Pramila Kumari sahoo,
TGT-Mathematics
Jawahar Navodaya Vidyalaya,
Jagatsinghpur. Odisha

My journey As a Teacher

Joined
Navodaya Vidyalaya Samiti
on 16-11-2001

Jawahar Navodaya Vidyalaya,
Bolangir,Odisha
From 16-11-2001 to 30-06-2007

Jawahar Navodaya
Vidyalaya,
Khordha ,Odisha
From 01-07-2007
to 05-09-2018

Jawahar Navodaya
Vidyalaya,
Jagatsinghpur ,Odisha
From 06-09-2018
Continuing

- Mathematics is a compulsory subject for all students at the secondary level. It is not only to be learned by the students for the sake of their career choice or advancement, but also they must practically understand the concept so that it will be easy for them to apply mathematical ideas in later part of their life.

- Mathematics is an important subject in school curriculum. And I am pretty sure that except one's mother tongue there is no other subject which is more closely related to one's daily life as mathematics.

- But it is observed that many students were not showing proper interest to practice mathematics, rather they used to memorize many theorems and formulae without proper understanding.

- Many of the students also consider mathematics as a difficult, boring and time consuming subject.

- Hence to cultivate the positive thinking in the mind of students, experimental practices are being introduced in the regular class hours. Each topic was taught through experiments and they learnt by doing experimentations.

Why Use of ICT

- With a more than 21 years of teaching experience especially to the students who are basically coming from rural background and educated in local languages up to fifth class, inspire and educate me to adopt innovative and experimental methodologies for effective teaching of this subject.

- In view of the importance and application of mathematics in higher studies, I adopted various innovative techniques in my classroom teaching.

Objectives

- To shift the traditional method of teaching methodology to innovative method of teaching through ICT and experimentations.

- To implement the effective teaching through Information and Communication Technology (ICT).

- To evaluate the understanding level of students through mathematical games, puzzles etc. Using ICT

- To eliminate the fear factor of studying mathematics.

- To elevate the understanding level of teaching through experiments.

- To encourage students to participate actively in online mathematical seminars, exhibitions and quiz programmes.

Students are always attracted toward the things which
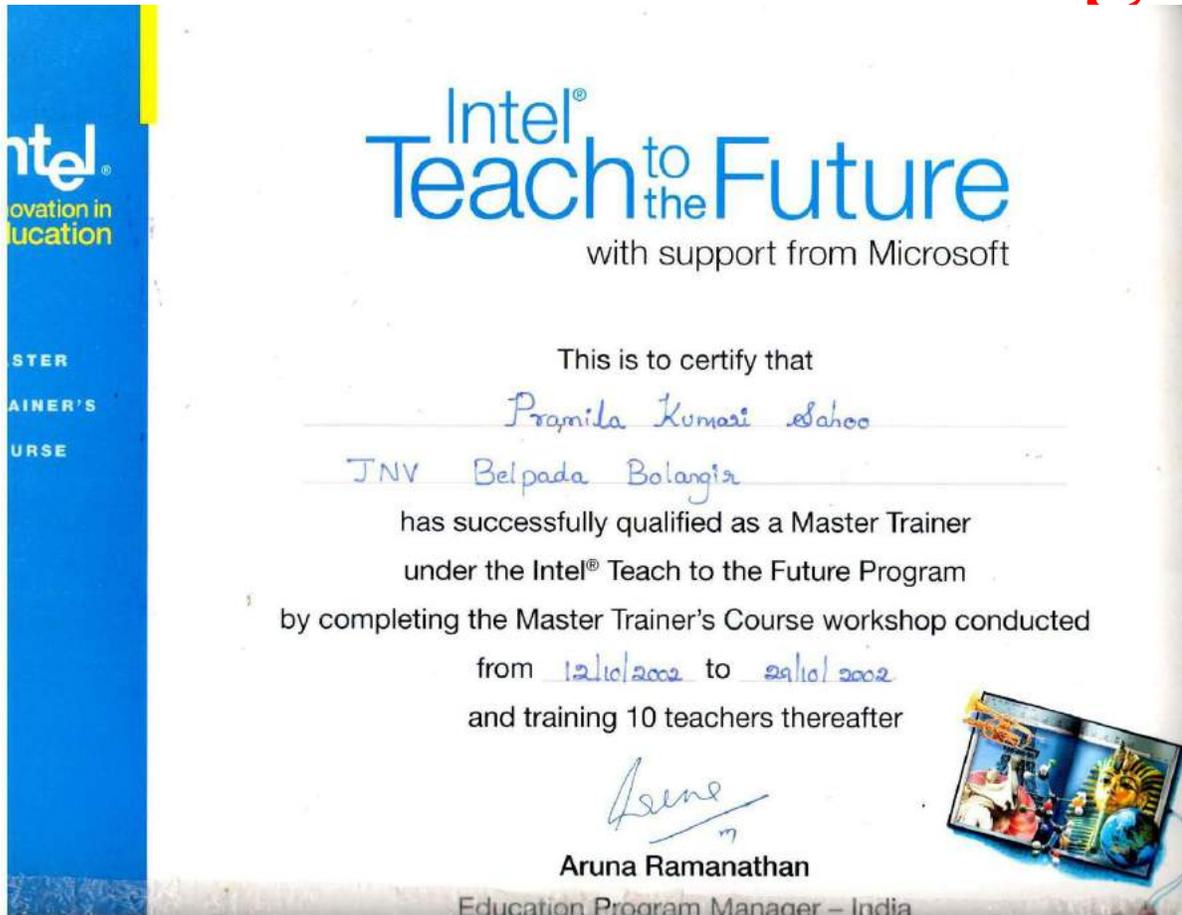are new and exciting

"I hear and I forget.

I see and I believe.

I do and I understand."

