



**MARATHA VIDYA PRASARAK SAMAJ'S**  
**Karmaveer Adv. Baburao Ganpatrao Thakare**  
**College of Engineering, Nashik**

Permanently Affiliated to Savitribai Phule Pune University Vide Letter No. : CA/1542 & Approved by AICTE New Delhi - Vide Letter No. : 740-89-32 (E) ET/98 AISHE Code - C-41622



## Mechanical Engineering Department

Academic Year – 2022-23	Class: F.E.
Semester – I	Date : 03/15/2022
CO: C01	PO: PO1, PO6, PO7, PO9, PO10, PO12

## Innovative Teaching Methods

**Title of Innovation method/activity:** Innovative Teaching Learning Method (Cardboard Sheet Task).

1. Name of Faculty: Mr. M.N.Sonawane

2. Subject: Systems in Mechanical Engineering

3. Objective of Method:

- I. To know opinion about technical knowledge shared
- II. To know opinion about presentation/argument skills acquired
- III. To know opinion about thought process initiated
- IV. To obtain the knowledge of Power plant and conversions of different energy

## 4. Topic Covered through Activity

1. Wind Power Plant
2. Hydroelectric Power Plant
3. Nuclear Power plant
4. Thermal Power Plant
5. Geothermal Power Plant
6. Solar Power plant
7. Tidal Power Plant

## 5. Description of method with Benefits (8 – 10 lines):

The best kind of play with sheets is unstructured play when you give student the opportunity to explore a versatile open-ended material without an end result in mind.

Benefits of method:

- It tests the candidate's skills such as communication skills, teamwork, listening ability, General awareness, confidence, problem-solving skills.
- It teaches students to share ideas with classmates.

- It helps students to think individually about a topic.
- The participants in a group listen and understand other participants points of view, making them think about the topic.
- It helps to understand the attitude and behavior of the candidates towards other participants in a group.
- Every participant shares his/her thoughts in the group, which makes the diversities in the ideas.
- It can build skills such as creativity, imagination and resourcefulness.
- It inspires creativity and imagination as the student build upon, transform and reinvent them.
- It also helps them explore imaginary places in their minds.

### **Roles and Responsibilities**

- **Teacher**
  - Provide the Introduction to all the topic.
  - Provide the study material.
  - Remain available during the completion of task.
  - Prepare assessment methodology.
- **Student**
  - Actively participate in group and contribute by means of discussion, hand-out.
  - Go through all the material provided on topics
  - Once topic assigned, understand it and work accordingly.
  - After this each student should be paired with another student or a small group and discuss any doubt with his partner. Then students have to discuss individually within the group.
- **Group**
  - Form the group of members as per the guidelines by teachers.
  - Assign the points within the group to achieve the task within stipulated time period.

## 6. Assessment Rubrics

### 1. Poster Design [20 Mark]

- ✓ Poster is attractive in terms of design, layout and neatness. (5)
- ✓ Creativity & Attractive poster with Neatness related to the topic (5Mark)
- ✓ Making the material easy to understand (1 Mark)
- ✓ Knowledge of energy and its conversions. (5Mark).
- ✓ Teamwork (3 Mark).
- ✓ There are no grammatical/spelling mistakes. (1 Mark)

Criteria	Excellent	High	Good	Average	Acceptable
Poster Design	Creativity & Attractive poster with Neatness related to the topic, Making the material easy to understand, Knowledge of energy and its conversions, Teamwork, There are no grammatical/spelling mistakes.	Somewhat effective Creativity & Attractive poster with Neatness related to the topic, Making the material easy to understand, Knowledge of energy and its conversions, Teamwork, There are no grammatical/spelling mistakes.	Moderate Creativity & Attractive poster with Neatness related to the topic, Moderate Making the material easy to understand, Moderate Knowledge of energy and its conversions, Teamwork, There are no grammatical/spelling mistakes.	Average Creativity & Attractive poster with Neatness related to the topic, Making the material easy to understand, Average Knowledge of energy and its conversions, Teamwork, There are no grammatical/spelling mistakes.	Less Creativity & Attractive poster with Neatness related to the topic, <del>Making the material easy to understand,</del> <del>Knowledge of energy and its conversions,</del> <del>Teamwork,</del> <del>There are no grammatical/spelling mistakes.</del>

