

My Journey to a National ICT Awardee Teacher



*"Where there is will
there is a way"*

My Primary Education

Government Secondary School
Vivekanandapur
Little Andaman
Anadaman & Nicobar Islands

My Higher Education

Government Model Senior
Secondary School
Hut Bay, Little Andaman
Anadaman & Nicobar Islands



Use of ICT during initial phase (2005 to 2008)

- Lab activities
- Teaching through powerpoint presentation
- Quiz application
- Best practices of school
- Educational games (C++)

Use of ICT during second phase (2009 to 2019)



Laptop

Only ICT tool available during early 2010 was laptop.

Use of Smart Class

Smart class was established first time in my school in the year 2016. Trainings were imparted on effective use of smart board to fellow teachers



Use of ICT during second phase (2009 to 2019)

ICT Lab

Well equipped ICT lab helped me to achieve desired output from my students.



GSSS RANGACHANG

Use of ICT in Teaching Learning Process

Digital Class

Integrating projector, Pen tablet with Microsoft Onenote software in teaching learning process being latest ICT tools that improved learning ability in my students.



Use of ICT in Teaching Learning Process

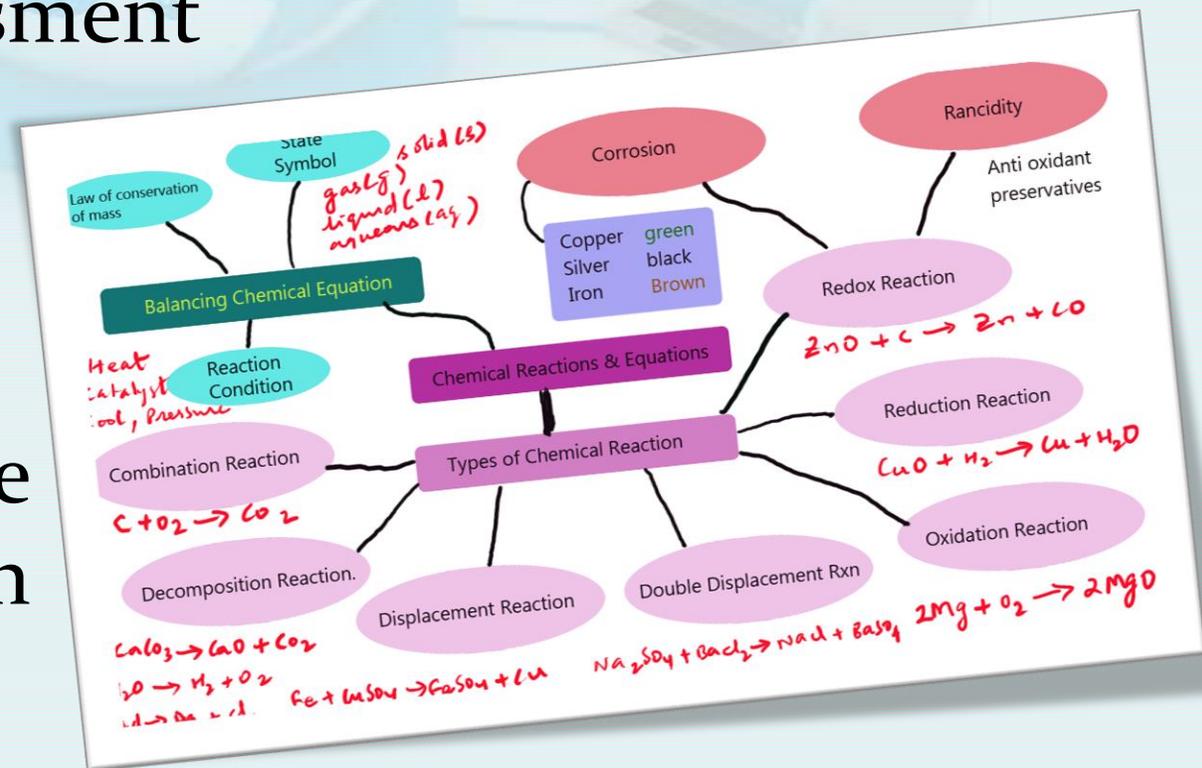
Use of whatsapp

Whatsapp was used as a medium of sharing notes and assessment materials.



Use of Mindmaps

Mind maps always helped me to revise the entire chapter in short time



Use of ICT in Teaching Learning Process

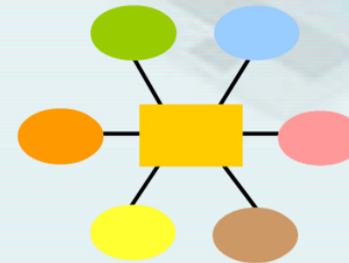
Assessment and Evaluation

Various ICT tools have been used to assess and evaluate students performance. Some of the tools which I used:

- ✓ Flash Cards
- ✓ Word search that my students really enjoy
- ✓ word puzzle [Link to concept map](#)
- ✓ Quiz



Students are creative
in groups



Cooperative skills

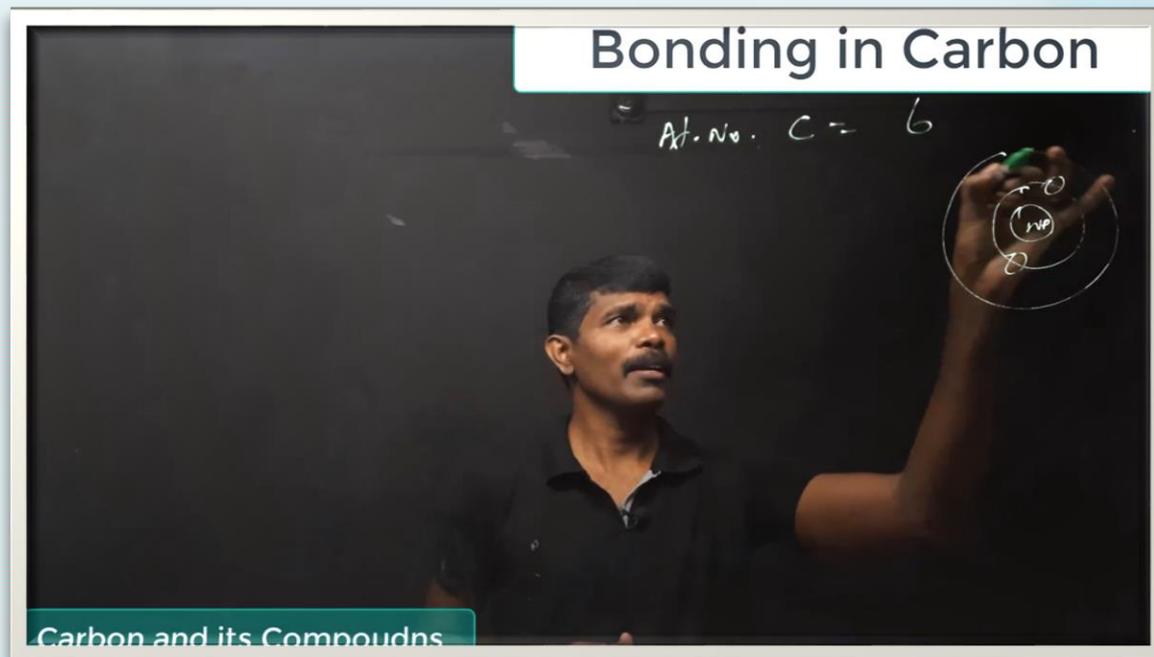
The students who will search more than 13 will be considered excellent.