Confucius

First Trainings On use of ICT in teaching Learning Process

Intel Teach to the Future
with support from Microsoft

This is to certify that

Pramila Kumari Sahoo

JNV Belpada Bolangir

has successfully qualified as a Master Trainer under the Intel® Teach to the Future Program by completing the Master Trainer's Course workshop conducted from 12/10/2002 to 29/10/2002 and training 10 teachers thereafter

Aruna Ramanathan
Education Program Manager – India

Partners in Learning

Microsoft

Certificate of Participation

Mrs. Pramila Kumari Sahoo

has participated in Partners in Learning Teacher Training Program

conducted from 6 Sept. 2004 to 20 Sept. 2004

Program Co-ordinator

Project Shiksha

Qualified as a Master Trainer Under the Intel, Teach to the Future program from 12-10-2002 to 29-10-2002

Completed Computer Training By Microsoft Partners in Learning

STUDENTS WORKING IN MATHEMATICS LABORATORY

Establishement of Mathematics park in school campus

Students Exhibiting with their Experiments

Mathematics Model Exhibition

CONDUCTING QUIZ PROGRAMME

ICT in Co-curricular activities

Photographs of seminar presentation by students

CONDUCTING PAINTING COMPITITION

PREPARATION OF WALL MAGAZINES
(Mathematical Puzzles, Games, Stories etc.)

Received The National Award for Innovative Practices and Experiments for Schools and Teacher Education Institutions 2017-18

TITLE OF THE PROJECT

"To Create Interest and Motivate the Students towards the Subject Mathematics by Applying Various Innovative Techniques"

National Seminar in Connection with National Award for Innovative Practices and Experiments in Education for Schools and Teacher Institutions 2017-18

To Create Interest and Motivate Students Towards Mathematics by Applying Various Techniques

Project Co-ordinator
Mrs. Pramila Kumari Sahoo, TGT, Mathematics
Jawahar Navodaya Vidyalaya, Khordha, Odisha

एन सी ई आर टी
NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
National Council of Educational Research and Training
श्री अरविन्द मार्ग, नई दिल्ली–110016
Sri Aurobindo Marg, New Delhi-110016

प्रमाण – पत्र
CERTIFICATE

यह प्रमाण पत्र

सुश्री प्रमिला कुमारी साहू, टीजीटी, गणित , जवाहर नवोदय विद्यालय, गुरुजंगा, खुर्दा, ओडिशा को उनकी नवाचार परियोजना विभिन्न तकनीकों लागू करते हुए गणित विषय के प्रति विद्यार्थियों में रुचि पैदा करना और प्रेरित करना के लिए शिक्षा में नवाचार पद्धतियों और प्रयोगों पर विद्यालयों और अध्यापक शिक्षा संस्थानों के लिए राष्ट्रीय पुरस्कार 2017–18 के अंतर्गत प्रदान किया जाता है।

This certificate is awarded to

Mrs. Pramila Kumari Sahoo, TGT Mathematics, Jawahar Navodaya Vidyalaya, Gurujanga, Khurda, Odisha for the Innovative Project **To create interest and motivate students towards the subject mathematics by applying various techniques** under National Awards for Innovative Practices and Experiments in Education for School and Teacher Education Institutions: 2017-18.

Use of ICT in Pandemic Period

❖Created My Own YouTube Channel And uploaded teaching videos .

❖Uploaded E-Content in my own website.

❖Attended trainings on Geogebra.

❖Developed so many geogebra applets for teaching mathematics.

❖Use of pen-tablet for online teaching and preparing teaching videos for YouTube channel.Use of Olab In doing experiments .

❖Use of MathPad for geometrical construction.

❖Use of Googleform, kahoot, Quizory.com, Menti meter for online assessment.

Created own You-Tube Channel (**Glory with Mathematics**) in which more than 300 videos are uploaded comprising teaching videos of the chapters of mathematics and related activities.
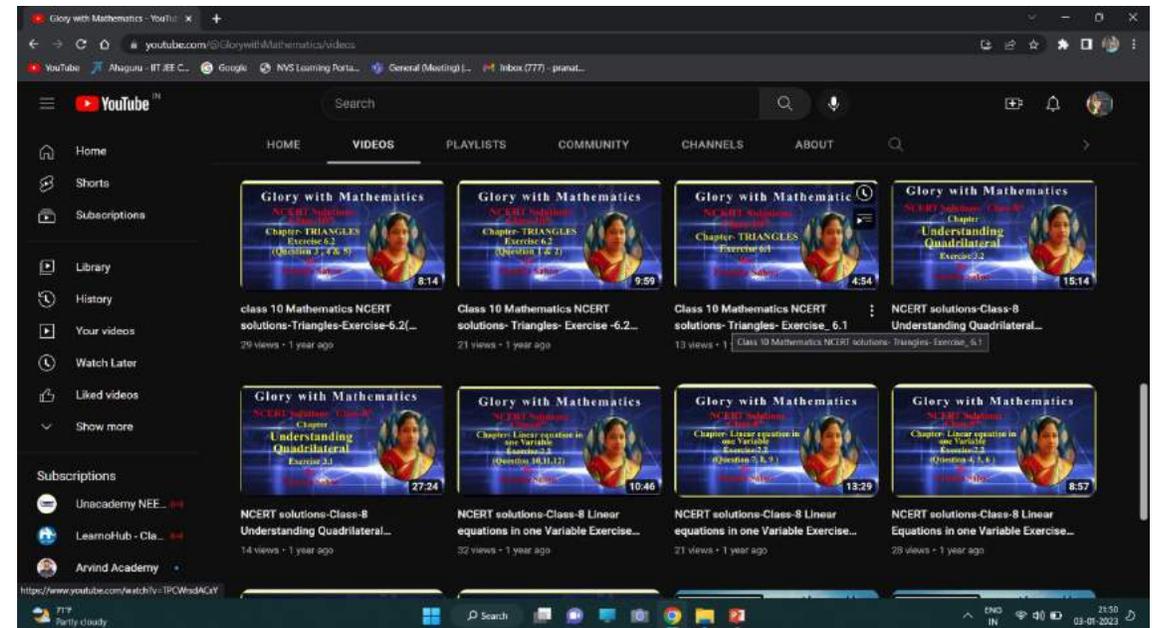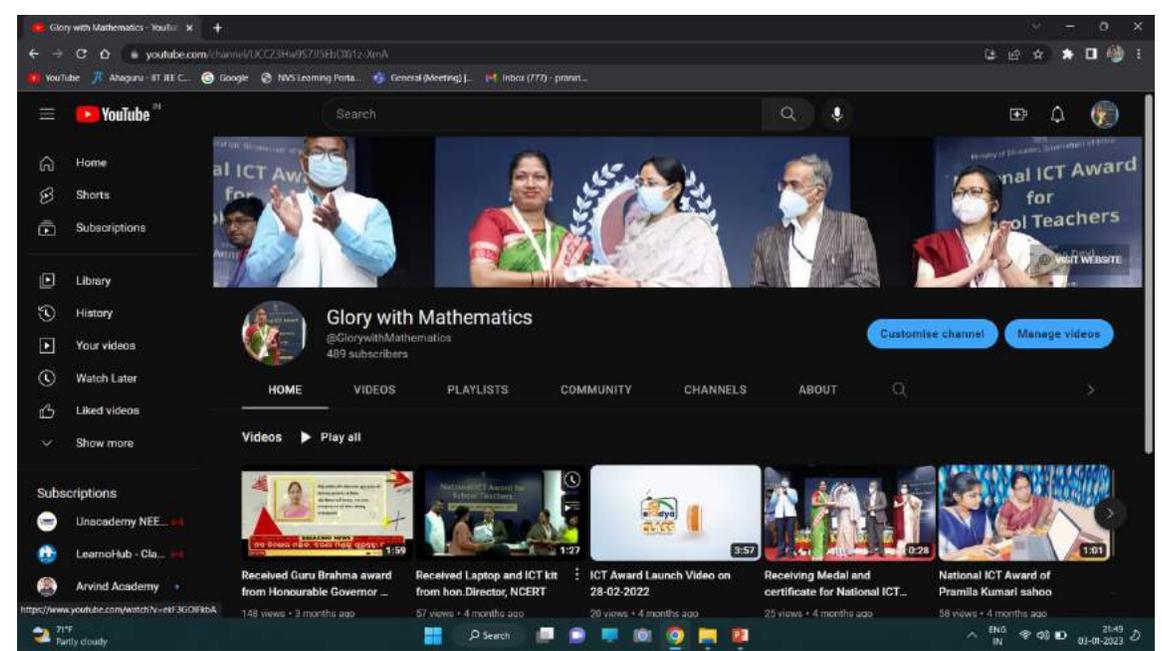
Glory with Mathematics - YouTube

