

DISTRICT INSTITUTE OF EDUCATION AND TRAINING
UTHAMACHOLAPURAM, SALEM-636010

A Report on
Research Project Abstracts

(Completed in the academic year 2020-2021 using 2019-2020 fund)

Submitted to



STATE COUNCIL OF EDUCATIONAL
RESEARCH AND TRAINING
CHENNAI-600 006
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Research Project Abstracts 2020-2021

Introduction

Searching it again and again means Re-search. Research is defined as human activity based on intellectual application in the investigation of matter. Research is defined as the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings. This could include synthesis and analysis of previous research to the extent that it leads to new and creative outcomes.

Research is a process of systematic inquiry that entails collection of data; documentation of critical information; and analysis and interpretation of that data/information, in accordance with suitable methodologies set by specific professional fields and academic disciplines.

Research is conducted to evaluate the validity of a hypothesis or an interpretive framework; to assemble a body of substantive knowledge and findings for sharing them in appropriate manners; and to generate questions for further inquiries.

Educational research refers to a systematic attempt to gain a better understanding of the educational process, generally with a view in improving its efficiency. It is an application of scientific method to the study of educational problems.

Educational Research

Education is a social process. Its fundamental objective is to change things like that in person, to progressive social development and individual approach to life are essential. The purpose is mainly dependent on the process of education. If the process of education is forceful and effective than person in the learning process, it is desirable to change the above simple and would be possible otherwise will be not. Therefore, the process of education is the key problem of how to strengthen the effective and powerful for solution of this problem research is necessary.

Educational research refers to a systematic attempt to gain a better understanding of the educational process, generally with a view in improving its efficiency. It is an application of scientific method to the study of educational problems.

Educational Research is the systematic application of scientific method for solving for solving educational problem.

Importance of Educational Research

- Educational research plays a crucial role in knowledge advancement across different fields of study.
- It provides answers to practical educational challenges using scientific methods.
- Findings from educational research; especially applied research, are instrumental in policy reformulation.
- For the researcher and other parties involved in this research approach, educational research improves learning, knowledge, skills, and understanding.
- Educational research improves teaching and learning methods by empowering you with data to help you teach and lead more strategically and effectively.
- Educational research helps students apply their knowledge to practical situations.

Types of Educational Research

1. Correlational Research
2. Experimental Educational Research
3. Quantitative Research
4. Qualitative Research
5. Mixed Educational Research

District Research Committee

As per the proceeding given by the Director of SCERT, Chennai-6, Dr M.Selvam , Principal, DIET, Uthamacholapuram conducted faculty meeting to prepare Research proposals on 5-1-2021. The Salem District Research Committee was formed on 5-1-2021 based on the proceeding of Director, SCERT, Chennai-6.

The Chairman and the members of District Research Committee.

S.No.	Name and Address of the DRC Members	Committee
1	Dr M. Selvam, Principal, DIET, Uthamacholapuram, Salem - 10.	Chairman
2	Dr P. Govindapraksh, Sr.Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
3	Dr.R.Selvamathi Sugirtha, Assistant Professor in Biological Science, Sri Sarada College of Education, Salem. 16	Member
4	Dr.K.P.Shanmugavadivu, Assistant Professor Sri Sarada College Of Education, Salem. 16	Member
5	Dr R. Nagalakshmi, Sr. Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
6	Dr K. Kannaki, Sr. Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
7	K. Ramesh Kumar, Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
8	Dr E. Maanhvizhi, Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
9	B. Ananthi, Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
10	B Uthayakumar, Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member

District Level Research Proposals Approval Committee Meeting

The research proposal approval committee meeting was conducted on 07.01.2021, at DIET, Uthamacholapuram , Salem. The chairman, members of District Research Team and the investigators were assembled on that day. The inaugural session started at 10.00 a.m with Tamil Thai Valthu. The Welcome address was given by Dr.P.Govindaprakash, Senior Lecturer. Dr. M..Selvam, the Chairperson of the District Research Team and the Principal of DIET, Salem gave Presidential address. The felicitation address was given by Dr.R.Selvamathi Sugirtha, Assistant Professor in Biological Science, Sri Sarada College of Education, Salem. and Dr.K.P.Shanmugavadivu, Assistant Professor ,Sri Sarada College Of Education, Salem. The valediction session was end at 6.30 p.m with National Anthem. The vote of thanks was given by K.Ramesh Kumar, Lecturer, IFIC Branch.



13 Research problems were presented by the faculty members and they were discussed and finalized. The approval committee discussed the need for the research project, Objectives, Sample, Tool, Methodology, Statistical Techniques used in this project, Time Schedule and Budget. The selected Research titles are listed below:

Research Investigators



S.No.	Title of the Research	Name of the Faculty and Designation
1	"Self Defense Management of School Teachers in COVID-19 Pandemic and their Scientific Attitude"	P. Govindapraksh, Sr.Lecturer, DIET, Uthamacholapuram, Salem - 10.
2	"An Analysis of Professional Development of Teachers' Online in-service Training Programmes During COVID19 Pandemic"	S.V. Vijayalakmi Shankar, Sr.Lecturer, DIET, Uthamacholapuram, Salem - 10.
3	"Effectiveness of Free and Open Source Software (FOSS) in Teaching Social Science at Upper Primary Level"	G. Dhanammal, Sr.Lecturer, DIET, Uthamacholapuram, Salem - 10.
4	"Effectiveness of Blended Teaching of Chemistry among Higher Secondary Students"	R. Nagalakshmi, Sr. Lecturer DIET, Uthamacholapuram, Salem - 10.
5	"Influence of Training - Courselet in Developing Online Assessment Skill among Teachers"	K. Kannaki, Sr. Lecturer, DIET, Uthamacholapuram, Salem - 10.

6	"Awareness on Tribal Welfare Schemes among Tribal member in the school Management Committee in Yercaud"	S. Peter Anandh, Lecturer, DIET, Uthamacholapuram, Salem - 10.
7	"Impact of "Value Bloomer" on inculcating values among Upper Primary Language Teachers"	S. Selvi, Lecturer, DIET, Uthamacholapuram, Salem - 10.
8	"Effect of Learning Management System Based Training on Action Research skill of Teachers"	K. Ramesh Kumar, Lecturer, DIET, Uthamacholapuram, Salem - 10.
9	"Impact of Teachers' Training on Addressing Attitude and Behavioral changes of the students during Covid-19 Pandemic"	S. Manikandan, Lecturer, DIET, Uthamacholapuram, Salem - 10.
10	"A study on Diverse Emotional Attributes of Orphan Children in Institutional Homes"	E. Maanhvizhi, Lecturer, DIET, Uthamacholapuram, Salem - 10.
11	"Impact of Micro Videos Chain on Classroom Transaction Skill"	M. Mahalakshmi, Lecturer, DIET, Uthamacholapuram, Salem - 10.
12	"Effectiveness of Composite ICT Techniques for Enhancing Teaching Science among Upper Primary Teachers"	B. Uthayakumar, Lecturer, DIET, Uthamacholapuram, Salem - 10.
13	"Impact of Encyclopedic Training videos on Mathematics Teaching skill Management by MOODLE"	R. Kavitha, Lecturer, DIET, Uthamacholapuram, Salem - 10.

District Level Research report submission Committee Meeting

The District Level Research report submission Committee Meeting was conducted from 19.04.2021 to 20.04.2021, at DIET, Uthamacholapuram ,Salem. In the first day, 6 research reports are approved and in the second day 7 research reports are approved by the District Research Team. The Chairman and members of District Research Team approved all reports with necessary modification and corrections.

Research problems , objectives of the research project , sample of the research project , Data collection of the research project , research tools used in of the research project , Methodology of the research project , statistical analyses used inth research project , result of the research project , Implication of the research project and suggestions of the research projects were presented by the investigators individually with PowerPoint slides using Multimedia projector. The Intervention Videos are displayed. After appropriate discussion with investigators all reports are approved by the District Research committee. **The Research Team, activities photos and abstracts of the 13 Research Projects are followed.**

The Chairman and the members of District Research Committee.

S.No.	Name and Address of the DRC Members	Committee
1	Dr. M. Selvam, Principal, DIET, Uthamacholapuram, Salem - 10.	Chairman
2	Dr. P. Govindapraksh, Sr.Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
3	Dr.R.Selvamathi Sugirtha, Assistant Professor in Biological Science, Sri Sarada College of Education, Salem. 16	Member
4	Dr.V.Priya, Assistant Professor in Physical Science Sri Sarada College Of Education, Salem. 16	Member
5	Dr. R. Nagalakshmi, Sr. Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member

6	Dr. K. Kannaki, Sr. Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
7	K. Ramesh Kumar, Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
8	Dr. E. Maanhvizhi, Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
9	B. Ananthi, Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member
10	B. Uthayakumar, Lecturer, DIET, Uthamacholapuram, Salem - 10.	Member

Team member discussion with the Research Investigators



Dr M. Selvam , Principal interacted with the Research Investigator



Investigators presented their reports





Investigators presented their reports





District Research Team consolidated their views



DISTRICT INSTITUTE OF EDUCATION AND TRAINING, UTHAMACHOLAPURAM, SALEM - 10.			
13 RESEARCH PROJECT ABSTRACTS (2020-2021)			
S.No.	Name of District	Title of the Research	Name of the Faculty and Designation
1	SALEM	"Self Defense Management of School Teachers in COVID-19 Pandemic and their Scientific Attitude"	P. Govindapraksh, Sr.Lecturer, DIET, Uthamacholapuram, Salem - 10.
2	SALEM	"An Analysis of Professional Development of Teachers' Online in-service Training Programmes During COVID19 Pandemic"	S.V. Vijayalakmi Shankar, Sr.Lecturer, DIET, Uthamacholapuram, Salem - 10.
3	SALEM	"Effectiveness of Free and Open Source Software (FOSS) in Teaching Social Science at Upper Primary Level"	G. Dhanammal, Sr.Lecturer, DIET, Uthamacholapuram, Salem - 10.
4	SALEM	"Effectiveness of Blended Teaching of Chemistry among Higher Secondary Students"	R. Nagalakshmi, Sr. Lecturer DIET, Uthamacholapuram, Salem - 10.
5	SALEM	"Influence of Training - Courselet in Developing Online Assessment Skill among Teachers"	K. Kannaki, Sr. Lecturer, DIET, Uthamacholapuram, Salem - 10.
6	SALEM	"Awareness on Tribal Welfare Schemes among Tribal member in the school Management Committee in Yercaud"	S. Peter Anandh, Lecturer, DIET, Uthamacholapuram, Salem - 10.
7	SALEM	"Impact of "Value Bloomer" on inculcating values among Upper Primary Language Teachers"	S. Selvi, Lecturer, DIET, Uthamacholapuram, Salem - 10.

