

## Mechanical Engineering Department

Academic Year – 2020-21	Class: F.E.
Semester – I	Date : 03/03/2021
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: Ms. G. M. Shirsat
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 [5 Mark]

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

## 7. Evaluation sheet of attendee

### DIV C

Sr. No.	Roll No.	Name of students	Poster Design Marks out of 5
1	1	Patil Vedant Sunil	3

### DIV B

Roll No.	Name of students	Poster Design Marks out of 5
1	Kalaskar Aditya Govinda	4

2	2	Patil Yashwant Uttam	3
3	3	Pawar Aishwarya Avinash	5
4	4	Pawar Kushal Bhagwat	3
5	5	Pawar Sanket Vijayrao	2
6	6	Pawar Shantanu Sanjay	3
7	7	Pawar Vaishnavi Shrirang	4
8	8	Potdar Ojaswini Anil	4
9	9	Ramzan Sahil Mohammad	2
10	10	Rane Umesh Virendra	3
11	11	Sathe Prathamesh Shashank	3
12	12	Shewale Pranjal Vijay	4
13	13	Shriwastav Sayali Ratan	5
14	14	Sonule Sumit Bajirao	
15	15	Sutrave Aishwarya Arun	5
16	16	Takane Chetana Laxmikant	4
17	17	Tandale Siddhi Mukesh	5
18	18	Tarle Jajwalya Santosh	2
19	19	Thombare Geeta Kishor	4
20	20	Uphade Abhishek Sunil	4
21	21	Vaishnav Pragati Sandip	4
22	22	Vispute Prajwal Kishore	3
23	23	Warde Vishal Ankush	3
24	24	Pathan Imran Shakil	
25	25	Patil Harshali Jitendra	4
26	26	Patil Pratik Yogesh	
27	27	Patil Yashwardhan Pramod	4
28	28	Rajole Om Anil	3
29	29	Randhir Pranjal Shashikant	5
30	30	Salunke Janavhi Prakash	5
31	31	Sangale Hemant Dattatray	2
32	32	Sangle Sakshi	5

2	Kankariya Shrushti Kalpesh	4
3	Karegaonkar Manish Sunil	2
4	Kedar Siddhesh Vishwanath	
5	Keskar Om Mandar	2
6	Khairnar Premroop Udaykumar	
7	Khairnar Samruddhi Mahesh	4
8	Khemnar Siddhi Prakash	4
9	Khoje Harshvardhan Ajay	
10	Kokani Deepak Uttamrao	4
11	Kulkarni Kartiki Rajendra	
12	Kumar Rohit Kumar Chhajju Ram	
13	Kumar Varun Ashwini Kumar	2
14	Kushare Chaitali Ganesh	4
15	Mahajan Sagar Rajaram	5
16	More Pratik Umesh	
17	Naik Tushar Vinod	3
18	Narnaware Kunika Ratnakar	
19	Nemade Riya Pravin	4
20	Pagare Om Sanjay	
21	Patil Kasturi Kiran	3
22	Patil Suyog Dagadu	4
23	Patil Umesh Randhir	
24	Gahiwal Tejas Devidas	
25	Gharate Tejaswini Hemant	
26	Ghughe Pranav Dnyaneshwar	
27	Ghule Pranay Balasaheb	
28	Hirani Krishna Hemant	
29	Jadhav Tejas Uttamrao	4
30	Jadhav Yogini Dhanraj	3
31	Jagtap Tanishka Devendra	4
32	Kakad Atharva Manik	3

