



# RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University  
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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

## Department of Civil Engineering

Academic Year 2022 – 2023 (Odd Semester)

Degree, Semester & Branch: V Semester B.E. Civil Engineering

Course Code & Title: EN8491 Water Supply Engineering

Name of the Faculty member (s): Mrs. C. Subha

### Innovative Practice Description

- **Unit / Topic:** Unit IV/ Advances in Desalination Techniques
- **Course Outcome:** CO4
- **Topic Learning Outcome:** TLO12
- **Activity Chosen:** Reflective journal
- **Justification:**

Reflective journals are used in the literature to promote learning, develop writing skills, and assess students' reflection levels. Journals allow students to document what they are learning and become more intuitive in their practice. So, this practice exposes recent advancements in desalination techniques to students.

- **Time Allotted for the Activity:** 50 Minutes

- **Details of the Implementation:**

In this methodology, students were clubbed into 4 -5 groups. Then they were given a copy of a journal on Seawater desalination technology and engineering in China: A review. Every group was given time to read the journal, and finally, they were asked to submit a report on inferences from the journal

- **CO – PO / PSO mapping:**

CO	PO6	PO7	PSO3
CO4	2	2	1

(1 – Low      2 – Moderate      3 – High)

- **PO / PSO mapped:**

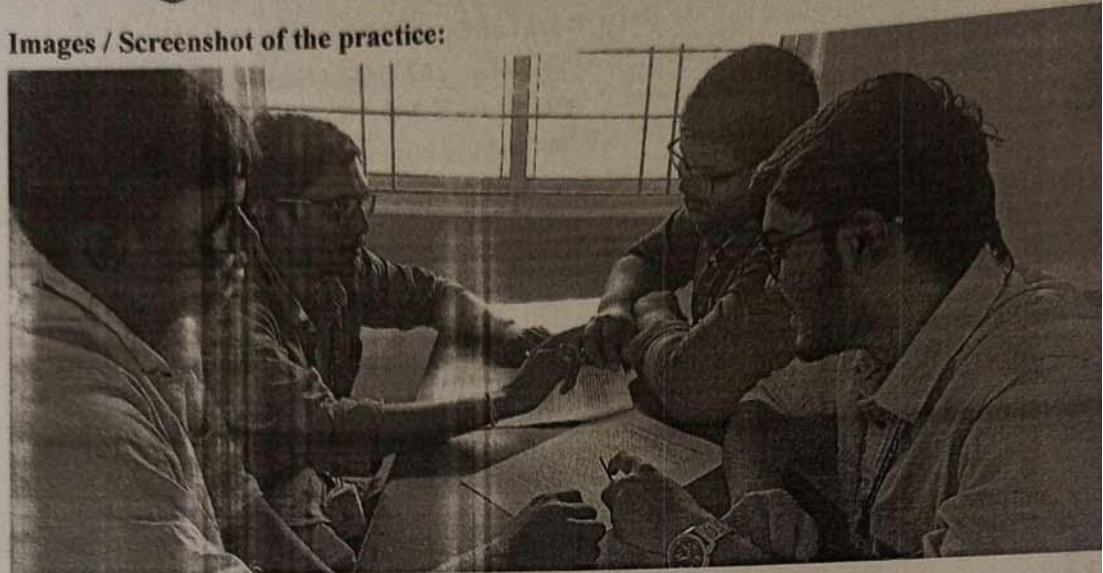
Innovative practice	PO6	PO7	PSO4
	3	2	2
<b>Justification for correlation</b>	Students will learn about water softening procedures to ensure public health.	Desalination treatment units will be designed and planned to meet the current and future needs considering economic, environmental, and sustainable aspects.	Design of desalination units.



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- Images / Screenshot of the practice:



- Reflective Critique:

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

Oral feedback was received from students, and most said they learned the desalination techniques, which are in practice.

- ❖ *Benefit of the practice:*

This practice certainly would develop project ideas among students. They will try to use this concept and its application.

- ❖ *Challenges faced in implementation:*

Since they have the first time gone through a journal, they faced difficulties in reading a full research paper.

**References:**

- ❖ Lin, Saisai; Zhao, Haiyang; Zhu, Liping; He, Tao; Chen, Shengfu; Gao, Congjie; Zhang, Lin (2021). *Seawater desalination technology and engineering in China: A review*. *Desalination*, 498(), 114728-. doi:10.1016/j.desal.2020.114728

C. D. H.

Signature of Faculty Member

HOD