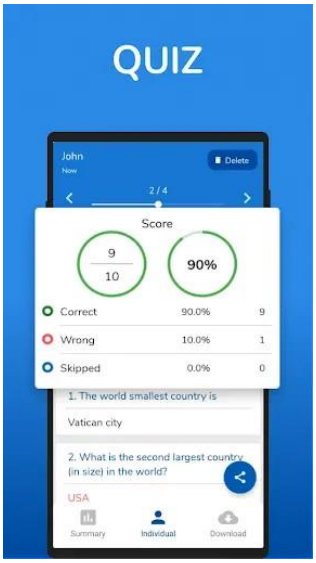
# UTILIZATION OF QUIZZORY APP FOR FORMATIVE ASSESSMENT AMONG THE UPPER PRIMARY SCIENCE TEACHERS




## Action Research Report

**Submitted by**

**Practitioner**

A.Vijayalakshmi,
Lecturer,
District Institute of Education and Training, Settikarai, - 636 704
Dharmapuri District.

**Submitted to**

**STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING, CHENNAI – 600 006**

**May 2024**

# UTILIZATION OF QUIZZORY APP FOR FORMATIVE ASSESSMENT AMONG THE UPPER PRIMARY SCIENCE TEACHERS

## Action Research Report

**Submitted by**

**Practitioner**

A.Vijayalakshmi,
Lecturer,
District Institute of Education and Training, Settikarai, - 636 704
Dharmapuri District.

**Submitted to**

**STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING, CHENNAI – 600 006**

**May 2024**

# DECLARATION

**A.Vijayalakshmi**
**Lecturer**
**District Institute of Education and Training**
**Settikarai, 636 704**

I hereby declare that the action research work done on the topic "UTILIZATION OF QUIZZORY APP FOR FORMATIVE ASSESSMENT AMONG THE UPPER PRIMARY SCIENCE TEACHERS" is an original piece of research work done by me. I have specified, by means of references, from where the information has been taken. To the best of my knowledge, this work has not been submitted earlier in full or part for any other research study in this or any other institution. I also declare that no parts of this present work are reproduced from any other source

**Signature of the Practitioner**
**(A. Vijayalakshmi)**

**Station: Dharmapuri**
**Date :**

# CERTIFICATE

**P.Govinda Prakash,**
**Principal,**
**District Institute of Education and Training**
**Settikarai, 636 704**

This is to certificate that this Action Research entitled **"UTILIZATION OF QUIZZORY APP FOR FORMATIVE ASSESSMENT AMONG THE UPPER PRIMARY SCIENCE TEACHERS" is** the action research work done by Mrs.A.Vijayalakshmi Lecturer in District Institute of Education and Training, Settikarai, Dharmapuri District during the academic year 2023-2024.

I assure that this action research is an original work of the investigator and has not been submitted in part of any other work.

**Principal**
**(P.Govinda Prakash)**

**Place: Dharmapuri**
**Date:**

**Acknowledgement**

I am indebted to the Director, the Joint Directors of State Council of Educational Research and Training, Chennai -6 for permitting me to do this Action Research work.

My sincere thanks to Dr.P.Govinda Prakash, Principal, District Institute of Education and Training, Settikarai, Dharmapuri and former principal Dr V.Hemalatha, Principal, District Institute of Education and Training, Krishnagiri for their support and continuous encouragement in pursuing this Action research work.

I express my deep gratitude to the Zonal Action research committee Chairperson and committee members for their eminent guidance, thought provoking ideas, and enriched professional sharing.

I express my heartfelt thanks to all my DIET colleagues and friends for their timely help in completing this Action research in a successful way.

Last but not the least, I am deeply grateful to the Heads, Teachers of Dharmapuri block schools that helped and cooperated extensively during the entire period. I could not have completed this Action research work without the help of each of these.

**A.Vijayalakshmi,**
Practitioner,

**District Institute of Education and Training**
**Settikarai, 636 704**

# CONTENT

## LIST OF TABLES



## LIST OF FIGURES

# ANNEXURE

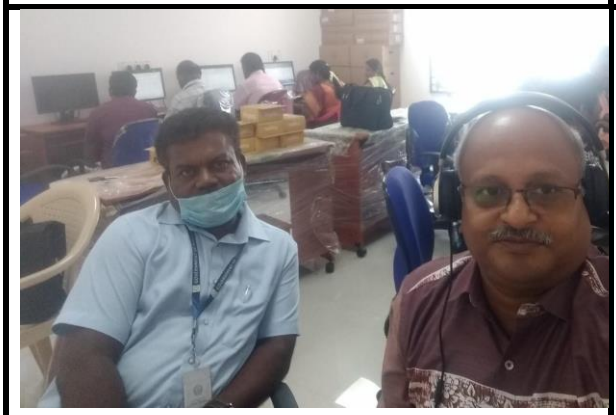
**PRE-TEST AND POST TEST QUESTIONNAIRE**

