

USING ICT FOR INNOVATION IN EDUCATION

Journey of National ICT Awardee

Sandeep, Haryana
2014

Primary Teacher,

Government Model Sanskriti Primary School, Fatehpur, Sector
20, Panchkula, Haryana



Birth / Education / Family Background

- Born on 20 July 1979
- Village – Gorchhi, Hisar
- 25 kms from Hisar, 170 kms from Delhi
- Father – Veternary Surgeon, Haryana Govt.
- Various schools in Isharwal, Siwani and later on Hisar
- Vishwas school, Urban Estate II, Hisar
- Jat College, Hisar
- IGNOU, Delhi
- Diploma in Education from GETTI, Loharu, Bhiwani



Service Profile

Joined Haryana Govt. Education Deptt. on 21/12/2004

Name of the school	From	To
GGPS Daya, Hisar	21/12/2004	07/08/2013
GPS Daya, Hisar	08/08/2013	19/08/2015
GHS, Hallomajra, Chandigarh	20/08/2015	16/04/2020
GPS Daya, Hisar	17/04/2020	25/04/2021
GMSPS, Fatehpur, Sec 20, Panchkula	26/04/2021	Till date

Teaching Journey Started

- Daya is a village situated 18 kms away from the Hisar district of Haryana
- Its population is approximately 4000 and it consists mainly of backward community comprising 40% SC, 25% BC.
- Main occupation – Farming, labourers

First school

Only 2 rooms

No Electricity in day

Class Under the tree



Learn to read

- Listening
- Speaking
- Reading
- Writing

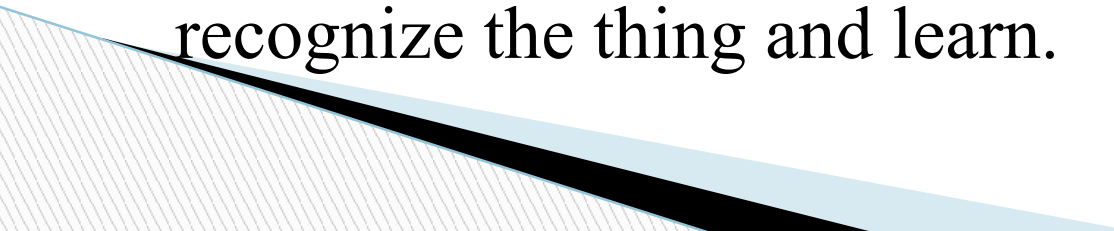
L S R W

The basic step is **LISTENING.**

AETIOLOGY

- Lack of teachers
- Absenteeism of students
- Slow learning children
- Absenteeism of teachers

It is known fact that not only children but also we all learn to speak, understand by the way of listening repeatedly, then correlate with the surroundings, recognize the thing and learn.



First step towards ICT

Viewing the problems lots of teachers are facing in dealing with teaching of language subjects specially English, I have decided to record lessons of curriculum books of Primary classes.

How to record



CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT

AETIOLOGY	INNOVATION	EFFECT
Teacher less class, slow learners, repetition	Specially recorded Audio Cassettes	e-tutor

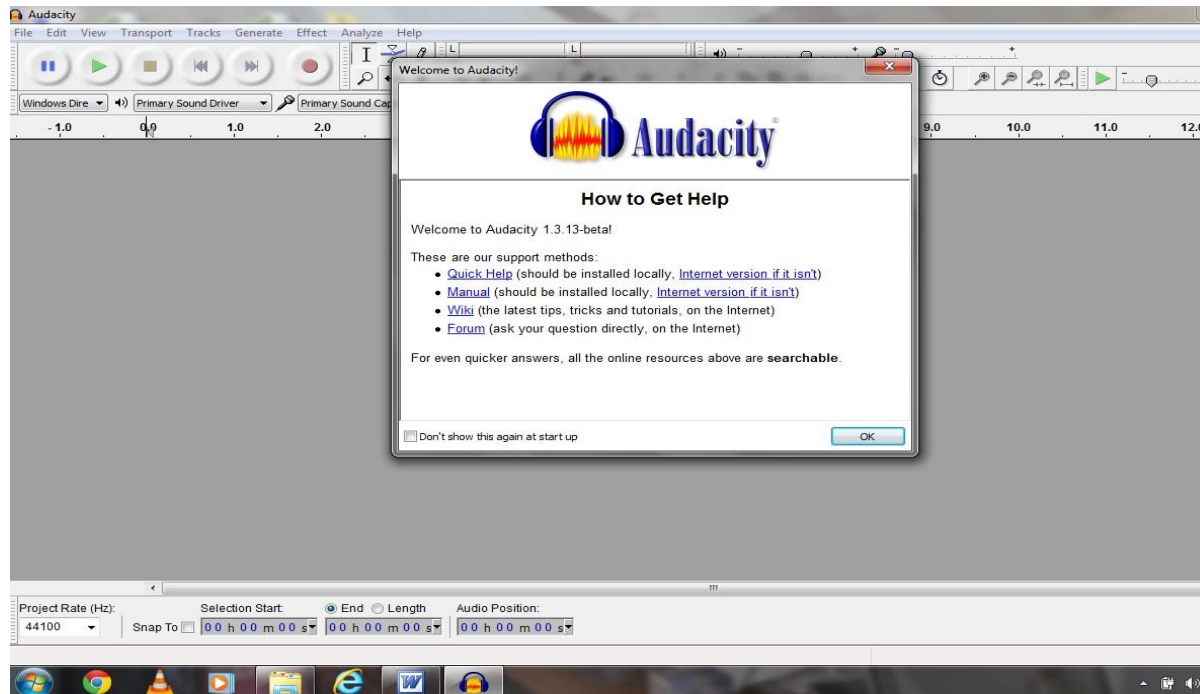


CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT



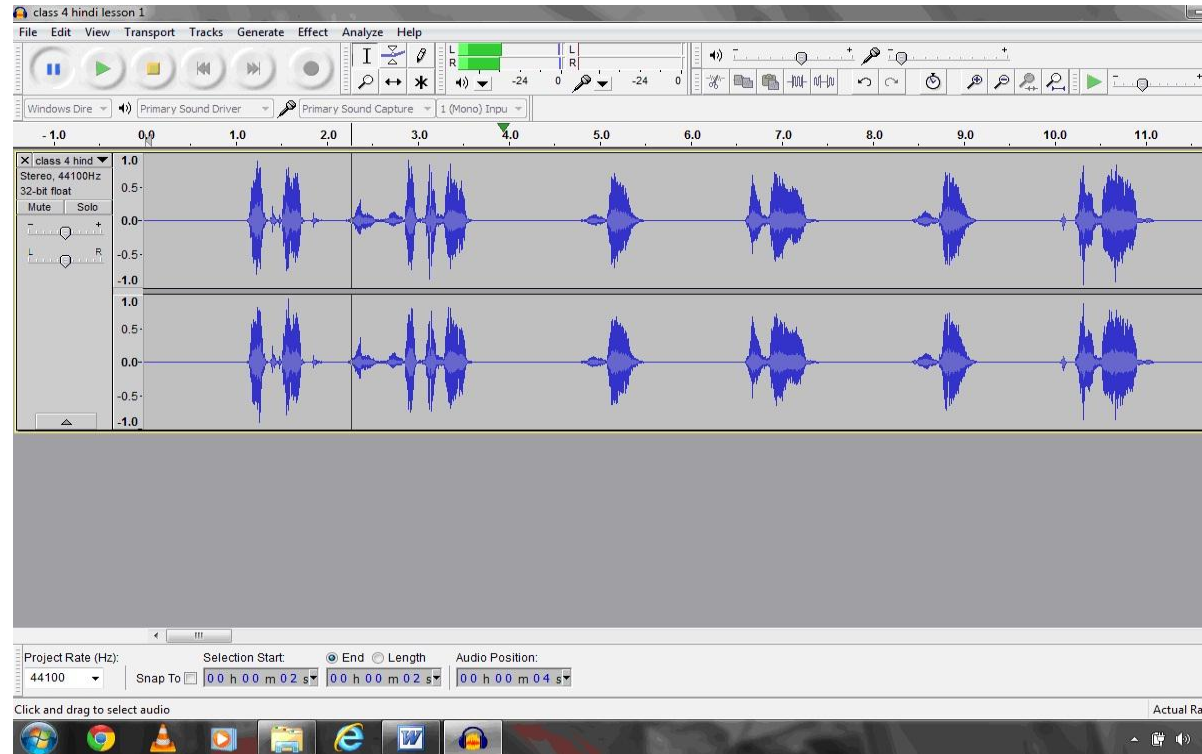
Computer introduced to students at earlier stage as soon I became aware of ICT and its applications for teaching and learning.

CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT



The Software behind all the Recording, Editing, and hope for better future of teaching and learning with Information Communication Technology's advancement.

CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT



I have started recording Audio files, lessons etc on my laptop. The audio nodes seem like this and can be edited in a number of ways

CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT

सीखने समझने
के लिए रिकार्डिंग
पाठ का प्रयोग

फायदे :-

- बच्चे Model Lesson को सुनेंगे
- बच्चों और अध्यापकों के लिए सहायक
- पाठ की अनेकों बार पुनर्आवृत्ति संभव
- अध्यापक का पूरा ध्यान कक्षा पर
- कम अध्यापकीय स्कूलों के लिए कारगर
- अध्यापक की अनुपस्थिती में भी शिक्षण संभव

CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT

AETIOLOGY

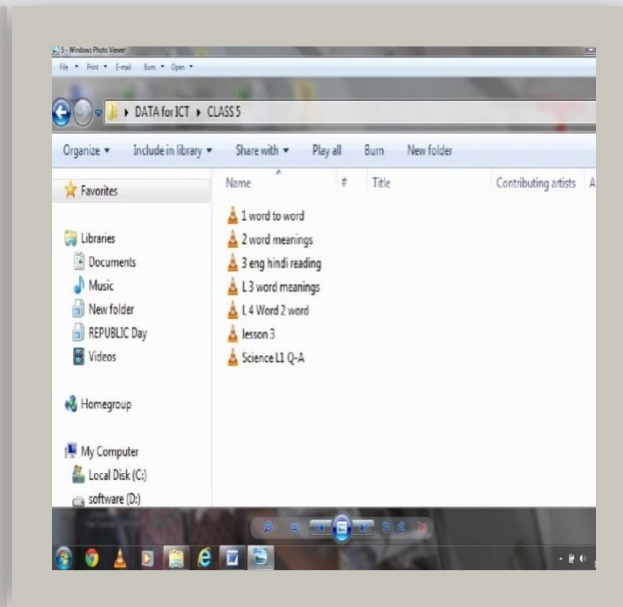
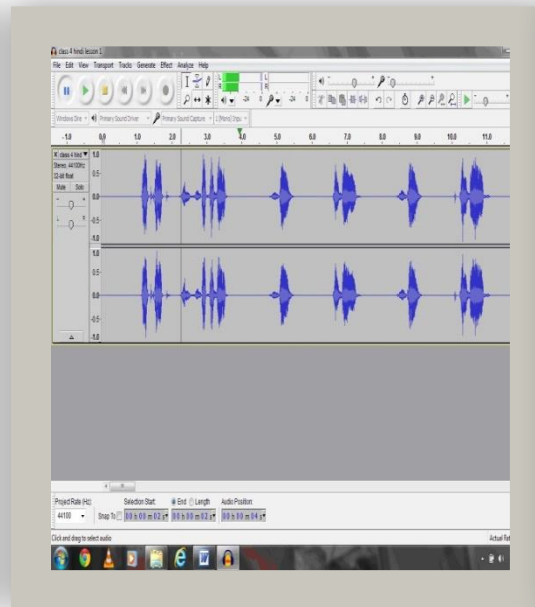
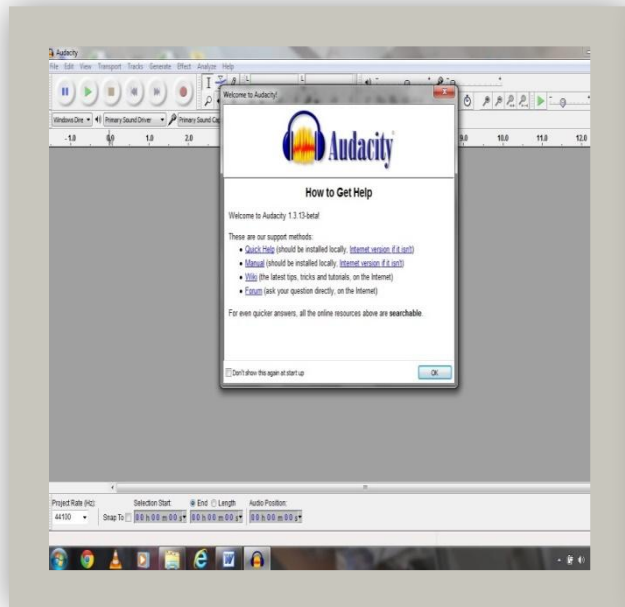
Entry of Laptop

INNOVATION

Use of 'Audacity' software to record lessons

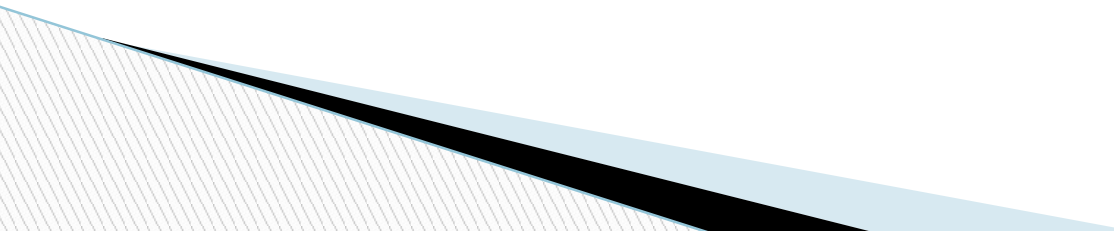
EFFECT

Better quality lessons for communication with the students



Class 5
English
Lesson 2

Benefits of this project

- ▣ **Great help to Teachers**
 - ▣ **Listening to model lesson**
 - ▣ **Repetition can be done**
 - ▣ **Patience is maintained**
 - ▣ **Full attention of Teacher on class**
 - ▣ **Very helpful in schools with inadequate number of teachers**
 - ▣ **Help in absence of Teacher**
- 

CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT

AETIOLOGY

Advent of EDUSAT DTH and the e classes with children unaware of daily content

INNOVATION

Developed a format of contents to be displayed on blackboard

EFFECT

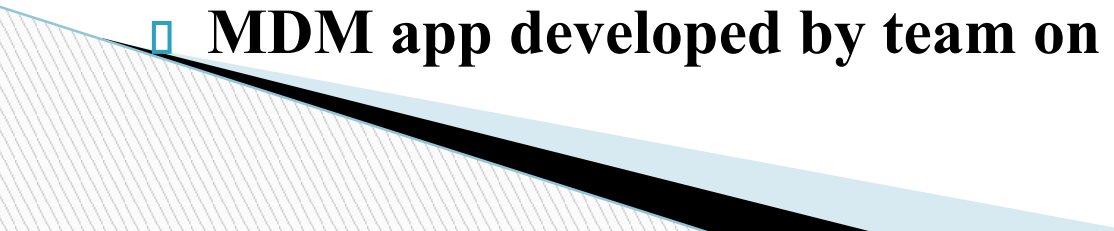
Students came well prepared and that led to better understanding



