

# **9<sup>TH</sup> NATIONAL TEACHERS SCIENCE CONGRESS 2018**

**FOCAL THEME:-**DESIGN LITERACY FOR EFFECTIVE SCIENCE  
COMMUNICATION BY EDUCATORS

**SUB THEME:-**NEW AND EMERGING MEDIA FOR EFFECTIVE SCIENCE LEARNING

**TITLE/COVER PAGE:-**EFFECTIVE SCIENCE LEARNING WITH FIRST e SCHOOL

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## **ABSTRACT**

Many research studies on Indian Education and performance of the children in schools present days clearly indicated that children learning levels are not good that means according to their age and class they are not having proper knowledge levels .In school they are not having teaching learning materials ,lack of laboratories especially in science subject . They are very poor in science learning even the school administration and management and teachers are also not providing such environment of science learning classroom for that reason recently government has decided to improve learning levels of the children with introducing digital class room with ICT technology in class room

First object technologies LTD, is a software company provided first e school is an education initiative and it approached the topics with an optimum mix of technology ,quality content ,pedagogy ,educational psychology ,mnemonics and guide for better performance in examinations. The content is prepared under the guidance of eminent academicians. It covers pre primary to higher secondary education under CBSE/ICSE and state boards in English and all leading languages under the banner of “First e school”.

In our school nearly 600 students are studying in that nearly 350 students are residing in government BC, SC,ST hostels .Government supplied first e school software to the hostels and provided CPU and Digital screen. The children will see daily digital content of science subject of class 6<sup>th</sup> to 10<sup>th</sup> as tutor for the hostels I am showing digital content to all the students they are understanding subject very well. Experiments and activities are provided with animations compare to non hostel students their performance is increased rapidly. I am also learning very well in subject and explaining in school as well. So first e school software is giving very good subject and skills for our students.

In this paper I am clearly indicating the difference of hostel students and non hostel students in their examinations performance.

## **INTRODUCTION**

In our school nearly 600 students are studying from 6<sup>th</sup> to 10<sup>th</sup> class .They are very poor family back ground and parents are uneducated coming from very remote areas. Nearly 350 students are living in BC, SC,ST welfare hostels. I am teaching 8<sup>th</sup> class to 10<sup>th</sup> class science. In our school no lab facilities, no teaching learning material available. Recently our new school building completed and we shifted there from old building. Last few years onwards our children are very poor in learning and very much absenteeism among the students and they are not able to understanding the scientific concepts .I am also working as tutor for the hostel children every day evening I will take classes in the hostel, but I am not able to show experiments and activities .The learning levels are the children's are not good .As much as I tried to teach for the children but not able to transfer complete concepts to their minds mainly lack of experiments ,lab works, projects ,no TLM . I was very sad from last 4 years. But from this academic year government provided digital software “first e school” by first object Technologies Company they supplied CPU and digital screen with software installation

## **FEATURES OF FIRST e SCHOOL**

- A) EASY INSTALATION**: First e school is very easy to install it happens in flip of second.
- B) CONTENT COVERAGE**: The content of the courses are prepared strictly as per the syllabus.
- C) LESSON PLANS**: The detailed lesson plans help the teachers in delivering the sessions in an organized way.
- D) ONE STOPS SOLUTION**: The course is designed the content is developed in such a way that entire student community is benefitted irrespective of their performance level.
- E) INTERACTIVE**: The e white board is an interactive tool.
- F) SUPERIOR CLARITY**: Best quality images and animations are used to provide easy understanding of the content.
- G) EASY TO UNDERSTAND**: 2D and 3D animation with detailed step by step explanations.

**H) EXPERIMENTS AND ACTIVITIES:** Pure theory without practical knowledge is mere waste .Lab experiments and activities are provides as video and animated clippings.

**I) EXAM FOCUS:** Equal importance and emphasis is given to develop conceptual understanding the students for the exams.

**J) MOCK TESTS:** Content covers interactive mock tests.

**K) ILLUSTRATIONS AND SOLVED EXAMPLES:** It covers all numerous illustrations covering all the model questions at end of each chapter are solved.

**L) ADDITIONAL CONTENT COVERAGE:** Solved questions and concepts from CBSE, ICSE and state boards which are not available in the current curriculum.

**M) BENEFITS:** The benefits of using first e school solutions are multifold and offers equal benefits to all the stake holders i.e. students and teachers and educational institutions

## **METHODOLOGY**

I decided that with the help of first e school digital software to teach hostel students of class 8<sup>th</sup> to 10<sup>th</sup> .From June first onwards I am using this digital content everyday in hostel I am explaining all science concepts according to our syllabus.