youtube.com/@GlorywithMathematics/videos

YouTube · Ahaguru - IIT JEE C... · Google · NVS Learning Porta... · General (Meeting) |... · Inbox (777) - pranat...

YouTube

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Liked videos
Show more

Glory with Mathematics
@GlorywithMathematics
489 subscribers

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Recently uploaded   Popular

1:59
Received Guru Brahma award from Honourable Governor of Odisha...
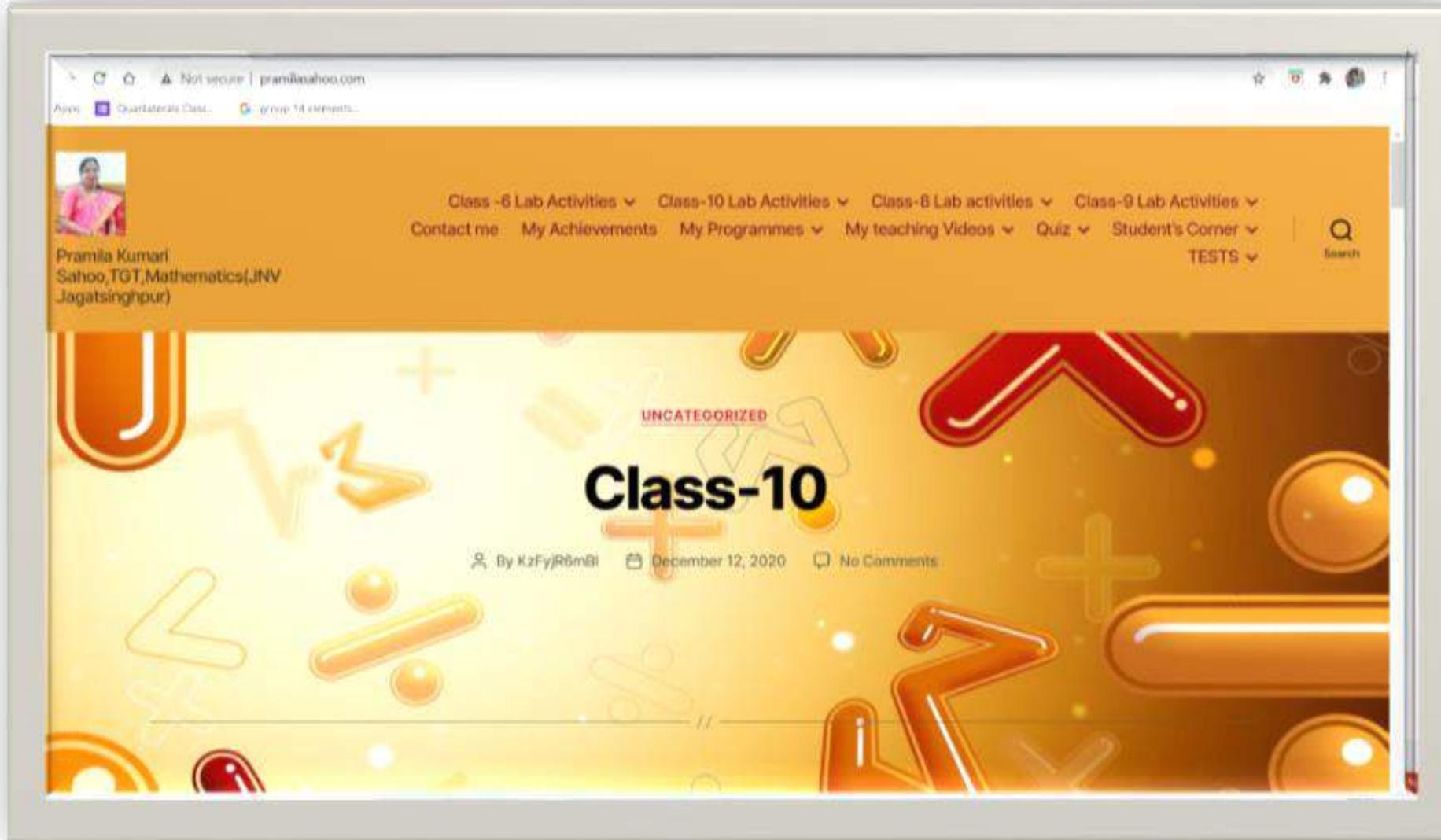148 views · 3 months ago

1:27
Received Laptop and ICT kit from hon.Director, NCERT
57 views · 4 months ago

3:57
ICT Award Launch Video on 28-02-2022
20 views · 4 months ago

0:28
Receiving Medal and certificate for National ICT Award From...
25 views · 4 month

Subscriptions
Unacademy NEE...
LearnoHub - Cla...
Arvind Academy

00:00:00

My Website

Use of ICT in Different fields

- ICT in Teaching Mathematics. .