| S.No | Questions | Yes | No |
|---|---|---|---|
| **1** | 'Survey Heart' and Google form is same or different | | |
| **2** | 'Survey Heart' quizz is offline mode | | |
| **3** | Quiz app is used for both formative and summative assessment | | |
| **4** | Another name for google form is quiz app | | |
| **5** | Is it possible to time limit he questions in quiz app | | |
| **6** | Quiz app is easily accessible for mobiles and laptop | | |
| **7** | Mail id is important for creating the quiz app | | |
| **8** | All features in google form is available in quiz app | | |
| **9** | Vice Typing is possible in quiz app | | |
| **10** | Is it possible to publish the questions in quiz app | | |

**PHOTOS**


Zonal Action Research committee - Approval the Topic

Quizzory app discussed with Expert



Teachers are practising in quizzory app

Zonal Action Research committee – Report Submission

# ACTION RESEARCH ABSTRACT

Action Research Number (2023 – 24) TN – DPI 04

1. Name of the Investigator : A.Vijayalakshmi

2. Name of the DIET : DIET Dharmapuri

3. Title : Utilization of Quizzory App for formative Assessment among the Upper Primary Science Teachers

4. Objectives : 1. To enhance the assessment skill of upper primary science teachers using QUIZZORY APP
2. To practise the quizzer app by preparing various types of questions
3.To maximize the utilization of QUIZZORY APP

5. Sample : The sample of this action research was 10 science teachers of Upper primary schools from Dharmapuri District

6. Tool : Questionnaire was prepared by the researcher and used as a tool for conducting both Pre – test and Post - test

7. Methodology : Single group Experimental study. Two day's Training was given about Quizzory app to the upper primary Science teachers

8. Findings

1. The strategy of using QUIZZORY app has facilitated the assessment skill of upper primary school teachers
2. The impact of introducing the usage of QUIZZORY app has been reciprocated in the usage of the app in the classroom situation for formative assessments
3. The adequate knowledge of usage of QUIZZORY app has given the teachers a confidence of using ICT for assessment purpose
4. This type of strategies helps in improving the usage of gaming web tools, to effectively improve the skill of assessment among primary school teachers

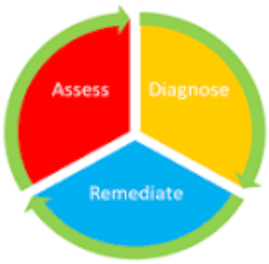
5. Using this strategy, all the children were motivated to answer and attempt all the questions, without being very much cautious that they are being evaluated
6. The performance of teachers in post-test is increased after the intervention by gain mean score is 14.5

## 1. Introduction:

Quizzory app is a survey heart which is a learning platform that offers multiple tools to make a classroom fun, interactive and engaging. As a teacher, everyone can create quizzes/tests/exams with various types of questions which are commonly used for conducting quizzers. In quiz builder, Quiz Conducted person can control quiz access level to the respondents like whether they can view test results or not, easy collection of respondent ID information and can set the duration by which the respondent has to answer the quiz/ exam. This helps in having a more accurate view of the respondent's knowledge on the subject being tested.

**Assessment skill** can be defined as: 'knowledge about how to assess - what students know and can do, interpret the results of those assessments, and apply the results to improve student learning and program effectiveness'. Through working with trainees and practicing science teachers, it has been found that assessment skill is a key part of supporting student progress.

There are three key elements of Assessment for learning: assess, diagnose and remediate.




The researcher identified six elements of assessment skill that experienced teachers have, all of which we can learn and develop through continued professional development.

### i. Classroom assessment skills

These assessment skills are employed in the everyday classroom. Teacher needs to be able to recognise where a student's current knowledge and understanding is, where the student needs to get to and how to get there. Teachers should also develop a 'mental map' of the subject where, for each concept, he/she understands what has come before (prior knowledge required), where it will lead (future applications and development of the concept) and where it fits into the curriculum.

**ii. Intervention skills**

Part of the mental map of the subject should be knowledge of the common errors, misconceptions and mistakes that students can make in a concept: what is difficult to learn, what has common misconceptions associated with it. These can be thought of as a type of terrain on the mental map: Students imagine them as the slopes of hills, or particularly difficult mountains, while other teachers have described them as holes, craters or pitfalls. These areas need a particular skill set to challenge and correct.

**iii. Interpretation skills**

Once the mental map of the subject has an established sequence of concept development and teachers understand the terrain, they will be able to notice when students make mistakes or hold misconceptions, interpret why this has happened and choose an appropriate intervention. These skills are an essential aspect of assessment literacy that can improve student progress.