		Gorakshnath	
33	33	Shinde Rohit Somnath	3
34	34	Shirsath Roshani Suresh	3
35	35	Singh Arjun Mahy Pal	4
36	36	Sonawane Abhishek Shriram	3
37	37	Sonawane Bhuvanesh Dhanraj	2
38	38	Suryawanshi Aniket Rajesh	5
39	39	Tambe Rahul Kailas	
40	40	Tarle Akash Balasaheb	
41	41	Vasaikar Yogendra Prashant	
42	42	Velis Siddhant Dnyaneshwar	1
43	43	Wagh Rushikesh Madan	2
44	44	Nigal Sahil Anil	
45	45	Pawar Rutik Sahebrao	2
46	46	Shaikh Sajid Yusuf	4
47	47	Shinde Prajwal Sunil	
48	48	Sonawane Saurabh Yadav	2
49	49	Udamale Harshad Anil	4
50	50	Uphade Ajinkya Uttamrao	
51	51	Uphade Nilesh Vishwas	2
52	52	Patil Sarvesh Tushar	4
53	53	Gangurde Shital	
54	54	Yuvraj Pagar	4

33		Kale Siddesh Sanjay	4
34		Kaloge Ashutosh Anil	4
35		Kapadnis Apurva Anant	
36		Khambait Ajay Chandrakant	3
37		Khambait Bhavik Bhagwan	
38		Kothiya Jaykumar Jagdish	
39		Magotra Saksham Magotra Ashwani Kumar	2
40		Maurya Kajal Karamchand	
41		Mehetre Aman Ganesh	3
42		Mhaisdhune Sahil Vilas	
43		Mhaske Gaurav Prakash	
44		Mundaware Lalit Latish	
45		Bhoi Darshana Sahebrao	5
46		Chavan Lalit Sunil	
47		Davkar Samruddhi Shashank	2
48		Dhawale Onkar Sarjerao	
49		Gundecha Prapti Sunil	3
50		Khairnar Savi Vijay	5
51		Naik Sanika Balasaheb	3
52		Nalkar Anuja Anil	3
53		Patil Mayuresh Somnath	1
54		Kush Patel	3

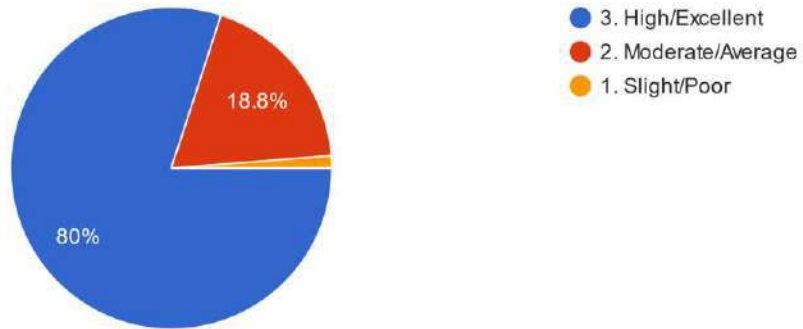
## 8. Impact Analysis

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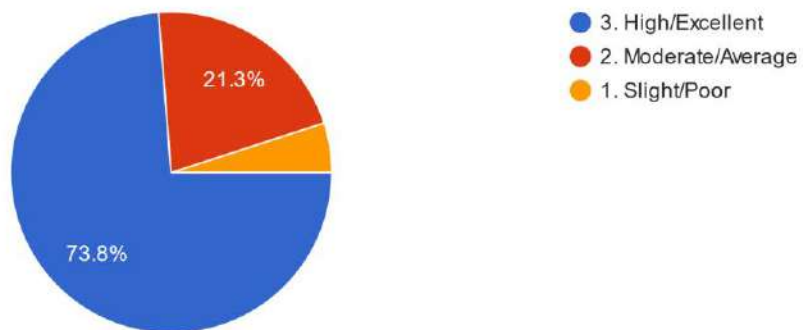
Q.1 Did you understand the cover and objective of the cardboard sheet task?