- ICT in Evaluation and assessment

- ICT in analysis of the performance of the students.

- ICT in project work of the students.

- ICT in Art integrated teaching

- ICT in Co-curricular activities.(Quiz, seminars)

- ICT in observation and celebration.

- ICT in carreer guidance and counselling

- ICT in social awareness.(You Tube channel, website, whatsApp, Face book

- ICT in Pace setting activities(community awareness)

ICT in Teaching Mathematics

▶ICT is essential in teaching and learning mathematics.

▶ICT improves the way mathematics should be taught and enhances student understanding of basic concepts.

▶It promotes higher order thinking and better problem solving strategies.

Hardware Tools Used in Teaching
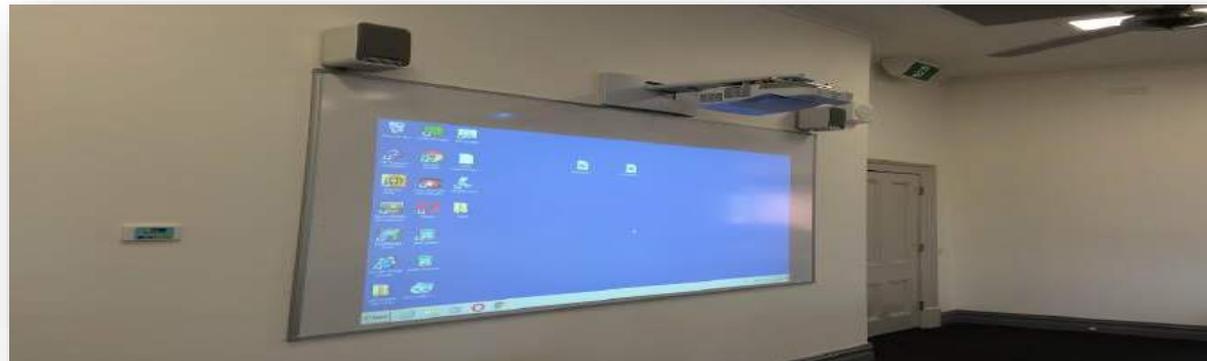
LAPTOP

DESKTOP

SMART PHONE

PEN TABLET

LCD PROJECTOR

ICT Soft-wares / Tools Used in Teaching –Learning- Assessment:

- MS Power Point
- Microsoft Team
- Google Meet
- Google form
- Khan Academy
- Geogebra
- Geometry Pad
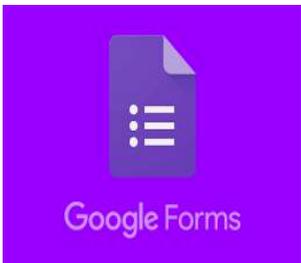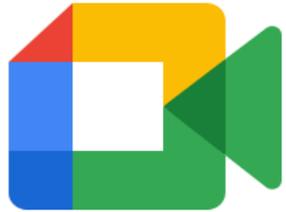
- MathPad
- O-Lab (Amrita University)
- Android Apps (Kahoot, Quizory.com, Form App, Teach Easy , Video Editor, etc.)
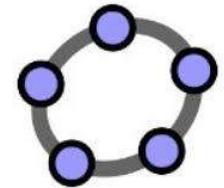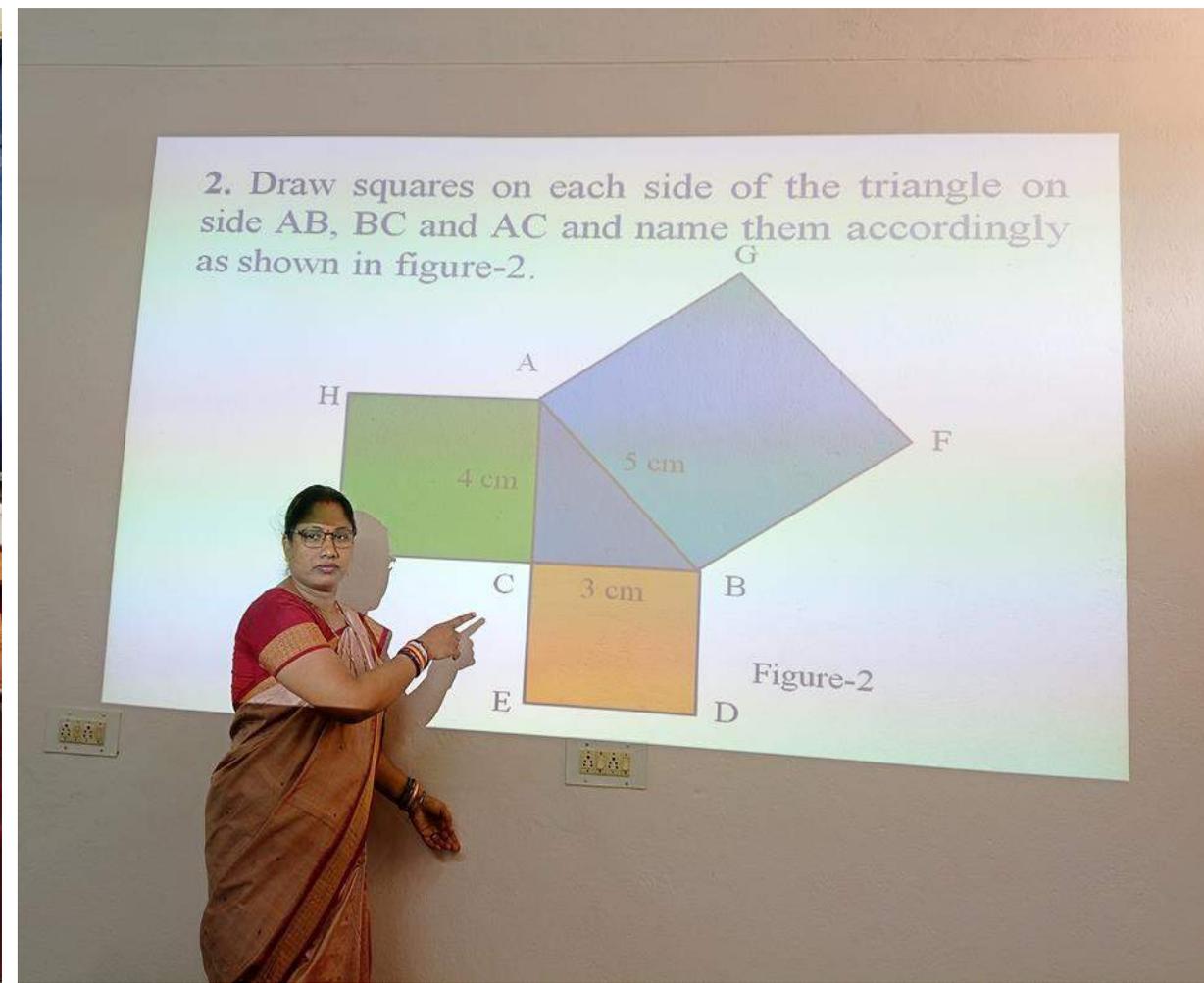
On-Line Teaching