U	A	P	R	I	N	C	I	P	A	L	A	X	I	S	E	M	O	H	Y	D	E	R	M
M	Q	N	A	C	O	T	A	P	R	E	E	Z	E	P	A	S	K	U	L	R	S	C	E
K	W	O	P	S	I	N	V	E	R	S	T	E	P	S	U	R	F	A	C	E	E	R	T
Y	E	I	E	A	M	A	Z	G	E	R	F	R	I	C	T	I	O	P	O	U	N	Q	A
A	D	G	R	C	A	P	R	T	I	O	N	O	M	U	S	I	P	L	O	N	D	E	S
R	F	H	T	E	L	U	Z	R	C	S	P	N	C	E	F	M	A	S	D	G	T	R	P
S	G	H	U	I	C	R	I	U	S	U	N	I	O	P	U	O	D	T	O	T	I	U	H
D	H	U	R	F	F	A	S	E	U	B	E	P	N	E	G	R	C	A	I	Y	K	T	O
F	I	A	E	W	T	R	P	M	B	O	C	O	C	M	I	N	G	Q	N	H	J	A	R
A	O	D	S	O	L	L	L	A	S	I	I	H	A	E	K	U	H	W	R	N	R	V	A
A	L	E	I	D	F	O	R	A	T	T	C	M	V	J	T	G	J	E	A	M	O	R	N
O	W	G	U	N	A	T	O	S	C	C	M	A	E	L	U	E	K	R	W	O	A	U	P
H	P	H	M	L	M	E	U	E	A	I	E	L	I	O	J	A	P	F	E	L	A	C	I
C	R	H	K	E	H	R	L	U	N	F	R	A	R	C	A	N	P	G	S	A	I	Y	T
V	L	O	L	W	E	F	O	O	C	E	O	E	E	Y	T	E	O	U	P	S	H	A	T
I	J	T	R	O	E	T	N	L	O	D	N	T	H	S	O	V	L	P	T	L	T	N	C
J	M	Y	T	R	K	I	D	L	U	A	T	H	P	P	D	E	E	O	E	S	H	O	N
J	I	Z	R	I	L	O	E	S	P	E	A	M	M	S	N	I	U	E	Y	P	W	O	
P	E	Z	O	R	D	M	T	A	S	L	C	N	O	O	M	G	V	I	R	T	U	A	L
I	O	C	M	A	O	B	P	H	I	I	N	T	K	K	O	D	E	T	U	B	A	E	I
C	A	V	E	L	I	G	H	T	M	S	O	R	R	E	T	A	G	S	O	B	L	T	G
R	M	W	A	Y	K	Y	Q	Y	P	R	L	O	I	L	D	R	A	N	P	I	E	M	E
M	L	E	R	T	R	E	W	X	T	E	S	P	H	I	A	I	M	B	E	R	E	A	U
E	R	N	U	X	E	V	N	O	C	M	E	O	T	S	E	L	I	S	T	R	A	X	M

My ICT Journey during Covid and Post Covid

Creation of video classes

Video classes had been created for class VIII to class X and telecasted through Doordarshan and local cable TV. More than 60 e-contents have been contributed to education department



Use of ICT in Teaching Learning Process

Social Media



Whatsapp being an important tool that connects quickly to the students. The following activities I usually practice through whatsapp

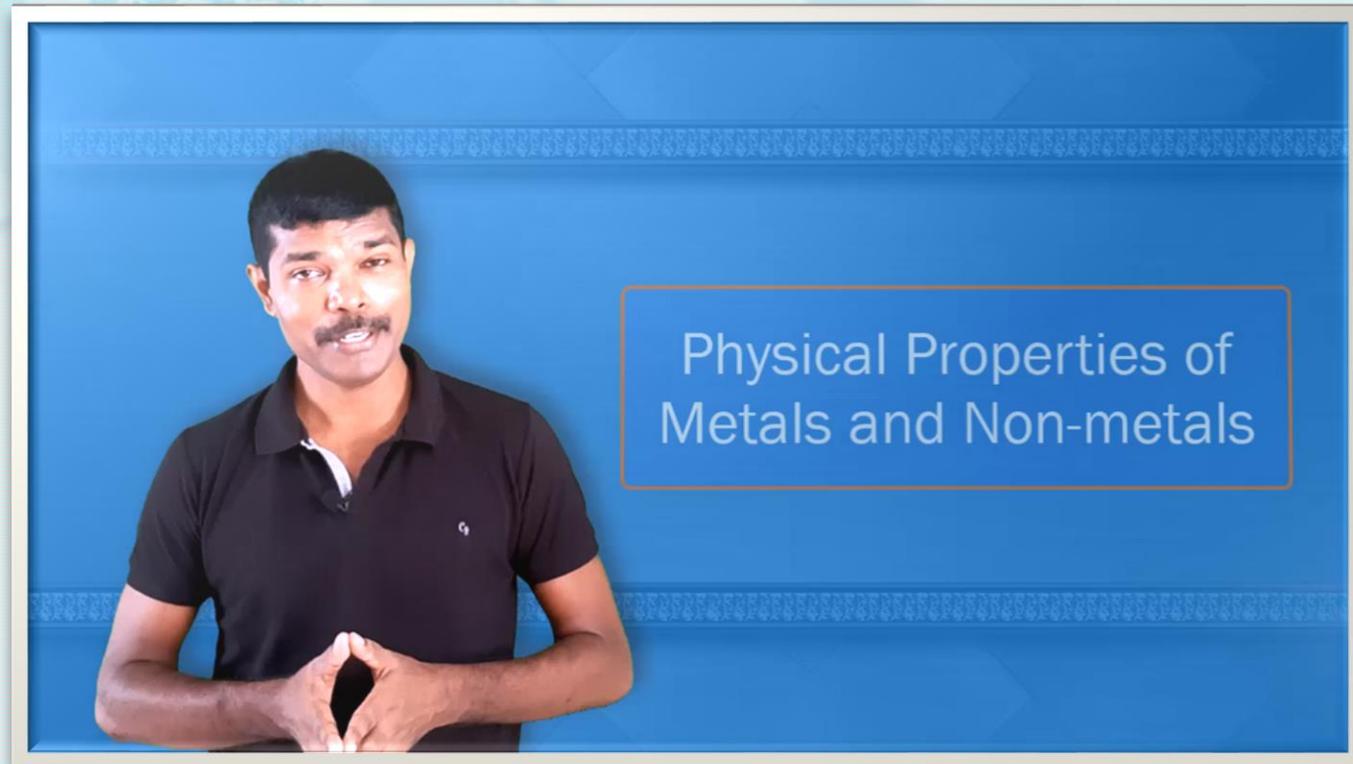
- Home assignments
- Peer work activities
- Doubt clearing through whatsapp chat
- Notes in pdf format/Google drive
- Sharing subject related videos
- Recording and sharing class room teaching
- Motivating students who perform well in class tests

Use of ICT in Teaching Learning Process

Online Learning Platform



With my teaching skills, e-learning materials are shared on DIKSHA PORTAL so that the digital content is available to diverse students population. More than 50 e-contents have been uploaded in DIKSHA portal.



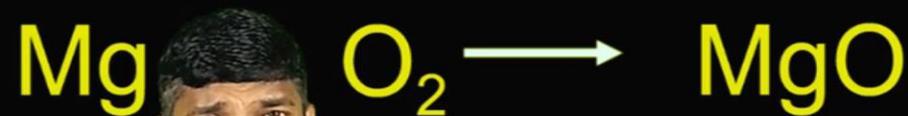
Use of ICT in Teaching Learning Process

Learning through Online platform

You Tube

My dedicated efforts on technical skills helped me to create digital learning material and able to get available on my YouTube channel (**ScienceCapsule**) thereby benefiting a large students population.

