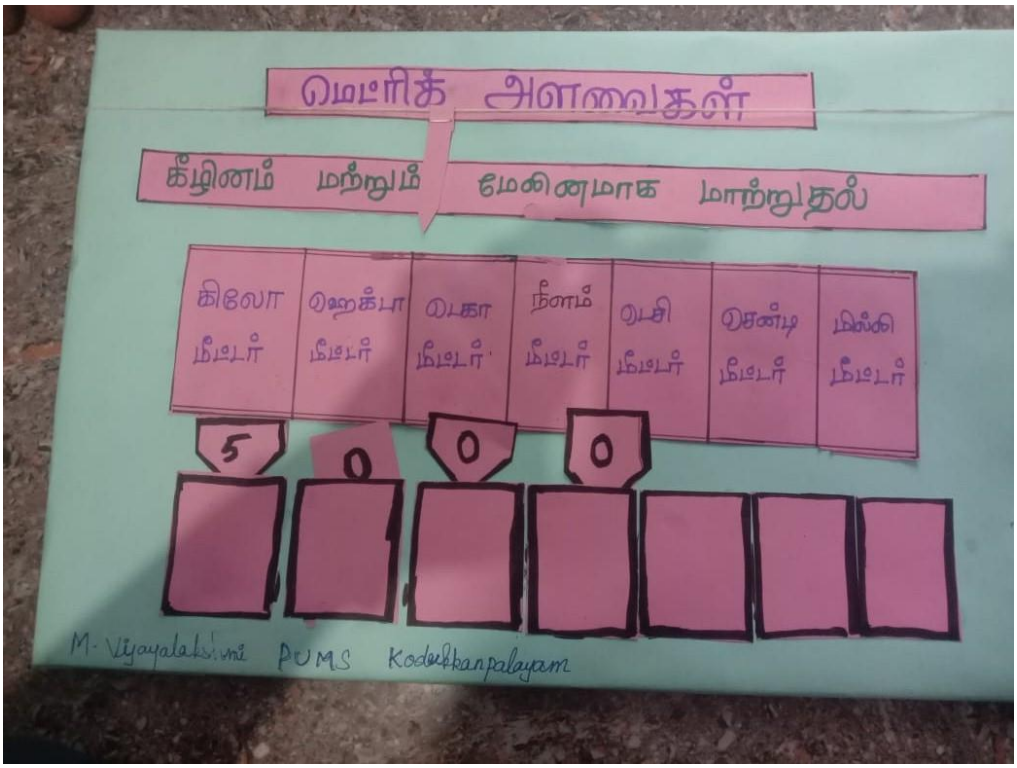
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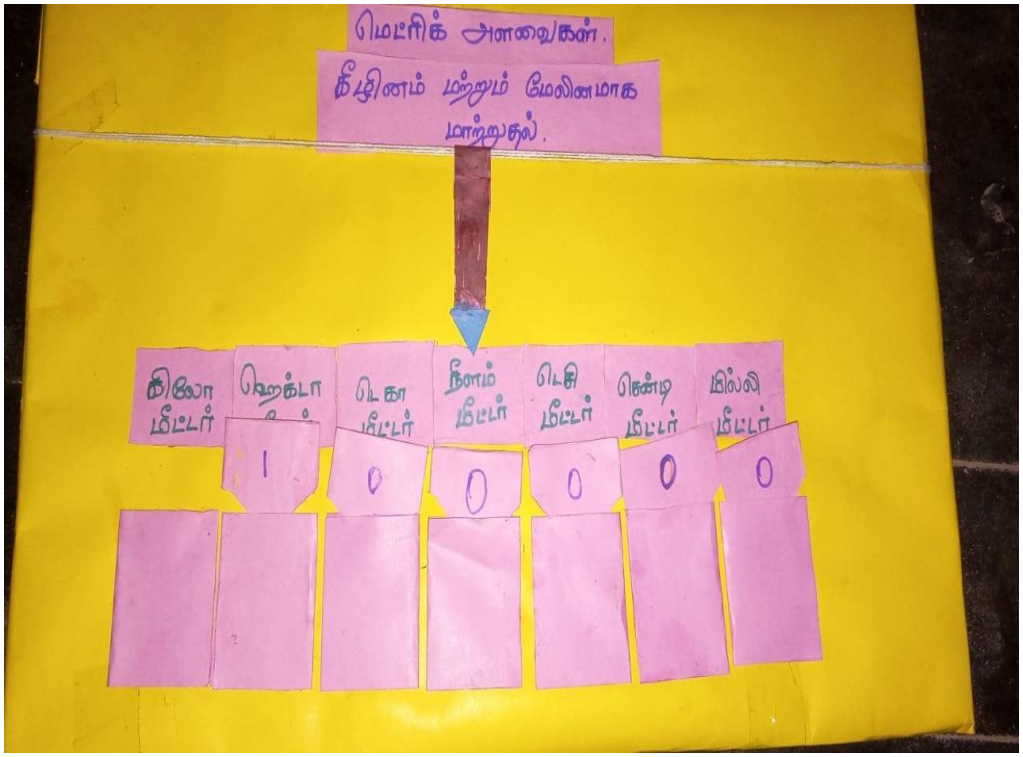
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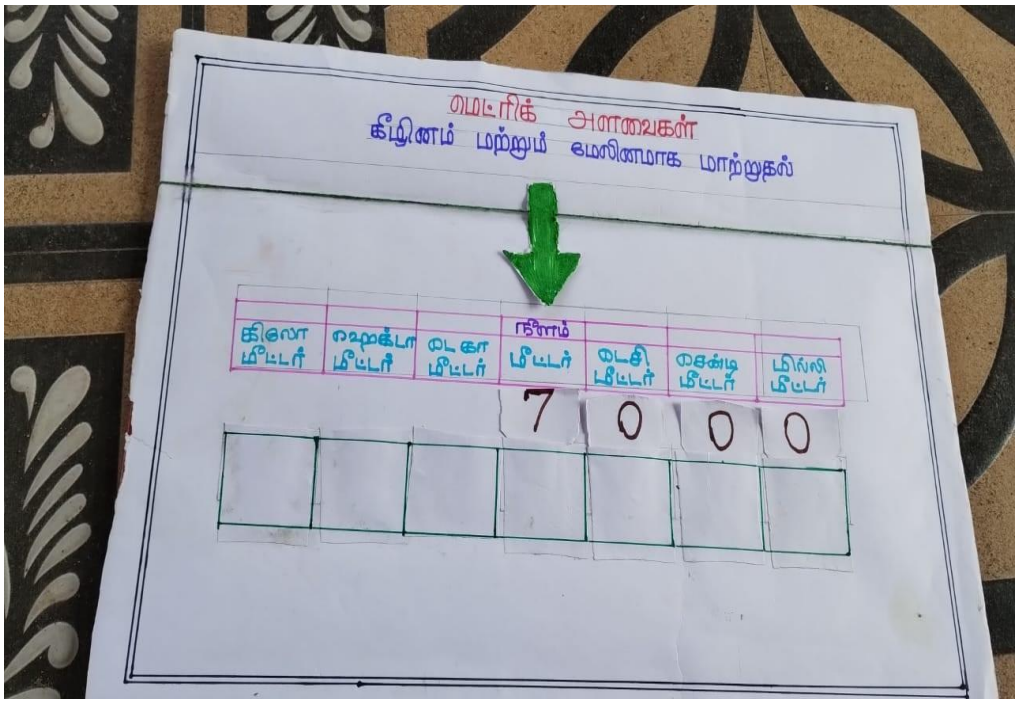
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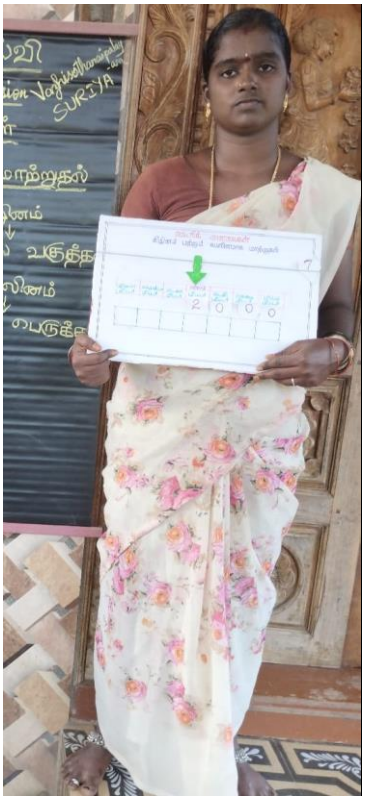
Principal Investigator monitored the usage of the TLM by the ITK volunteer at MMS, Reddichathiram center