8	SALEM	"Effect of Learning Management System Based Training on Action Research skill of Teachers"	K. Ramesh Kumar, Lecturer, DIET, Uthamacholapuram, Salem - 10.
9	SALEM	"Impact of Teachers' Training on Addressing Attitude and Behavioral changes of the students during Covid-19 Pandemic"	S. Manikandan, Lecturer, DIET, Uthamacholapuram, Salem - 10.
10	SALEM	"A study on Diverse Emotional Attributes of Orphan Children in Institutional Homes"	E. Maanhvizhi, Lecturer, DIET, Uthamacholapuram, Salem - 10.
11	SALEM	"Impact of Micro Videos Chain on Classroom Transaction Skill"	M. Mahalakshmi, Lecturer, DIET, Uthamacholapuram, Salem - 10.
12	SALEM	"Effectiveness of Composite ICT Techniques for Enhancing Teaching Science among Upper Primary Teachers"	B. Uthayakumar, Lecturer, DIET, Uthamacholapuram, Salem - 10.
13	SALEM	"Impact of Encyclopedic Training videos on Mathematics Teaching skill Management by MOODLE"	R. Kavitha, Lecturer, DIET, Uthamacholapuram, Salem - 10.

1. Title of the Research Project

“Self Defense Management of School Teachers in COVID-19 Pandemic and their Scientific Attitude”.

2.Name of the Researcher

Dr P.Govindaprakash, Senior Lecturer, DIET, Uthamacholapuram, Salem-10

3. Need and significance of the Project

Teachers are the backbone of education system for imparting knowledge to the students in institutions. They shape the future of the young minds and to become the contributing members of the society. The Scientific attitude is necessary to an individual to lead a smooth and live comfortable life in the society. An individual with good scientific attitude can understand the phenomena of nature and human behavior and accordingly in their own family as well as in the society in which they lives. The scientific attitude plays a major role in moulding a child's character and in selecting a career deciding course for this life. Another important significant feature is the possessions of scientific attitude by the teachers who teach it has influence directly or indirectly in the classrooms.

The COVID-19 pandemics which have been created by the outbreak have left us behind without opening the schools, colleges, and other educational institutions to safeguard the future generation. The teacher are in creating the awareness, preventive measures and management of corona by developing scientific attitude to develop self-defense management in order to make the school environment in turn society corona free.

Unless a teacher possesses the Scientific Attitude and Self-Defense Management in COVID-19 in their day-to-day life, he/she cannot eliminate the negative attitude of COVID-19 pandemic. A teacher without proper knowledge of Self-Defense Management in COVID-19 and Scientific Attitude cannot develop or promote it to their students. Now it is the right time for the identification of necessary factors of scientific attitude and Self-Defense Management in COVID-19 pandemic among the teachers. Hence the researcher has chosen the project **“Self Defense Management of School Teachers in COVID-19 Pandemic and their Scientific Attitude”**.

4. Methodology

I. Objectives of the Study

- i. To assess the level of Self-defence Management of School Teachers in five Educational district of Salem district.
- ii. To find out the level of Scientific Attitude of School Teachers in five Educational district of Salem district.
- iii. To compare Self-Defence Management of School Teachers in COVID-19 Pandemic and their Scientific Attitude.
- iv. To assess the Self-Defense Management of School Teachers based on gender, type of teachers, type of school management, locality of school, teaching experience and educational qualification and
- v. To find out the Scientific Attitude of School Teachers based on gender, type of teachers, type of school management, locality of school, teaching experience and educational qualification.

II. Method

Survey method is used in this Project.

III. Research Tools used in this Study

- i. Self Defense Management Scale of COVID-19 (SDM Scale of COVID-19) and
- ii. Scientific Attitude Scale of COVID-19

IV) Sample of the Project

Salem district has five Educational Districts, namely; 1.Attur, 2. Edapadi, 3.Sankari, 4.Salem Rural and 5.Salem Urban. 410 Primary and Upper Primary Teachers among these educational districts of Salem district were treated as sample of the project.

V) Statistical Technique used in this Project

The researcher used Percentage Analysis, t test, f test to analyze the data which are collected from the five educational districts of Salem district.

5. Major Findings

1. The teachers of Attur Educational District possess higher Self-defense Management (Mean Value – 99.06). The teachers of Salem Rural Educational District possess lower Self-defenseManagement (Mean Value – 94.83). There is a significant difference among Educational Districts with respect to Self-defense Management.
2. The teachers of Attur Educational District possess higher Scientific Attitude (Mean Value – 49.87). The teachers of Sankari Educational District possess lower Scientific Attitude (Mean Value – 46.68). There is a significant difference among Educational Districts with respect to Scientific Attitude.
3. There is a significant positive relation between Self Defense Management and Scientific Attitude of School Teachers in COVID-19 Pandemic. The correlation value (r) is 0.42.
4. There is a significant difference between Male and Female teachers with respect Self Defense Management at 1% level with t-value 2.81.
5. There is no significant difference between Secondary Grade Teachers (SGT) and Graduate (GT) Teachers with respect to Self DefenseManagement and Scientific Attitude and its dimensions at 5% level.
6. 47.8% of teachers possess moderate Level of Self Defense Management in COVID-19 and
7. 54.4 of teachers possess moderate Level of Scientific Attitude in COVID-19.

6. Implications of the Research

1. This study will generate the awareness of Self-defence Management among the School teachers in COVID-19 Pandemic.
2. This study will inspire the target teachers to develop their Scientific Attitude in COVID-19 Pandemic.
3. In-service training programme will develop scientific attitude among the teachers.

Self Defense Management of School Teachers in COVID-19 Pandemic and their Scientific Attitude	
Researcher:Dr P.Govindaprakash, Sr. Lecturer, DIET, Salem-10	
Presentation of Research Proposal	Workshop on Research Tools Construction
	
Workshop on Research Tools Construction	Workshop on Research Tools Refinement
	
Data Collection	
MMS, MettuTheru, Salem	Gokula Vilas Middle School , Dhathagapatti, Salem
	

1.Title of the Project

“An Analysis of Professional Development of Teachers’ Online In-Service Training Programmes during COVID 19 Pandemic”.

2. Name & DIET of the Researcher:

Dr. S.V.Vijayalakmi Shankar, Senior Lecturer, DIET, Uthamacholapuram, Salem -10.

3. Need and significance of the study:

The analysis was designed to gather information about the In-Service Teachers and their Professional Development in which online teachers participate, the challenges they encounter while learning the content, understanding the content, recall the content and apply the content. Teachers' perceived needs for additional training to better support to handle ICT-based online training for successful professional development. The analysis also investigated the aspects of teachers' different kinds of an in-service training programmes. The present study aimed to analyse seven online in-service programs organized by the District Institute of Education and Training (DIET), Uthamacholapuram, Salem, Tamilnadu. But also, whether the online in-service program achieved its specific goals and had a positive impact on teachers' affective status, knowledge-base and practices. The analysis was conducted in two ways after the program took place. 1.using online Google form for 17 blocks of Salem dt.2. Remaining four blocks field survey collection was made with the help of DIET Faculty members.

4.Methodology:

I. Objectives:

- To reveal the various forms of online training modes adopted during the COVID-19 pandemic.
- To analysis, the various online in-service training program conducted during the COVID-19 pandemic.
- To find out the understanding capacity of teachers' online in-service training program conducted during the COVID-19 pandemic.
- To find out the effectiveness of an online in-service training program conducted during the COVID-19 pandemic and

- To identify whether the professional development has occurred or not due to an online in-service training program conducted during the COVID-19 pandemic.

II. Method of Experiment:

Survey Method (Random Sampling)

III. Tool:

A Survey Questionnaire was constructed to analyse the understanding capacity of teachers in an online in-service teacher training programme.

1. Training on Digital Assessment Tools for teachers.
2. Training on Digital Resources Preparation in Science and Social Science.
3. Training on Math Park for Upper Primary Teachers.
4. Training on Post NAS Intervention Activities.
5. Training on Enhancing Immediate Span of Memory through Yoga.
6. Training on Questioning Skills for Upper Primary Teachers.
7. Training on Questioning Skills for Primary Teachers.

IV. Samples:

The data for the study has been collected from Government Primary School, Government Middle School, and Government High School, other types of schools (aided schools and AdiDravida Welfare schools), Salem dt, Tamilnadu State, India.

Total Number of Teachers Trained:13,880, Number of samples collected:4448

Percentage of samples: 32%

Name of the Online In-Service Training Programme	Number of Teachers	Number of Teachers taken for
Training on Digital Assessment Tools for teachers.	1840	779
Training on Digital Resources Preparation in Science and Social Science.	1641	265
Training on Enhancing Immediate Span of memory through Yoga.	2722	829

Training on post-NAS Intervention Activities.	2463	983
Training on Math Park for upper primary teachers.	922	206
Training on Questioning Skills for upper primary teachers	1627	191
Training on Questioning Skills for primary teachers	2665	1195
Total population	13,880	4448

V. Statistical Techniques used:

1. Question wise Analysis 2.Descriptive Statistics and 3. Differential –t-test

5.Findings:

- Mean of Concept attainment score of training on Digital Assessment Tool is 72.7%
- Mean of Concept attainment score of training on Digital Resources Preparation is 71.43%
- Mean of Concept attainment score of training on Immediate Span of Memory through Yoga is 61.80%
- Mean of Concept attainment score of training on Post NAS Intervention Activities is 82.02%
- Mean of Concept attainment score of training on Math Park for Upper Primary Teachers is 59.53%
- Mean of Concept attainment score of training on questioning skills for upper primary teachers is 59.53% and
- Mean of Concept attainment score of training on questioning skills for primary teachers is 65.30 %

6. Educational Implications:

- In this investigation, male teachers have high content attainment mean score of training on Digital Assessment Tools, Training on Math Park, and Training on Questioning Skills for Primary as Well Upper Primary than the Female Teachers.
- Training on Digital Resources Preparation, Training on Immediate Span of Attention through Yoga, and Training on post-NAS intervention activities female teachers have high content attainment mean scores than male and vice versa.
- In the training on Immediate Span of Memory, post-NAS intervention, Math Park, and Questioning Skills for upper primary and Primary concerning Type of School, there is no difference between the mean scores of content attainment of above said training and Type of School.
- Analysis of professional development of teachers through an online in-service training program in this investigation indicated that there is much significant relationship among online in-service training programs and years of experience, type of posts.
- This suggests that from this analysis professional development of teachers' online in-service training programs are related to classroom practices and their professional growth.
- However, teachers should have autonomy and liberty in deciding when and where to integrate technology to support their teaching practices.
- These days though, primarily due to pandemics, all types of teachers have to mandatorily resort to technology because of the online in-service training program, which seemingly is going to become a new norm in the future.