Teaching through Online Lab

Doing experiments Using Geogebra

Visiting and Teaching through ICT in the remote students during Pandemic period

Preparation of E- content by Using These Softwares / Mobile Apps

❖ Power-point animation

    ❖ Geogebra

        ❖ Stop-motion Animation studio

            ❖ Maths-Pad

                ❖ Use of On Line Lab for Mathematics

I regularly use smart class room for effective teaching and better understanding of students. Pen tablet is being used by me to derive formula, solve questions and to prove theorems for making online classes real and natural.
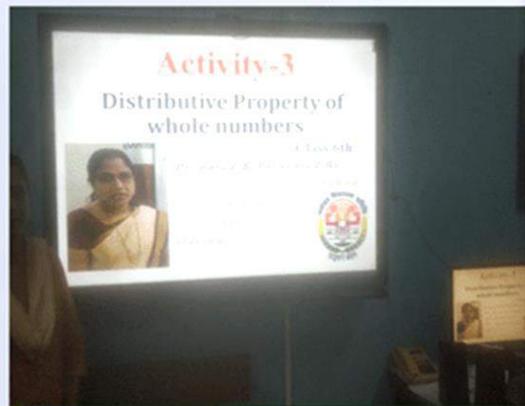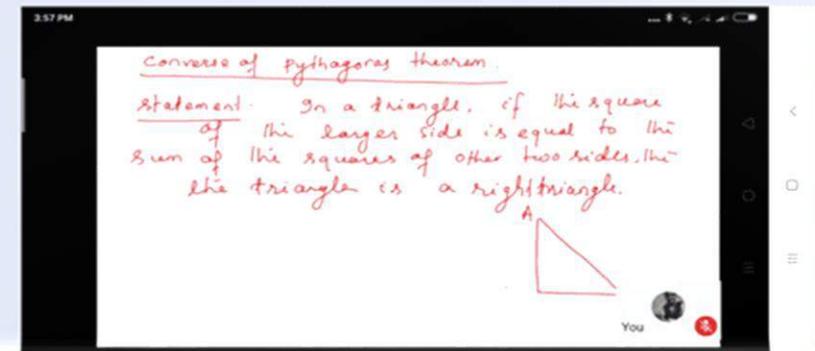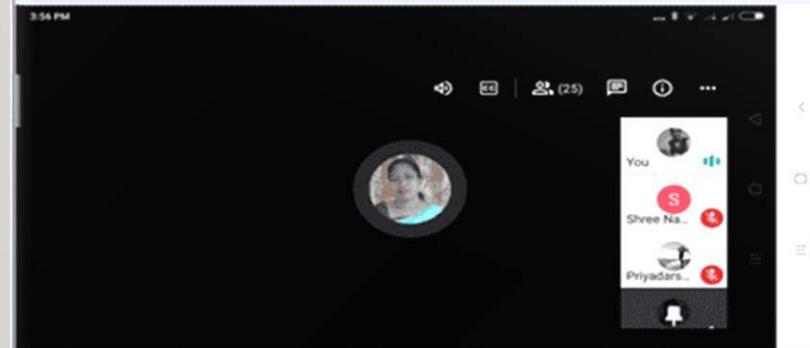
Objective

To verify the sum of first 'n' natural numbers i.e. $\dfrac{n(n+1)}{2}$ by graphical method.