## 7. Evaluation sheet of attendee

Civil Engineering			Electronics & Telecommunication Engineering		
Roll NO	Name of Students	Marks	Roll NO	Name of Students	Marks
1	AHER RUTUJA DATTATRAY	19	1	AHER SHUBHAM BALASAHEB	19
2	BAGADE PRATHAMESH PRASHANT	20	2	AHER SARVESH NARENDRA	14
3	BEDSE SANKET BHAGAWAN	20	3	AHER ANURAG SANJAY	18
4	BHAGURE MAYUR PUNJA	15	4	OM YOGESH AHIRRAO	19
5	BHAMARE TEJAS PRASHANT	22	5	AKHADE PRERNA POPAT	17
6	BHANUSHALI RISHI NAVNEET	18	6	AMRITKAR SOHAM KRISHNA	16
7	BHIKULE VILASINI VINAYAK	16	7	BACHHAV HIMANSHU KAILAS	15
8	BHOJ ANIKET DILIP	18	8	BAVNE PRIYANKA BABURAO	19
9	BORSE SARTHAK VISHWAS	20	9	BHAMARE LALIT SITARAM	18
10	CHAURE SAURABH SOMNATH	19	10	KEDAR DHANSHREE VISHNU	18
11	CHITTE TRUPTI GHANSHYAM	14	11	BURKUL SANJANA BHARAT	18
12	DAREKAR JITESH SANTOSH	14	12	CHAUDHARI BHARGAV BHUPENDRA	14
13	DATIR ROHIT SHASHIKANT	15	13	DAWARE NILAM SANJAY	18
14	DAWANGE YASH NANASAHEB	20	14	DEORE PRATYUSH SUNIL	16
15	DEOKAR ANUSHKA AMIT	21	15	DESAI SHRADDHA CHANDRAKANT	20
16	DEORE SAURABH PRAVIN	23	16	DEVKAR SANIKA DINESH	18
17	DERE RAHUL APPASAHEB	18	17	DHAMANE TANMAY DILIP	19
18	DESHMUKH RUTUJA BHARAT	18	18	GANGURDE RAJESH SANTOSH	19
19	DESHMUKH SAKSHI DATTATRAY	19	19	GAVALI SAKSHI MUKUND	15
20	DETHE VAISHNAVI SUBHASH	19	20	GAWALI SAHIL CHANDRAKANT	18
21	DHAKANE RUTUJA SHASHIKANT	17	21	HATKAR KRUSHNA VINOD	22
22	GAURI HARI DHIKALE	18	22	JADHAV SNEHA SAMIR	21
23	GAIKWAD ADITYA RAMDAS	19	23	JAGTAP PIYUSH SHAILENDRA	17
24	GAIKWAD DHANASHRI HEMANT	20	24	JOSHI AVDHUT KISHOR	17
25	GAIKWAD ATHARVA ASHISH	14	25	KAKADE AKSHADA JAGDISH	22
26	GAIKWAD SAMEER BHAGWAN	18	26	KARDILE SNEHA CHANDAN	19
27	GANGURDE UJWAL SANJAY	18	27	KHAIRNAR LOKESH DEEPAK	17
28	GAWALI DARSHAN SANDEEP	14	28	KOKATE ABHAY SUNIL	15
29	GHULE ABHISHEK GANPAT	20	29	KOSHTI ATHARVA MILIND	16
30	GORE SAKSHI VIJAY	20	30	KSHIRSAGAR MONIKA PANDURANG	19