80 responses



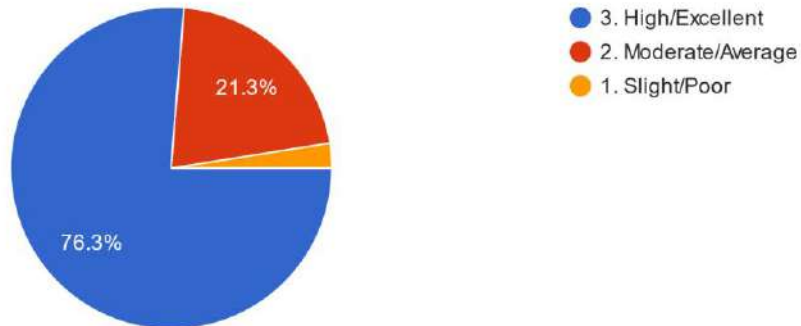
Q.2 Do you find that methodology is helpful to cover the content of syllabus?

80 responses



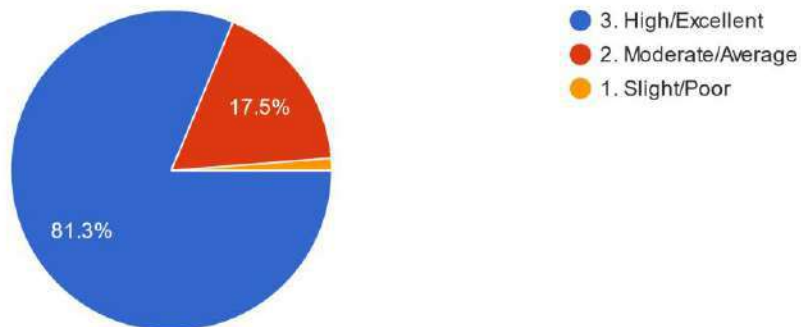
Q.3 Does this helps you for building a good team work?

80 responses



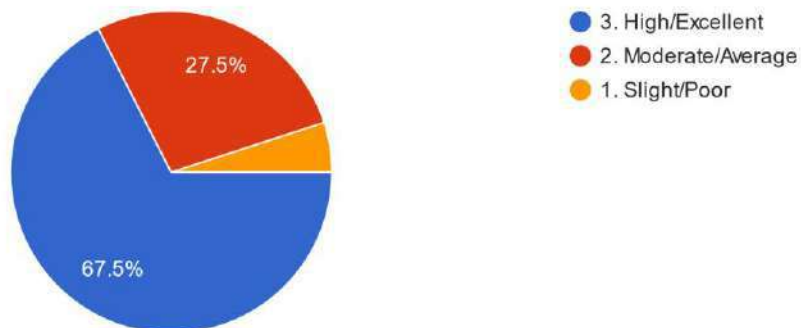
Q.4 Does the content covered is relevant and helpful for life long learning