**iv. Knowledge of exam system**

Knowing what is assessed, how it is assessed and when it is assessed is an important part of assessment literacy. Although teaching and learning should focus on the subject, it should also know and understand the formal assessment systems that exist.

**v. Exam technique**

Teachers' understanding of exam technique is crucial in preparing students for exams and qualifications. This includes the types of questions asked in examinations, the types of responses required by the examiner, common mistakes made by learners and techniques that can gain credit or marks from examiners. Teachers often expose their students to a variety of past exam questions to improve success in actual examinations. How often and when you introduce these is part of this element of assessment skill.

**vi. Critical understanding of assessment**

Teachers with good assessment skills understand the appropriate uses of different assessment types, along with their application, benefits and limitations. This element is made up of a knowledge of types of assessment (including summative and formative approaches), approaches to assessment (multiple choice, short answer, long answer, practical), the reliability of an assessment and the validity of inferences from that assessment. Improving the understanding of these areas can improve the use and quality of assessment in lessons.

**Improving assessment skill**

Assessment skill is more than just ensuring students can pass exams, it is about developing your professional understanding of the subject through knowledge and skills.

Each of the six elements can be developed by focusing on three strands: knowledge, application and critical understanding.

Knowledge: For each element of assessment skill, a teacher can develop the structure of his/her subject knowledge and the knowledge of that aspect of assessment. This includes

- knowing how learners develop their knowledge of concepts
- noticing where they are in their learning
- Identifying common misconceptions and selecting appropriate interventions. Alongside it knows about qualification systems and how students can succeed in them.

Application: Teachers need to be able to apply the elements of assessment skill to real-life situations. For example, knowledge of common misconceptions itself is not enough. How he/she applies that knowledge in planning and teaching lessons is important too.

Teachers need to be able to notice when a learner does not understand a concept, then apply his or her knowledge of appropriate interventions and learning strategies.

Critical understanding: Applying assessment strategies successfully relies on an understanding of their benefits and limitations. A critical understanding of their own subject knowledge terrain, of assessment approaches and of qualification structures (linear, modular, question types) will enhance their ability to teach, make professional judgments and support the students' progress.

**Online assessment**

Online assessment is **a digital testing method where students can take exams, quizzes, or assessments through an internet-connected device**. These assessments measure students' knowledge, skills, and understanding of a particular subject.

**Benefits of online assessment**

- Exam Candidates are used to Digital.
- Reduced Administrative Burden.
- Quicker to Mark and Issue Results.
- Collaborative Question Authoring.
- Automated Test Assembly Tools.
- On-Screen Marking Tools.
- It's More Environmentally Friendly.
- Scalable with Worldwide Reach
- Increased Security.
- Flexibility to Take Exams Anywhere
- Assessment Reporting.
- Cost Effectiveness.

- Assessments that are Accessible to All

Formative Assessment

- Quizzes can be used as both a type of formative and summative assessment. A quiz is a short assessment designed to measure student learning on a topic or skill. When used during a unit, with the results utilized to provide remediation or acceleration, the quiz is formative.
- Survey Heart is a mobile free app

**2. Need for the Action Research:**

Upper primary school teachers, to a certain degree, have attained the skill to use ICT in the following process. In recent years, curriculum transactions are made easier via electronic gadgets. But when it comes to the assessment part, they use traditional methods. As an alternative, the researcher wants to introduce a simple app which can help the upper primary school science teachers to use it to assess the students. Using this app, formative assessment of the students is made easier. It also eases the work of a teacher in preparing mark sheets, continuous progress monitoring and ranking the students based on their academic performance. This would widen the usage of ICT formative assessment of the students.

**3.Identification of the problem**

During school visits, it was found that teachers have a variety of exposure to different teaching learning apps and tools. But when it comes to assessment tools, there is a small lag. The teachers find it difficult to access the students, to rank them and to give remedial teaching based on their understanding. In order to overcome this issue, the practitioner finds an easy remedy to meet the requirements of the teacher. So, the practitioner used the "Quizzory app" which finally gives a solution for assessing the students, using technology and in a playful manner

**4. Statement of the problem**

"Utilization of QUIZZORY APP for formative assessment among the upper primary science teachers"

- **QUIZZORY APP:** This is an intuitive students' response tool for educators to use it in their classrooms. Teachers can digitally engage students in conducting formative assessment
- **Upper Primary teachers**: teachers handling classes VI to VIII in government Upper primary schools
- **Utilization:** Utilization means the subjects /class for which the teachers use the app and how often the use the app

## 5. Objectives of Action Research

- ❖ To enhance the assessment skill of upper primary science teachers using QUIZZORY APP
- ❖ To practise the quizzer app by preparing various types of questions.
- ❖ To maximize the utilization of QUIZZORY APP

