

Mechanical Engineering Department

Academic Year – 2020-21	Class: SE
Semester – I	Date : 12/09/2020
CO: CO5, CO6	PO: PO1, PO7, PO9, PO12

Innovative Teaching Methods

Title of Innovation method/activity: Innovative Teaching Learning Method (Case study/Product survey) for Electric Vehicle and Storage Devices.

Link shared to the students: On Google classroom

1. Name of Faculty: Mr. Y. S. Bhavsar
2. Subject: Electrical and Electronics Engineering
3. Objective of Method:
 - I. To get acquainted with Electric Vehicle (EV) technology and subsystems
 - II. To get familiar with various energy storage devices and electrical drives

4. Topic Covered through Activity:

Different Electric Vehicle technologies and energy storage devices for EV.

5. Description of method with Benefits:

Forming different group of the students consisting of maximum five numbers. They should carry out a case study/product survey focused on various EVs available. Each group will prepare a presentation and records five minutes video based on the topic assigned to them. Grading will be done as per rubrics given to the presentation.

Benefits of method:

- It helps students to compare different models of Electric Vehicle.
- It teaches students to discuss contents with group and improves communication skills.
- It helps focus attention and engage students in comprehending the reading material.

The method:

Monitor and support students as they work through the following in this method:

- 1) Forming different group of students consisting maximum 5 members in each group.
- 2) Each group is assigned with different topics related to Electric Vehicle and Storage Devices.
- 3) Each group will prepare a presentation video based on their topic.
- 4) It will be graded based on rubrics assigned.

Roles and Responsibilities

- **Teacher**
 - Develop the awareness about Electric Vehicle Technology and Storage Devices
 - Provide the study material on Electric Vehicle technology and storage devices.
 - Remain available during the completion of task.
 - Prepare assessment methodology.
- **Student**
 - Go through all the material provided on Electric Vehicle Technology and Storage Devices.
 - Once topic assigned, prepare presentation and record video based on the topic.
 - Actively participate in group and contribute by means of discussion.
- **Group**
 - Forming the group of members as per the guidelines.
 - Understand and discuss to finalize the best content for the assigned topic.
 - Assign the work within the group to achieve the task within stipulated time period.

6. Assessment Tools

Content	6	3	0
	Excellent	Good	Not acceptable
	The content are appropriate with no smudges	The content are acceptable with little smudges	The content are not appropriate
Presentation	6	3	0
	Excellent	Good	Not acceptable
	The presentation is very well organized and expressive.	The presentation is well organized with little expressive.	The presentation does not seem to be acceptable
Content delivery	6	3	0
	Excellent	Good	Not acceptable
	The content is very well explained and clarity in speech	The content is well explained with little hesitation	The content delivery is not proper and acceptable
Timeliness	2	0	
	Up to due date	After due date	
	Video submitted up to due date	Video submitted after due date	

7. Evaluation sheet of attendee

Roll No.	Name of students (Div. A)	Marks obtained out of 20
1	HARSH DATTATRAY AHER	
2	GANESH UMESH AHIRRAO	14
3	KETAN BHAUSAHEB AMBRE	
4	PRANIT LAXMAN BACHHAV	
5	SIDHHANT SUNIL BACHHAV	17
6	BHARAT RAJU BAGUL	18
7	TEJAS SANTOSH BAVISKAR	17
8	RUSHIKESH KAILAS BHANDARE	17
9	ANIKET PRAKASH BODKE	17
10	SUSHANT RAJENDRA BODKE	17
11	SWAPNIL TUKARAM BORADE	16
12	SAMARTH BHAGWAT BORASTE	17
13	VISHAL ASHOK BUDHAWANT	15
14	BHUSHAN RAJENDRA CHAUDHARI	16