80 responses

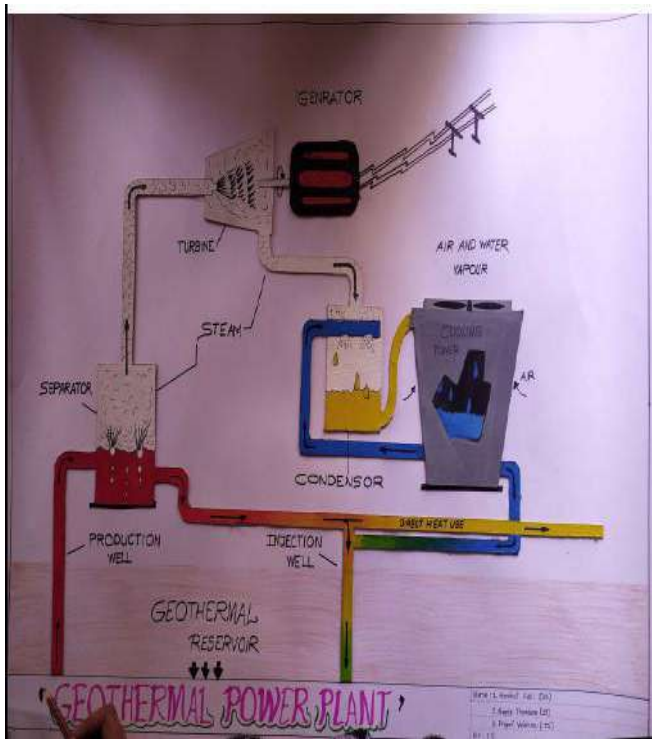
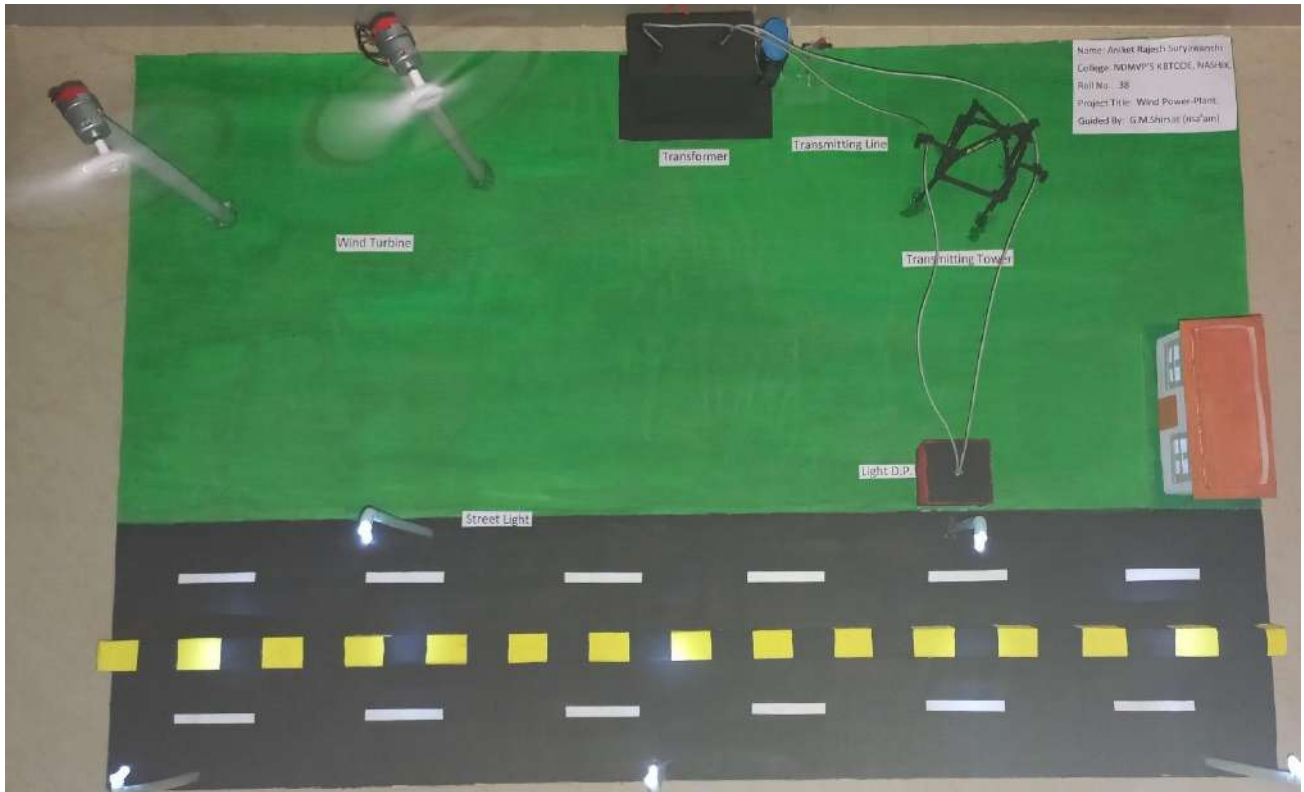