Reaction of magnesium ribbon with air (oxygen)

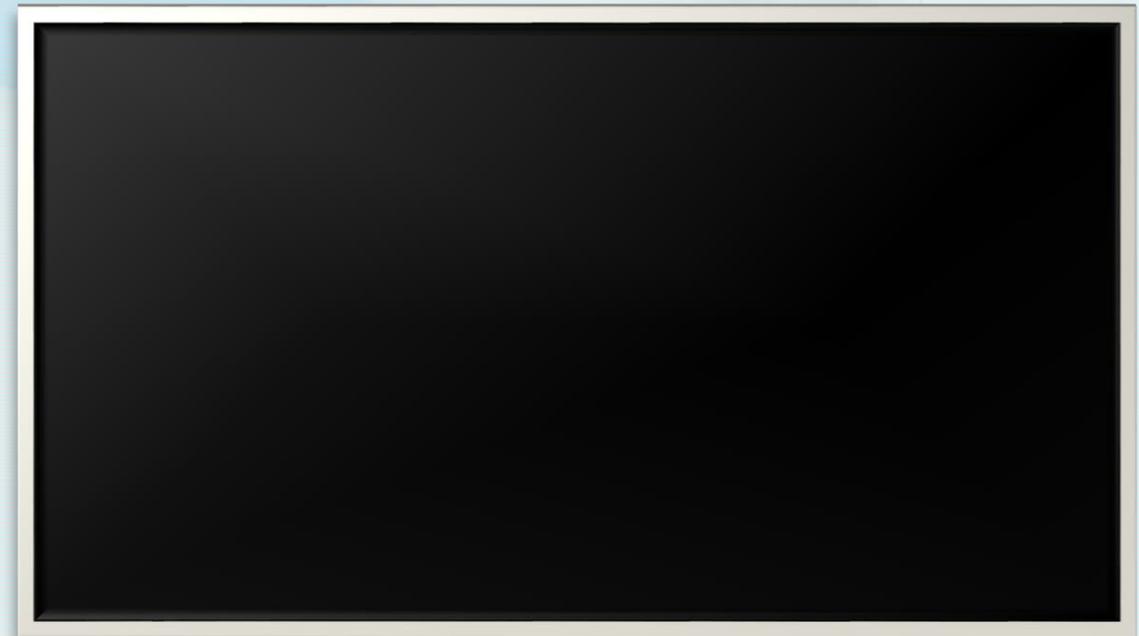


ScienceCapsule

Use of ICT in Teaching Learning Process

Google Meet

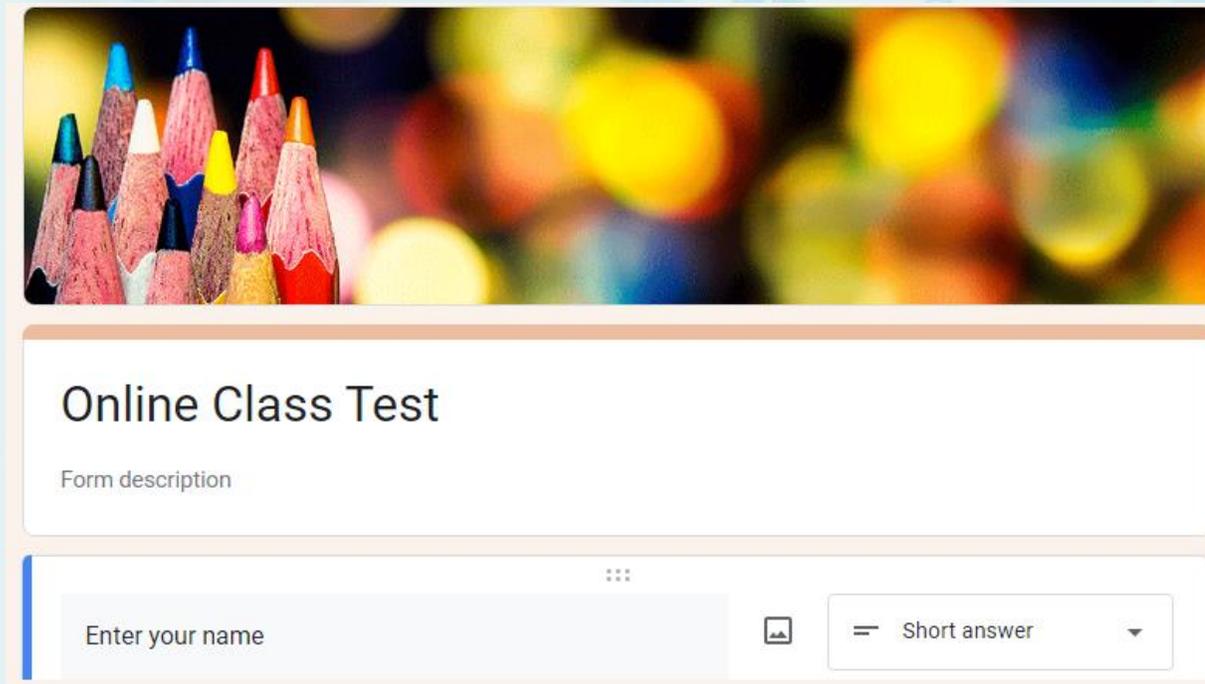
Network connectivity has got improved after the launch of CANI project (under sea optical cable). During lock down classes had been conducted through google meet.



Use of ICT in Teaching Learning Process

Use of Google Form

Google forms had been used as an advanced tool for assessment purpose.



Online Class Test

Form description

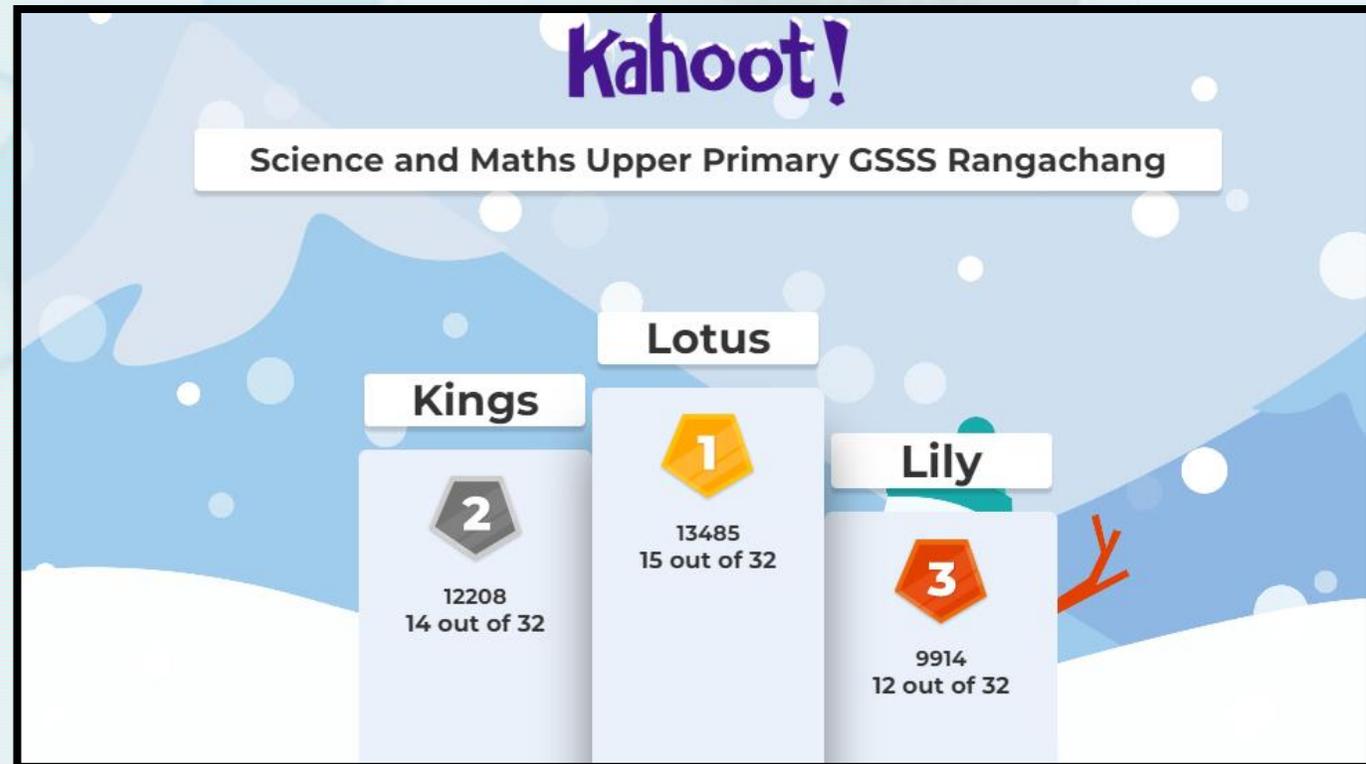
Enter your name

Short answer

Use of ICT in Teaching Learning Process

Online Quiz using Kahoot

Kahoot has been an interesting assessment tool used in my class. Also various school level quiz competitions are conducted by using this online tool.