1. Research Title : ‘‘Effectiveness of Free and Open
Source Software (FOSS) in Teaching Social
Science at Upper Primary Level’’

2. Name and DIET of the

Researcher : G. Dhanammal, Senior Lecturer,
DIETUthamasolapuram,Salem - 636010

3. Need and Significance of the study :

The impact of FOSS will be felt in many areas. In this paper we focus on FOSS in education and the role it can play in schools, colleges and universities. Information and communication technologies (ICTs) have the potential to improve the quality of education. FOSS has the potential to help lower the cost barrier by reducing the cost of software and there are numerous other advantages in education, including pedagogical benefits. Teachers can use computers to construct their assessment tasks, to deliver these tasks to relevant students and to record and provide feedback and grades to these students. Hence, the investigator aimed to train the teachers to use free and open source software in history and geography teaching.

4. Methodology

I. Objectives :

- To train the teachers on effectiveness of free and open source software in history and geography teaching.
- To evaluate and ascertain the training package on effectiveness of FOSS in history and geography teaching among the teachers through online will be made positive impact in assessment skills of the teachers, and
- To suggest legitimate training package on effectiveness of FOSS in history and geography teaching for further adoption.

II. Method of experiment:

Mixed type of research has been adopted for this study viz., qualitative and quantitative design. For quantitative study: Parallel group experimental design has been adopted. For qualitative study (in progress), the investigators will interview the teachers about the impact of training on using FOSS in Social science Teaching.

III. Tool:

The instruments used in the present study included:

- Achievement questionnaire: used to study the knowledge of the teachers about FOSS using social science teaching, and
- Small group interview schedule: small group interview organized by the investigators and received the suggestion for implementing the FOSS in Social Science teaching.

IV. Samples:

60 teachers from secondary schools has selected through randomly as sample (30 teachers are in control group and 30 are in experimental group).

V. Statistical Techniques used:

The descriptive and inferential statistics have been used to made analysis for the present research. The descriptive analysis have made with the mean and percentage analysis and teachers 't' test have used to made inferring the results i.e analysis of significant difference.

5. Findings:

- The Free and Open Source Software used in this present study holds online and face to face interaction among the learners makes to move towards clarity and deep knowledge of learning content.
- FOSS helps the students to operate and explore the learning content again and again and opportunity to enhance their skills to a greater extent by means of repeated and various mode of content availability.
- Both online and Face to face learning helps in clarifying the doubts and allows to interact discuss and disseminate the learned knowledge which enables the meta-learning among the students.
- Visualization of learning content in social science and the flexibility of learning is ensure through this model and allows a kind of immediate and real-time engagement put forth by the students and create interests among the students towards face to face interaction as well as connected through social sites each other, and

- The contextualization process become easy among the students become very easy through FOSS tools and it encompasses the meta-learning, attaining the required skills and enabled space for reinforcement.

6. Educational Implications:

- Teachers are striving to strike a balance between resources and requirements, open source e-learning software has emerged as a viable solution.
- The expected outcomes of this research are Open source products are customizable and can involve third parties.
- New features and tools can be imported from the open source community and the huge collaborative network of the open source community minimizes, although it does not eliminate, the risk of discontinued service.
- Volunteer help is available through open source support systems such as forums. This research explores the usage of FOSS are helps for extensive collaboration ensures that software products keep improving, and
- FOSS has enriched the education field in many ways. Also by providing tools and software to help the students and teachers to achieve their academic, career and personal goals.



Tool preparation workshop



Module preparation



e-content preparation



Face-to-face workshop



Small group discussion



Observation of skill of teachers FOSS tools

1. Research Title: Effectiveness of Blended Teaching of Chemistry among Higher Secondary Students.

2. Name :Dr. R.Nagalakshmi,Senior Lecturer ,DIET,Salem

3. Need and significance of the study:

Technology continues to transform today's classrooms. And teaching methods have changed to fit the expectations, learning styles, and interests of students. Today, blended learning is fast becoming a preferred teaching strategy for all grade levels. It's popular because it effectively combines the benefits of traditional instruction with online learning. The perfect blended learning program includes web-based teaching supported by human touch and media. It optimizes the achievement of learning objectives with the application of appropriate learning technologies to match the personal learning style. In this pandemic situation the need for blending the teaching strategy arises because of regular class room direct instructions does not have its significance. Hence this study emerged.

4. Methodology:

I. Objectives

- To find out the level of achievement of control group students in chemistry subject.
- To find out the level of achievement of experimental group II students in Chemistry subject.
- To find out the effectiveness of Blended method of teaching chemistry subject.

II. Methodology

In this research the investigator applied experimental research as a method.

III. Tools used

1. Academic Achievement Questionnaire in Chemistry subject.(Constructed and validated by the investigator).
2. Multimedia package on chemistry subject constructed and validated by the investigator.

IV. Sample

The sample of this study consists of 25 higher secondary students in Salem District. Simple random sampling technique was used to select the sample for the present study. Proportionate weightage was given to various sub-samples.

V. Statistical Techniques Used

1. Mean (measures of central tendency), 2. Standard Deviation (measures of variability) and
3. Differential Analysis 't' test

5. Findings:

Research Question One

What is the effect of using blended learning on the achievement of 12th grade students in chemistry?

To answer this question, the means and standard deviations were obtained for the performance of the study two groups (The experimental and the control groups) on the pre and post achievement tests and their scores. It is noticed from the analysis that the mean of the experimental group that was taught by using the blending learning the post test was higher than the mean of the pre-test, since it reached (4.34), while the mean for the Control group that was taught by the traditional method reached (3.24). To determine if there was any significant difference between the means of the study two groups at the level ($\alpha < 0.05$) in the achievement test, the researcher applied the covariance analysis (ANCOVA).

The hypothesis was tested where the (F) value regarding the strategy reached (7.158) with significance level of (0.000), which means the presence of differences with statistical significance between the means of the two study groups on the post achievement test in favor of the experiential group, this means rejecting the null hypothesis that states: there are no differences with statistical significance at the level ($\alpha < 0.05$) in the students' achievement in the 12th grade in the chemistry attribute to the used teaching strategy (blended learning), the traditional method, the results obtained were in favor of the experimental group.

It is noticed that the means of the experimental group that was taught by using the blended learning strategy was higher since it reached (4.34), while the means of the control group that was taught by the traditional way, was lower as it reached (3.24). This indicates that the difference was in favor of the experimental group that learned by using the blended learning strategy, which means that the use of the blended learning strategy had the effect on the achievement of the 12th grade students in the chemistry subject compared to the traditional method, which is the answer of question one.

Question Two

What is the effect of using blended learning on the attitude of 12th grade students in teaching chemistry?

To answer this question, the means and standard deviations of the performance of the study's two groups (the control and the experimental) on the attitudes questionnaire were calculated.

It is noticed from the table that the means of the experimental group that was taught by using the blended learning was higher, since it reached (4.33), while the mean for the control group that was taught by the traditional method reached (3.24). To determine whether the differences between the means of the two study's groups is with statistical significance at level ($\alpha < 0.05$), the researcher has applied (ANCOVA)

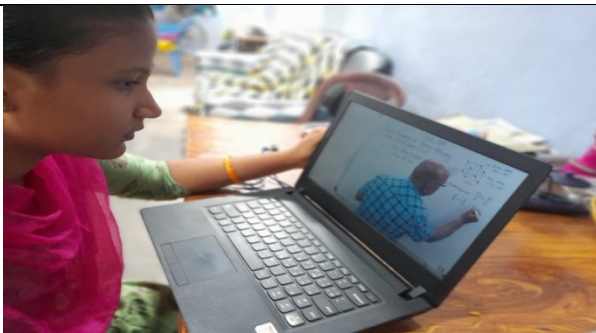
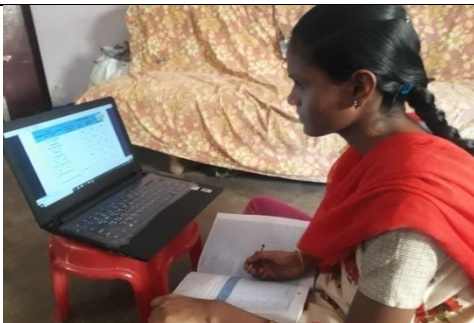
It is inferred that the (F) Value for the strategy reached (6.872) with significance level ($\alpha < 0.05$), which indicates the presence of statistical significant differences between the means of the performance of the study's two groups on the post attitudes questionnaire, this means rejecting the second null hypothesis that states: there are no differences with statistical significance at the level ($\alpha < 0.05$) in the students attitudes in the 12th grade in the chemistry attributed to the used teaching strategy the blended learning, the traditional method.

It is evident that the modified means of the experimental group that was taught by using the blended learning strategy was higher since it reached (4.33), while the mean for the control group that learned by the traditional method reached (3.24), which indicates that the difference was in favor of the experimental group that was taught by using the blended learning. This means that using the blended learning strategy had a positive effect on the attitudes of the 12th grade students towards the chemistry compared to the normal method, which forms the answer to the second question.