Sum of 'n' Natural Numbers
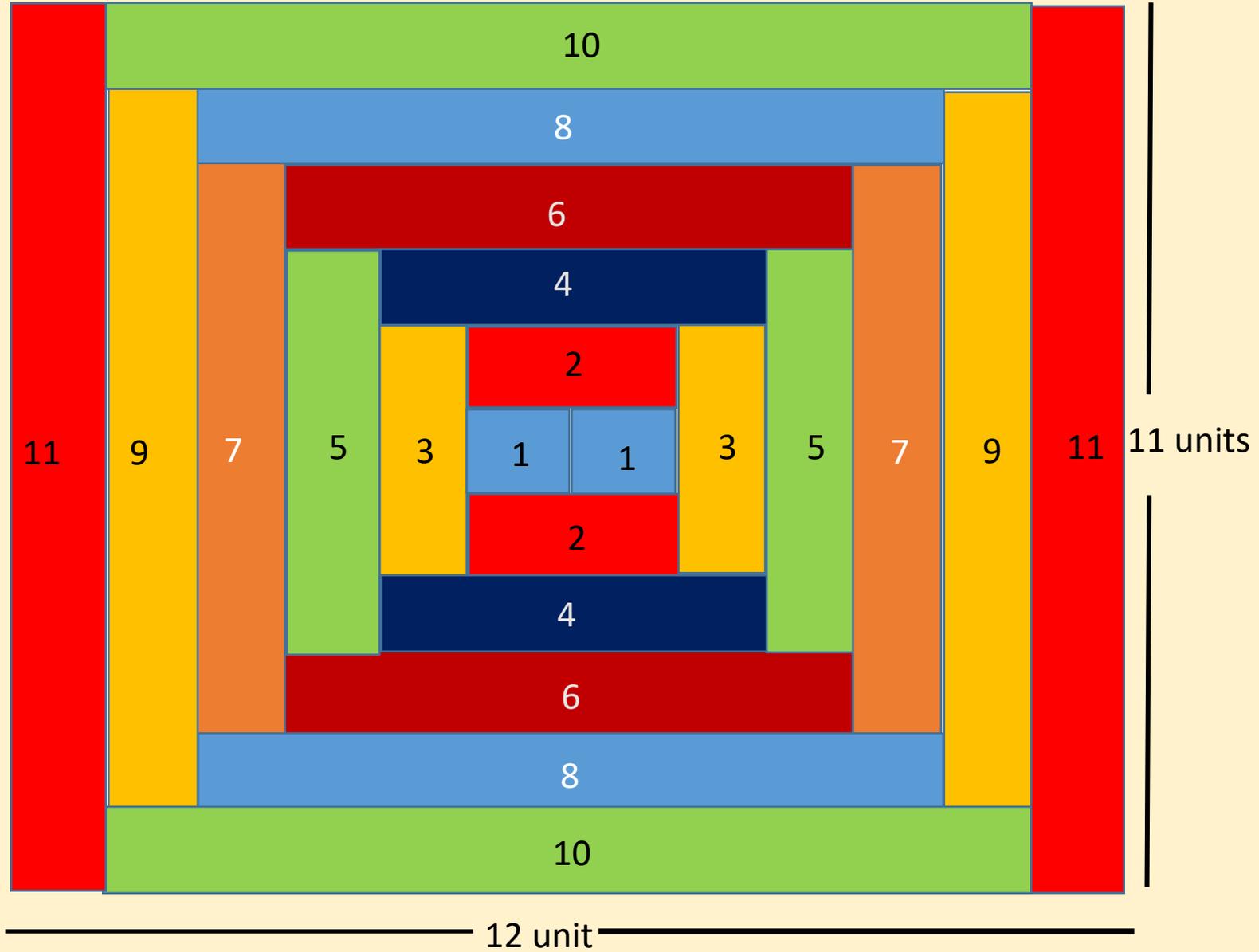
Sum of 'n' Natural Numbers
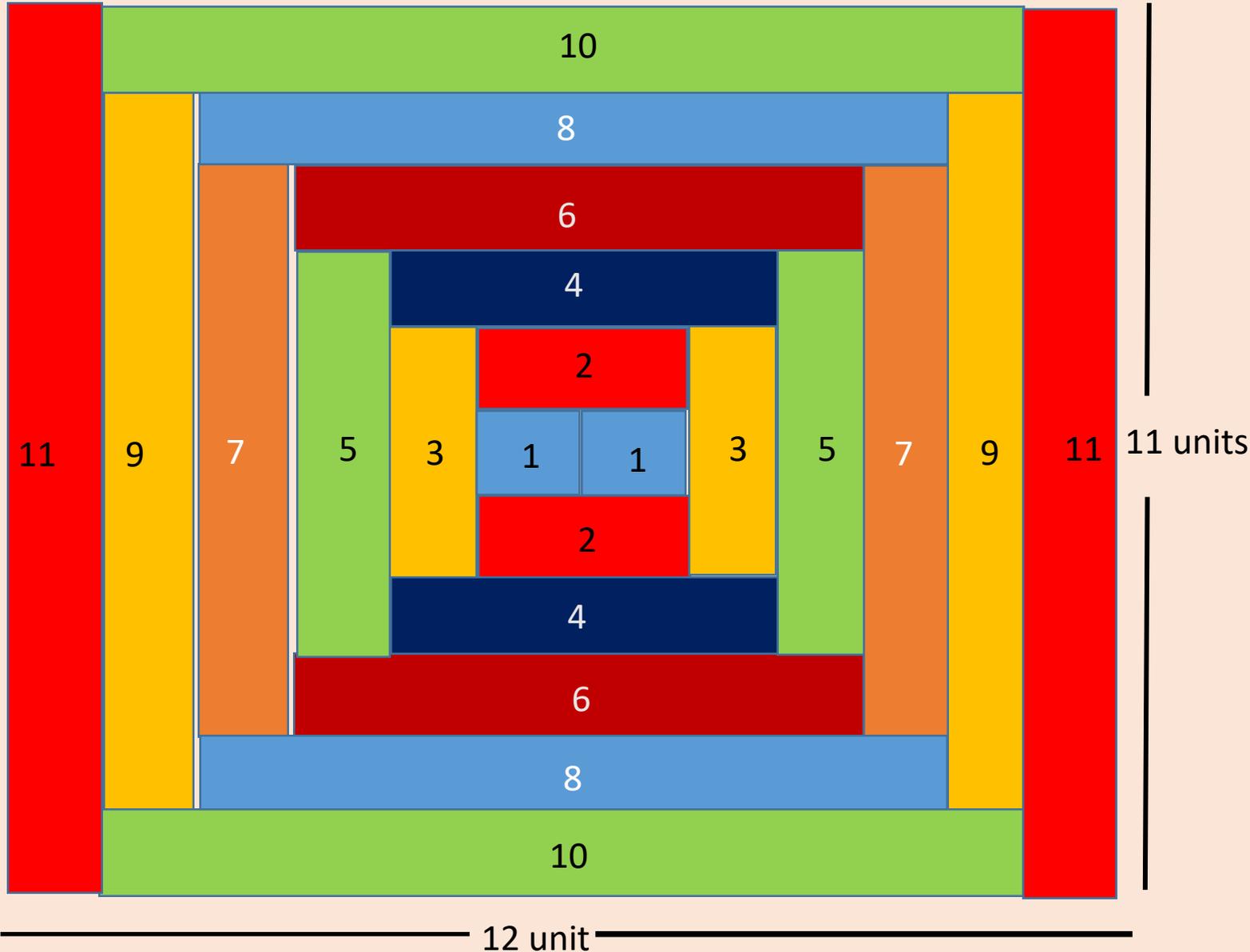
2(1+2+3+4................+10+11