Use of ICT in Teaching Learning Process

Lab activities using GOLABZ and OLABS

Various online simulations and activities have been used for effective teaching.

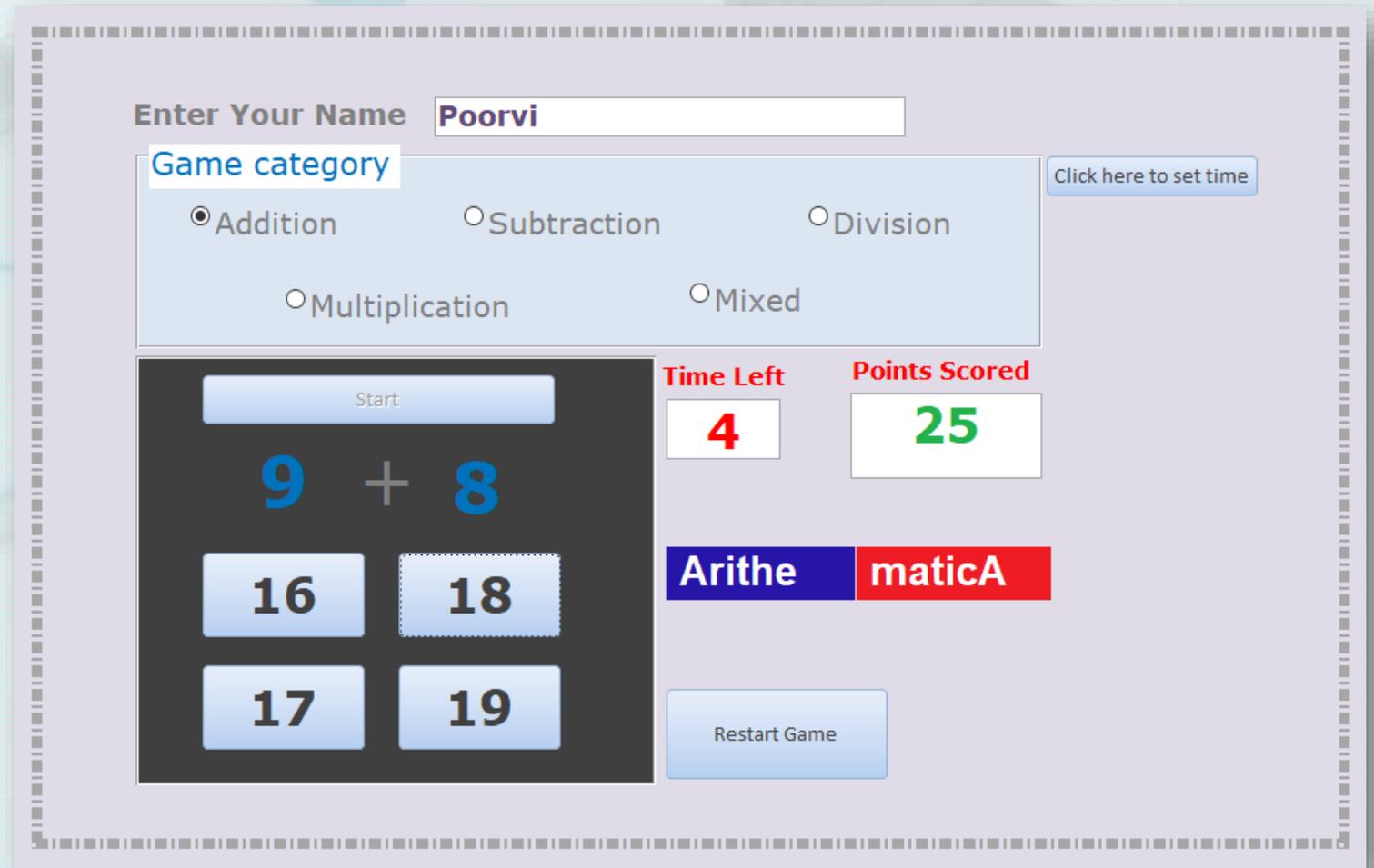
The screenshot shows a simulation interface for 'Atoms & Molecules'. On the left, a cylindrical container holds a dark space with many small blue dots representing particles. A thermometer is attached to the top of the container, showing a temperature of 75 K. Below the container, there are controls for 'Heat' and 'Cool'. On the right, a panel titled 'Atoms & Molecules' lists 'Neon', 'Argon', 'Oxygen', and 'Water' with corresponding colored dots. Below this list are three buttons labeled 'Solid', 'Liquid', and 'Gas'. At the bottom left, there are play and pause buttons.

The screenshot shows a simulation interface for 'Neutral Atom'. The central part of the screen displays a model of a Lithium atom with a nucleus containing three protons (orange) and three neutrons (grey), and three electrons (blue) orbiting in two shells. The text 'Lithium' and 'Stable' are displayed. To the right, a periodic table highlights the element Lithium (Li). Below the periodic table, there are input fields for 'Net Charge' and 'Mass Number', both with a '+' sign. At the bottom, there are three bowls labeled 'Protons', 'Neutrons', and 'Electrons' containing the respective particles. A 'Model:' section has radio buttons for 'Orbits' (selected) and 'Cloud'. A 'Show' section has checkboxes for 'Element', 'Neutral/ion', and 'Stable/Unstable'. A legend at the top left shows 'Protons: (orange dot)', 'Neutrons: (grey dot)', and 'Electrons: (blue dot)'. A refresh button is at the bottom right.

Use of ICT in Teaching Learning Process

ArithemticaA

An interactive application has been developed to improve arithmetic skills in students. This application has helped students to acquire arithmetic skills through gamified learning.



The screenshot displays the user interface for the 'ArithemticaA' game. At the top, there is a text input field labeled 'Enter Your Name' containing the name 'Poorvi'. Below this is a 'Game category' section with five radio button options: 'Addition' (selected), 'Subtraction', 'Division', 'Multiplication', and 'Mixed'. To the right of these options is a button labeled 'Click here to set time'. The main game area features a 'Start' button at the top, followed by the math problem $9 + 8$. Below the problem are four answer buttons: '16', '18', '17', and '19'. To the right of the game area, there are two score indicators: 'Time Left' showing '4' and 'Points Scored' showing '25'. At the bottom right, there is a 'Restart Game' button. The game title 'ArithemticaA' is displayed in a stylized font with 'Arithe' in blue and 'maticA' in red.

Demo video of Arithemtica

The screenshot displays the Arithemtica game interface. At the top, there is a text input field for the name, which contains "Poorvi". Below this is a "Game category" section with four radio button options: "Addition" (selected), "Subtraction", "Division", and "Mixed". A "Click here to set time" button is located to the right of these options. The main game area is a dark grey panel containing a "Start" button at the top. Below it, the math problem $10 + 9$ is displayed in large blue numbers. Underneath the problem are four buttons with the numbers 19, 18, 20, and 21. To the right of the game panel, there are two score boxes: "Time Left" showing 5 and "Points Scored" showing 0. Below these boxes, the game title "Arithemtica" is displayed in a blue and red banner. At the bottom right of the game panel, there is a "Restart Game" button.