Date: _____			Day: _____	
Period and Time	Class	Subject	Topic	Class In Charge Signature
1st 08:55 to 09:30				
2nd 09:30 to 10:05				
3rd 10:05 to 10:40				
4th 10:40 to 11:15				
If Saturday; Bal Film Name : _____				

To maximize the use of available **ICT** resource

Mid Day Meal Record using Excel

- ❑ Not any prescribed method of record keeping**
 - ❑ Started to explore the possibilities**
 - ❑ Learned EXCEL software**
 - ❑ Designed MDM Record register**
 - ❑ Named it after my Daughter MEHAK**
 - ❑ Very helpful in schools for recordkeeping**
 - ❑ More then 5000 schools uses this format**
 - ❑ MDM app developed by team on this basis**
- 

CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT

AETIOLOGY

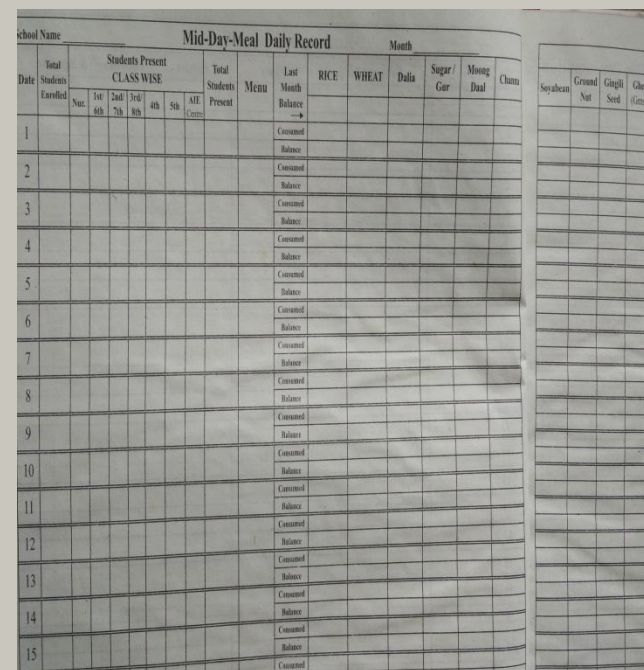
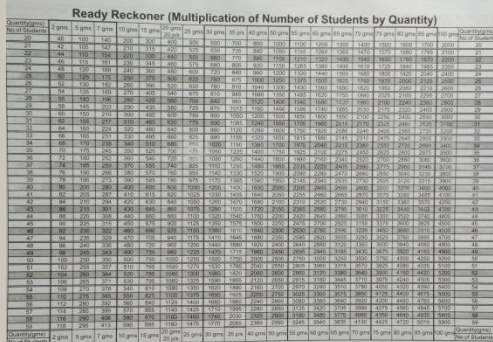
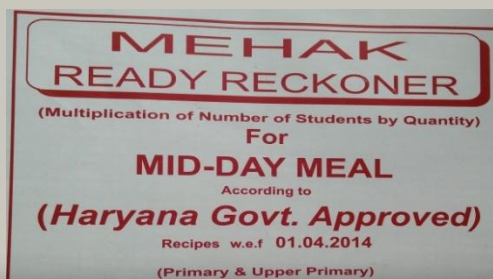
As mid day meal incharge found the absence of any standard format

INNOVATION

Devised Mehak Mid day meal scheme register and ready reckoner

EFFECT

Currently being implemented
in more than 5000 schools
across haryana



Got COPYRIGHT for MDM Register

  Extracts
from the Register
of Copyrights

Dated: 03/08/2018

1. Registration Number:	L-77077/2018
2. Name, address and nationality of the applicant:	SANDEEP PACHAR, HOUSE NO. 9, SHYAM VIHAR, KANHAJI ROAD, HISAR, HARYANA-125001, INDIAN
3. Nature of the applicant's interest in the copyright of the work:	AUTHOR
4. Class and description of the work:	LITERARY/DRAMATIC WORK
5. Title of the work:	MD DAY NGAL RECORD REGISTER
6. Language of the work:	ENGLISH, HINDI
7. Name, address and nationality of the author and if the author is deceased, date of his decease:	SANDEEP PACHAR, HOUSE NO. 9, SHYAM VIHAR, KANHAJI ROAD, HISAR, HARYANA-125001, INDIAN
8. Whether the work is published or not published:	UNPUBLISHED
9. Year and country of first publication and name, address and nationality of the publisher:	N/A
10. Year and country of subsequent publications, if any, and name, address and nationality of the publisher:	N/A
11. Names, addresses and nationalities of the owners of various rights comprising the copyright in the work and the extent of rights held by each, together with particulars of assignments and licences, if any:	SANDEEP PACHAR, HOUSE NO. 9, SHYAM VIHAR, KANHAJI ROAD, HISAR, HARYANA-125001, INDIAN
12. Names, addresses and nationalities of other persons, if any, authorized to assign or license or rights comprising the copyright:	SANDEEP PACHAR, HOUSE NO. 9, SHYAM VIHAR, KANHAJI ROAD, HISAR, HARYANA-125001, INDIAN
13. If the work is an artistic work, the location of the original work, including name, address and nationality of the person in possession of the work. (In the case of an anonymous work, the year of completion of the work should also be stated):	N/A
14. If the work is an artistic work, whether it is registered under the Designs Act 2002 if yes give details:	N/A
15. If the work is an artistic work, mention of being registered as a design under the Designs Act 2002 whether it has been applied to an article (such as, included, process and, if yes, the number of times it is reproduced):	N/A
16. Remarks, if any:	
Class of Author:	Civil/Cultural
Date of Application:	05/05/2018
Date of Receipt:	05/05/2018


DEPUTY REGISTRAR OF COPYRIGHTS


Copyright No :- L77077/2018 dated 03/08/2018

https://youtu.be/HCXhRE_tcY8

Designed for Himachal Pradesh

MID DAY MEAL

Cash Book

cum

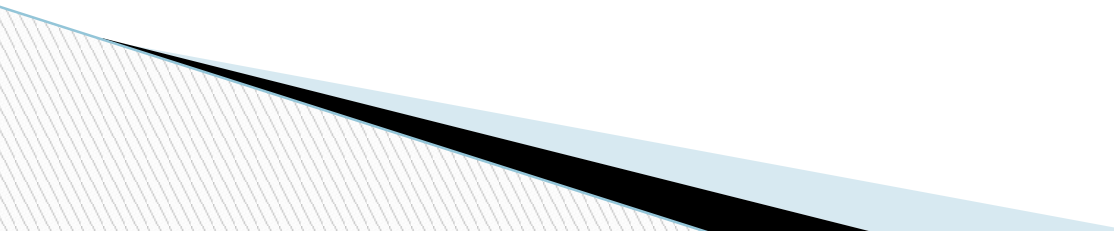
Ration Record Register

No. 244001

Education Department
HIMACHAL PRADESH

Year : _____

Need for some special device for morning assembly and connection with DTH TV

- ▣ Need some electronic device combined with amplifier to cater need in morning assembly as well as for connection with existing DTH television**
 - ▣ Found Audix-50**
 - ▣ Assembled it on box with speaker and UPS backup**
- 

HARSHA

- ❑ **Amplifier**
- ❑ **Cordless mike**
- ❑ **2 ports for extra mikes**
- ❑ **CD/DVD/MP3/DIVX player**
- ❑ **USB Player**
- ❑ **AUX in**
- ❑ **2.1 channel output**
- ❑ **240V AC**
- ❑ **12V DC**
- ❑ **110V AC**
- ❑ **4, 8, 16 ohms output**
- ❑ **UPS**
- ❑ **1 hour plus UPS backup**
- ❑ **Charging time 4-5 hrs approx**



Morning Prayer Sequel

MORNING PRAYER SEQ.