15	RUSHIKESH MANOJ CHAVAN	16
16	ANKUSH SANTOSH DERLE	16
17	SHASHANK VINOD DESHMUKH	16
18	GAURAV PUSHPARAO DHONDGE	16
19	ROHIT RAMESH DUGAJE	16
20	SAKSHI VISHWAS GADAKH	15
21	VISHWAJEET RAJENDRA GADAKH	16
22	ONKAR HEMANT GAIKWAD	16
23	ROHIT HIRALAL GHARATE	16
24	ANANT SUNIL HIRE	16
25	PRASAD DIPAK HIRE	16
26	PRATHAMESH DINESH JADHAV	16
27	UMESH SHRIRAM JADHAV	16
28	AMEY APPASAHEB KADAM	
29	NEHA RAJENDRA KAPADNIS	
30	YASH DEEPAK KAPURE	16
31	LOKESH DNYANESHWAR KELKAR	15
32	RUTUJ SANJAY KHAIRNAR	15
33	YASHODEEP ARUN KHAIRNAR	16
34	PRATHMESH SOMNATH KHODE	16
35	VISHAL RAMNATH KHOLE	16
36	VAIBHAV ASHOK KIRTIWAR	16
37	GAURAV MURLIDHAR KOTHAWADE	16
38	PUSHKAR RAJENDRA KOTHAWADE	16
39	ABHISHEK SHARAD KOTKAR	16
40	VAIBHAV DNYANESHWAR KUSHARE	16
41	YUVARAJ RAMCHANDRA LABHADE	17
42	ANIKET KAILAS LAHANE	16
43	ANIKET SUBHASH LAWAND	16
44	JAY RAJENDRA MAHALE	17
45	OMKAR MANOJ MALI	17
46	BACHHAV KUNAL DEVIDAS	15
47	BAHIRAM SHUBHAM MOTILAL	
48	CHAUDHARI UDAY YUVRAJ	
49	GHAYAL ANIKET ARUN	15
50	GHOTEKAR PRATIK VITHOBA	
51	GUNJAL SHIVRAJ GAJENDRA	17
52	JADHAV MUKTA MAHENDRA	
53	JAGTAP HIMANSHU SHEKHAR	17

54	KHAIRNAR SUSHAN NARENDRA	15
55	KHAIRNAR ANIKET SANJAY	
56	MONDHE PURUSHOTTAM BALU	15
57	PATALE ROHIT BHAUSAHEB	15
58	MINESH MAHESH CHAURE	15
59	SHUBHAM JADHAV	15
60	PIYUSH SONAWANE	15
	Total appeared	

Roll No.	Name of students (Div. B)	Marks obtained out of 20
81	UTKARSH NARENDRA MALVE	17
82	BHUSHAN SHANTARAM MALSANE	17
83	HIMANSHUSHEKHAR KESHAV MANDAL	17
84	SHUBHAM SOMNATH MHASKAR	17
85	TANMAY VISHAL MHATRE	16
86	AASHISH ANIL MOGAL	15
87	SAHIL SHASHIKANT MUTHAL	16
88	TEJAS SANJAY NANKAR	15
89	VISHAL DINESH NISHAD	16
90	PRATIK DATTATRAY PACHORE	16
91	ALOK SATISH PAGARE	17
92	GAURAV RAJESH PAGAR	17
93	NISHANT VILAS PIMPARE	17
94	ROHIT DILIP PINGALE	17
95	VANSH JAIPRAKASH PAWAR	17
96	CHINMAY LALIT PATIL	16
97	DEV SACHIN PATIL	16
98	DEVEN PRAVIN PATIL	16
99	PRANAV RAJENDRA PATIL	16
100	PRATIK KANTILAL PATIL	16
101	DEEP MILIND PATEL	16
102	HIMANSHU ALKESH POTDAR	
103	SHANTANU GAURANG PRADHAN	15
104	ATHARVA PRAVIN RAYATE	
105	PRANAV SHIVAJI RAYTE	
106	PRATIK RAMESH SALUNKE	17
107	ROHIT ANAND SALVE	16