Enter Your Name

Game category

Addition Subtraction Division

Multiplication Mixed

[Click here to set time](#)

Start

$10 + 9$

19 18

20 21

Time Left: 5

Points Scored: 0

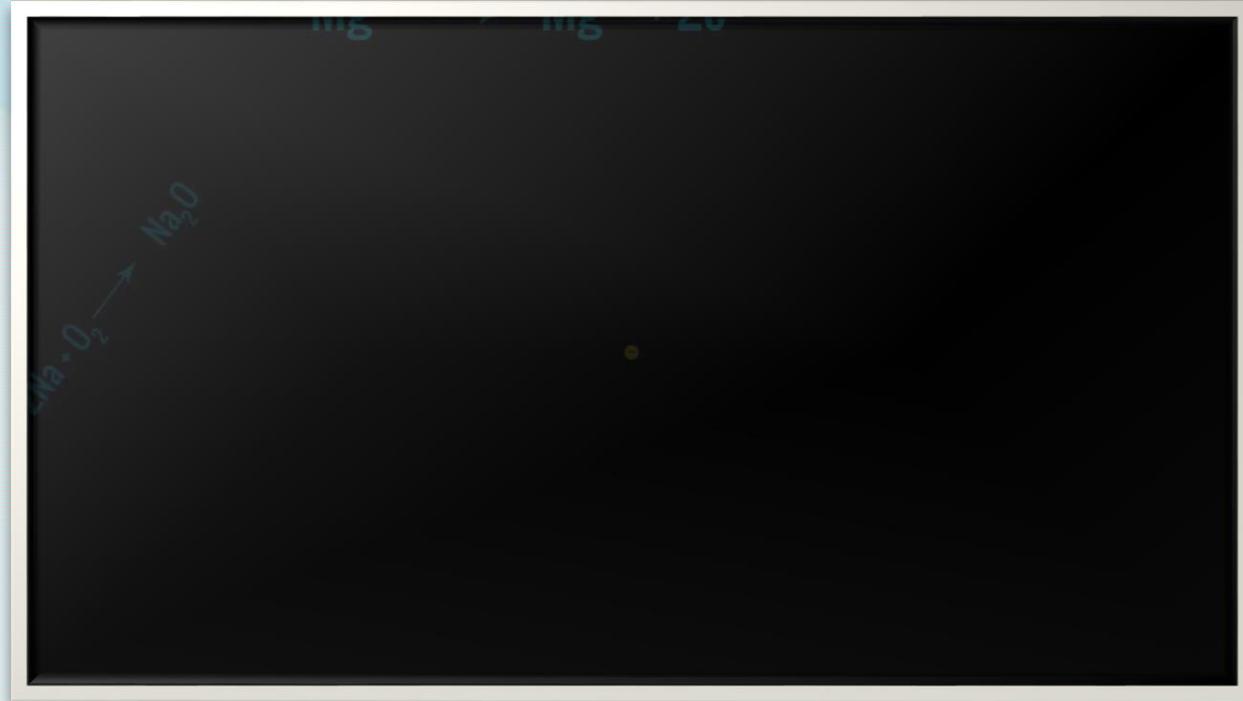
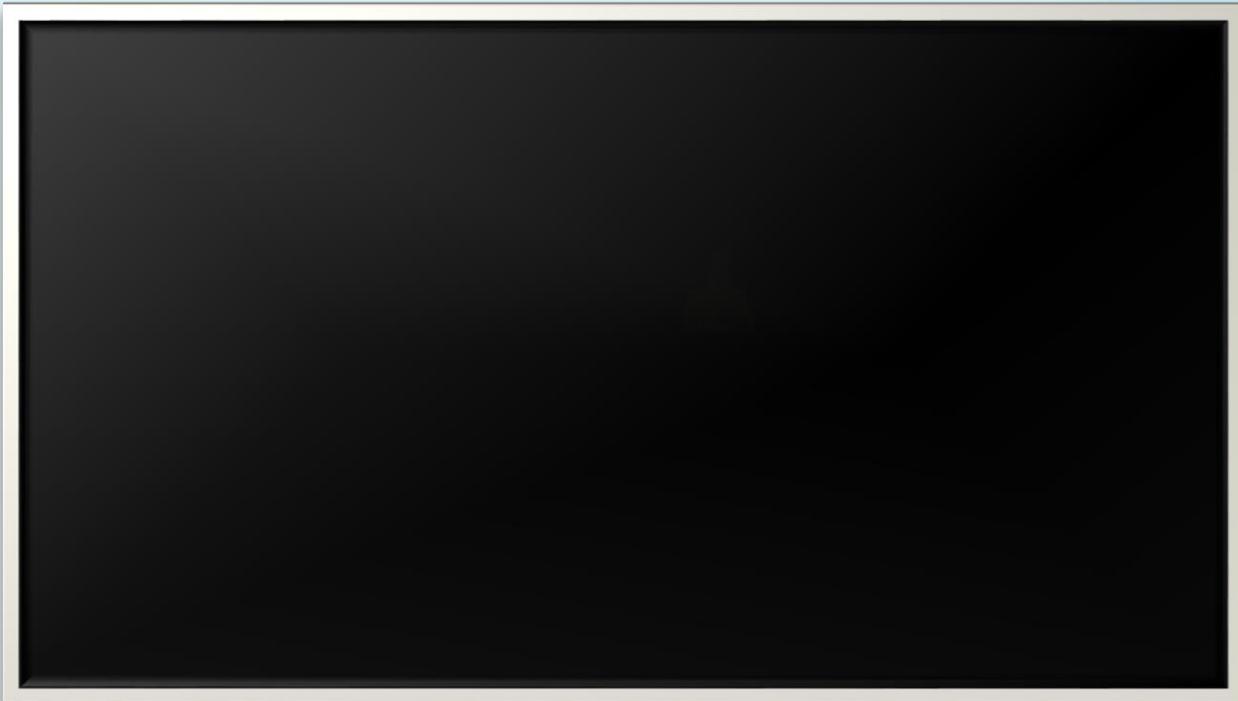
Arithemtica