31	HAGAWANE JAGANNATH BALASAHEB	19	31	KULKARNI NIKITA DEVENDRA	21
32	JADHAV VARSHA BALASAHEB	20	32	KUMBHARE HARSHAL SANJAY	19
33	KADAM MANSI SANTOSH	19	33	MAHAJAN DIVYA SUBHASH	21
34	KADLAG AJIT RAVINDRA	18	34	MAHAJAN ROHIT KISHOR	18
35	KADLAG PRATIK BALASAHEB	17	35	MARATHE SHRUTI HITENDRA	16
36	KATE ANJALI PRAMOD	14	36	MEMANE SAKSHI SANTOSH	20
37	KATHE RAMKRUSHNA SANDESH	19	37	MORE PRAJAKTA SHASHIKANT	20
38	KATKADE SIDDHI SANDIP	18	38	MORE ITESH UDAY	18
39	KEDAR SHWETA DILIP	19	39	MORE DIPESH HEMKANT	18
40	KHAIRE SNEHAL SACHIN	19	40	PADOL RUTIK BHAUSAHEB	19
41	KHAIRNAR HARSHAL SANJAY	20	41	PAGARE TANUSHREE	18
42	KOLHE KAVERI EKNATH	17	42	PATHAK UDAYKUMAR	14
43	KOTHAWADE NEHA SATISH	19	43	PATIL AASTHA VILAS	19
44	MEHRA SAGAR SUBHASH	16	44	PATIL VEDANTI KISHOR	19
45	MOGAL OM SACHIN	14	45	PATIL VEDEHI RAHUL	16
46	PAGAR SWAPNIL SHANTARAM	14	46	PAWAR MOHIT JAYWANTRAO	18
47	PAGAR YASHWARDHAN SURESH	15	47	PAWAR SUYASH SANDIP	18
48	PAGAR TEJAS PRABHAKAR	18	48	PAWAR YASH RAJENDRA	19
49	PANGARE AADITYA PRABHAKAR	17	49	PISAL MANSI TUSHAR	15
50	PANGAVHANE ROHIT RAVSAHEB	18	50	SANGLE SANSKRITEE SANJAY	14
51	PARDESHI SHRUTI NANDKISHOR	20	51	SARODE VAIBHAV AMBADAS	18
52	PATIL CHAITNYADIP RAMDAS	18	52	SASANE PRIYANKA SURESH	18
53	PAWAR SRUSHTI PAMKAJKUMAR	20	53	SHEJWAL PRATHAMESH KAILAS	17
54	PINGLE SHIVAM PRADIP	14	54	SHELKE TEJASWINI PRADIP	19
55	RAYATE SUCHITA VIKAS	18	55	SHETE KAUSHALYA SUHAS	19
56	SAWANT ANIKET PRAVIN	18	56	SHINDE AARYA VIVEK	14
57	SHARDUL ROHIT SHIVAJI	14	57	SHINDE PRAJAKTA MANOHAR	15
58	SHEJWAL SAKSHI RAVINDRA	20	58	SHINDE SANIKA NANDLAL	21
59	SHEJWAL SNEHAL BALASAHEB	16	59	SHINDE SHIVANI SOMNATH	18
60	SHETE ABHAY PRADEEP	16	60	SHIRUDE SAKSHI PRAMOD	18
61	SHINDE TANMAYEE SHAILESH	18	61	SOMVANSHI VIDYA SANJAY	15
62	SONAWANE DIYA BALASAHEB	14	62	SONAWANE SARTHAK SANDEEP	18
63	SONAWANE YASH ANIL	14	63	TATHE SANGRAM SUNIL	18
64	SURYAVANSHI YASH ANIL	18	64	TILE SANIKA PRAKASH	19

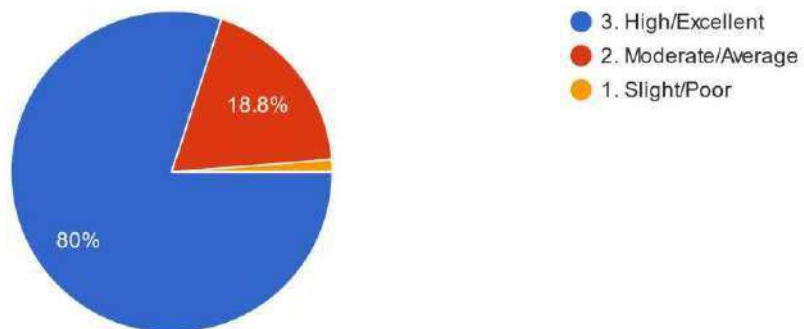
65	TAJANPURE PRANAV RAMESH	18	65	USHIR SNEHAL KAILAS	17
66	UPHADE PRATIKSHA DASHRATH	19	66	WAGH DIPTI YOGESH	21
67	WAGH KAJAL JAYWANT	16	67	WAGH DIPALI RAVINDRA	20
68	ZUTING SARVESH SADASHIV	14	68	YEOLE SHRUSHTI SANDIP	19

