Mechanical Engineering Department

Academic Year – 2020-21	Class: TE
Semester – I	Date : 12/12/2020
Course Outcome: CO2, CO3	PO: PO1, PO4,PO10, PO12

Innovative Teaching Methods

Title of Innovation method/activity: Crossword Puzzle

1. **Name of Faculty**: Dr. V.C.Shewale

2. **Subject**: Heat Transfer

3. **Objective of Method**:

I. To increase technical vocabulary of students

II. To understand the concept of heat transfer.

III. To improve the mental health of students.

4. **Topic Covered through Activity**:

Different modes of heat transfer such as conduction, convection and radiation.

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

The crossword puzzle is a kind of word game which can help students to extend their vocabulary knowledge. It helps students to memorize terminology, definitions, spelling, and pairing key concepts. Hints of puzzle are based on knowledge of different modes of heat transfer such as conduction, convection and radiation.

Benefits of method:

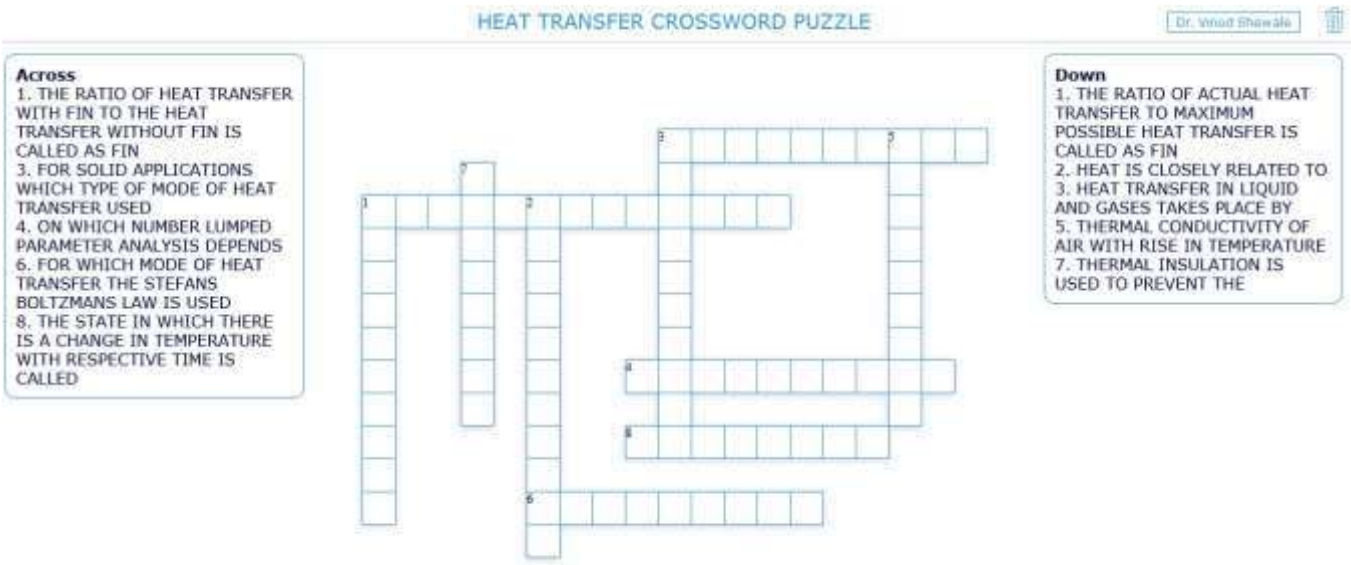
- It helps students to think individually about a hint or answer to a question.
- It builds oral communication skills of students.
- It helps focus attention and engage students in solving puzzle.
- The crossword puzzle activity improves the mental health of students.

Roles and Responsibilities

- **Teacher**
  - Introduce basic concept of heat transfer to students theoretically.
  - Ask them to go through the concept of heat transfer to know more about different modes such as conduction, convection and radiation.
  - Provide crossword puzzle to students

- **Student**
  - Understand basics of heat transfer and different modes such as conduction, convection and radiation.
  - Attempt crossword puzzle and submit to subject teacher.