6. Educational Implications:

The educational scenario will need a solid infrastructural foundation in order to implement an effective blended learning program, describing the importance of maintaining connectivity, learning devices, and digital content. Another consideration that cannot be overlooked is the need for adequate professional development and support for teachers — especially considering the increased need for self-reflection and collaboration necessary to develop and maintain a meaningful blended learning.

CLASS 12 STUDENTS WATCHING CHEM VIDEOS AT HOME

Kokilavani XIIA	LathikaEswari XII A
 A student with dark hair and glasses, wearing a teal shirt, is sitting at a wooden desk. She is looking at a laptop screen which displays a chemistry video. A book is open on the desk in front of her.	 A student with dark hair, wearing a pink shirt, is sitting at a wooden desk. She is looking at a laptop screen which displays a chemistry video. A book is open on the desk in front of her.
Janani XII A	Mohanapriya XIIA
 A student with dark hair, wearing a red shawl over a white shirt, is sitting on a red plastic stool. She is looking at a laptop screen which displays a chemistry video. A book is open on her lap.	 A student with dark hair, wearing a green and black patterned sari, is sitting on a bed. She is looking at a laptop screen which displays a chemistry video. A book is open on her lap.

1.Name of the Research

“Influencing of Training Courselet in developing Online Assessment Skills among Teachers”

2. Investigator

Dr K. Kannaki, Senior Lecturer, ,DIET, Uthamasolapuram Salem - 636010

3. Need for the Study

Teachers can use computers to construct their assessment tasks, to deliver these tasks to relevant students and to record and provide feedback and grades to these students. Computers can also be used to analyze students' responses, both to provide feedback to the student on the quality and relevance of their response, as well as to provide feedback to the teacher on whether the task can differentiate between students with different abilities. ICT based assessment can be used to test many different capabilities and skills that are developed by students. There are only a few tasks that might not be suitable for completing and recording electronically, but the number of such tasks is rapidly diminishing as technology becomes more sophisticated and widespread. In many disciplines laboratory equipment can be manipulated remotely and students can undertake real time physical performances that are able to be recorded and used for assessment purposes. We are quickly approaching the stage where our imaginations will be the limiting factor in designing e-assessment tasks.

4. Methodology

I. Objectives

- ✓ To design training package on developing online assessment skills among the teachers.
- ✓ To train the teachers through Course let in developing online assessment skills among the teachers.
- ✓ To evaluate the training package on developing online assessment skills among the teachers and
- ✓ To ascertain the training package on developing online assessment skills among the teachers through Course let will be made positive impact in assessment skills of the teachers.

II. Method of Experiment

Parallel group experimental design has adopted for this study.

III. Tools

- (i) Achievement questionnaire and
- (ii) Observation schedule

IV. Sample

80 teachers from secondary schools have been selected through randomly as sample (40 teachers are in control group and 40 are in experimental group) in order to analyze the impact of workshop on developing online assessment skills among teachers.

V. Statistical techniques used

Descriptive statistics such as Mean, percentage and SD are used for basic analysis. Inferential statistics such as student t test, effective size are used to find out the differences of the sample responses.

Findings

- ✓ No significant difference is noticed between pre-test mean scores of control and experimental group teachers in using training courselets for developing online assessment skills.
- ✓ The significant difference is noticed in between post-test mean scores of control and experimental group teachers in using training courselets for developing online assessment skills.
- ✓ No significant difference between post-test mean scores of Male and Female teachers in using training courselets for developing online assessment skills.
- ✓ No significant difference between post-test mean scores of Rural and Urban School teachers in using training courselets for developing online assessment skills

- ✓ No significant difference between post-test mean scores of experimental group teachers in using training courselets for developing online assessment skills with regard to years of experience and
- ✓ No significant difference between post-test mean scores of teachers from primary schools and teachers from upper primary schools of experimental group in using training courselets for developing online assessment skills.

Educational implications

- ✓ The training courselets on online assessment skills are useful to the teachers in learning and developing online assessment skills among the teachers.
- ✓ The courselets are sent to the teachers and made available for them thereby the teachers can access and utilize the learning content anytime and anywhere.
- ✓ The courselets training model of training holds online interaction among the learners makes to move towards clarity and deep knowledge of learning content.
- ✓ The online availability of learning content helps the participants to operate and explore the learning content again and again and opportunity to enhance their skills to a greater extent by means of repeated and various mode of content availability.
- ✓ Online Interaction helps in clarifying the doubts and disseminates the learned knowledge which enables the meta-learning among the participants and
- ✓ The flexibility of learning is ensure through the training Courselet model and allows a kind of immediate and real-time engagement put forth by the participants and create interests among the participants the learning content as well as connected through social sites each other.

Courselet –Developing Online Assessment Skills



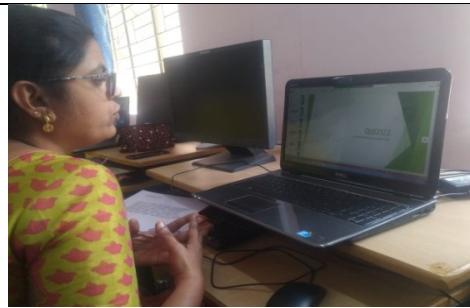
Module Preparation Workshop



Online Classes Inaugurated By Principal



on Google form



Online training – Courselet on Quizzez app



Kahoot app Online training



Courselet on Learningapp.org

1.Title of The Research:

“Awareness on Tribal Welfare Schemes among Tribal Members in the School Management Committee in Yercaud Block”

2.Name of the researcher:

Dr. S. Peter Anandh, Lecturer, DIET, Salem

3.Need and Significance of the Study

Government has taken several steps by framing appropriate policies needed to design and implement various welfare programmes for achieving the objectives of creating favourable environment to ensure speedy socio-economic development of Tribal people. Major ameliorative activities for these communities are grouped under educational development, economic development, Special Component Plan for the for Tribal people. The regular economic development programmes implemented by various sectoral departments for the benefit of Scheduled Tribes with specific target coverage for the Schedule Tribes.

The School Management Committee shall perform the functions of Monitoring the working of the school; Preparing and recommend school development plan; Monitoring the utilization of the grants received from the appropriate Government or local authority or any source and Performing such other functions as may be prescribed Government of India and state Government have implemented varieties of Schemes of Comprehensive Tribal Development Programme (CTDP), Integrated Tribal Development Programme (ITDP), Vocational Guidance Centre etc. for the welfare of the Tribal people. Hence, the investigator wanted to find out how far the tribal members in the school management committee understood the welfare scheme, did they create awareness among themselves and educate the parents to make use of the schemes to develop their socio-economic status with higher education, there is need to study the level of awareness among the tribal members in the School management committee this research project was chosen by the investigator.

4.Methodology

I. General Objective of the Study

1. To find out the level of awareness towards the tribal welfare educational schemes among the tribal members in the School management committee in Yercaud block
2. To find out the level of awareness towards the Economic welfare schemes for the tribal people among the tribal members in the School management committee in Yercaud block

II. Specific Objectives of The Study

3. To find out the significant difference in the level of awareness towards the tribal welfare educational schemes among the tribal members in the School management committee in Yercaud block with respect to their,
 - ❖ Gender
 - ❖ Age
 - ❖ Educational qualification
 - ❖ Years of member in the SMC
 - ❖ Annual income of the family
4. To find out the significant difference in the level of awareness towards the Economic welfare schemes for the tribal people among the tribal members in the School management committee in Yercaud block respect to their,
 - ❖ Gender
 - ❖ Age
 - ❖ Educational qualification
 - ❖ Years of member in the SMC
 - ❖ Annual income of the family

III. Method of the study: The investigator used descriptive survey method for the present study.

Population: The population for this study was covered the all-tribal members in the School management committee in Salem district.

IV. Tools Used: “Questionnaire on awareness towards tribal welfare scheme”.

V.Sample: A simple random sampling technique, a sample of 300 tribal members in the School management committee was selected.

VI. Statistical Technique

The investigator used Percentage Analysis, t test, for ANOVA, the formulated hypotheses were testified with the statistics, Data analysis.

5. MAJOR FINDINGS

1. The level of awareness among the tribal members in the School management committee is moderate towards
 - a. Economic welfare scheme
 - b. Educational welfare Scheme
 - c. overall welfare scheme
2. There is no significant difference in the mean score of awareness towards
 - a. Economic welfare scheme
 - b. Educational welfare Scheme
 - c. overall welfare Scheme among the tribal members in the School management committee with respect to their gender.
3. There is no significant difference in the mean score of awareness of the samples towards
 - a. Economic welfare scheme
 - b. Educational welfare Scheme
 - c. overall welfare scheme among the tribal members in the School management committee with respect to their with respect to their Age.
4. There is significant difference in the mean score of awareness towards
 - a. Economic welfare scheme
 - b. Educational welfare Scheme
 - c. overall welfare scheme among the tribal members in the School management committee with respect to their with respect to qualification.
5. There is significant difference in the mean score of awareness towards
 - a. Economic welfare scheme
 - b. Educational welfare Scheme
 - c. overall welfare scheme among the tribal members in the School management committee with respect to their with respect to their years of membership in SMC.

6. Educational implications

1. Awareness training programme will make the SMC members to use the tribal welfare educational and economic welfare schemes. This will lead to increase the socio-economic status of the tribal members.
2. When the volunteers are created awareness, in turn they will interact with their community members about the various welfare schemes. This will lead to eradicate the child marriage, the use of the child in work or other activities for the benefit of others.
3. The most effective strategies will prevent abuse are those that promote positive roles and valued status for people with disability throughout the Community inclusion. Enhancing valued status, raising awareness. Supporting families and carers, creating safer services, Building a person's confidence.
4. In order to protect and preserve the culture and identity of scheduled tribes the awareness among the tribal members in the SMC are to be strengthened. Hence, the governmental policy should not only focus on tribal development but on sustainable development of tribes with their rich culture, customs, traditions and language, as tribal identity lies with their distinct culture and traditions which they have inherited from their ancestors.

1.Title of the research :

The Impact of “Value Bloomers” on Inculcating Values among Upper Primary English Teachers.