In the morning I am teaching without digital content in the school like this nearly three months I completed my teaching .I am observing the performance of the hostel and non hostel students .Hostel students are learning more and understanding capacity with the help of digital content very much increased than non hostel students. To do this project I selected 46 students of 10<sup>th</sup> class in which 29 students of hostel as experimental group and 17 students of non hostel students are controlled group.

## **RESULTS /FINDINGS**

I conducted two formative assessment tests to all the students' hostel students' marks are more compared to non hostel students.

### **DISCUSSION/ANALYSIS**

The help of digital content the students of hostel performance is more compared to the non hostel students who are not having digital class

The average marks in FA1+FA2 of hostel students are 8.42

The average marks in FA1+FA2 of non hostel students are 6.11

As above results clearly indicating that digital classroom will increase children's understanding and performance levels.

### **CONCLUSION/COMMENTS**

This type of digital class will give very good results for the students and teachers also. I will try to continue in all classes with digital classroom try to bring non hostel students to the hostel to learn more and I will improve my teaching ability.

### **REFERENCES**

1. First Object Technologies Ltd

### **ACKNOWLEDGEMENTS**

I am very thankful to hostel wardens to give opportunity to work as tutor and I thankful to my school headmaster to conduct this study and I thankful to 10<sup>th</sup> class students to participate in this project.

### **ANNEXURE**

10<sup>th</sup> class students FA1 AND FA2 marks lists of hostels and non hostel students

## HOSTEL STUDENTS MARKS LIST

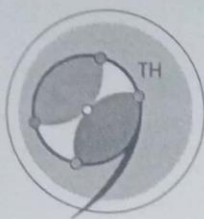
SLNO	Name of the student	FA1 Marks	FA2 Marks
1	D Akash	8	8
2	M Akhil	6	9
3	Syed Ameer	10	10
4	MD Arfath	9	8
5	CH Bhanuprasad	8	7
6	V Chakinder	8	6
7	V Dattatri	9	8
8	A Gnaneshwar	10	9
9	Y Hariprasd	9	10
10	B Henanth	8	7
11	P Joginath	7	9
12	N Kanikesh	9	8
13	K Krishna	8	7
14	J Laxman	7	8
15	K Laxminarayana	6	9
16	K Mahesh	8	7
17	G Prasad	7	8
18	B Nandulal	10	9
19	S Pavankalyan	9	10
20	M Rajesh	9	9
21	CH Ramesh	8	9
22	B Sai kumar	9	8
23	S Saketh	9	7
24	T Sangameshwar	9	8
25	J Santhosh	10	10
26	V Sardhar	9	8
27	K Sathish	8	10
28	K Raju	9	8
29	K Satwik	10	9
	TOTAL	246	243
	AVERAGE	8.48	8.37

TOTAL AVERAGE     $=8.48+8.37$                        $=16.82/2$                        **$=8.42$**

### NON HOSTEL STUDENTS MARKS LIST

SLNO	Name of the student	FA1 Marks	FA2 Marks
1	M Shadulla	7	6
2	A Shanker	4	7
3	G Shivakumar	6	7
4	CH Sreeman	7	5
5	B Teja	4	4
6	B Uday	6	3
7	N Venkat	9	7
8	P Venugopal	6	7
9	D Achyutkumar	5	5
10	M Vishnu	8	4
11	M Anil	7	7
12	MD Ajmeer	6	6
13	K Dasharath	5	5
14	S Karunakar	8	8
15	M Laxman	7	6
16	D Mahesh	8	6
17	N Murali	7	5
	TOTAL	110	98
	AVERAGE	6.47	5.76

TOTAL AVERAGE      =6.47+5.76      =12.23/2      =**6.11**



# National Teachers Science Congress

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## Registration Form

To be filled and submitted by the applicant



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2) 8<sup>th</sup> NTSC Workshop RIE Mysore 3) 9<sup>th</sup> NTSC Workshop BENGALURU

Details of Co-author (if any): \_\_\_\_\_

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Focal Theme: Design Literacy for Effective Science Communication by Educators

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1. New and emerging media for effective science learning ☒
2. Transition to STEM education ☐
3. Science communication for all ☐
4. Science learning for sustainable development ☐
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I hereby declare that the information furnished by me is true and complete to the best of my knowledge. The enclosed paper is entirely my original work and involves no plagiarism. All sources (print, internet or other) have been properly acknowledged and referenced.

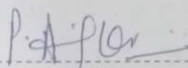
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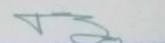
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Designation: PGHM

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Date & Place: Jogipet, 28/9/2018

  
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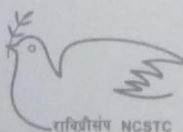
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