## 6. Hypotheses of Action Research

- There is a significant difference in the mean scores of pre-test and post-test scores of the upper primary teachers

## 7. METHODOLOGY

### 7.1 Plan of action

The following stages where followed by the investigator during the action research:

- Prepare questionnaire to measure the assessment skill of upper primary school teachers and their knowledge in using QUIZZORY APP as an assessment tool
- conduct pre-test to 10 upper primary science teachers
- conduct a two days training for 10 upper primary teachers on QUIZZORY APP
- Time is given for the teachers to construct their assessment schedule using QUIZZORY APP and utilize in their classrooms
- conduct post-test to 10 upper primary teachers
- Analyze and interpret the data
- Documentation

## 7.2 SAMPLE FOR THE STUDY

The sample of this action research was 10 science teachers of Upper primary schools from Dharmapuri District.

**Table 1**: **Sample taken for Action Research**

| Sl.No | Name of school | Name of teachers |
|---|---|---|
| 1 | GHSS Kullanur | Mr SR Sivakumar |
| 2 | GHS Jamboth | Mr Saravanan |
| 3 | AGBHSS Dharmapuri | Mr Stalin |
| 4 | GHSS Begarahalli | Mr Aravinthan |
| 5 | PUMS Mottalur | Mr Rajendiran |
| 6 | PUMS Sakkilipatti | Mr Arjunan |
| 7 | PUMS Kathirampatti | Mrs Kanimozhi |
| 8 | PUMS Kukadapatti | Mrs Sangeetha |
| 9 | PUMS Soriyampatti | Mrs Malar |
| 10 | PUMS Bethur | Mrs Revathi |

## 7.3. Research tool

**Questionnaire** was prepared by the researcher and used as a tool for conducting both Pre-test and post-test.

- These statements sort out the awareness of the upper primary teachers regarding the usage of digital techniques to assess the achievement of students academically.
- The usage of QUIZZORY app and their knowledge about using the app to assess the student' achievement is also tested.

- A pre-test questionnaire was given to 10 teachers of Dharmapuri district and their response was scored. The teachers were given training about the QUIZZORY app and how it can be used as an assessment tool. The teachers were allowed to create their own questions with importance to Yes or no type questions
- The intervention was conducted to all 10 upper primary school teachers
- They were asked to conduct quiz games with their students in the classroom. The investigator cleared the doubts.
- The teachers were asked to use the app using their mobile to assess the students' achievement. Also, small study groups were formed

**7.4. limitation of the Action Research**

1. Selected 10 upper primary science teachers alone has taken for the action research
2. Eighth Standard Physics Subject only has been taken for the study.
3. Dharmapuri block teachers only taken.

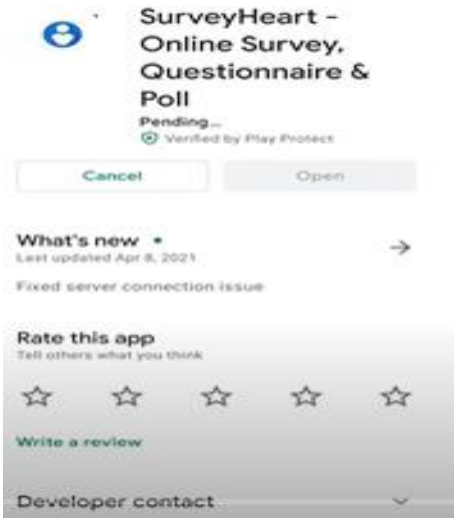
**8. Intervention**

- Two day's Training was given about Quizzory app to the upper primary teachers.
- Based on the given following steps the Quizzory app was explained to the teachers.

## Creating an account in survey heart

**Step – 1 Quizz app download**

- Go to the play store and download the survey heart app/ quizzory app.



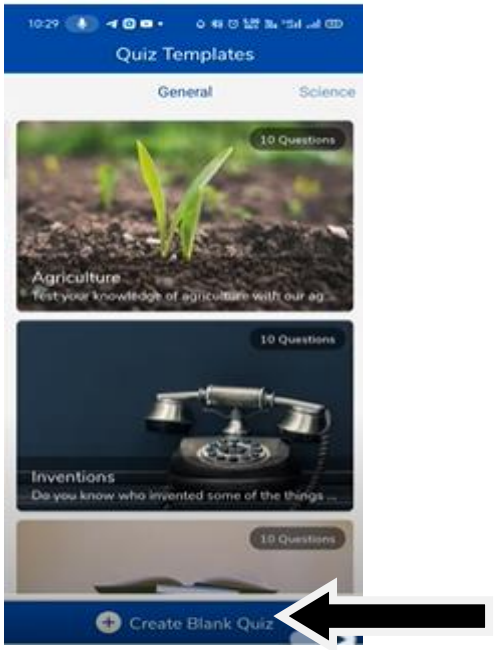
- Enter your name, email address, and create a password before clicking on **Sign Up Now**.
- Check your email to verify the account
- Type in your email address and password for the account and click on Sign In