2.Name of the Researcher :

Mrs S. Selvi, Lecturer, DIET, Uthamacholapuram, Salem-10.

3. Need and significance of the Study

Human Life is more valuable in the world because it is based on values. Without values man's life is nothing. So values must be inculcated in the mind of children from childhood onwards. Teachers must develop values through teaching all subjects. The part of art and literature is more on value education. Not only stories but also poetry is more appealing in developing values in the mind of children. They educate and entertain. The aim of this project is to collect poems in Upper Primary English text books which have full of values in preparing the module, ‘The Value Bloomers’ and to impart in teaching and learning activities

When I visited schools HMs and teachers told the misbehavior of some students towards their parents, teachers and the public. They never bother about their parents' economical condition. They spent lavishly and are irregular to schools and turned to be addicts to smoking, drinking, etc. So value education is a must. In the present situation pupils need more value education for their better life. To implement the ‘Value Bloomers’ among the Upper Primary teachers.

4. Methodology:

I. Objectives:

To find out the impact of ‘the Value Bloomers’ on inculcating values among Upper Primary teachers through teaching poems.

1. To evolve the Value Bloomers on inculcating values through teaching poems.
2. To validate the evolved Value Bloomers collected on inculcating values through teaching poems.
3. To implement the Value Bloomers for inculcating values through teaching poems among the Upper Primary teachers.
4. To find out the significant difference in the utilization of Value Bloomers in teaching poem with respect to their experience and educational qualifications.

II. Method:-

Single group experimental study(pre-test and post-test Method).

When an experimenter uses this design, he measures dependent variable, before the independent variable X is applied or withdrawn and then takes its measurement again afterwards. The difference in the measurements of dependent variable, if any, is computed and the amount of change is taken as a result of the application or withdrawing of independent or treatment variable.

III. Tool :-

Pre- test and Post-test questionnaire and discussion on values

1. Questionnaire for measuring the knowledge on imbibed values in the poems of upper primary level.

IV. Sample :-

37 English handling teachers at upper primary level both male and female teachers in Salem District..

V. Statistical Analysis

It is found from the statistical evaluation of pre- test and post-scores that the impact of ‘value Bloomers’ is more on teachers. They have understood the importance, ways and activities of inculcating values among students with the values in poems with different activities. The teachers scored marks from 31 marks and above in the pre-test scores. The post- test scores show that the teachers have scored 61 and above marks.

5. Findings:

1. It is found from the statistical evaluation of pre- test and post-scores that the impact of ‘value Bloomers’ is more on teachers. They have understood the importance, ways and activities of inculcating values among students with the values in poems with different activities.
2. The teachers scored marks from 31 marks and above in the pre-test scores.
3. The post- test scores show that the teachers have scored 61 and above marks.
4. The Percentage is 100%.

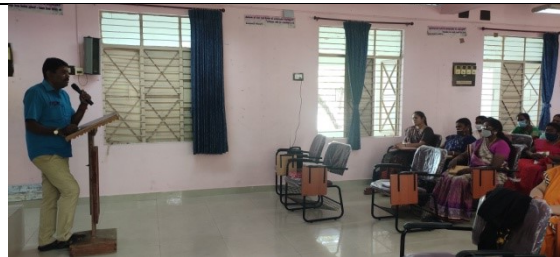
6. Educational Implications:

About 37 Upper Primary English Teachers in Salem District will be provided with the ‘Value Bloomer’ to teach poems with value based activities to inculcate values among Upper Primary students. The further impact of values through teaching poems in schools will be assessed in future. The Teaching of values must be included in the learning outcomes.

Intervention Training



Intervention Training



Intervention Training



1. Title of the Study:

“Effect of Learning Management System Based Training on Action Research Skills of Teachers”

2. Name of the Investigators:

K. Ramesh Kumar, Lecturer and Dr. E. Maanhvizhi, Lecturer, DIET, Salem-10

3. Need for the Study

Research is the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions. Research is a vital part that helps in the development. Action Research is conducted in the grass root level for better developments and solving the issues faced by the teachers in his/her classroom or school environment. Teachers are the people in the education system who works at the grass root level. To have better developments right from the grass root level the teachers should be trained on action research skills which will help him/her to work independently. The teacher needs to develop knowledge and skill. This knowledge acquisition process should not reduce or hinder the quality teaching learning process of the schools. Hence the investigator has designed this study which provides training on research skills through Learning Management System without disturbing the class room teaching time of teacher.

4. Methodology

a) Objectives of the study

The objectives of the study are

- To study the effectiveness of Learning Management System on action research skills.
- To enhance the knowledge on Action Research among Teachers using online Learning Management System, and
- To find out whether the enhancement of knowledge differ with
 - a. Age
 - b. Gender
 - c. Qualification
 - d. Years of experience
 - e. Locality of the school
 - f. Type of school

b) Method of Research

Mixed type of research has been taken up in which both Qualitative and quantitative study method was adopted.

Qualitative study

The effect of learning management system has been conducted through qualitative study. The samples have been interviewed through semi-structured interview schedule.

Quantitate study

Single group experimental study

c) Sample, sample size

72 samples from teaching community belonging to different strata like secondary grade teachers, Bachelor trained teachers, Head Masters of various levels, Block Resource Teacher Educators, Lecturers, Senior Lecturers, Principals of various institutions, who have taken up teaching as profession has been part of the study. Samples have been selected from different parts of the district which will include both male and female belonging to both rural and the urban areas, random sampling method will be employed for the selection of samples.

d) Tools and Techniques

A pre-test and post-test question paper has been constructed and administered to the participants before and after the intervention through learning management system.

e) Intervention

Specially designed Training material has been prepared by the investigator. Training for teachers has been given through Moodle platform for 6 days. The LMS has provided all the sufficient data for monitoring the participants.

5) Findings

- Rural school and urban school locality teachers have same knowledge in using online learning management.
- Urban residence teachers have more knowledge in using online learning management.
- Teachers handling higher secondary classes have more knowledge in using online learning management.
- UG qualified Teachers have more knowledge in using online learning management.

- Teachers working in private schools have more knowledge in using online learning management.

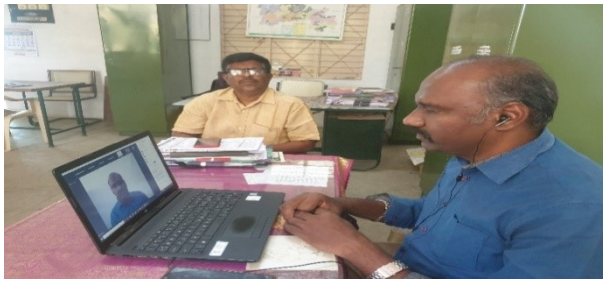
6) Educational Implications

The following were derived as educational implications of the present study:

- Utilization of MOODLE Platform for providing in-service training for the teachers would be the future development of the educational system.
- The results of the study would help with new understandings and insights into the aspects of teacher professional development and in-service trainings.
- This study would provides the Department of School Education and State Council of Educational Research and Training, State Government of Tamil Nadu with new information relating to issues that needs to be considered in addressing the future educational policies and the designing of in-service trainings.
- Being aware of the findings of this research-based study would lead to an in-depth knowledge on MOODLE Courses and that could promote a positive approach and attitude among the teachers on MOODLE Courses.
- An action plan could be evolved by the policy makers to extend the existing level of awareness on MOODLE Courses and its utilization in Tamil Nadu. The modalities of the action plan could be designed on the basis of the research findings of the study.
- The findings of the present study, if taken up in the right spirit, and be elevated to the implementation stage, then that could lead to the future of the State Government of Tamil Nadu.
- The findings of the study could provide in establishing a link-based service form one department to another department with regard to the use of MOODLE Courses. Efforts would be accelerated to integrate all the departments and provide a wholesome training to the teachers.

- The government may also formulate the methods to encourage teachers to use MOODLE Courses for their professional development and to ensure equal professional development opportunities for all teachers irrespective of their locality, type of school and so on.
- Diagnosis and remediation is a basic need for designing teacher professional development courses. Teachers can utilize MOODLE Courses for upgrading their knowledge in content and pedagogy. This would not only help to enhance the instructional process but would also save their time and energy.
- When the teachers are given in-service training in the virtual mode they are given freedom to learn the contents in a self-pacing manner.
- Quality time of the teachers is fully utilized for effective teaching learning process.
- The teachers will be able to use the materials that are provided in the online mode when and where it is needed for them without any hurdles as they are stored in the cloud storage.

Glimpses of the Training on 'How to handle MOODLE Platform'



Conducting online training for the participants of MOODLE course on how to use the platform



Principal proposing the idea behind the MOODLE course and encouraging the participants to take up the course



Investigator explaining to the participants about the duration of the course, patterns of evaluation etc

1. Title of the Project:

Impact of Teachers' Training on Addressing Attitude and Behavioral Changes of the Students During COVID-19 Pandemic

2. Name of the Investigator

S.Manikandan, Lecturer, DIET Uthamasolapuram, Salem - 636010.

3. Need and Significance for the Study

Due to the school closure and total shift from face-to-face learning to face-to-screen learning, students may experience reduced motivation toward studies and increased pressure to learn independently. Emerging research assessing the mental health implications of COVID-19 has identified a heightened prevalence of moderate-to-severe self-reported depression and anxiety among the general public, reflecting the adversity of uncertainty and health-related fears. However, the research investigating the disruption in vulnerable student population due to pandemic is required. The present work is aimed to assess the knowledge, attitude, and behavior of students to the COVID-19 outbreak and to assess attitude and behavioural changes among the students and suggest the ways and means to address these changes by providing psychological behavior modification strategies through workshop for teachers.

4. Methodology**I. Objectives**

- ✓ To study the changes in attitude and behaviour of the students in primary and upper primary schools during covid-19 pandemic.
- ✓ To find out the causes of attitude and behaviour changes among the students in primary and upper primary schools during covid-19 pandemic.
- ✓ To train the teachers to address the attitude and behaviour changes among the students in primary and upper primary schools during covid-19 pandemic.
- ✓ To find out the effectiveness of the training on addressing attitude and behaviour changes among the students in primary and upper primary schools during covid-19 pandemic.
- ✓ To enable the teachers in practicing behavior modification strategies in schools for students wellness.