## 8. Impact Analysis

Questions	3 - High/ Excellent (%)	2 - Moderate/ Average (%)	1 - Slight/ Poor (%)
Q.1 Did you understand the cover and objective of the cardboard sheet task?	80	18.8	1.2
Q.2 Do you find that methodology is helpful to cover the content of syllabus?	73.8	21.3	5
Q.3 Does this helps you for building a good team work?	76.3	21.3	2.5
Q.4 Does the content covered is relevant and helpful for life long learning	81.3	17.5	1.2
Q.5 Did you want us to conduct such activity again	67.5	27.5	5

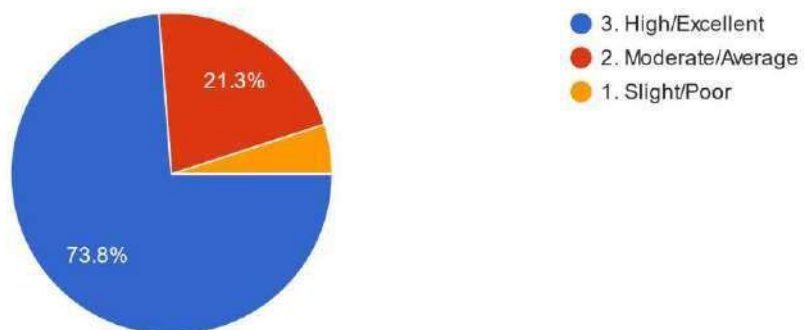
Q.1 Did you understand the cover and objective of the cardboard sheet task?

80 responses



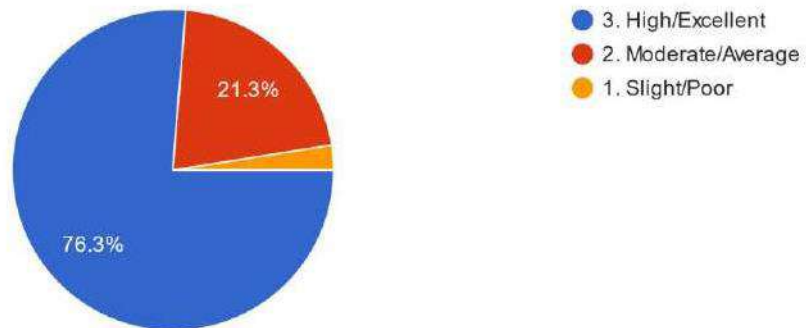
Q.2 Do you find that methodology is helpful to cover the content of syllabus?

80 responses



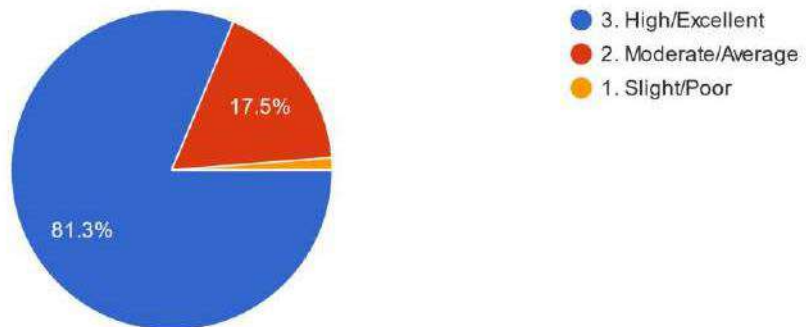
Q.3 Does this helps you for building a good team work?