GAYATRI MANTRA

PRAYER

NATIONAL ANTHEM

NATIONAL SONG

PATRIOTIC SONG

NEWS, YOGA Etc.

CHRONOLOGICAL ORDER OF THE INNOVATIONS AND THEIR EFFECT

AETIOLOGY	INNOVATION	EFFECT
Morning Assembly	"HARSHA" unfolded	Regular prayers, e tutorials, personality development of children



<http://youtu.be/j5Lhb8SQ-sQ>

Morning assembly in some schools

- <https://youtu.be/j5Lhb8SQ-sQ>
- <https://youtu.be/tOqeK16jC4Q>
- <https://youtu.be/2uHhaxoihx0>
- <https://youtu.be/8La5XqXO8ps>



Review of Morning Assembly

- <https://www.youtube.com/shorts/osh9o8wmBjw>
- <https://youtu.be/JyhhJBFaDbM>

EDUSAT TV turned into smart TV

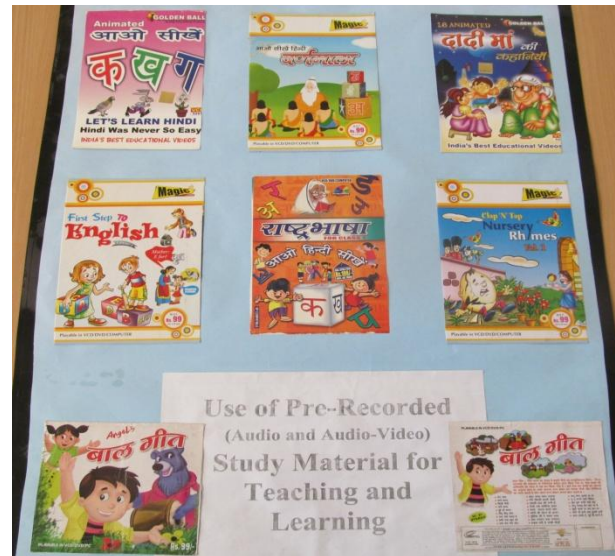
AETIOLOGY	INNOVATION	EFFECT
EDUSAT Signal Failure	Use of DVD's using DTH TV and HARSHA	Enhanced and enriched learning



**To maximize the Use of
available **ICT** resource**

EDUSAT TV turned into smart TV

AETIOLOGY	INNOVATION	EFFECT
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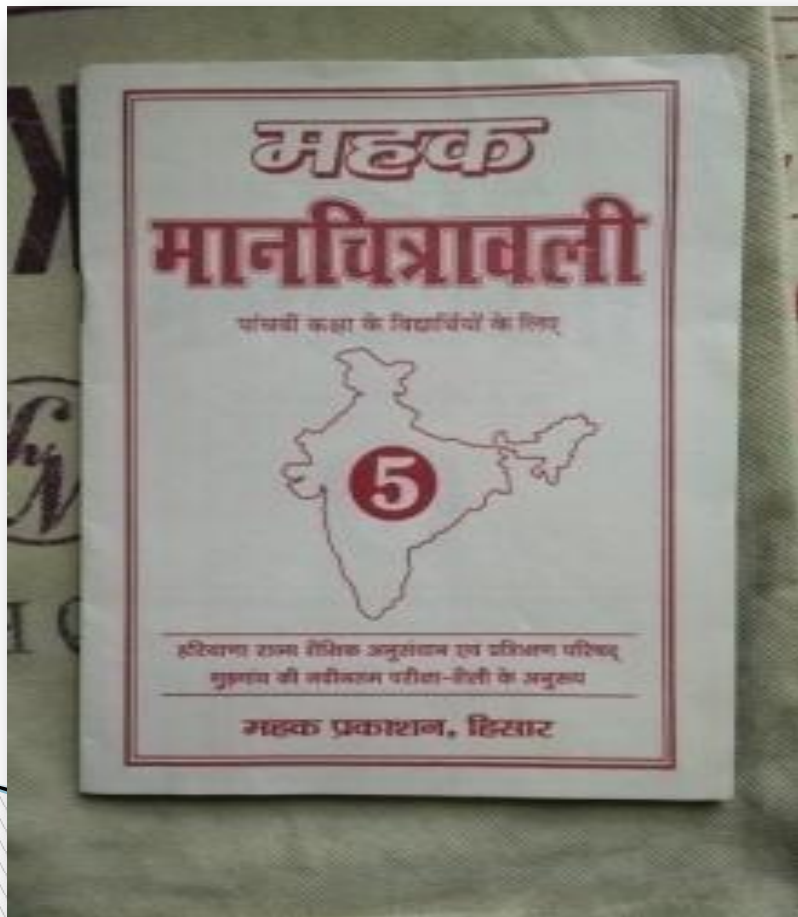
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available **ICT** resource