II. Method of Experiment

Mixed type of research has adopted for this study. Descriptive survey design was employed for qualitative study and for quantitative study, the parallel group experimental study has adopted.

III. Tools

- A survey questionnaire
- Focus group interview
- An achievement questionnaire

IV. Sample

For qualitative study: 300 teachers **and 100 students** from primary, upper primary and higher secondary schools of Salem district have selected randomly as sample for obtaining the data on attitude and behavioural changes of the students.

For quantitative study: 60 teachers from primary, upper primary and higher secondary schools of Salem district have selected randomly as sample for control group and same for experimental group.

V. Statistical techniques used

Descriptive statistics such as Mean, percentage and SD are used for basic analysis. Inferential statistics such as student t test, effective size are used to find out the differences of the sample responses.

Findings

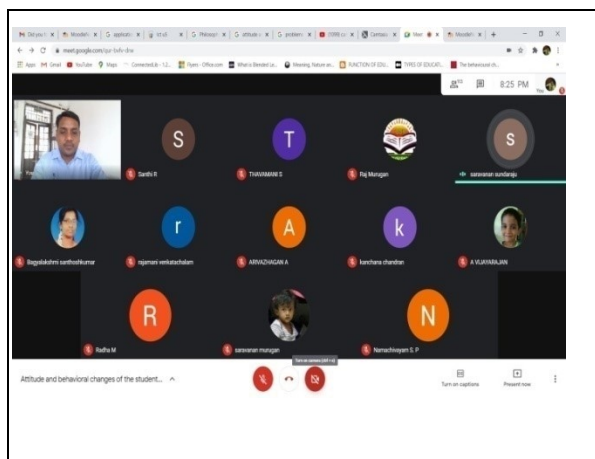
In qualitative part the findings from survey are

- Reduced memory span has noticed among the students due to absence of learning imposing environment
- Self-learning activities are completely missing among the students
- No peer learning and discussion have noticed
- Organization of learning cues and contents are declined among the students in all level but it is high in primary level students.
- Listening and writing skill mitigated due to absence of enforcement by the parents as well as teachers.

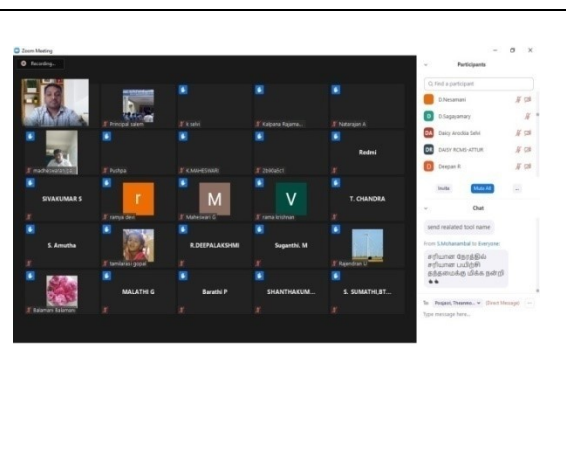
- Valuing the educational inputs is completely reduced in students and they were not interested towards learning content and other academic activities.
- Gradual freedom and prolonged absence of learning environment becomes non-systematic learning attitude developed among the students observed.
- ✓ The post-test mean scores form control (40.22) and experimental group (89.22) teachers are highly differ. It is interpreted that the using encyclopedic training videos for developing mathematics teaching skills management is highly effective.
- ✓ Results shows after workshop, the post-test scores indicates that teachers become well aware about the concepts such as continuous and discontinuous development of cognitive, social, moral and emotional development and Issues facing by the students during non-schooling days and remedies.

Educational implications

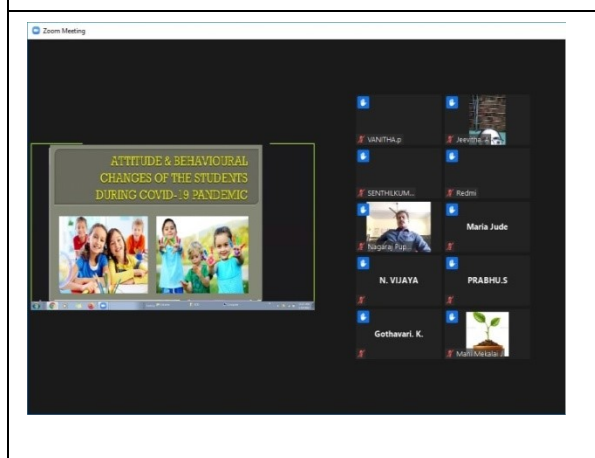
- ✓ This study has provided the knowledge of the variety of difficulties facing by the students at different level during Covid-19 pandemic.
- ✓ Problems in cognitive, social, emotional and moral development of students from primary level to higher secondary level has identified through this study.
- ✓ The present research elicits an insight on importance of continuous encouragement from the teachers to students for addressing discontinuous development of cognitive, social, emotional and moral development.
- ✓ Significance of academic intervention for students in all level have been emphasized and this study has raised many questions about the effects of discontinuous development among the students and meaningful interventions.



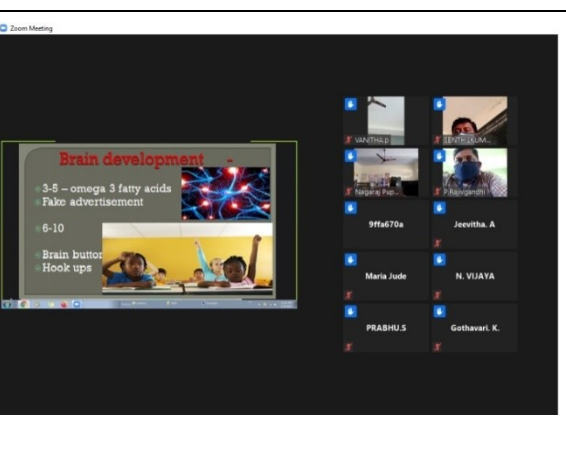
Focus Group Discussion Meet On Google Meet



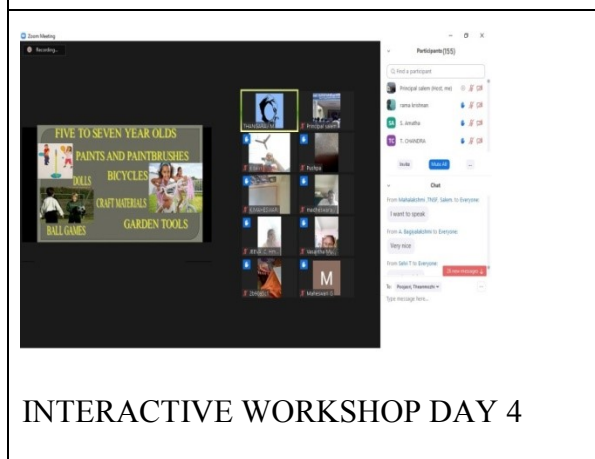
INTERACTIVE WORKSHOP DAY 1



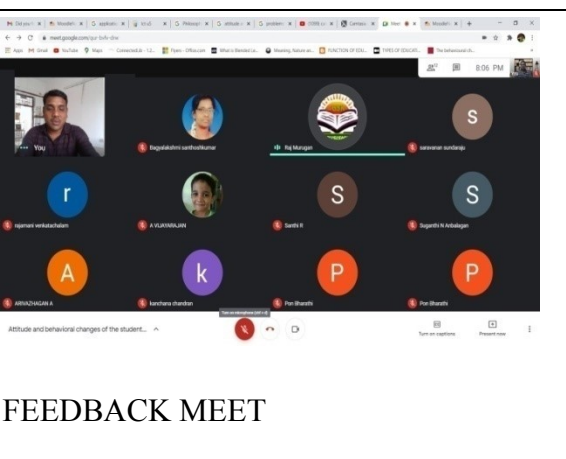
INTERACTIVE WORKSHOP DAY 2



INTERACTIVE WORKSHOP DAY 3



INTERACTIVE WORKSHOP DAY 4



FEEDBACK MEET

1.Title of the study

“A Study on Diverse Emotional Attributes of Orphan Children Living in Institutional Homes”

2.Name of the investigators

Dr E. Maanhvizhi, Lecturer and K. Ramesh kumar, Lecturer, DIET, Salem

Indroduction

Family is an important sociological component of any individual. Those who are deprived from the family set up face lots of emotional disturbances such as anxiety, depression, feelings of left alone, difficulties in the social interaction and conduct. These issues attain a peak when the individual is in adolescent ages. Among these adolescents also the group of people who are at high risk are the orphan children, runaways, abandoned by family, juvenile delinquents, etc.

3.Need and Significance of the Study

In India, along with the growing total population of the country, the number of orphan and abandoned children is also increasing. According to the UNICEF 2012, there are more than 25 million orphan or abandoned and about 44 million destitute children in India. Very few studies have been done on the psychological health of these children and adolescents leaving a yawning gap for further research in this regard in India.

Emotional problems influence the child's overall development, especially the academic and social outcome as adults. Hence, there is a need to assess and identify mental health problems in these institutionalized children so that suitable intervention measures can be designed for them at the right time. Considering the gaps in the earlier research studies in this regard in India, the present study is designed.

5.Methodology

I. Objectives

Following are the objectives formulated for the study

- To study the prevalence and the types of emotional problems in orphan children living in institutional homes.

- To study the association between sociodemographic variables and emotional problems in these children, and
- To study the impact of emotional problems on Educational Outcomes of these children.

II. Method:

Mixed type of research has been used for this study. A part of the study has been conducted in qualitative and the part of the study have been conducted in quantitative design. The quantitative part of the study has focus on the emotional problems encountered by the orphan children and its association with the sociodemographic variables. The qualitative part of the study has focused on the impact of the emotional problems on the educational outcomes.

III. Sampling Technique:

Purposive Sampling Technique have been employed. 134 orphan students have been interviewed and they were taken up as samples.