= Area of the Rectangle

=11 X 12

Therefore

$$1+2+3+4.............+10+11= \frac{11 \times 12}{2}$$

Sum of 'n' Natural numbers

$$= \frac{n(n+1)}{2}$$

Result

It is verified graphically that,

$$1 + 2 + 3 + \ldots + n = \frac{n(n + 1)}{2}$$

or

Sum of first 'n' natural numbers $= \dfrac{n(n+1)}{2}$

Completed the Online Training on Geogebra (Basic) and Geogebra (Advanced) by the Spoken tutorial, IIT, Bombay

COMMONWEALTH *of* LEARNING

HONOR CODE
Completion Certificate

This is to certify that

Pramila kumari sahoo

successfully completed

Teaching Mathematics with Technology (TMT)

a four-week online course

offered by the Commonwealth of Learning (COL)

16 June 2022

Professor Asha Kanwar
President and CEO
Commonwealth of Learning, Canada

Verify the authenticity of this certificate at
mooc4dev.org/v/62bc7fb877802

Successfully completed Teaching Mathematics with Technology (Geogebra) ,a four week online course offered by the Commonwealth of Learning (COL)

Some developed applets by using Geogebra:

In-centre of a triangle
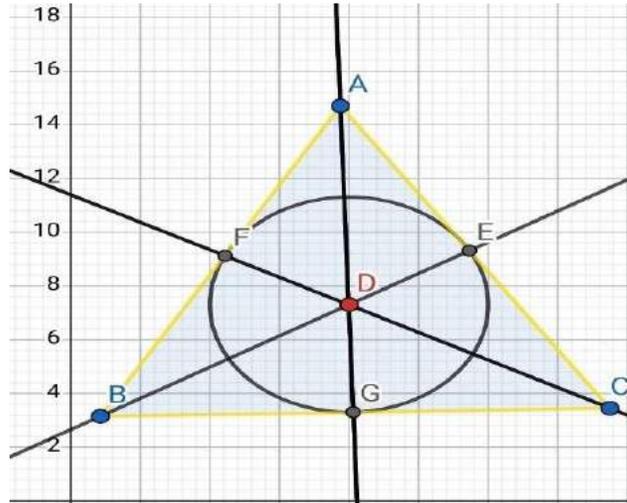
Altitudes of a triangle
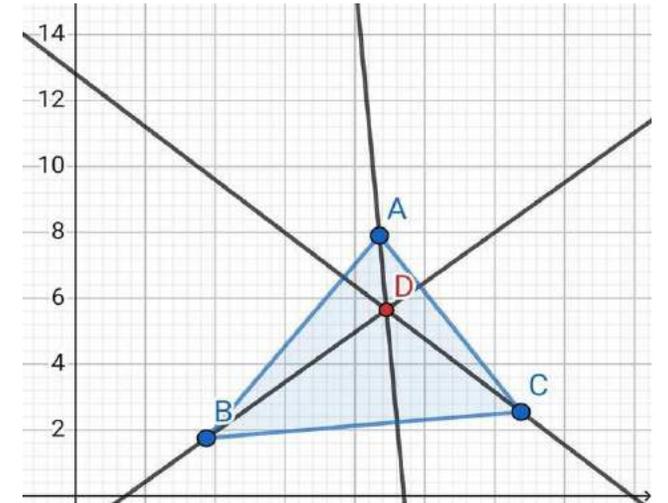
Circum-centre of a triangle
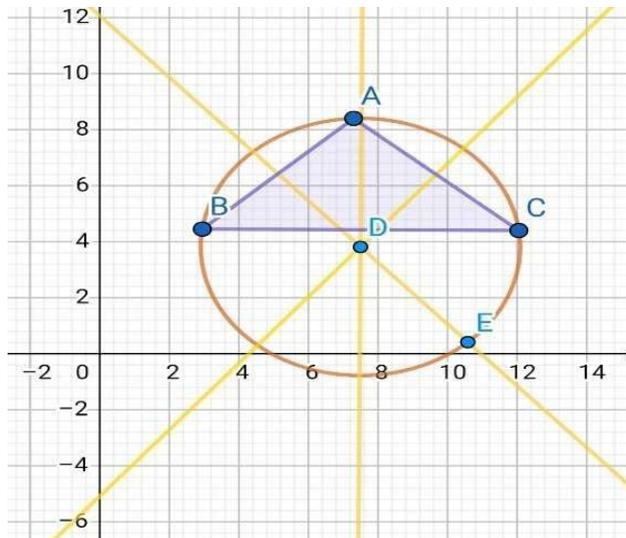
Perpendicular bisector of sides of a triangle

नवोदय विद्यालय समिति
शिक्षा मंत्रालय, स्कूल शिक्षा और साक्षरता विभाग, भारत सरकार
NAVODAYA VIDYALAYA SAMITI
MINISTRY OF EDUCATION, DEPT. OF SCHOOL EDUCATION
AND LITERACY, GOVT. OF INDIA

नवोदय नेतृत्व संस्थान
कोणार्क, पुरी , ओडिशा- 752 111
NAVODAYA LEADERSHIP INSTITUTE
KONARK, PURI, ODISHA - 752 111

MRS. PRAMILA KUMARI SAHOO, TGT MATHEMATICS
JAWAHAR NAVODAYA VIDYALAYA, JAGATSINGHPUR, BHOPAL REGION

has successfully completed
Virtual Training for NVS Teachers on OLabs by Amrita University
On 14-10-2020 organized by
NAVODAYA LEADERSHIP INSTITUTE, KONARK, PURI, ODISHA.

