

Learning Science through QR-Code by Using Tablet

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ABSTRACT: In this research paper new technology has been used to teach science. Today we use technology everywhere. So we use QR-Code, blog, online test, phet simulation through tablet in teaching learning process of science. From this research paper, it is found that there is increase in comprehension and technological skills in the students with the help of new techniques of technology. Students nurtured their life skills.

KEYWORDS: Tablet, QR-Code, Blog, Online Test, Phet Simulation etc.

I. INTRODUCTION:

The important aspect of learning process is a comprehension. The learning outcomes can be completed by increasing knowledge and comprehension. Only qualitative improvement is not knowledge. But knowledge means skill development, development of thinking power, development of understanding level and students will be active and comprehension getting knowledge of new techniques. Traditional learning process is outdated. Now students can get knowledge in home also with the help of mobile, ATM, Computer, Laptop, Television, you tube etc. He has an attraction of these things/techniques. If we use these technologies in teaching-learning process, the dropout rate of students will be reduced. The students will be present physically and mentally in the classroom. In science study activities are important. So if in science study technology is used, it will be better than traditional teaching methods. In it students will be actively participate as well as we can give them web-base Classroom observation schedule.

1. Classroom was observed from different direction.
2. Participation of students.
3. Evaluation
4. Teaching-learning approach
5. Handling of tablet

Delimitation of study

The study delimited to the following aspects

Class- 8th
Sub-Science
Topic-Disaster Management

learning experience. We can provide reference books. They students will get opportunity of experiments. Students will make self presentation with the help of Tablet. They will evaluate themselves their content with the help of blog. We can give complete knowledge and enhance their imagination by using QR code and tablet. Students will be active and thought provoking, primary skills will be developed with help technology. In ancient time it is said that if anyone would do signature he would be literate. But the definition of literacy is changed. Now day's students should have the knowledge of technology and he should implement it in learning process. Then and then only we will create literate students.

II. OBJECTIVES:

1. To increase interest in science subject.
2. To develop technical skill.
3. To develop life skill.
4. To improve in comprehension
5. To give chance of self evaluation.

III. METHODOLOGY:

Sampling

The Sample consisted of 20 students of class 8th

Design of study

The researcher followed single group pre test and post test design.

Method of data collection

Data were collected from respondent

1. Students of class 8th

Tools Used

Action Plan

Researcher make a action plan for investigation are as follow:

Day-1st
Time-30min

Activity-Pre test

Researcher take test on previous taught lesson through traditional method and in next stage researcher teach selected lesson by using of modern technological elements in 5e based learning process .

Day-2nd

Time-30min

Activity-Engage

First make the groups of 4-4 students, tell them to scan given QR-Code by using tablet . They

will get a pictures on a disaster by following link in QR-Code .Afterwards tell them to observe a pictures in tablet and complete given chart.

Sr. No.	Natural Disaster	Manmade Disaster

Day-3rd

Time-30min

Activity-Explore

Tell them to scan the next QR-Code by using tablet. They will get a video on a disaster by following link in QR-Code. They have to observe and tell to complete the given chart.

Sr. No.	Name of Disaster	Effects of Disaster

Day-4th

Time-30min

Activity-Explain

Tell them to scan the next QR-Code by using tablet. They will get a questions on a disaster by following link in QR-Code. Take a group discussion on those questions.

1. What is meant by a disaster?
2. What is meant by storms?
3. What is meant by fire?

Day-5th

Time-30min

Activity-Elaborate

Tell them to make PowerPoint presentations on the following topics

- 1.Various disasters(use various pictures)
- 2.Remedies to overcome disasters .

Day-6th

Time-30min

Activity-Evaluation

Tell them to scan the next QR-Code by using tablet. They will get online test on a disaster by following link in QR-Code. Student solve online test. Students will get result after completing online test automatically.

Day-6th

Time-30min

Activity-Post test

Researcher take post test on this lesson with questionnaire.