5. Findings

- Orphan boys and orphan girls have more or less same emotional attributes.
- Orphan students of age 13-15 have more emotional attributes than other age orphan students.
- Orphan student studying in secondary classes have more emotional attributes than orphan students in other classes.
- Orphan students of rural locality have more emotional attributes than other locality orphan students.
- Boys school orphan students have more emotional attributes than girls school and coeducation school orphan students.
- Orphan students under guardians have more emotional attributes.

6. Educational Implications

The implications of this study for education are worth noticing as orphan students are increasing due to various reasons. The role of the educators has increased from academic to the responsibility for the all round development of the individual child. This investigation is a modest attempt at being a guide to that role. Education has an important role in the all round development of an individual. Educationists cannot ignore this aspect of development and also the needs of modern and future society. The progress of a country depends on the maximum exploitation of its human resources and sound mental health is one of the first requisite conditions of an individual's development.

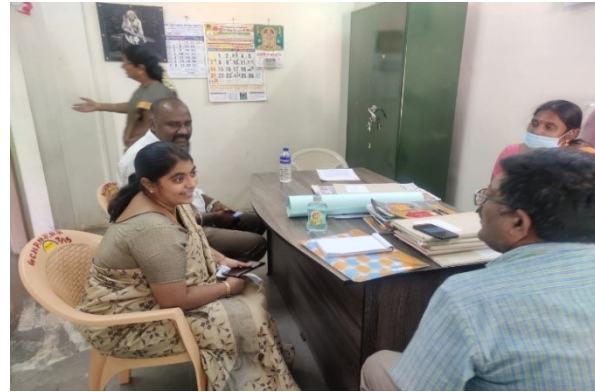
Emotional attributes and academic achievement also play an important role in the development of an individual. Orphan students in the present society encounter many problems which are to be addressed it is the duty of the school to play an important role in this respect. The schools are to address not only the academic issues but also all the emotional issues of the children. This present study may, to some extent, help the school to detect, cure and prevent incidences of maladjustment in Orphan children.

The study may give an insight into the knowledge of needs and developmental tasks of orphan children. Schools and the institutional homes can help children to adjust to their problems and mould their personality to overcome them. By understanding the needs of these children, the school and educational administrators can frame appropriate school policies, methodology of teaching and congenial school environment. It is an important task of school to utilize the various developmental characteristics that emerge at the adolescent stage in imparting guidance and molding behavior according to the specified goals of education. From the findings of this study, educators will be able to develop policies to foster pro-social values, character development and democratic virtues in school children.

Education in the real sense would seem meaningless, if it is only confined to academics, if people are not ready to help, cooperate with each other, behaves like an emotionally stable person along with all coping up skills. Hence this study would help in the overall development of the orphan students who are increasing in numbers.



Tool preparation workshop with the people who work in instructional homes, child line, child friendly Salem project etc



Discussion about the study with the District Child Protection Officer by the investigators and the Principal



Discussion about the students with the In-charge of the institutional home



Discussion about the students of Institutional home with the Principal of a School.

1. Research Title:

Impact of Micro Videos on Effective Classroom Transaction in mathematics for Primary Teachers

2. Name and DIET of the Researcher:

M.Mahalakshmi, Lecturer, DIET, Salem

3. Need and Significance of the study:

Technology is improving at a very rapid speed and it demands almost all the systems in the world to pace up with it. A similar demand is directed towards the traditional learning methodologies for its survival. Therefore, in this paper we highlighted the need of reforms in the prevailing educational models. We introduced the upgraded models of learning, which can be preferably used to cope up with the technological advancements as well as improve the overall learning performance. With the rapid increase in the use of social media and connectivity, it is easier to reach out to students using the tools instead of binding them to traditional class room only.

Mathematics is an abstract concept. Traditional method of teaching mathematics, make students frustrated. Nowadays students attracted with social media like You Tube, Whatsapp, Instagram etc.. Teaching math concepts through micro videos give more sense to learning than the traditional method of teaching. Micro videos allow students to learn at their own pace, and if needed they can use repeatedly, access from anywhere and anytime, boundary from education and lot more.

Video-Based Learning is one such example of a creative and interactive instructional strategy. Videos are one of the foundational tools for learning. They improve learner performance by providing visual examples, allowing them to **interact, explore** and **digest** the content at their own pace.

Using videos to communicate ideas and concepts make learning engaging and insightful. A typical video consists of moving images, sound, and text. So when a learner is watching an interactive video, he is engaging in what you'd call **multi-sensory learning**, which literally means learning through two or more senses.

When learners use multiple senses to grasp the depth of a concept, it allows for more cognitive connections. This not only facilitates deep thinking and understanding of the concept

from different perspectives, but they also acquire problem solving skills which are crucial for better work performance. Videos can be used to demonstrate procedures that can assist in mastery learning. There are **visual** learners who better understand and retain information when ideas, words and concepts are associated with images and videos. These learners learn best through what they see, and videos are an ideal recipe for visual learning. So, the practitioner planned to prepare micro videos for fifth standard mathematics to improve the teaching skill among primary teachers.

4. Methodology

i) Objectives:

- To know the transaction skill of concepts among the teachers
- To know the impact of micro videos on classroom transaction skill
- To develop the transaction skill thorough micro videos
- To create interest among teachers to develop micro videos
- To enhance the capacity of utilizing micro videos for hard spots in classroom teaching
- To create linkage with class room learning activities and day today life among the students.

ii) Method of Experiment:

- Pre test
- Preparation of Micro videos
- Validating micro videos
- Intervention
 1. One day workshop regarding usage of chain of micro videos
 2. Practicing module consisting chain of micro videos
- Post test

iii) Tool:

- Pre-test questionnaire
- Module consisting a chain of micro videos
- Post-test questionnaire

iv) Sample:

30 primary school teachers of Salem District.

v) Statistical Techniques Used:

- Mean (measures of central tendency)
- Standard Deviation (measures of variability)
- Differential Analysis 't' test

5. Findings:

Results showed that a statistically significant difference exists in the pretest and post test scores among primary teachers of Salem District. The practitioner arrived the following results, based on the characteristics and advantages of micro videos.

- There is significant difference between pretest and post test scores of sample in fifth standard mathematics teaching (t value =24.54)
- There is significant difference between I term pretest and post test scores of the teachers in fifth standard mathematics teaching(t value =30.19).
- There is significant difference between II term pretest and post test scores of the teachers in fifth standard mathematics teaching (t value =24.63).
- There is significant difference between III term pretest and post test scores of the teachers in fifth standard mathematics teaching(t value =30.17)
- There is no significant difference between male and female teachers post test scores in teaching through micro videos(t value =4.9423)
- There is no significant difference between math degree and non math degree teachers post test scores in teaching through micro videos (t value =0.8105)
- There is significant difference in the post test between teachers having ICT knowledge and no ICT knowledge in mathematics teaching(t value =5.0043)
- There is no significant difference in the post test between Veerapondy block teachers and Panamarathuppatty block teachers of Salem District(t value =0.3256)

6 Educational Implications:

This study highlights the importance of using micro videos in effective classroom teaching in fifth standard mathematics. It may help the students to acquire more knowledge, get concrete ideas, watch and re-watch facilities and any time any where opportunities. Hence the following recommendations foot fourth for further studies.

- It's time to adopt a teaching strategy which involves videos rather than regular method of teaching
- This study will inspire the teachers to use micro videos for remaining subjects
- Using video in education creates a personalized learning experience, allowing the individual to learn at their own pace
- With video, student can watch and re-watch a video as many times as needed to grasp a topic. Moreover, one can pause whenever he needs to take notes, rehearse it in his brain, or stop and think through the concept. This makes students to love learning.

Planning on Micro Videos production



Shooting on Micro Videos

Shooting on Micro Videos



Workshop on Validating of Micro Videos

Review on Micro Videos



1. Title of the Research:

“Effectiveness Of Composite ICT Techniques For Enhancing Teaching Science Among Upper Primary Science Teachers”

2. Name of the Principal Investigator:

B.UTHAYAKUMAR, Lecturer, DIET, Salem-10.

3. Need And Significance:

Information and communication technology is a technological source to make information available at right time, right place, in the right form to the right user. ICT in schools can be used as a school communication to improve student learning and better teaching techniques. With the advancement of technology in education, schools adopt school communication software to transmit, store, share or exchange information. Computer based learning is one of the modules of school communication tool that helps students to enhance their learning skills through computer aided education .It imparts computer knowledge to students and enables them to obtain large amount of information .

4. Methodology

Method of the study: Quasi Experiment Research Design pre-test post-test experimental method was used in the study.

Population of the study: upper primary school Science handling teachers

Pre-test and post-test double group experimental design will be used in the study.

(i) Objectives

- ❖ To design and develop a composite ICT technique in teaching biology among upper primary teachers.
- ❖ To validate and standardize the composite ICT technique to teach biology among teachers.
- ❖ To find out the initial level of cognition among teach on composite ICT techniques.
- ❖ To implement the evolved composite ICT technique(Module) in teaching science
- ❖ To compare the pre-test and post-test
- ❖ To find out the impact of composite ICT knowledge among the teachers.

ii. Method of Experiment:

Quasi Experiment Research Design pre-test post-test experimental

(iii) Tools

Check list was used to measure the impact of intervention Training

iv) Sample:

43 Upper Primary Teachers of Government school were selected for the study.

v) Statistical Techniques:

1. Percentage analysis
2. t test and
3. paired sample t test

5.Findings

- ❖ There is no significant difference in the pretest mean scores of ICT techniques in teaching science among the samples with respect to their locality
- ❖ There is no significant difference in the pre-test mean scores of ICT techniques in teaching science among the samples with respect to their educational qualification
- ❖ There is no significant difference in the post test mean scores of ICT techniques in teaching science among the samples with respect to their gender.
- ❖ There is no significant difference in the post test mean scores of ICT techniques in teaching science among the samples with respect to their locality
- ❖ There is no significant difference in the post test mean scores of ICT techniques in teaching science among the samples with respect to their educational qualification
- ❖ There is significant difference between pre-test and post-test mean scores of ICT techniques in teaching science of male teachers.
- ❖ There is significant difference between pre-test and post-test mean scores of ICT techniques in teaching science of female teachers.
- ❖ There is significant difference between pre-test and post-test mean scores of ICT techniques in teaching science of Rural School Teachers.
- ❖ There is significant difference between pre-test and Post-test mean scores of ICT techniques in teaching science with respect to Urban School teachers .
- ❖ There is significant difference between pre-test and post-test mean scores of ICT techniques in teaching science of U.G with B.Ed qualified teachers.