Q.5 Did you want us to conduct such activity again

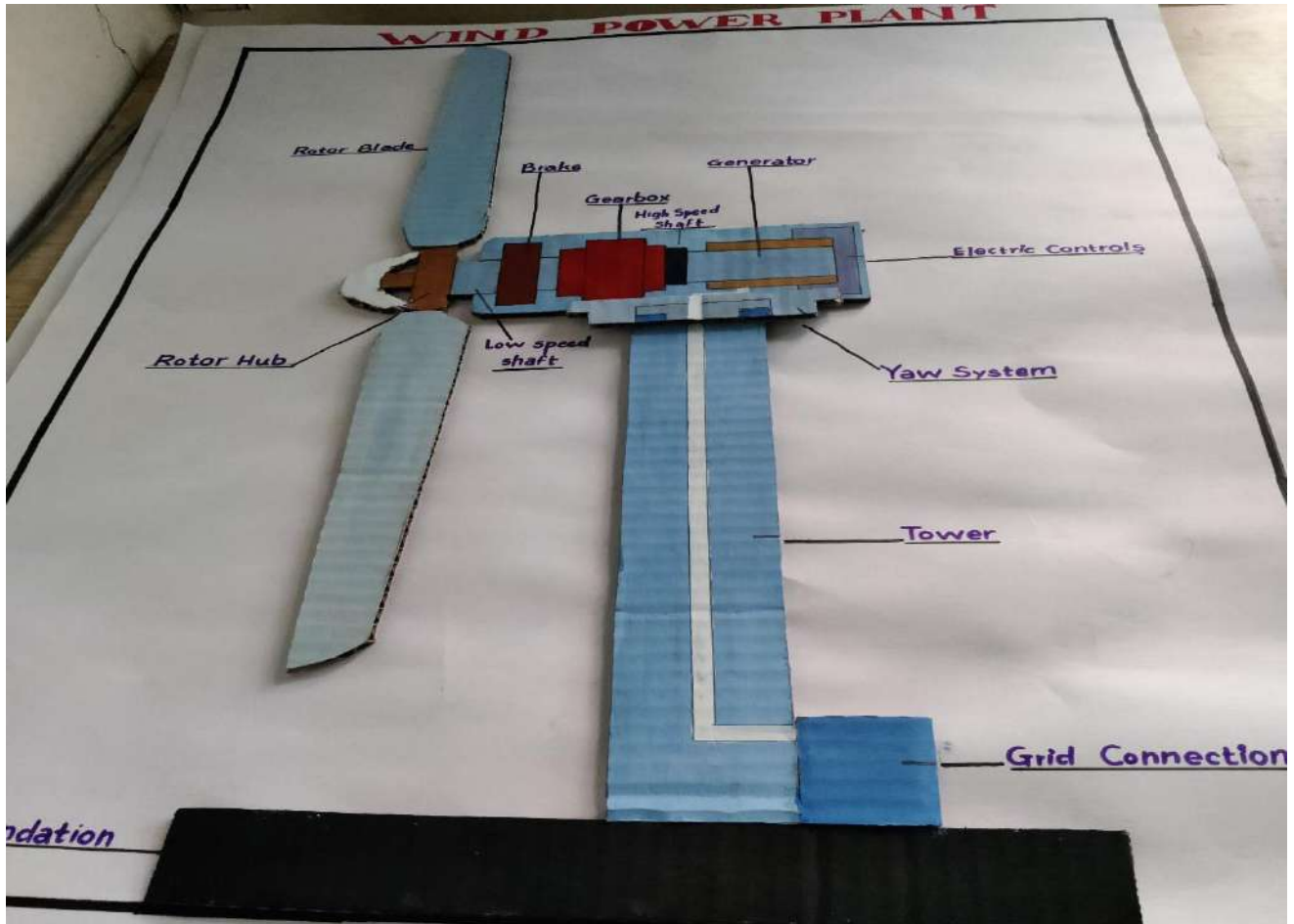
80 responses



## 9. Activity Picture







Link :

<https://drive.google.com/drive/folders/0B9TKsdo2eBBTfjBpTWVQbkJNcWdfdGdVdHJvRXFsUFk2cE1jTzBHNVhsMmxLY2cxSkpzdms?usp=sharing>

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

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