80 responses



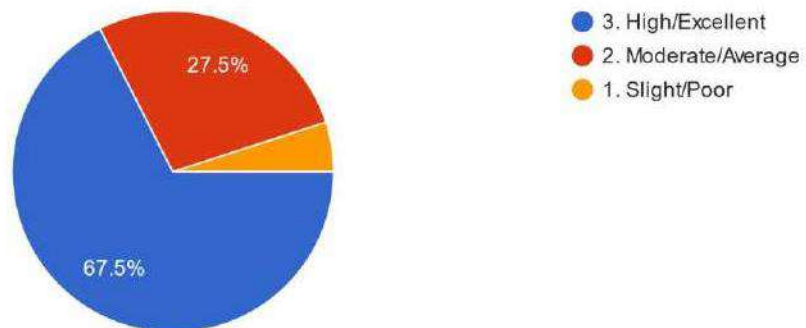
Q.4 Does the content covered is relevant and helpful for life long learning

80 responses



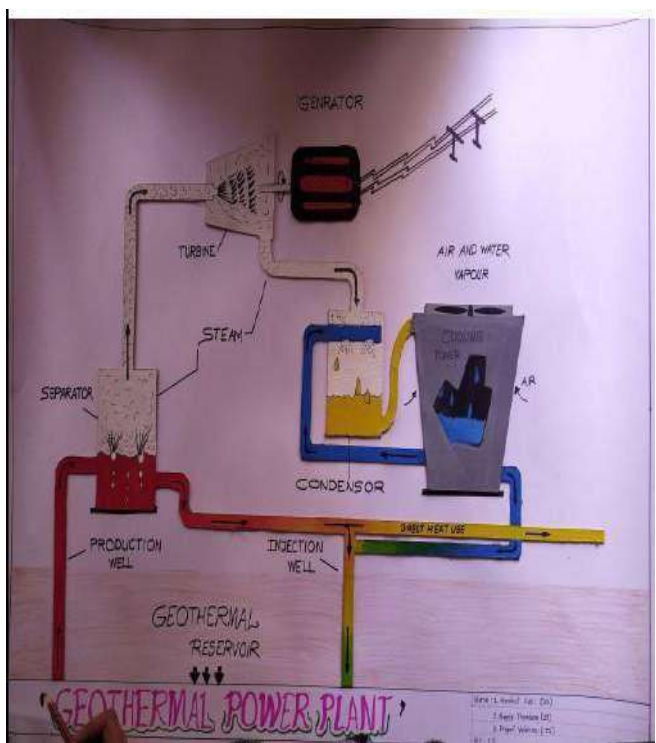
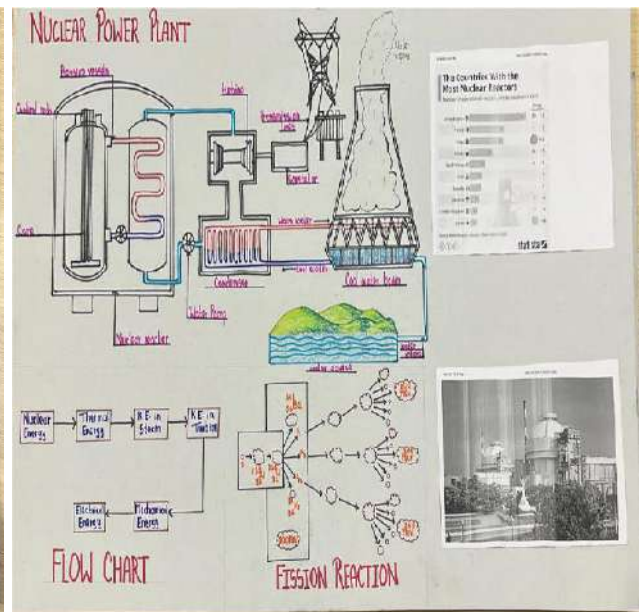
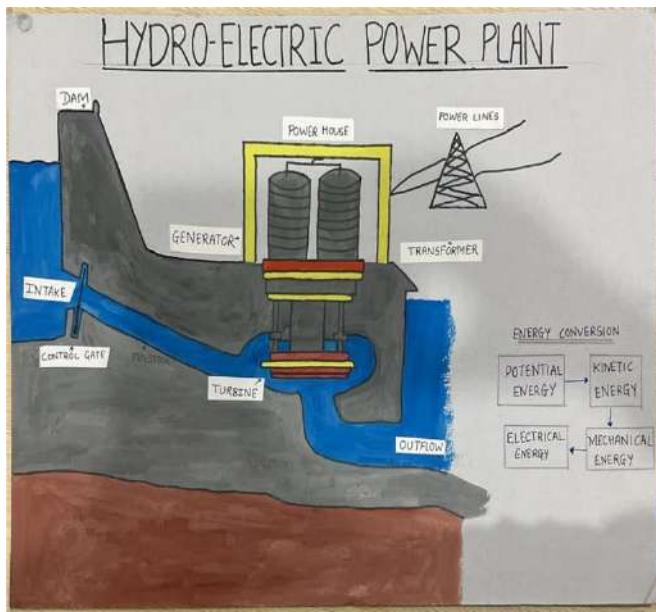
Q.5 Did you want us to conduct such activity again