- ❖ There is significant difference between pre-test and post-test mean scores of ICT techniques in teaching science of P.G with B.Ed qualified teachers.

There is significant difference between the pretest and posttest mean scores of ICT techniques in teaching Science among Upper Primary school teachers

The level of ICT technique in teaching Science in the pre test

- 23 percent are in good level
- 51.2 percent are in fail level
- 11 percent are in to be improved in the pre test

The level of ICT technique in teaching Science in the post test

In the level of post test after the intervention

- ✓ 32.6 are in the excellent level
- ✓ 45.6 percent are in the good level
- ✓ 20.9 percent are in the fair level

Pre-test mean score has increased from 37.09 to 86.65 in the post test

6. Educational Implications of the Study

- Information and communication technology should be implemented from the primary level.
- Information and communication technology should be applied at all levels in the Schools for the development of education and interest among pupils.
- Refreshment courses and orientation programmes should be organized for the teachers' in order to improve the education teaching and learning.
- Strength of the class must be limited for maintaining conducive atmosphere in the classroom.
- Vast changes in the curriculum are needed; some changes in the methodology of teachers are required.
- Care should be taken to prepare the education teachers in the training period itself in such a way as to get knowledge and ability to apply different methods on development of education teaching.
- Apart from the theory part, practical session should be given more importance.

- Teachers should make students to understand education concepts and apply real time activities.
- Education related dramas', education exhibitions, Education competitions in every year in every school.ang
- Different technology should be implemented in the education teaching and learning and that technology knowledge should be available for teachers.

Dr.M. Selvam, Principal Publishing the module



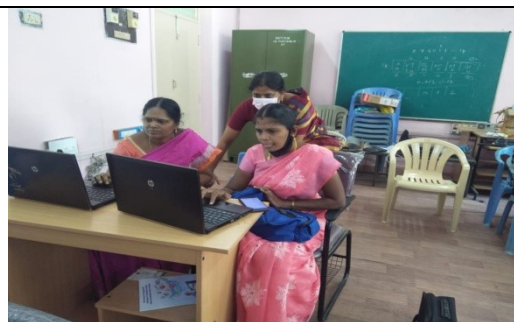
On-line Training



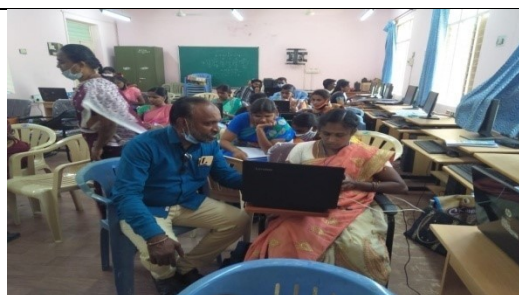
On-line Training



On-line Training



On-line Training



1. Research Title:

“Impact of Encyclopedic Training Videos on Mathematics Teaching Skill Management by Moodle”

2. Name & DIET of the Researcher:

R.KAVITHA, Lecturer, DIET, Uthamacholapuram, Salem-10.

3. Need and Significance of the Study:

The aims of teaching mathematics are to bring skills like critical thinking, analytical thinking, logical reasoning, decision-making, problem-solving among the students. Such aims are difficult to be achieved while teachers are communicating through verbal and mechanical methods that are usually used in the class of mathematics. Teachers are central to classroom instruction in mathematics and have a major impact on students’ learning. To strengthen the mathematics teaching, teachers are need to update their teaching skills. To bring innovatively, creatively, under stable and at the same time creating an interest in the classroom teacher have to integrate one of the strategies or skill is technology. Of course, technology plays a vital role in all the sectors including teaching. While Math teachers incorporating some of the Math applications in their classroom teaching students can learn the content in a better manner. Increased access to technology for math allows for a more customized learning experience. Because no two learners are exactly alike, technology can provide individual students with content and supports that are particularly helpful to their individual needs. So the teachers are need to modernize their teaching skills. There are some of the online courses also available in Learning Management System like MOODLE, MOOC, SWAYAM and others to enhance the teacher professional development.

4. Methodology:

(i) Objectives

- To study the need and expectations of the teachers on inclusion of encyclopedic training videos on mathematics teaching skill management by Moodle.
- To train the teachers of mathematics teaching skills through encyclopedic training videos by Moodle.
- To evaluate the training package on encyclopedic training videos on mathematics teaching skill management by Moodle.

- To ascertain the training package on encyclopedic training videos on mathematics teaching skill management by Moodle among the teachers through online will be made positive impact in assessment skills of the teachers, and
- To suggest legitimate training package on encyclopedic training videos on mathematics teaching skill management by Moodle teaching for further adoption.

(ii) Method of Experiment

Quasi-experimental design has been adopted for this study. For this the investigator has implemented single group experimental design in order to find out the effectiveness of encyclopedic training videos in developing mathematics training skills management among the teachers.

(iii) Tool

An achievement questionnaire has used to obtain the data on effectiveness of encyclopedic training videos in developing mathematics teaching skills management. The questionnaire consists of 25 questions in two sections. First 10 questions for obtaining the information on mathematics teaching skills and remaining 15 questions are about android teaching apps using mathematics teaching.

(iv) Sample

The sample consists of 40 teachers handling mathematics subjects at primary schools of Attur, Konganapuram and Salem Rural block, Salem district and the investigator had used convenience sampling technique for selecting the sample for the study.

(v) Statistical Techniques used

The pre and post-test scores of 40 teachers (24 female and 16 male) on questioning skills were analyzed through descriptive statistics (mean and percentage) and inferential statistics student 't' test and effect size.

5. Findings

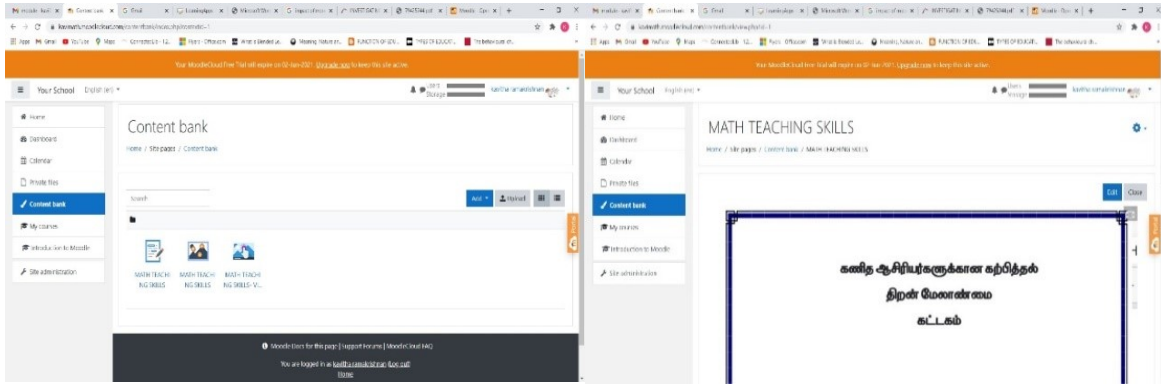
- No significant difference has noticed between pre-test mean scores of control (36.54) and experimental group teachers in using encyclopedic training videos for developing mathematics teaching skills management.(35.23)
- The post-test mean scores form control (40.22) and experimental group (84.19) teachers are highly differ. It is interpreted that the using encyclopedic training videos for developing mathematics teaching skills management is highly effective.

- Male and female teachers are in experimental group teachers in using encyclopedic training videos for developing mathematics teaching skills management are same (SD 6.33 & 7.11).
- No difference between post-test mean scores of experimental group teachers in using encyclopedic training videos for developing mathematics teaching skills management with regard to locality of the school.
- No significant difference between post-test mean scores of experimental group teachers in using encyclopedic training videos for developing mathematics teaching skills management with regard to years of experience and
- No significant difference between post-test mean scores of teachers from primary schools and teachers from upper primary schools of experimental group in using encyclopedic training videos for developing mathematics teaching skills management.

6. Educational Implication:

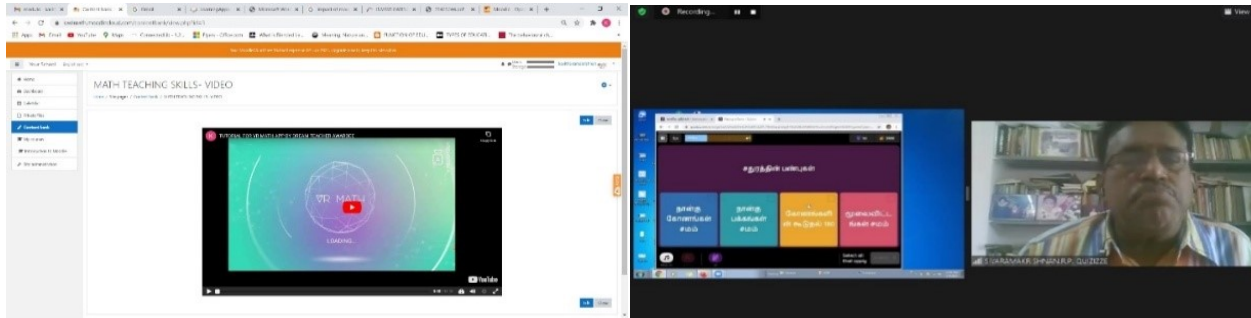
- It helps in exchange and shares ideas among teachers for professional growth.
- It enhance teaching, and facilitate learning using multimodal courseware, Integrate ICT using pedagogical innovations to develop higher-order thinking skills among learners.
- Teacher can participate in learning activities on LMS at any time and from anywhere. It helps the Mathematics teacher to create an enthusiastic and concrete Math classroom.

PHOTOS



Open an account on the MOODLE platform

Uploading a e-content on the MOODLE platform



Uploading a video on usage of android application workshop conducted for Teachers through Zoom meeting for enhancing Math teaching skill management of the MOODLE platform



Pre-test was conducted to the primary teachers