Specialty

1. Students actively participate in learning process.
2. Teacher works as a facilitator.

IV.DATA ANALYSIS AND INTERPRETATION:

Evaluation - Comparisional study

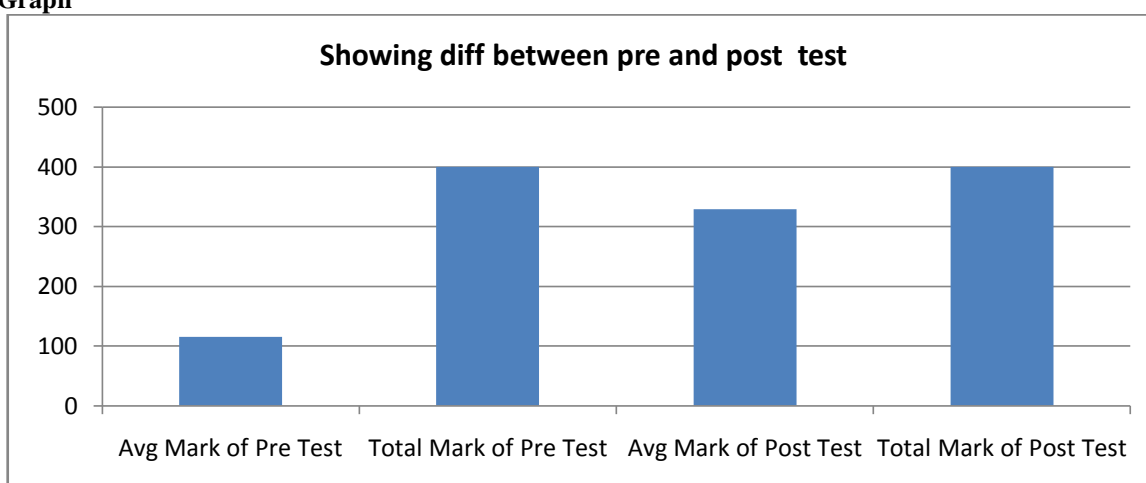
Written Exam

Total Marks-20

Sr. No.	Pre Test (Traditional Method)		Sr. No.	Post Test(5e Based Techsavy Method)		Sum of differences & post test	Sum of square differences pre & post test
1	7	20	1	16	20	-9	81
2	7	20	2	18	20	-11	121
3	5	20	3	15	20	-10	100
4	4	20	4	17	20	-13	169
5	5	20	5	15	20	-10	100
6	5	20	6	16	20	-11	121
7	4	20	7	14	20	-10	100
8	3	20	8	16	20	-13	169
9	7	20	9	18	20	-11	121
10	4	20	10	16	20	-12	144

11	9	20	11	19	20	-10	100
12	5	20	12	14	20	-9	81
13	9	20	13	15	20	-6	64
14	5	20	14	16	20	-11	121
15	5	20	15	18	20	-13	169
16	7	20	16	17	20	-10	100
17	6	20	17	18	20	-12	144
18	5	20	18	16	20	-11	121
19	7	20	19	17	20	-10	100
20	6	20	20	18	20	-12	144
	115			329		-214	2370

Graph



Pre Test mean = 5.75
 Post Test mean = 16.45
 Difference between pre & post test mean = 10.7
 Calculated “t” value = 23.9
 For df 19 required “t” value significance = .01
 level to 2.50

The investigator get “t” value of 23.9 which is higher than the required “t” value. Therefore, we can confidently say that techsavy based teaching can enhance the achievement level of the student in science.

V.OBSERVATIONS

1. There is qualitative improvement in student.
2. Student participated in activity based learning process.
3. Exchange of information has been done.
4. Got inspiration for self presentations.

VI.RESULTS:

1. Qualitative improvement has been done.
2. Complete understanding of concepts.
3. Developed life skills such as communication, co-operation, critical thinking etc.
4. Developed technological skills by using of QR-Code, PPT, tablet etc.
5. Increase in comprehension and knowledge.

REFERANCES:

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Online vs. Paper Based Testing: A Comparison of Test Results

2.Rateeba Algoufi Education Department, northern Illions University ,Dekalb,USA(2016) Using Tablet in Education

ANNEXURES:

- 1.Questionnaire Marks -20 (Each question contain 2 marks)
 - A. Knowledge based questions
 1. Write protective measures on flood
 2. Write effects of tsunami
 3. What precautions will you take during lightning.
 4. Write effect of cloudburst.
 5. What precautions will you take during thunder storms.
 - B. Comprehension based questions
 1. What is a disaster?
 2. What is an earthquake?

3.What are the effect of flood?
4.Explain effect of a volcano?

5.Write name of natural disasters?