### Step – 2 Quizz App Creation

- Sign in survey heart – open in below page – click quizzes


### Step – 3 Create Blank Quizzes

Click quizzes – open in below template – click blank quiz - Create blank quizzes to create our own questions



**Step – 4 Choose topic and Type of question**

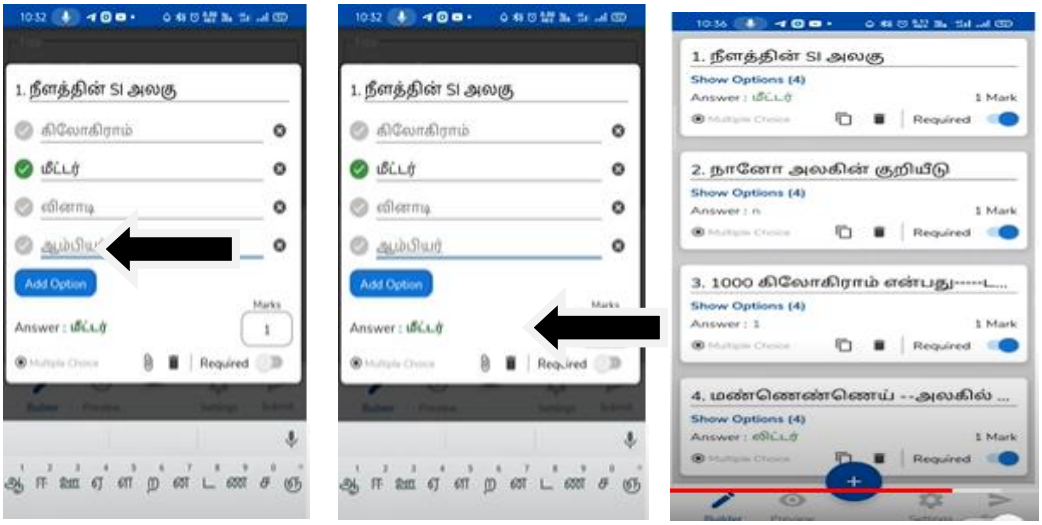
Give the title name and description for the questions you are going to create. Click (+) Symbol select the options - we choose multiple choice for multiple choice questions and data collected to choose short answers.

Attach image video and website link to create the question



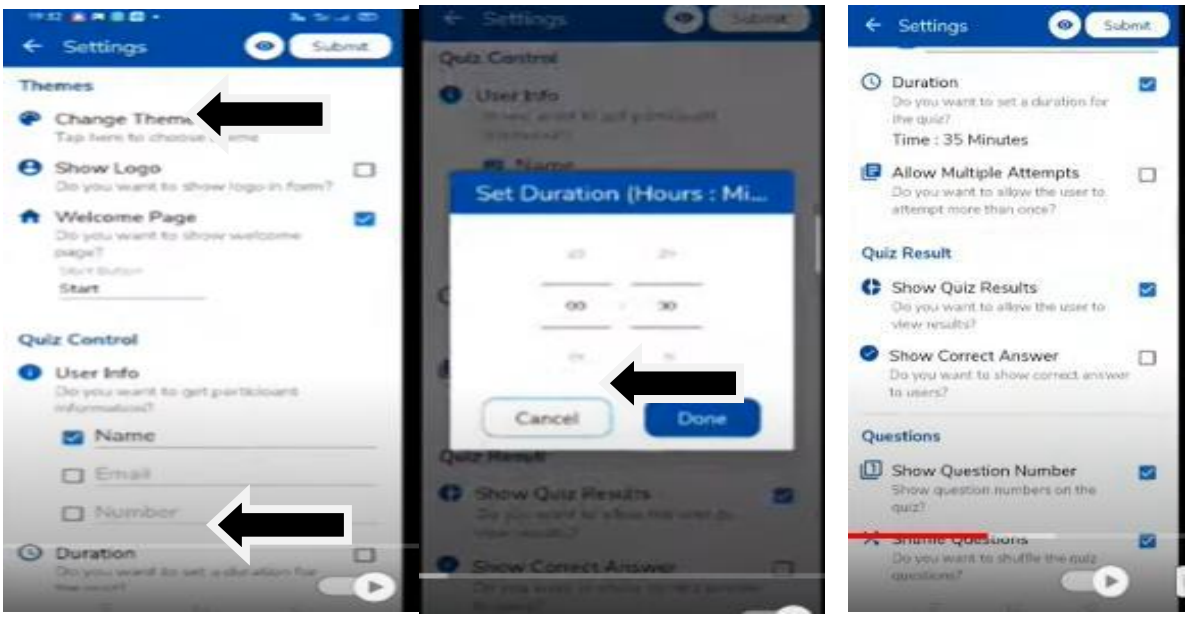
**Step – 5 Type the question and add option**