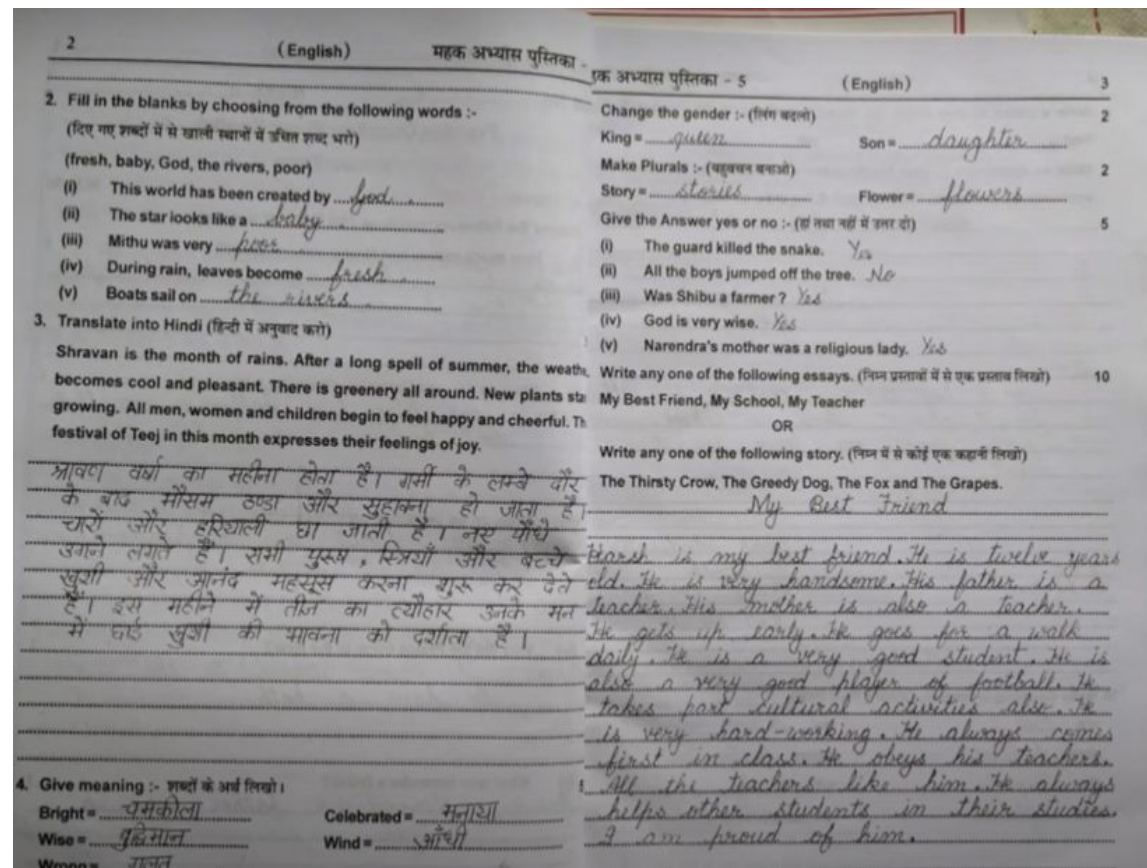
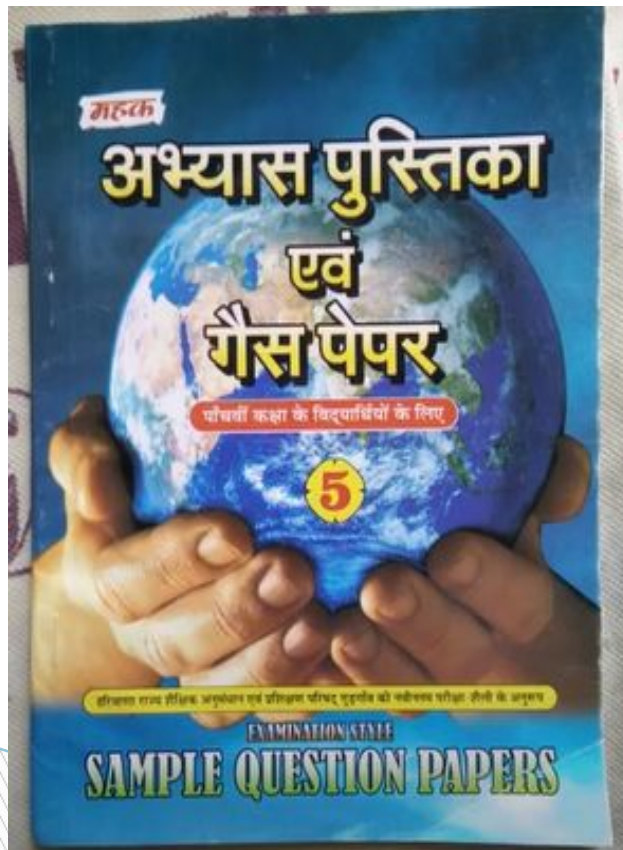
SOME OTHER INNOVATIONS

AETIOLOGY	INNOVATION	EFFECT
Map that can cater to the needs of 5th class students	‘Mehak Maanchitravali’ with the use of PageMaker software.	Better understanding by the students



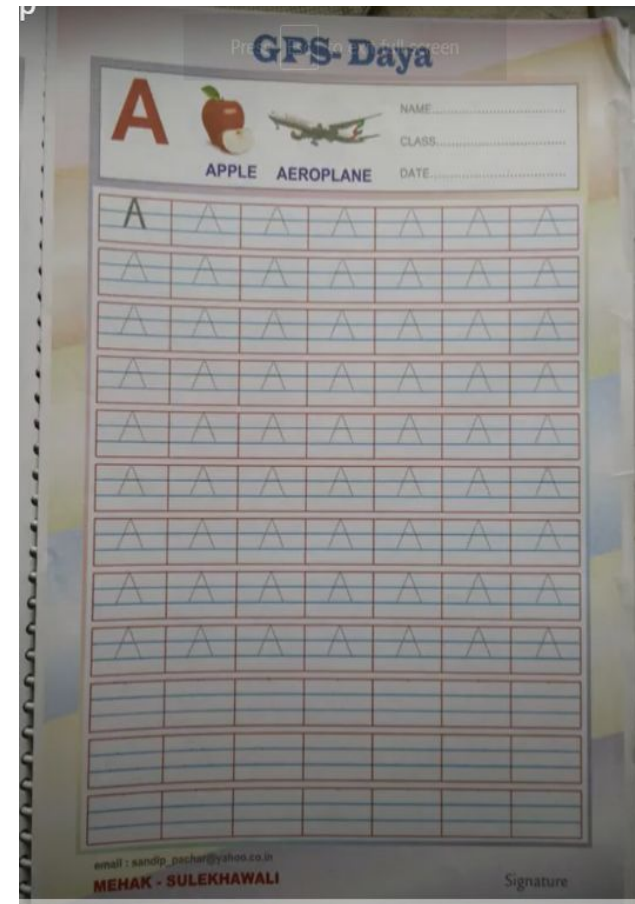
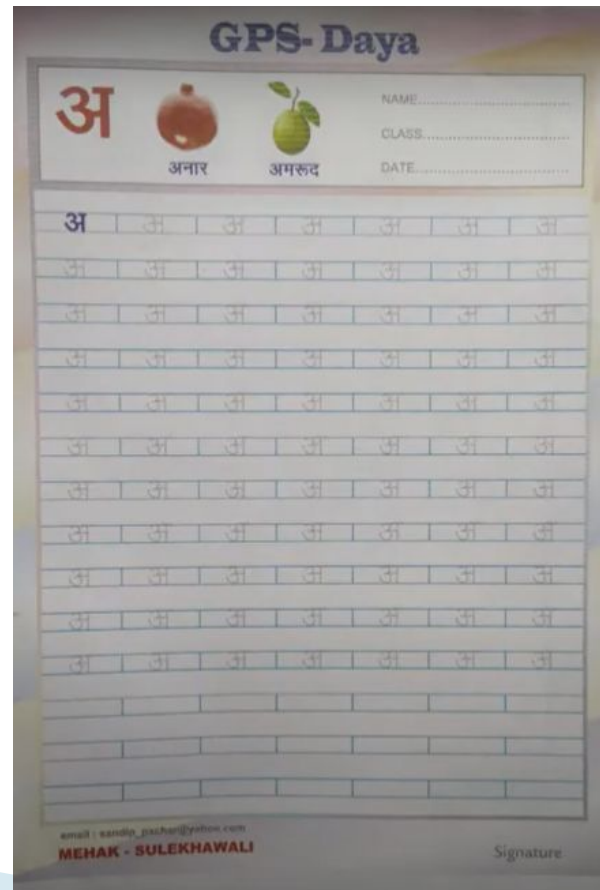
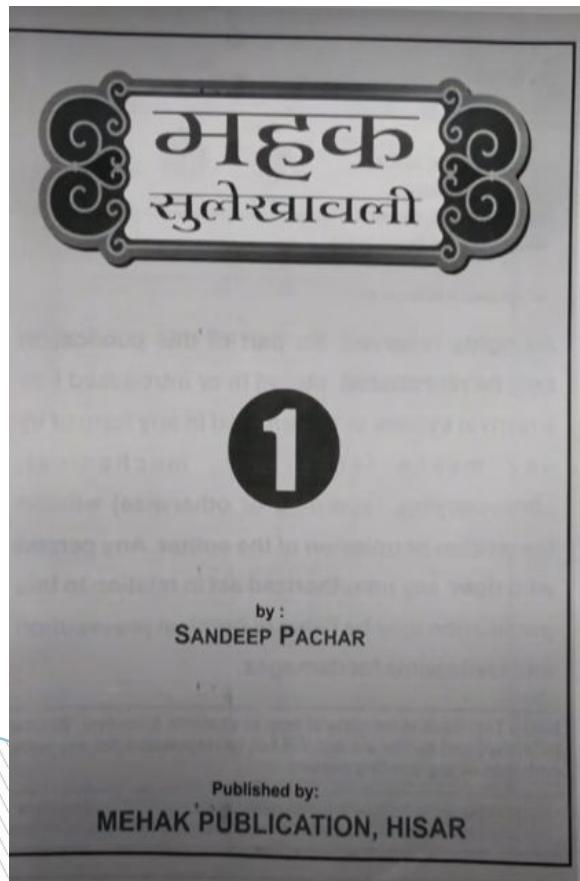
SOME OTHER INNOVATIONS

