



Department of Civil Engineering

Academic Year: 2021 - 2022 (Odd Semester)

Degree, Semester & Branch: VII semester B.E E.C.E – A&B, Mechanical – A&B

Course Code & Title: OEN751 & Green Building Design

Name of the Faculty member: Mr.J.Ramprashath

Innovative Practice Description

Unit / Topic: Unit - III / Comforts in Building / Heat Transfer Characteristics of Building Materials and Building Techniques

- **Course Outcome:** CO3
- **Topic Learning Outcome:** TL10
- **Activity Chosen:** Cross Word Puzzle
- **Justification:**

Heat Transfer take place in a building through various modes such as conduction, convection and radiation, also factors affecting the heat transfer characteristics in a building such as environmental, physiological, macro and micro climatic, building orientation, shape, etc. contributes to the same. As lots of technical terms and concepts are there in the above topic, I made a cross word puzzle to make the students more familiar with the above technical terms and concepts.

- **Time Allotted for the Activity:** 10 minutes.
- **Details of the Implementation:**
 - i. Cross Word Puzzle is a very commonly used classroom assessment technique. It is a fun filled assessment technique which also engage the students actively in the class.
 - ii. I took all the students to Civil Cadd lab and asked the students to take the cross word puzzle.
- **CO – PO / PSO mapping:**

CO	PO1	PO5	PO7
CO1	3	1	3

(1 – Low 2 – Moderate 3 – High)

- **PO mapped:**

Innovative practice	PO1	PO7
Justification for correlation	By understanding the heat transfer characteristics in buildings, the students will be able to provide solutions for complex civil engineering problems by applying the knowledge gained.	Knowledge on heat transfer characteristics in buildings is very much essential for site selection and design of various civil engineering structures as a passively heated or cooled buildings.

- Images / Screenshot of the practice:

Crossword Labs

[Make a Crossword](#) [Find a Crossword](#) [About](#) [Login/Sign Up](#)

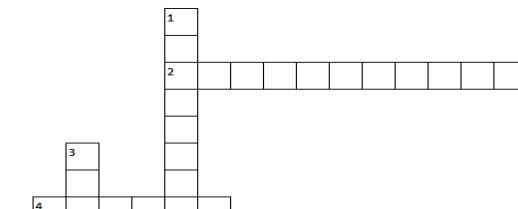
Heat Transfer Characteristics of Building Materials

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Across

- 2. energy constitutes about more than 85%
- 4. comfort temperature

Down

- 1. insulation value of clothing
- 3. mean outside air temperature
- 4. % of commercial energy is used for building

- **Reflective Critique:**

- ❖ ***Feedback of practice from students and other stakeholders:***

The students felt easy to remember and recollect the concepts involved in the given topic which will make them to attend the questions under this topic in Internal Assessment Test.

- ❖ ***Benefit of the practice:***

- i. Cross Word Puzzle is an effective way of involving all students in class simultaneously.
- ii. It prompts students to reflect on the day's lesson and provides the instructor with useful feedback.

- ❖ ***Challenges faced in implementation:***

Initially, I have planned the activity for 10 minutes but students have taken 15 to 20 minutes to complete.

References:

- ❖ Sustainable Building Design Manual. Vol 1 and 2, Teri, New Delhi, 2004.
- ❖ <https://crosswordlabs.com/view/classification-of-rocks>