108	GOKUL SAMPAT SANAP	16
109	SARTHAK ANJAN SARKAR	16
110	ROSHAN SUNIL SAWANT	16
111	SAURABH SANJAY SHEWALE	16
112	VAIBHAV MOHAN SHEVKAR	15
113	MAYUR VASANT SHINDE	16
114	YASH BHIMRAO SHINDE	16
115	MAYUR SOMNATH SHIRSATH	16
116	OMKAR VISHWANATH SHIRSATH	16
117	SAKET SANKET SINGH	15
118	SUYASH SHARAD SONAWANE	16
119	YASH SHARAD SONAWANE	16
120	ABHISHEK VIJAY TAMBE	16
121	JAYDATT CHANDRAKANT TASKAR	16
122	JAYESH NILESH THAKUR	16
123	TAPAN CHANDRAKANT THORAT	
124	TANAY SUDHIR UGALE	16
125	HRUSHIKESH RAJENDRA WACKCHAURE	
126	LOKESH RAVINDRA WAGH	
127	SAURABH SANJAY WAGH	
128	URVESH AVINASH WAGHULDE	
129	AKSHAY BALKRISHNA WATPADE	
130	ANKIT VISHWNATHRAI YADAV	
131	DEEPAK SHYAMKISHOR YADAV	16
132	VIVEK RAMESH ZADE	17
133	PATIL NAKSHATRA HEMANT	18
134	PATIL PARSHURAM SANJAY	
135	PATIL PRASHANT SATISH	17
136	RAIJADE AKSHADA SANJAY	16
137	SAUNDANE ADITYA SANJAY	
138	SHELKE RUSHIKESH VITTHAL	
139	SHENDE RAJATKUMAR SHYAM	15
140	SHINGADE VEDANT MAHESH	16
141	SONJE MAYUR PRAMOD	16
142	THAKARE SUJAY PRAKASH	
143	PATIL CHIRAG DINESH	11
144	VAIBHAV BANDU DONGARE	
145	SAGAR SHIRSATH	

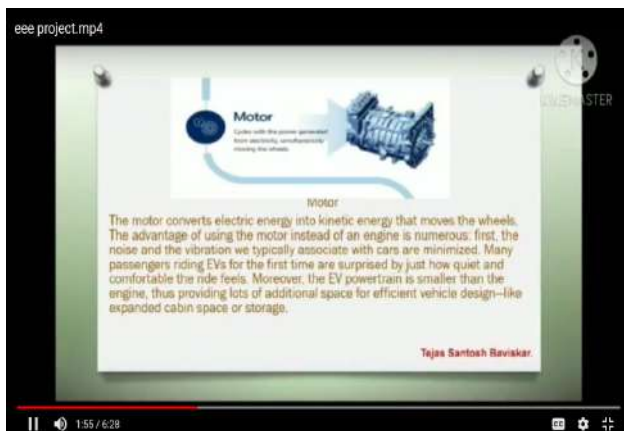
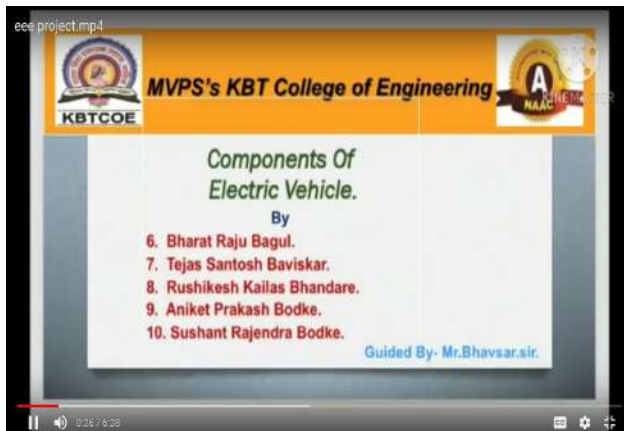
	Total appeared	

Student responses: Uploaded as a separate excel sheet

8. Impact Analysis

SN	3- High/Excellent	2 - Moderate /Average	1- Slight/Poor
1. Did you understand and cover the objective of the activity?			
2. Do you find that methodology is helpful to cover the content beyond syllabus?			
3. Does this helps you for building a good team?			
4. Does the content covered are relevant and will be helpful as a life-long learning?			
5. Can you want to conduct such activity again?			

9. Activity Picture



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

bhavsar.yogesh@kbtcoe.org, hod.mech@kbtcoe.org



Mr. Y. S. Bhavsar
Subject In charge



Mr. Y. S. Bhavsar
Module Coordinator

Dr. A. B. Kakade
NBA Coordinator

Dr. V. C. Shewale
HoD