AETIOLOGY	INNOVATION	EFFECT
Practice for Exam Poor Handwriting	'Sample Question papers' with the use of PageMaker software.	Students motivated to improve handwriting and also to score good marks in exam



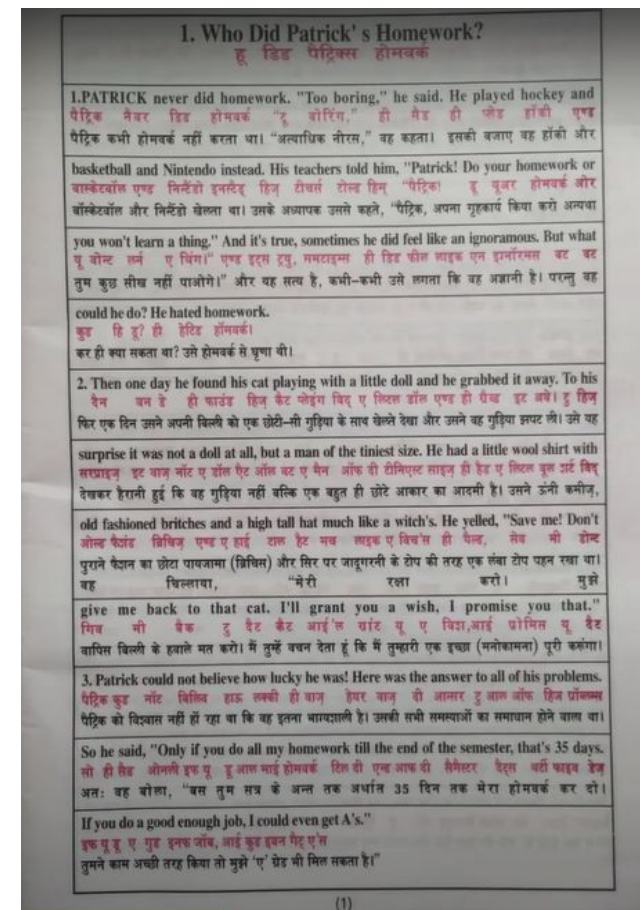
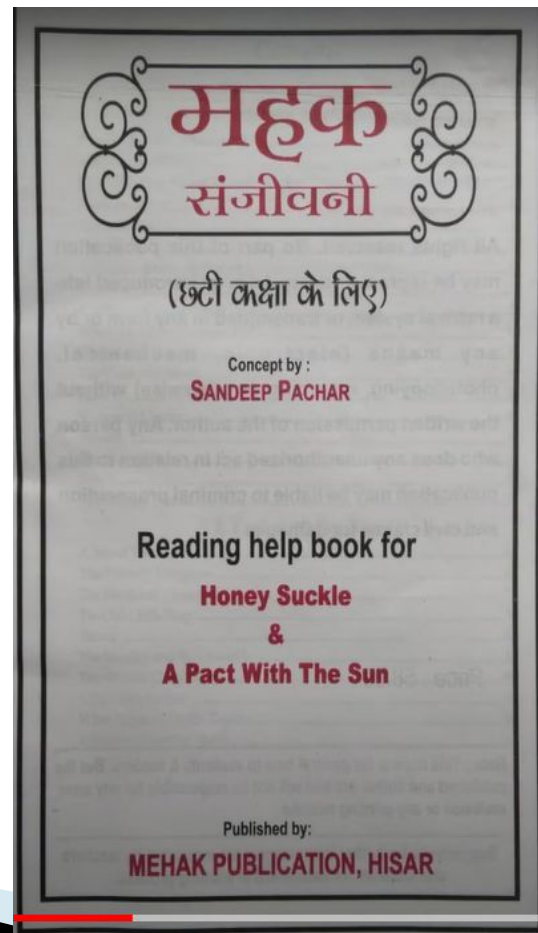
SOME OTHER INNOVATIONS

AETIOLOGY	INNOVATION	EFFECT
Poor Handwriting of students	Cursive writing workbooks with the use of PageMaker and coral draw software.	Students motivated to improve handwriting at elementary level



SOME OTHER INNOVATIONS

AETIOLOGY	INNOVATION	EFFECT
Students unable to read English	Pronunciation book for help them learn pronunciation in their mother tongue	Students learned a lot, This book was used using audio lesson



SOME OTHER INNOVATIONS

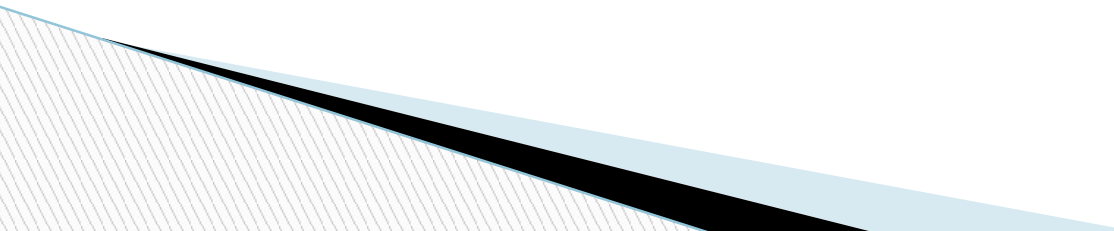
AETIOLOGY	INNOVATION	EFFECT
Students unable to read English	Pronunciation book for help them learn pronunciation in their mother tongue	Students learned a lot, This book was used using audio lesson

1. PATRICK never did homework. "Too boring," he said. He played hockey and पैट्रिक नेवर डिड होमवर्क "टू बोरिंग," ही सैड ही प्लेड हॉकी एण्ड पैट्रिक कभी होमवर्क नहीं करता था। "अत्याधिक नीरस," वह कहता। इसकी बजाए वह हॉकी और basketball and Nintendo instead. His teachers told him, "Patrick! Do your homework or बास्केटबॉल एण्ड निन्टेंडो इनस्टेड हिज टीचर्स टोल्ड हिम् "पैट्रिक! दू यूअर होमवर्क ओर बास्केटबॉल और निन्टेंडो खेलता था। उसके अध्यापक उससे कहते, "पैट्रिक, अपना गृहकार्य किया करो अन्यथा you won't learn a thing." And it's true, sometimes he did feel like an ignoramous. But what यू वोनट लर्न ए थिंग।" एण्ड इट्स ट्रु, समटाइम्स ही डिड फील लाइक एन इग्नॉरमस बट वट तुम कुछ सीख नहीं पाओगे।" और यह सत्य है, कभी-कभी उसे लगता कि वह अज्ञानी है। परन्तु वह

Application to ICT Award

All the works were going on simultaneously when I came to know about ICT Awards

So, I compiled my work and applied for the first time in 2013 but my application was not forwarded from the state and later on in 2014 and this time I was shortlisted to present my works before the Jury and in this way I reached CIET, NCERT, New Delhi



More than 52 Participants all over INDIA participated and shared their works



The presentation Day in room no 202, CIET, NCERT



The greatest news

No. F. 11-06/2014-Sch-5
Government of India
Ministry of Human Resource Development
(Department of Schools Education & Literacy)
(School-5 Section)

Shastri Bhawan, New Delhi
Date: 14.08.2015

To,

1. Prinicpal Secretary – Education, of the Govts. of Delhi, Himachal Pradesh, Haryana, Karnataka, Madhya Pradesh, Tamil Nadu & Uttarakhand
2. Chairman, CBSE
3. Commissioner KVS
4. Commissioner NVS

Subject:- National ICT Award for Teachers- 2014-reg.