SUBHASH CHANDRA
COORDINATOR

N DHIREN SINGH
DEPUTY COMMISSIONER

नवोदय नेतृत्व संस्थान, कोणार्क,पुरी
NAVODAYA LEADERSHIP INSTITUTE
KONARK, PURI
Certificate of Participation
This is to certify that
Mrs. PRAMILA KUMARI SAHOO, TGT MATHS
of JNV JAGATSINGHPUR, **Bhopal Region**
has successfully completed the Virtual Training on
Guided Learning Programme in Mathematics
on 23.04.2021 organised by
NAVODAYA LEADERSHIP INSTITUTE, KONARK, PURI

SUBHASH CHANDRA
COORDINATOR
NLI KONARK, PURI

KUSUM KUMARI SINGH
DEPUTY COMMISSIONER
NLI KONARK, PURI

Completed the Online Training on Olabs By amrita University

Completed the Online Training on Guided Learning Programme in Mathematics by Khan Academy

Certificate

BRITISH COUNCIL

CBSE

Certificate

This is to certify that

Pramila Kumari Sahoo

attended and completed the online

Test Item Writers

held from 2 March 2021 - 1 April 2021

for the CBSE-CBE project

(March 2021-March 2022)

Signed

Rowan Kennedy
Deputy Director India
British Council

Signed

Dave Mellor
Deputy Director of
Assessment
Aplhaplus Consultancy Ltd

Signed

Joseph Emmanuel
Director (Academics)
CBSE

Alpha Plus

Education for
Employment
Foundation
Skills for Success

Attended and Completed the Online Test Item writers Training By British Council for the CBSE – CBE Project From March 2021 to March 2022

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Art Integrated Learning
on 12 November 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Covid-19 Scenario: Addressing Challenges in School Education
on 12 January 2021

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Curriculum and Inclusive Classrooms
on 24 October 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Developing Personal-Social Qualities (PSQ) for Creating a Safe and Healthy School Environment
on 25 October 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Initiatives in School Education
on 28 December 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Integrating Gender in the Teaching Learning Process
on 01 November 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Integration of ICT in Teaching, Learning and Assessment
on 03 November 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Pedagogy of Environmental Studies
on 28 November 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Pedagogy of Mathematics
on 05 November 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Pedagogy of Languages
on 10 December 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Pedagogy of Science
on 12 December 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Pedagogy of Social Sciences
on 17 December 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Preschool Education
on 31 December 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Pre-vocational Education
on 12 January 2021

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_School Based Assessment
on 30 November 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_School Leadership: Concepts and Applications
on 24 December 2020

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Understanding Rights, Child Sexual Abuse and The POCSO Act, 2012
on 14 January 2021

Dr. Hrushikesh Senapaty
Director, NCERT

National Council of Educational Research & Training
Certificate of Completion
This is to certify that
PRAMILA KUMARI SAHOO
has successfully completed the course

NVS_Pedagogy of Mathematics
on 29 November 2020
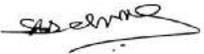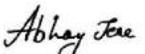
Dr. Hrushikesh Senapaty
Director, NCERT

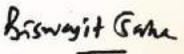## School Innovation Ambassador Training Program

Innovation Ambassador Certificate

This is to certify that
PRAMILA KUMARI SAHOO

has completed the
School Innovation Ambassador Training Program
of 72 hours duration of Ministry of Education's Innovation Cell,
AICTE and CBSE.

Prof. Anil Sahasrabudhe
Chairman
AICTE

Dr. Abhay Jere
Chief Innovation Officer
Ministry of Education's Innovation Cell

Dr. Biswajit Saha
Director (Training & Skill Education)
CBSE

Issue Date: July 2022

Certificate ID: SIA2021140501/IA

Certified as Innovation Ambassadar by Ministry of education

UNESCO MGIEP
MAHATMA GANDHI INSTITUTE OF EDUCATION FOR
PEACE AND SUSTAINABLE DEVELOPMENT

AWARDS THIS CERTIFICATE TO

Pramila Kumari Sahoo

FOR SUCCESSFULLY COMPLETING THE COURSE ON

The Digital Teacher (English)

Anantha K. Duraiappah
Director, UNESCO MGIEP

UNESCO MGIEP
MAHATMA GANDHI INSTITUTE OF EDUCATION FOR
PEACE AND SUSTAINABLE DEVELOPMENT

AWARDS THIS CERTIFICATE TO

Pramila Kumari Sahoo

FOR SUCCESSFULLY COMPLETING THE COURSE ON

The Digital Teacher: Course Facilitator

Anantha K. Duraiappah
Director, UNESCO MGIEP

Verification code: 154aa0d6-700d-43bb-97fa-355c7f587fe6

This certificate was generated on Aug-18-2022

The Digital Teacher Course Facilitator

Produced best subject average in class-X Mathematics (CBSE)

Year	Subject Average	Achievement
2018-19	87.76	2nd position in regional level
2019-20	92.25	1st position in Regional Level
2020-21	91.5	2nd position in regional level

Helped students to use ICTs for self-learning, cooperative/ collaborative learning, investigation, experimentation, development of higher order thinking skills

Students are using for

▶ Self Learning-Khan academy, YouTube, StepApp,

▶ Assignments- Khan Academy, Google form, Kahoot, quizory.com

▶ Investigations- Geogebra, YouTube.

▶ Experimentation- Geogebra, O-Lab (Amrita University), Math Lab (CBSE Tut)

Helped in achieving 21st Century skills – cooperation, collaboration, communication, creativity, critical thinking.

- The students help each other in online platforms.
- They made discussions on social media like whatsapp.
- Through SMS, email, they convey their thoughts.
- If one student create any interesting or innovative solution to a question, that is shared and others are inspired.
- Critical thinking are developed by the use of figures.
- By using the modern tools and facilities, I use to integrate all the children together.

Quiz

Group activities

Preparing models in math lab

Mathematics Exhibition

Innovations

Preparing Wall magazine

National ICT award For 2018 Received On 28th February 2022

Received Guru Brahma Samman From Honourable Governer of Odisha, Prof. Ganeshi Lal on Teacher's Day (05-09-2022)

I am very much thankful to Navodaya Vidyalaya Samiti, all my principals, my colleagues, and my students for supporting me.

At the end I convey my hearty thanks to CIET-NCERT for giving me this wonderful opportunity to share my experiences to all my viewers.

Thank You