- Type question in the spaces given or else you can paste the question from word documents.
- You can create simple multiple-choice or text-based questions to test to see if students understand what is happening. This is a fairly quick formative assessment to do in class.
- Click add option give more options in given question – select correct answer and award marks – click Required button on to have a compulsory question and unable to skip another question. Set the timing to collect the response.




**Step – 6 Set Time duration in Settings**

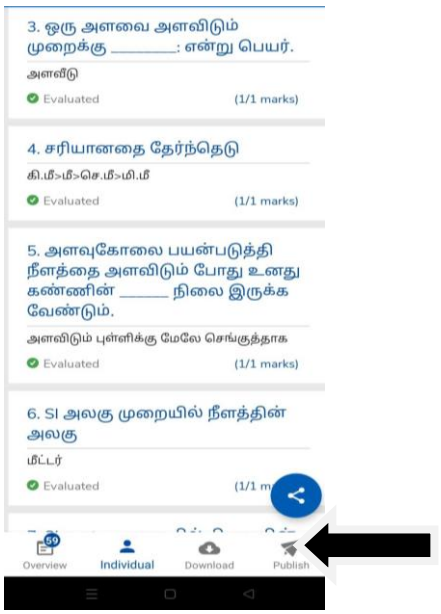
- Before entering marks change settings into below items.
- Go to setting – change theme – Set duration – show quiz results – show correct answer – show question number – you need shuffle question set shuffle questions -



**Step – 7 Collect Response through WhatsApp**

- Complete the questions shared via link through WhatsApp – collect the response – you create questions or import the question.


**Step – 8** Publish the Question




- Collect the answer for all the students and publish the question. Once published the questions it cannot be used for next time.

**9. Evaluation procedures:**

**Evaluation** is a systematic determination and assessment of a subject's merit, worth and significance, using criteria governed by a set of standards. It can assist an organization, program, design, project or any other intervention or initiative to assess any aim, realisable concept/proposal, or any alternative, to help in decision-making; or to ascertain the degree of achievement or value in regard to the aim and objectives and results of any such action that has been completed. The primary purpose of evaluation, in addition to gaining insight into prior or existing initiatives, is to enable reflection and assist in the identification of future change.

- The scores of 10 upper primary teachers for pre-test and post-test scores have been tabulated.
- The scores for 10 items of the for pre-test and post-test were tabulated for item analysis
- From these scores, we come to know that upper primary school teachers are now found to be facilitated in using QUIZZORY app to assess the performance of students

**Table 2: Teachers Pre-test / post- test scores**

| S.No | Name of the Teachers | Pre-Test Score | | Post-Test Score | |
|---|---|---|---|---|---|
| | | Out of 10 | Out of 100 | Out of 10 | Out of 100 |
| 1 | Mr SR Sivakumar | 03 | 30 | 7 | 70 |
| 2 | Mr Saravanan | 04 | 40 | 6 | 60 |
| 3 | Mr stalin | 04 | 40 | 7 | 70 |
| 4 | Mr Aravinthan | 05 | 50 | 8 | 80 |
| 5 | Mr Rajendran | 03 | 30 | 6 | 60 |

| | | | | | |
|---|---|---|---|---|---|
| 6 | Mr Arjunan | 03 | 30 | 6 | 60 |
| 7 | Mrs Kanimozhi | 04 | 40 | 7 | 70 |
| 8 | Mrs Sangeetha | 04 | 40 | 6 | 60 |
| 9 | Mrs Malar | 06 | 60 | 9 | 90 |
| 10 | Mrs Revathi | 05 | 50 | 8 | 80 |
| | Total | 41 | 410 | 70 | 700 |
| | Average | 4.1 | 41 | 7 | 70 |

**Table 3: pre-test and post-test total scores:**

| **No. of teachers** | **Pre-test total score** | **Post-test total score** |
|---|---|---|
| 10 Teachers | 410 | 700 |

**Table 4: pre-test and post-test mean scores:**

| **No. of teachers** | **Pre-test mean score** | **Post-test mean score** | **mean values Difference** |
|---|---|---|---|
| 10 Teachers | 20.5 | 35 | 14.5 |