Monitoring the Primary class studeny's work in the ITK center.

ITK teachers teaching activities



Teacher’s activity

Students Participation

ITK teachers teaching activities

ACTION RESEARCH ABSTRACT (2023-2024)

1)Name of the DIET : Vadalur, Cuddalore District.

2)Faculty : Dr.G.Palani , Senior Lecturer.

3)Title : Enhancing the teaching strategy skills among Illam Thedi Kalvi teachers of cuddalore block in Metric measures concepts at upper primary level.

4) Summary

a) Introduction : "IllamThedi Kalvi" the Government of Tamil Nadu's ambitious endeavour, is robustly addressing the post-Covid learning gap among primary and middle school students. Despite running continuously since December 2021, it still hasn't attracted widespread national attention. This is a pity, because ongoing research has found that 67% of the initial learning gap in rural Tamil Nadu disappeared in less than four months after ITK's launch. Amidst a deluge of pessimistic findings on the pandemic's impact on education, this comes as a booster shot. **lllam Thedi Kalvi Scheme** feature is that the volunteers will reach students in order to improve the condition of education, motivate parents to continue their children's education, work for the development of the local school.

b) Need for the study: On-site supports to schools were given in Cuddalore block during 2023-24. At the time of visits, various centers viz., CRC, CWSN, ITK etc., were given importance. It was inferred by the researcher in few ITK centers of the allotted block on the usage of Metric measures at upper primary level with respect to the learning outcomes ie., tables in metric measures and conversion of units in it were not up to the mark. The same was confirmed by the interaction with the ITK Volunteers and in turn with the students .So, it is decided to enhance the skill of the volunteers on metric measures with respect to the learning outcomes by innovative strategy of utilizing the TLM on Metric measures at upper primary level.

c) Objectives :

a) To study the ITK teacher's knowledge on utilization of teaching strategy skills in the Metric measures.

b) To enhance the usage of innovative teaching strategy skills among ITK teachers on said topic.

c) To find out the effectiveness of the innovative strategy to be used in the above study.

d)To find out the ITK volunteers knowledge on their teaching strategies to their children with reference Metric measures and their conversion of units at the terminus level in comparison with the entry level.

d) Reasearch questions: To find out the efficacy of the Strategy instruction, orientation material developed for the treatment, the final performance of the ITK Volunteers were assessed by the tool in the form of question paper covering the features of Metric measures and conversion of units in it to assess their awareness of the same.

e)Sample: 31 ITK Volunteers who came with their own interest to participate from cuddalore block are the sample of the study.

f) Methodology : Pre-test – post-test method of assessments were conducted with suitable intervention. Treatment were given to the ITK volunteers by the principal researcher with the help of an orientation training on Metric measures and conversion of units in it with the supporting material in the form of TLMs

g) Major findings : The performance of the ITK volunteers were found to be good at post-test around 76% than their pre-test around 14% . However the Volunteer's teaching strategy utilizing the appropriate TLM for the said concept was found to be improved to some extent finally to that of entry level in observation. So ITK volunteers achievement on the said variables are found to be significant at post test level than pre-test level.

h) Educational Implications: The strategy of transacting the concepts with respect to the learning outcomes on utilization of Strategy instructions and TLM will be much useful not only for empowering the Volunteers on the concept but also to the level of upper primary students..

i) Recommendations:

a. ITK Volunteers must be given opportunity to have an orientation on not only in Metric measures concept but also in other hard spots in Mathematics.
b. ITK Volunteers must be trained periodically by the quality wing of Samagraha Shiksha in the basic aspects of utilization of TLMs at No cost and Low cost, not only in Mathematics subject but in other handling subjects also.
c. The strategy of transacting the specific Learning Outcomes in all the subjects viz., Metric measures concepts in Mathematics, etc., with its appropriate TLMs must be

oriented at regular intervals by means of TLMs preparation workshops at BRC, Cuddalore.

d. TLM grant @ Rs500/- can be provided every year by Samagraha Shiksha to each ITK volunteer for preparing Teaching Learning Materials of their own in the handling subjects with an allotment of proper time schedule with frequent reviews.
e. DIET faculties in their discipline can be the best resourceful persons to give orientation on Learning outcomes and preparation of TLMs in the respective subject and hence Samagraha Shiksha and DIET can address the grievances of ITK volunteers in their service.

j) Conclusion :

So it could be concluded that the piece of attempt done by researchers with the orientation material and the strategy adopted in this study improved the ITK Volunteer's teaching strategy in Metric measures and conversion of unit in it overall while solving their respective standard mathematical problems.

– Dr.G.palani
Principal Investigator