Restart Game

Use of ICT in Teaching Learning Process

Energised Textbook

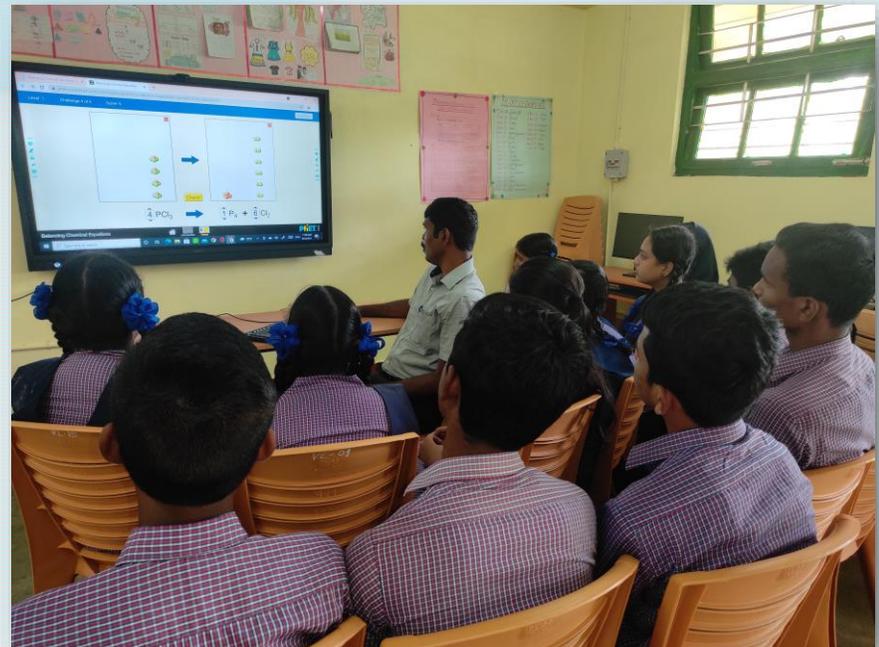
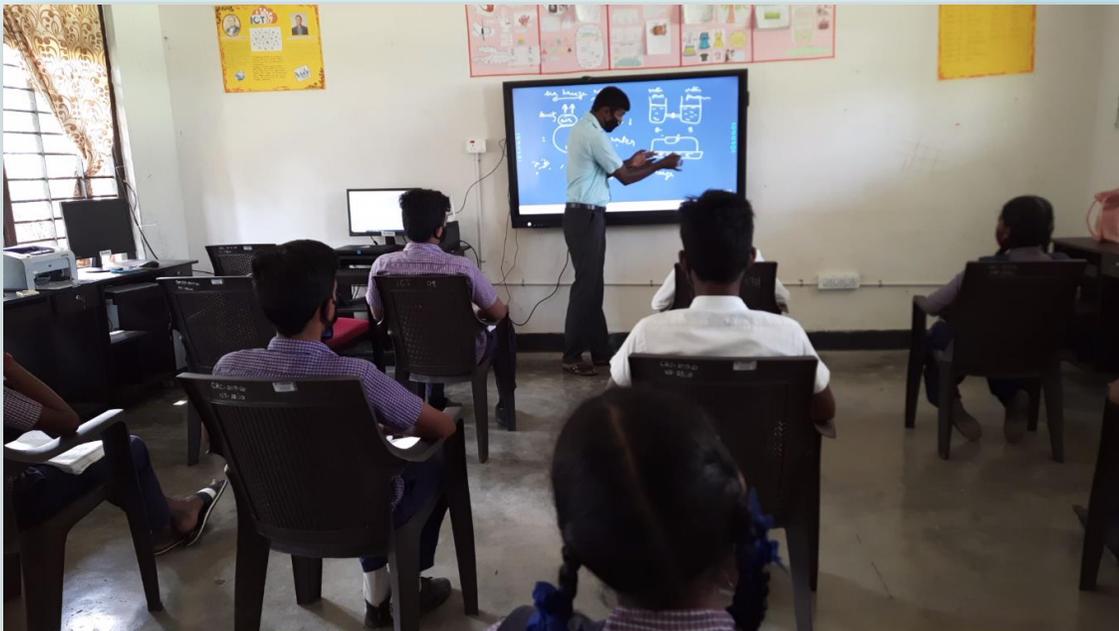
I have contributed QR content both textual and video (animations and explanatory) for the department of education.



Use of ICT in Teaching Learning Process

Innovative approach using Smart panel Board

Under the initiative of Samagra Shiksha our school has got interactive smart panel board. Teaching learning process has gone much higher with the help of this board.



Use of ICT in Teaching Learning Process

Zero Period Innovation

A separate period has been allotted to mitigate the learning gaps during covid -19 pandemic

**Government Senior Secondary School
Rangachang**



Zero Period Innovation

"A unique way of serving students to shape them for better future"

Aims of Zero Period Innovation (ZPI)

- ❑ Provide fundamental educational needs and addresses learning loss.***
- ❑ Convert thoughts into sentences***
- ❑ Improve in vocabulary***
- ❑ Efficient in arithmetic operations***
- ❑ Solve day to day life problems based on arithmetic skills.***

Basic structure of Zero Period Innovation (ZPI)