**Chart 1: pre-test and post-test Total Score performance of teachers:**

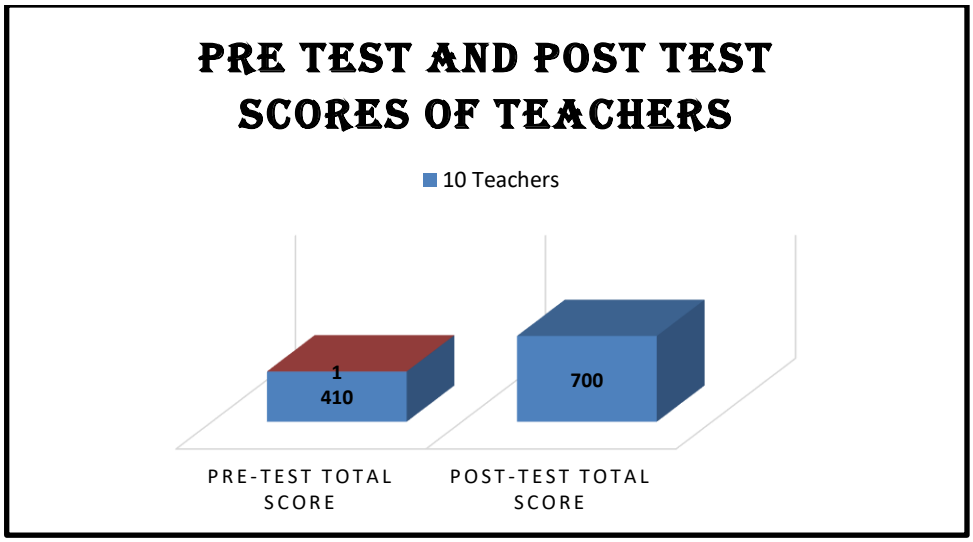
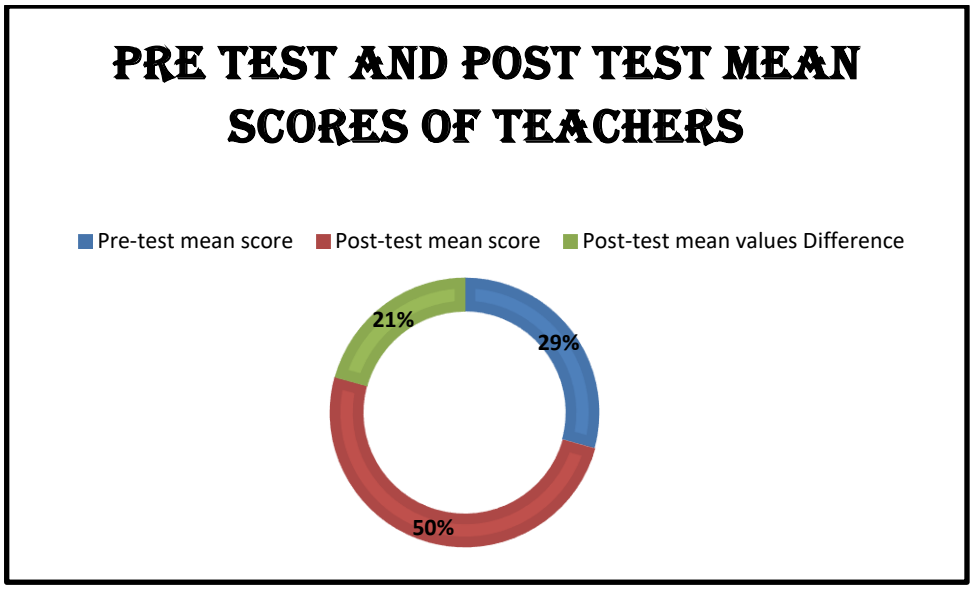



**Chart 2: pre-test and post-test Mean Score performance of teachers:**




## 10. Analysis and interpretation

The dividing line between analysis of data and interpretation is difficult to draw as the two processes are symbolical and merge imperceptibly. Interpretation is inextricably interwoven with analysis. The analysis is a critical examination of the assembled data. Analysis of data leads to generalization.

Interpretation refers to the analysis of generalization and results. A generalization involves concluding a whole group or category based on information drawn from particular instances or examples

Interpretation is a search for the broader meaning of research findings. Analysis of data is to be made regarding the purpose of the study.

Data should be analyzed in light of hypothesis or research questions and organized to yield answers to the research questions.

Data analysis can be both descriptive as well as a graphic in presentation. It can be presented in charts, diagrams, and tables.