6. Assessment Tool



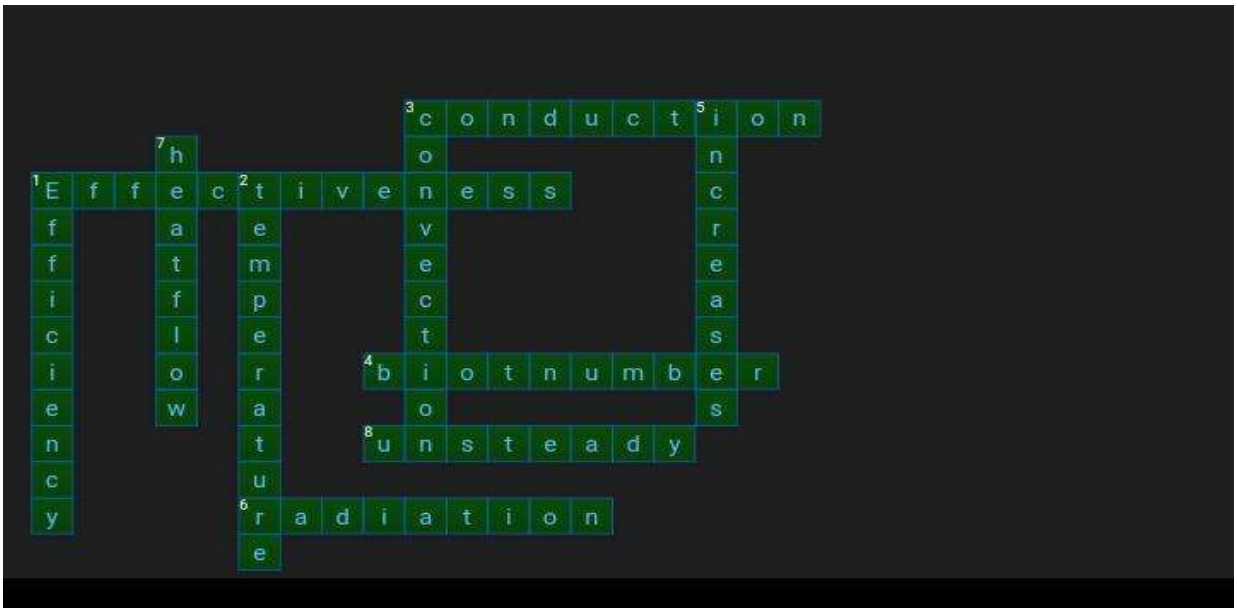
7. Evaluation sheet of attendee

Sr.No.	Roll No	Students Name	Score out of 10
1	3	AHER PRERANA BHAUSAHEB	10
2	4	AHIRE SHUBHAM BALCHANDRA	9
3	5	AHIRRAO ABHISHEK MAHENDRA	10
4	6	AMBEKAR KRISHNA SANJAY	10
5	7	AMRUTKAR ATHARVA PRAMOD	10
6	8	AVHAD ABHISHEK ANIL	10
7	9	AVHAD PRASAD SANTOSH	10
8	10	BADGE PARAG SUNIL	10
9	11	BAIRAGI PRIYA NARAYANDAS	10
10	12	BAVISKAR SIDDHI VIKAS	10
11	13	BHALEKAR YASH KIRAN	10
12	14	BHALERAO RAJ AJAY	10
13	16	BHANGARE PRAMILA SUBHASH	10
14	17	BHOSALE HARSHAL SAMBHAJI	9
15	18	BODKE PRAJWAL DIPAK	10
16	19	BODKE YASH SHIVAJI	10
17	20	BONDE CHETAN MOHAN	10
18	22	BRAHMANKAR TEJAS SOMNATH	10
19	24	CHANDWADKAR ASHUTOSH SANTOSH	10
20	25	CHAUDHARI ABHISHEK SATISH	10
21	26	CHAUDHARI ANUJA NITIN	10
22	29	CHAVAN RUTUJA VILAS	9
23	30	CHOPDA YASH RAJESH	10
24	31	DANGARE SAURABH BALASAHEB	10
25	33	DEORE CHIRAG MADHUKAR	10
26	34	DESHMUKH PRATHMESH RAVINDRA	10
27	35	DHANAIT SACHIN MADHAVRAO	10
28	36	DHANWATE ASHWINI BHAUSAHEB	10
29	37	DHOMSE RUSHIKESH PRAKASH	10
30	38	GAIKWAD NINAD AVINASH	10
31	39	GAIKWAD SHRIKANT ANIL	10
32	40	GANGURDE KRUSHNA PRAMOD	9
33	42	HARAK SUSHANT ARUN	10
34	43	HATKAR VAIBHAV MADHUKAR	10
35	46	JADHAV PRAJAKTA UTTAM	10
36	47	JADHAV TRUPTI SANJAY	10
37	48	JANGLE RAHUL DNYANESHWAR	10
38	49	JOSHI DHRUV HEMANT	10
39	50	JOSHI SIDDHARTH NITIN	10
40	52	KADAM SANDESH SURESH	10
41	54	KAPADNIS NIKITA YADAV	10
42	56	KOLHE MAYURESH VISHNU	10
43	58	LOHAKANE VEDANT ASHOKRAO	9
44	60	MAHALE SHRUTI RAJESH	10
45	61	MAHATME OM KIRAN	10
46	63	METKAR SHANTANU HEMANT	10
47	64	MHASKE SHREYAS BHALCHANDRA	10
48	65	BADHE NIKHIL LALIT	10
49	68	DESALE AAYUSH DEEPAK	10
50	70	GANGURDE ROHIT NARENDRA	10

8. Impact Analysis

SN	3- High/Excellent	2 - Moderate /Average	1- Slight/Poor
1. Did you understand and cover the objective of the activity?	87.6%	12.4%	--
2. Do you find that methodology is helpful to cover the content beyond syllabus?	85.7%	14.3%	--
3. Does this method helps you to stimulate your thinking capacity?	84.4%	15.6%	--
4. Does the content covered are relevant and will be helpful as a life-long learning?	84.4%	15.6%	--
5. Can you want to conduct such activity again?	84.4%	15.6%	--

9. Activity Picture



10.For review and critique contact: e-mail address of faculty and HOD
shewale.vinod@kbtcoe.org, hod.mech@kbtcoe.org

Dr. V.C.Shewale
Subject In charge

Dr. S.B.Sonawane
Module Coordinator

Dr. A.B.Kakade
NBA Coordinator

Dr. V.C.Shewale
HoD