Basic Needs and addressing Learning Loss

Level 1



Level 2

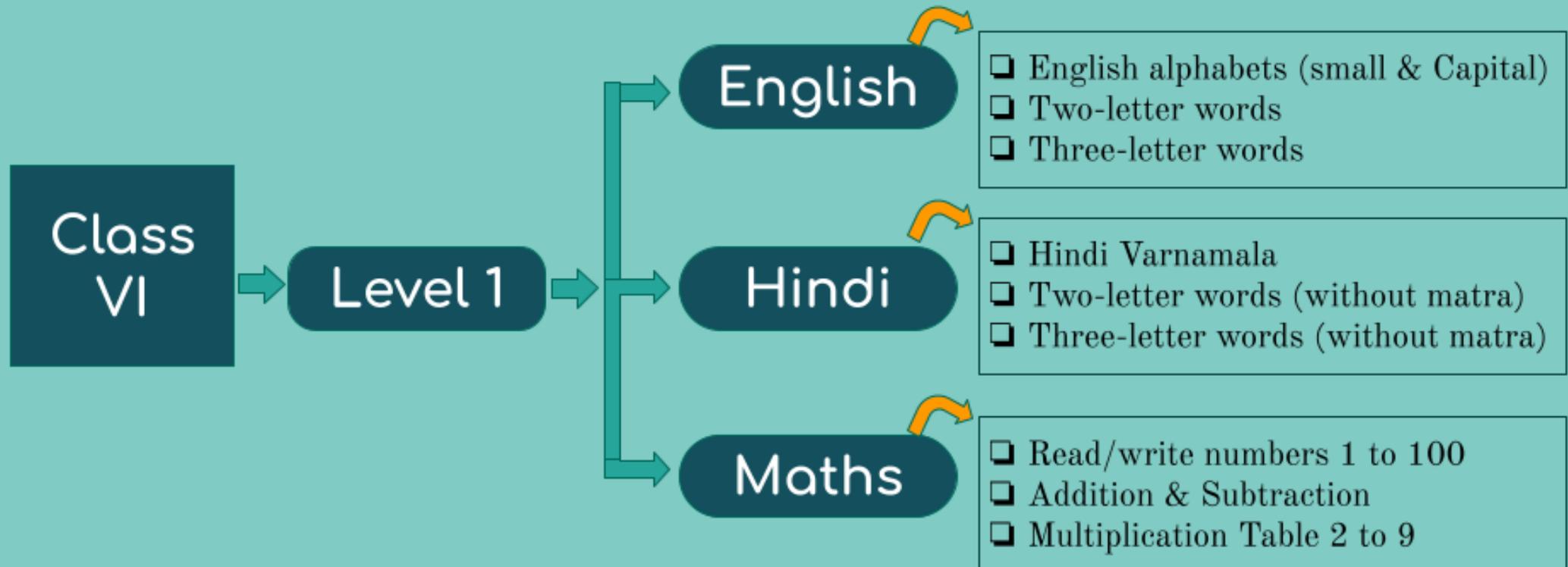


Level 3

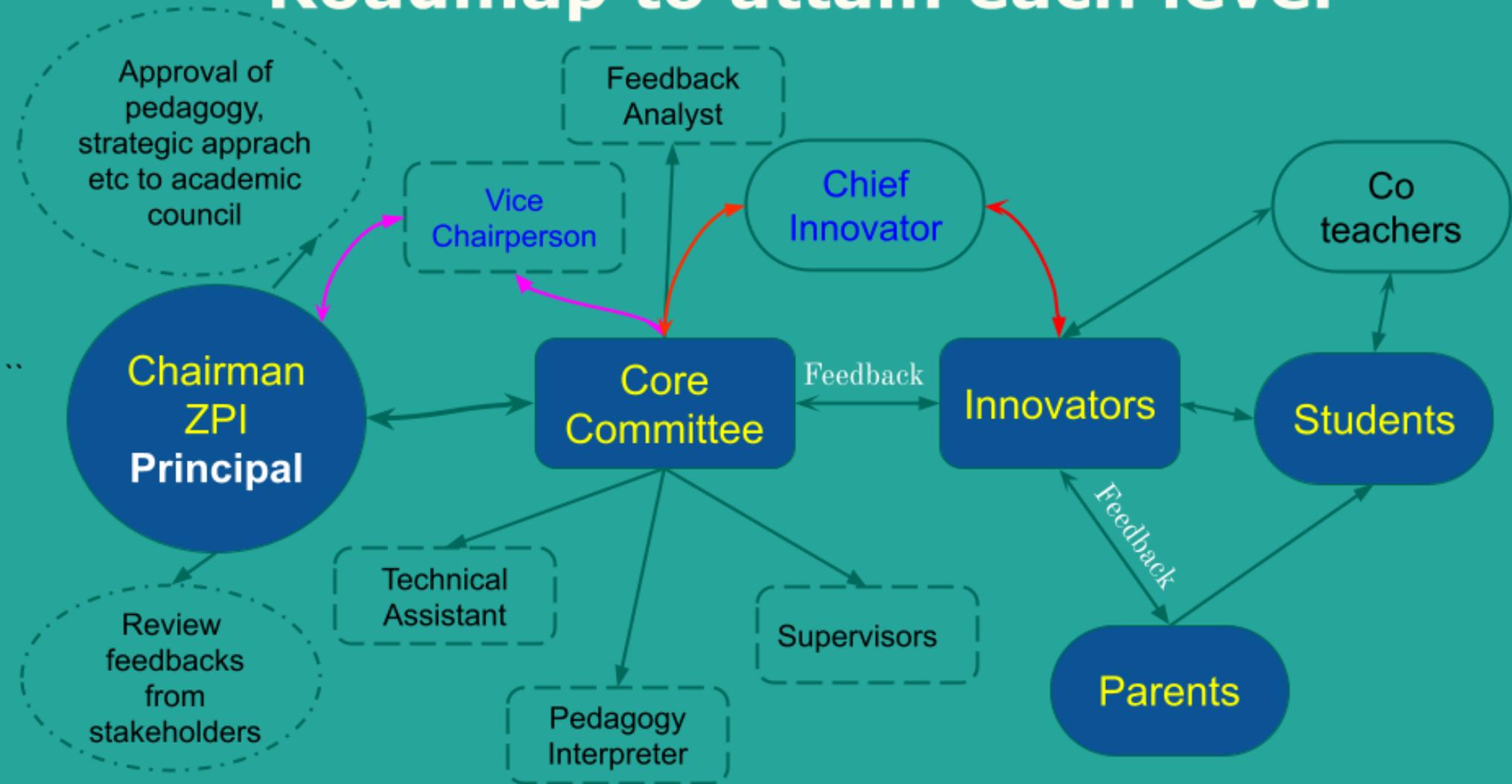


Learning Outcomes prescribed by NCERT

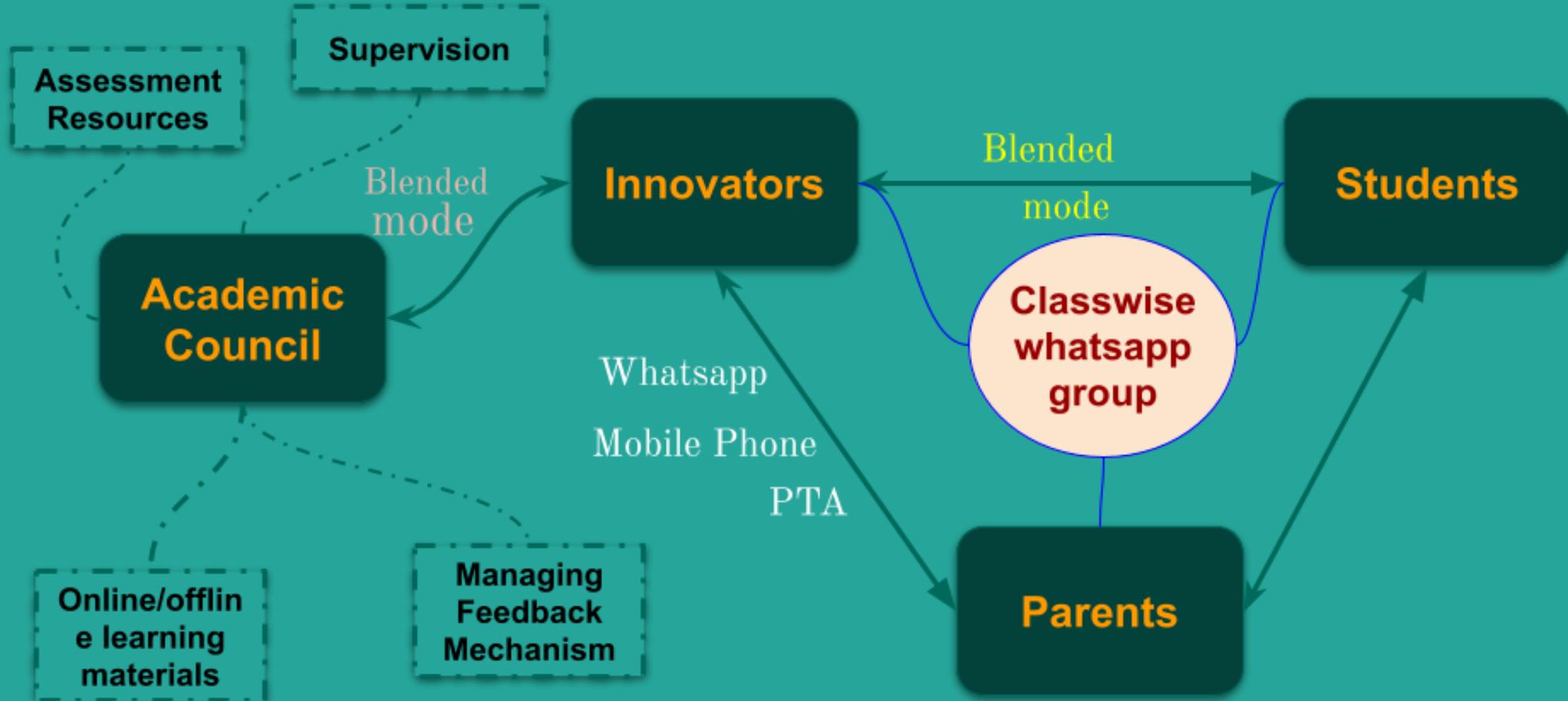
Strategic approach Zero Period Innovation (ZPI)