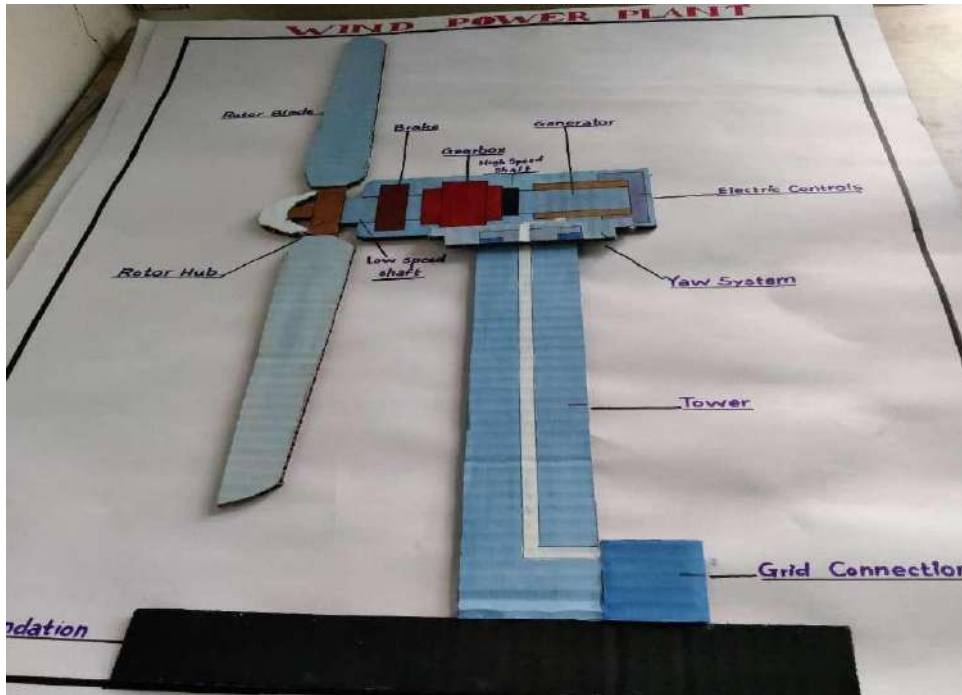
80 responses



## 9. Activity Picture







10. For review and critique contact: e-mail address of faculty & HOD

[sonawane.mohit@kbtcoe.org](mailto:sonawane.mohit@kbtcoe.org), [kakade.amol@kbtcoe.org](mailto:kakade.amol@kbtcoe.org), [hod.mech@kbtcoe.org](mailto:hod.mech@kbtcoe.org)

Mr. M. N. Sonawane

Subject In charge

Dr. A. B. Kakade  
NBA Coordinator

Mr. P. C. Shete

Module Coordinator

Dr. V. C. Shewale  
Head of Department