- The assessment skill of the upper primary school teachers has been facilitated using QUIZZORY app
- The assessment skill of upper primary teachers in post-test has increased
- This is evident from the increase in total mean score of post-tests over the pretest by the teachers
- This is obvious from the increase of their total mean score of pre-test value (mean value: 20.5) and post-test value (mean value: 35)
- The performance of teachers in post-test is increased after the intervention by a gain mean score is 14.5

**11. Findings**

- The strategy of using QUIZZORY app has facilitated the assessment skill of upper primary school teachers
- The impact of introducing the usage of QUIZZORY app has been reciprocated in the usage of the app in the classroom situation for formative assessments
- The adequate knowledge of usage of QUIZZORY app has given the teachers a confidence of using ICT for assessment purpose
- This type of strategies helps in improving the usage of gaming web tools, to effectively improve the skill of assessment among primary school teachers
- Using this strategy, all the children were motivated to answer and attempt all the questions, without being very much cautious that they are being evaluated
- The performance of teachers in post-test is increased after the intervention by a gain mean score is 14.5

## 14.Recommendations:

- QUIZZORY app usage has developed the assessment skills of upper primary teachers
- This could also be suggested for teachers handling primary and secondary level.
- This could be taken up by all types of schools in the district to improve the assessment skills of teachers and to strengthen their confidence in using a new technique for assessment.
- This strategy could be followed in all districts of Tamil Nadu to help in the improvement of the assessment skills of teachers.
- All the children will be motivated to use their acquired knowledge and skills.
- This methodology can also be used in Non-Formal Education, Adult Education, Alternative and Innovative Education Centres.

## 15. Educational Implication:

- Usage of Technology in assessment helps to assess the students instantly
- Stipulated time helps the students to complete the question quickly and interestingly. It kindles their knowledge to learn.

# ANNEXURE

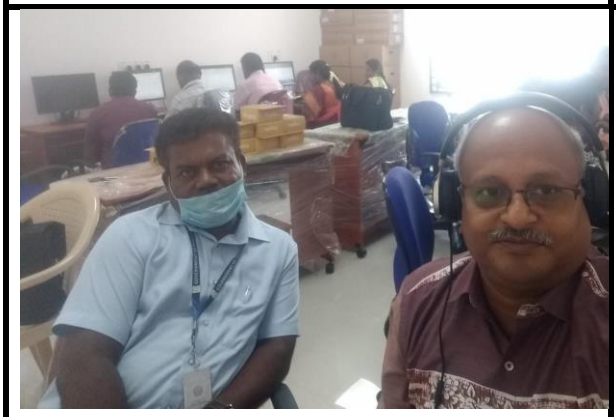
## PRE-TEST AND POST TEST QUESTIONNAIRE

| S.No | Questions | Yes | No |
|---|---|---|---|
| **1** | 'Survey Heart' and Google form is same or different | | |
| **2** | 'Survey Heart' quizz is offline mode | | |
| **3** | Quiz app is used for both formative and summative assessment | | |
| **4** | Another name for google form is quiz app | | |
| **5** | Is it possible to time limit he questions in quiz app | | |
| **6** | Quiz app is easily accessible for mobiles and laptop | | |
| **7** | Mail id is important for creating the quiz app | | |
| **8** | All features in google form is available in quiz app | | |
| **9** | Vice Typing is possible in quiz app | | |
| **10** | Is it possible to publish the questions in quiz app | | |

**PHOTOS**


Zonal Action Research committee - Approval the Topic

Quizzory app discussed with Expert



Teachers are practising in quizzory app

Zonal Action Research committee – Report Submission

Action Research Number (2023 – 24) TN – DPI 04

1. Name of the Investigator : A.Vijayalakshmi

2. Name of the DIET : DIET Dharmapuri

3. Title : Utilization of Quizzory App for formative Assessment among the Upper Primary Science Teachers

4. Objectives : 1. To enhance the assessment skill of upper primary science teachers using QUIZZORY APP
2. To practise the quizzer app by preparing various types of questions
3.To maximize the utilization of QUIZZORY APP

5. Sample : The sample of this action research was 10 science teachers of Upper primary schools from Dharmapuri District

6. Tool : Questionnaire was prepared by the researcher and used as a tool for conducting both Pre – test and Post - test

7. Methodology : Single group Experimental study. Two day's Training was given about Quizzory app to the upper primary Science teachers

8. Findings

1. The strategy of using QUIZZORY app has facilitated the assessment skill of upper primary school teachers
2. The impact of introducing the usage of QUIZZORY app has been reciprocated in the usage of the app in the classroom situation for formative assessments
3. The adequate knowledge of usage of QUIZZORY app has given the teachers a confidence of using ICT for assessment purpose
4. This type of strategies helps in improving the usage of gaming web tools, to effectively improve the skill of assessment among primary school teachers
5. Using this strategy, all the children were motivated to answer and attempt all the questions, without being very much cautious that they are being evaluated

6. The performance of teachers in post-test is increased after the intervention by gain mean score is 14.5