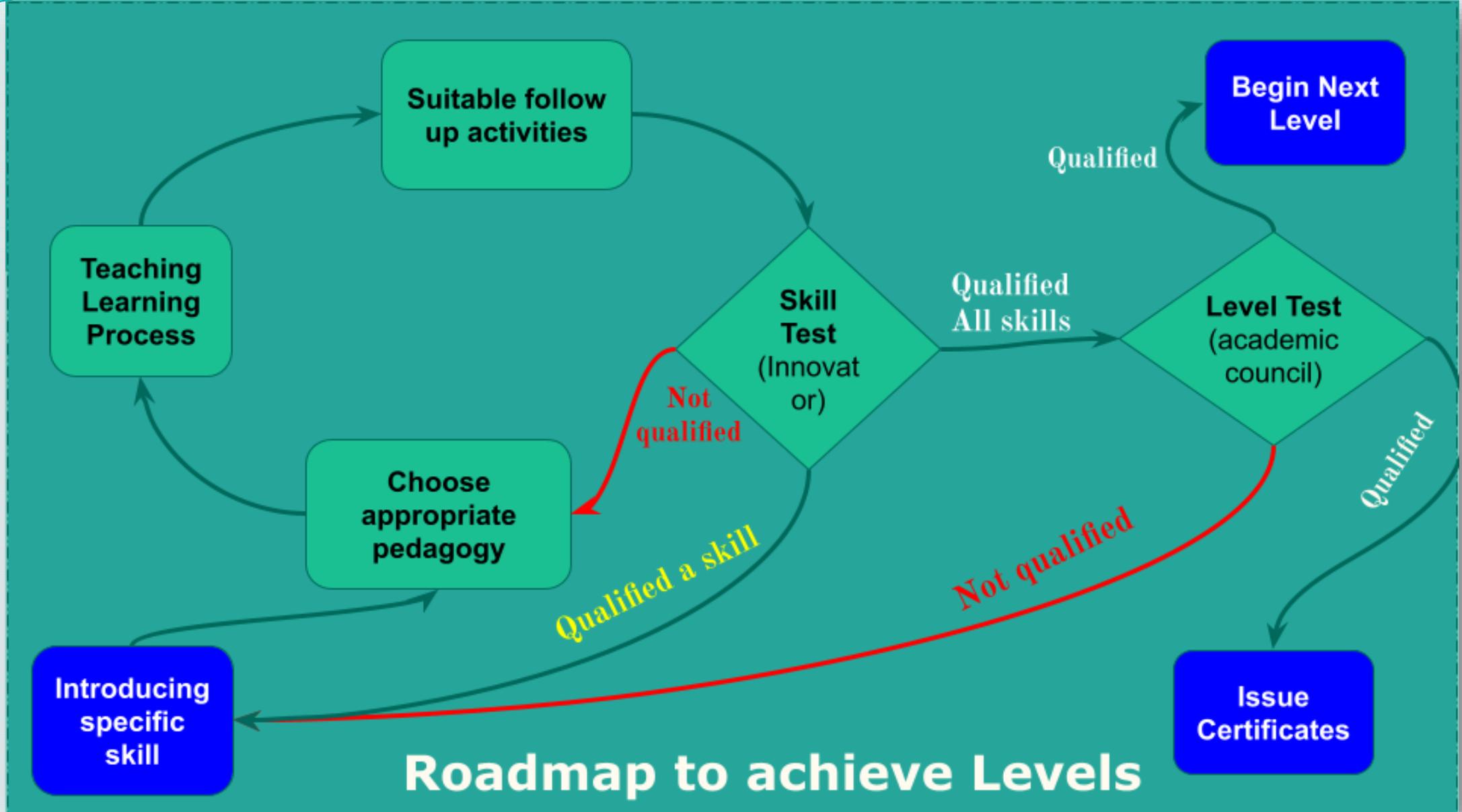


Roadmap to attain each level



Step by step Activities of ZPI



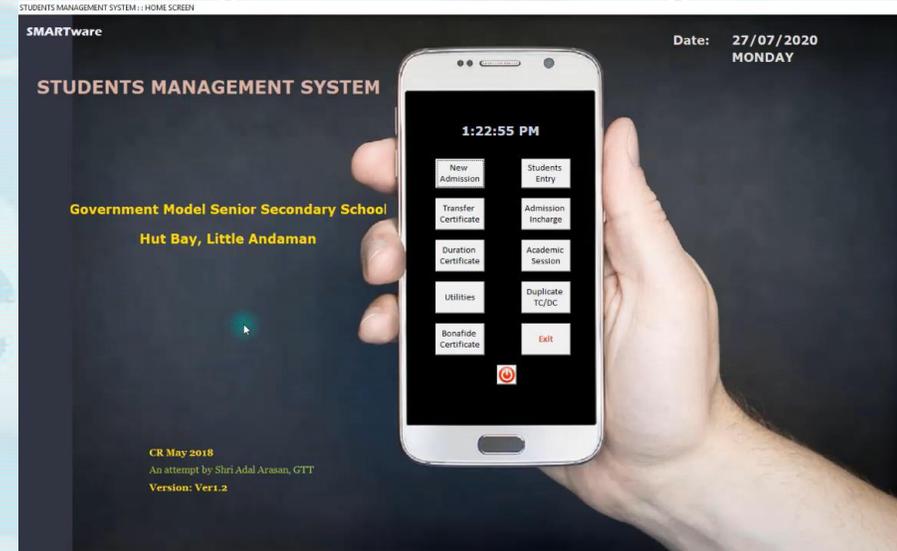


Roadmap to achieve Levels

Use of ICT other than teaching learning process

Smartware

I have developed a desktop application for students management



Secondary Level Quiz Competition (Class IX to XII)

Name of the school:

Round Number: Starts from group

Science Round

A C

B D

Score Board

	A	B	C	D
Current	0	0	0	0
Total	0	0	0	0

Direct Questions: Points
Passed Questions: Points

Type of Question: Group number:

Quiz programme: An interactive quiz application have been developed for the school which was found to be very useful in conducting quiz competitions in school on various occasions

Use of ICT other than teaching learning process

Documentary videos of school activities

Best practices of my school are compiled by me. Best practices such as kishori club, eco club, vocational education, civic amenities etc.



Trainings and workshops

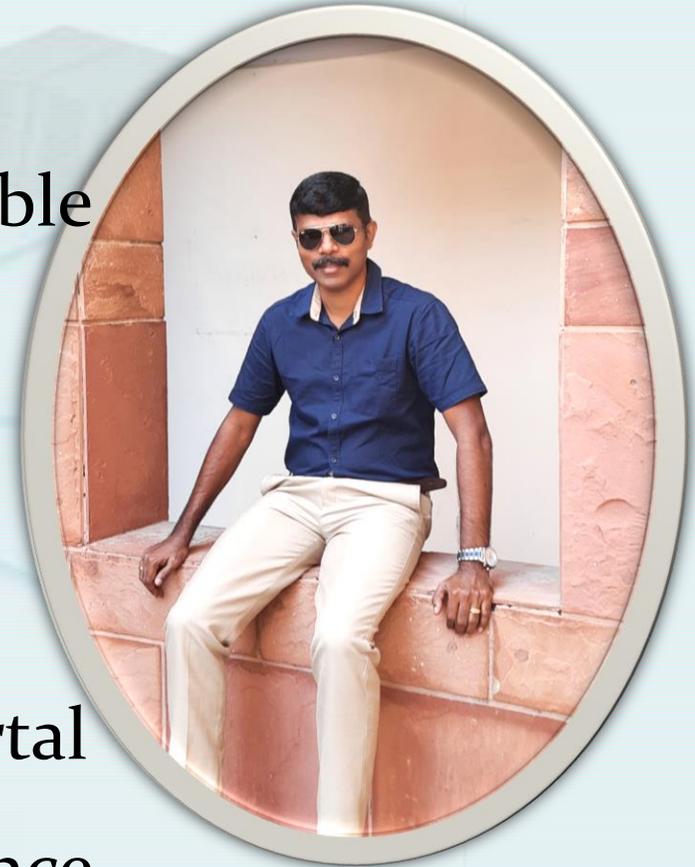
- Teachers were given trainings on various ICT tools such as using Google meet, effective use of smart board etc.
- Trainings on cyber safety has been given to teachers of South Andaman and my school teachers and students
- Workshops were conducted for DIET students using latest ICT tools
- Teachers were given training on how to create effective video content

Challenges faced while integrating ICT in Education

- Non availability of resources such as projector, digital materials etc
- Poor internet connectivity
- Lack of awareness on ICT tools
- Lack of trainings on use of ICT tools (word processing, spreadsheet, audio and video editing, animations etc.)
- Access to digital devices by students

My future plan

- ArithmeticA application would be made available in mobile application.
- Create digital repository (Subject wise)
- Create AR and VR content
- Contribute more quality e-content to DIKSHA portal
- Create QR based supplementary ebook for science subject (Class IX & Class X.





**Technology will not replace
teachers, but teachers who
adopt technology will replace
those who do not**