Sir/Madam,

The National Award for teachers for use of IT in Education for the year 2014 will be given alongwith the National Award to Teachers (NAT), in the award ceremony which is scheduled at Vigyan Bhawan on 5th September, 2015. The awardees are to reach Delhi by 2nd September, 2015 forenoon latest.

2. 9 teachers have been selected for the National ICT Award 2014. The list of awardees is as under:-

Sl. No.	Name of awardees	State / Organization
1.	Sh. Sandeep	Haryana (Government Public School Daya, Hisar- 125001, Haryana)
2.	Sh. Naveen Gautam	Himachal Pradesh (Government Senior Secondary School Mundkhar, Bhoranj, Hamirpur- 177001, Himachal Pradesh)
3.	Sri Shambulingaiah	Karnataka (Govt. Higher Primary School, Jodikothapally, Kolar- 563135, Karnataka)
4.	Sh. Manhor Lal Rai	Madhya Pradesh (Government Sec. School, Mahalakshmi, (Fort Campus), Shajapur- 465001, Madhya Pradesh)
5.	Sh. N. Anbazhagan	Tamil Nadu (Panchayat Union Middle School, 1-3 Ward Uthiramerur

Proud Moment

5 Sept, 2015

Vigyan Bhawan, New Delhi



Print Media

की मार से बर्बाद हो चुकी है।

निकल दिया था। इसके बाद जिसके घर में पुत्र ने पनाह

संदीप पचार को राष्ट्रपति ने किया सम्मानित

जामरुम संवाददाता, हिसार : इंदोरेशन एंड कम्युनिकेशन टेक्नोलॉजी (आईसीटी) के बेहतर उपयोग को लेकर राजकीय प्राथमिक पाठशाला डाया में तेजाव संदीप पचार को शिक्षक दिवस पर राष्ट्रपति ने सम्मानित किया। संदीप प्रदेश के एकमात्र अध्यापक हैं जिनको यह सम्मान मिला है।

राष्ट्रीय की केंद्रीय भाग्य संसाधन विकास मंत्रालय की तरफ से आईसीटी के उपयोग व शिक्षक में नवाचार के लिए वर्ष 2014 का पुरस्कार दिया गया।

डाया के शिक्षक संदीप पचार ने बताया कि यह राष्ट्रपति भवन में सम्मान मिलने से काफी खुश है। वह प्रदेश के एकमात्र शिक्षक हैं जिनको यह सम्मान मिला है।

यह है संदीप की उपलब्धि

राजकीय प्राथमिक पाठशाला डाया में तेजाव एवं कैमरी टेड निश्चल रूपम विहार कॉलेजी में रहने वाले संदीप 2004 में नौकरी आए। वो साल तक बच्चों को पढ़ाते रहे। 2006 में

संदीप पचार को सम्मानित करते राष्ट्रपति।

पहली शुरूआत मिड डे मील का रजिस्टर तैयार करने से हुई। इसके अपने बेटी पर 'महाक मिड डे मील रिकार्ड रजिस्टर' नाम दिया। टेड साल तक इसकी खमियों को दूर किया और अब उनका बच्चा रजिस्टर प्रयोग होता है। प्रदेश के करीब तीन हजार स्कूलों में इसका प्रयोग किया जाता है।

संदीप ने 2009 में आईसीटी पर काम शुरू किया। छोटे बच्चों की ओरों पर फकड़ कमजोर होने और एक पाठ कक्षा में निकलने पर पीछे रहने की बात आने पर पाठ को रिकार्ड करने काम शुरू हुआ। इसमें संदीप ने पाठ को कैमरे में रिकार्ड करवा शुरू किया।

सब रेहः

संवाद ३ के आरु यह जि

रेह ता पर क मा में

अद्विप निकल पैरु गार्। जि हमार। गणा। प दोबाग। आरु ने उपय शिक्षा

कक्षा में शिक्षक नहीं ही। उस रोज़करी को जुबानी नहीं हुई तो उसने डिजिटल को शिक्षक के रूप में चुन लिया।

जलपद निरुपत में होगा मिठेह

कि मार में बर्बाद हो चुकी है। इसके बाद जिसके घर में पुत्र ने पनाह

शिक्षक दिवस : डाया के अध्यापक संदीप आज होंगे राष्ट्रपति से सम्मानित

‘संदीप’ से शिक्षा जगत को रोशनी

जामरुम संवाददाता, हिसार : इंदोरेशन एंड कम्युनिकेशन टेक्नोलॉजी (आईसीटी) के बेहतर उपयोग को लेकर डाया के एकमात्र प्राथमिक पाठशाला डाया में तेजाव संदीप पचार को शिक्षक दिवस पर राष्ट्रपति ने सम्मानित किया। संदीप प्रदेश के एकमात्र अध्यापक हैं जिनको यह सम्मान मिला है।

संदीप पचार को सम्मानित करते राष्ट्रपति।

राष्ट्रीय की केंद्रीय भाग्य संसाधन विकास मंत्रालय की तरफ से आईसीटी के उपयोग व शिक्षक में नवाचार के लिए वर्ष 2014 का पुरस्कार दिया गया। डाया के शिक्षक संदीप पचार ने बताया कि यह राष्ट्रपति भवन में सम्मान मिलने से काफी खुश है। वह प्रदेश के एकमात्र शिक्षक हैं जिनको यह सम्मान मिला है।

डाया के शिक्षक संदीप पचार ने बताया कि यह राष्ट्रपति भवन में सम्मान मिलने से काफी खुश है। वह प्रदेश के एकमात्र शिक्षक हैं जिनको यह सम्मान मिला है।

कन्नरवाई : जिला मौलिक शिक्षा विभाग ने एसपी कन्नरवाई 17 जेबीटी शिक्षकों पर

जामरुम संवाददाता, हिसार : हाईकोर्ट के आदेश के बाद वर्ष 2011 में पन्नी अंगुले सवाकर नौकरी पाये

तीन खंडों से एक भी शिक्षक न

डाया के अध्यापक संदीप आज होंगे राष्ट्रपति से सम्मानित

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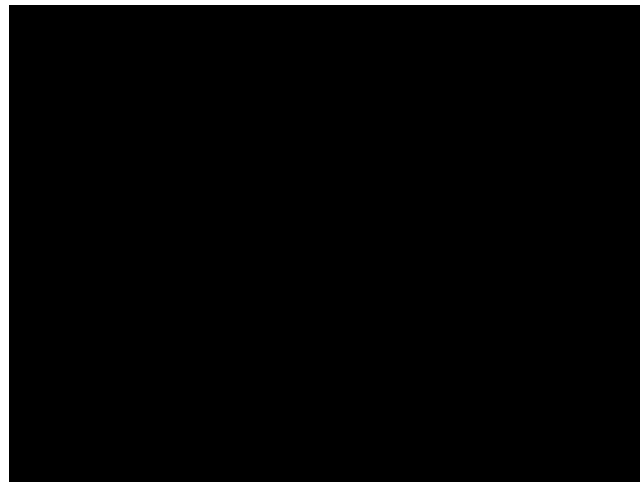
हिसार के शिक्षक को पुरस्कृत करेंगे प्रणब

जासं, हिसार : शिक्षण कार्य में सुचना तकनीक के इस्तेमाल करने पर हिसार के डाया गांव के राजकीय प्राथमिक पाठशाला के प्राथमिक अध्यापक संदीप पचार को केंद्रीय मानव संसाधन विकास मंत्रालय द्वारा पुरस्कृत किया जाएगा।

संदीप पचार

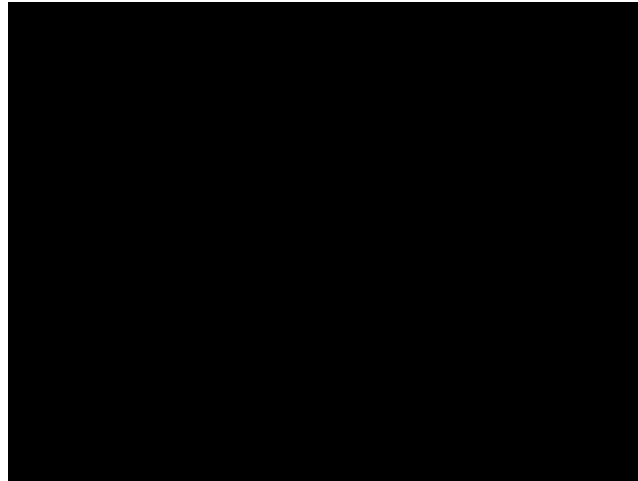
E-Tutor

<https://youtu.be/2YuJbyhODoQ>



E-Paathshala in classroom Listening skills

<https://youtube.com/shorts/LbgzbZ8CdoY?feature=share>



Connected all classrooms with small speakers



NIPUN BHARAT Abhiyan



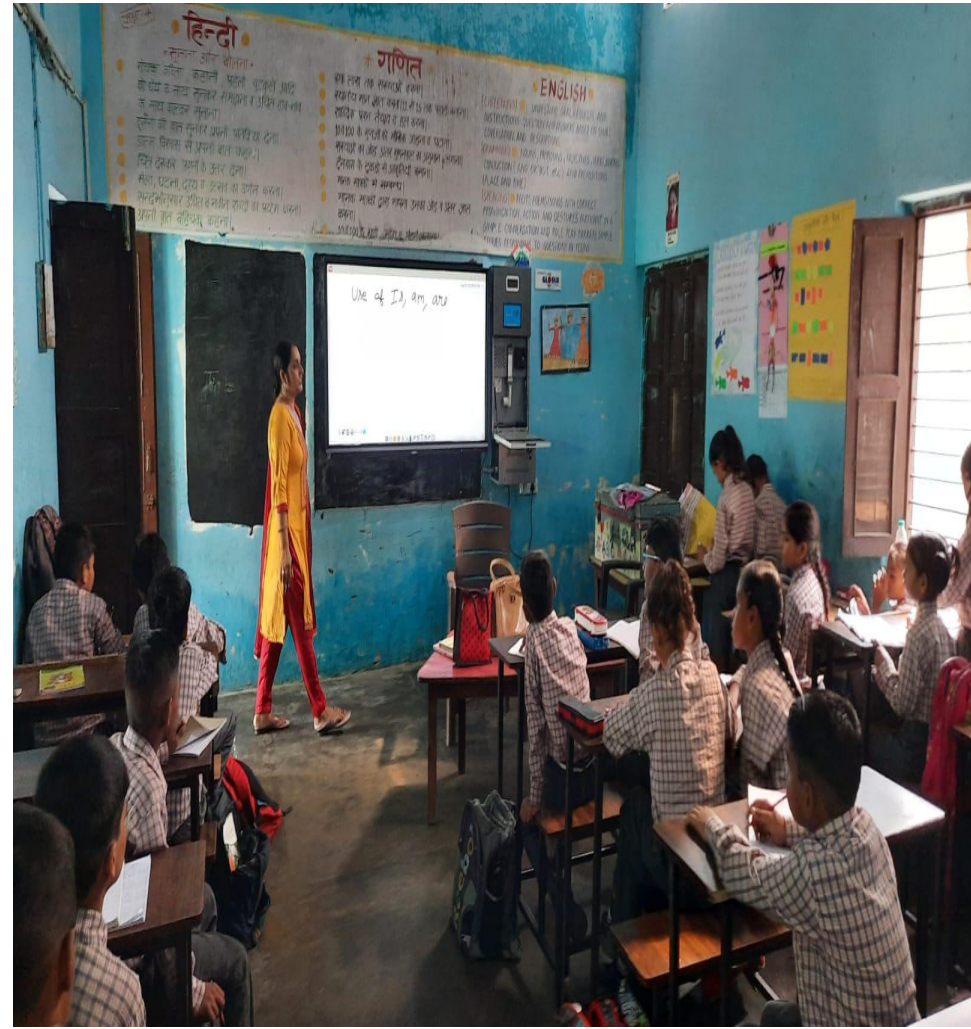
ISRAEL Tour for ICT



Uzbekistan tour



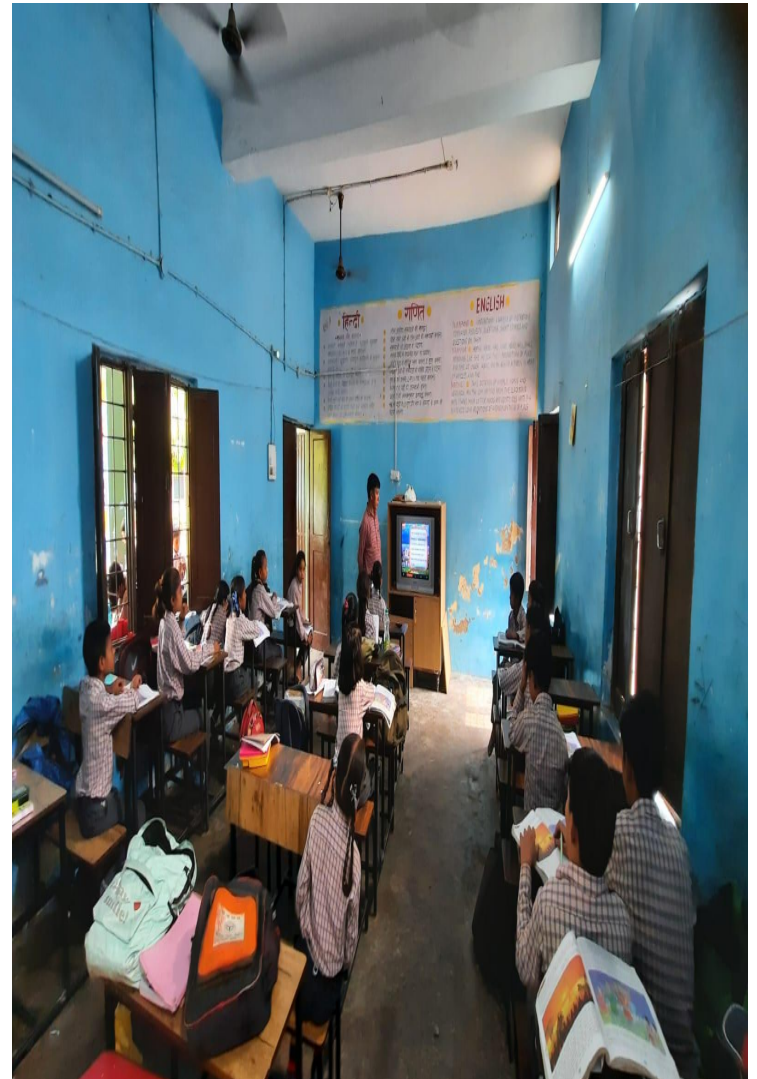
GMSPS Fatehur, Sec 20, Panchkula



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The journey has just begun.....

**Still
Working.....**

