



RAMCO INSTITUTE OF TECHNOLOGY

Rajapalayam

Department of Artificial Intelligence and Data Science

Academic Year: 2022- 2023 (Even Semester)

Degree, Semester & Branch: IV Sem. B.Tech. Artificial Intelligence and Data Science.

Course Code & Title: CS3591- Computer Networks.

Name of the Faculty member: Dr.M.Kaliappan, Professor/AD

Theme of discussion: OSI layers.

Date and Time: 07.02.2023 & 11.00 am to 11.50am

1 Active learning practices: JIGSAW Cooperative Learning Technique

1.1 Topic:

Topic :Discuss the OSI model and seven layers.

Application	To allow access to network resources	7	Group 7
Presentation	To translate, encrypt, and compress data	6	Group 6
Session	To establish, manage, and terminate sessions	5	Group 5
Transport	To provide reliable process-to-process message delivery and error recovery	4	Group 4
Network	To move packets from source to destination; to provide internetworking	3	Group 3
Data link	To organize bits into frames; to provide hop-to-hop delivery	2	Group 2
Physical	To transmit bits over a medium; to provide mechanical and electrical specifications	1	Group 1

1.2 Learning Outcomes

- Describe the services of seven OSI layers
- To improve listening, communication, and presentation skills.

1.3 Procedure:

Step 1 (2 minutes)

- Form the 7 groups with seven members on the students' academic performance.
- Posted the OSI layer material in student whatsapp group

Step 2 (2 minutes)

- Appoint one student from each group as the leader and each student in a group given a number from 1 to 7. Divide the course contents (OSI model) into 7 layers.

Step 5 (15 minutes)

- Give students time to read over the course content's segment.

Step 7 (15 minutes)

- Bring the students back into their jigsaw groups

Step 8 (10 minutes)

- Ask each student to present her/his segment to the group.
- Encourage others in the group to ask questions for clarification

Step 9

- Float from group to group, observing the process

Step 10(6 minutes)

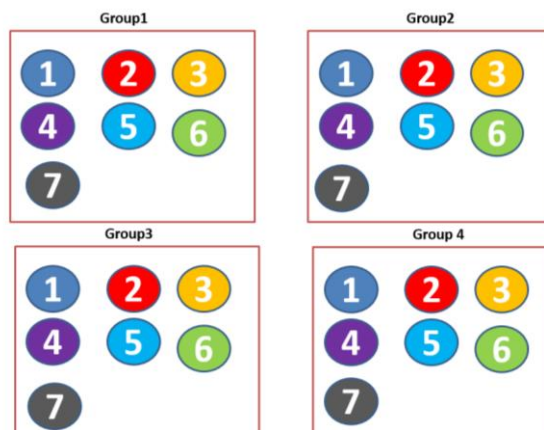
- At the end of the session, give a quiz on the material.

1.4 Design and Implementation

- Procedure of Jigsaw activity posted in the course website in advance in which students knew the knowledge of this activity.

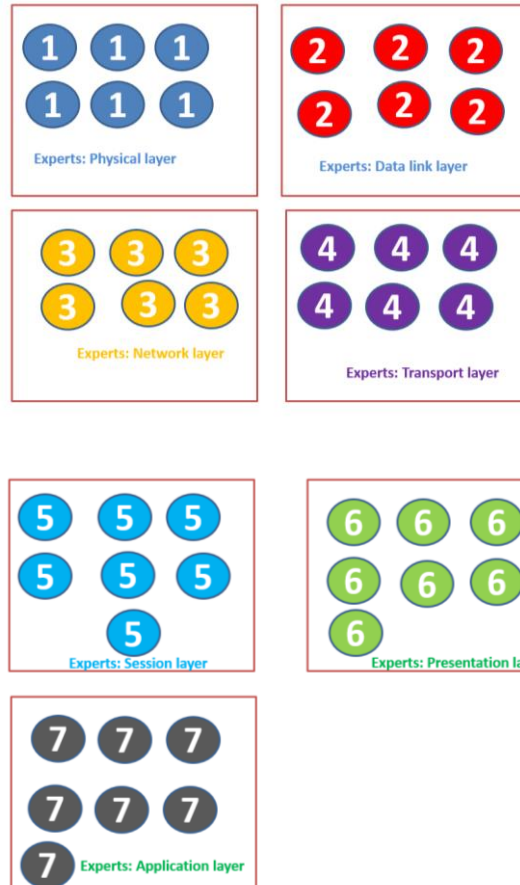
Followed the Step 3

- Divide students into 7-person Jigsaw groups as a expert group for each OSI layer



Followed the Step 3

- Form temporary “expert groups” by having one student from each Jigsaw group join other students assigned to the same segment.
- Some clue about the course contents given to each expert group when they were discussed the segment that used to remember the student about the topic

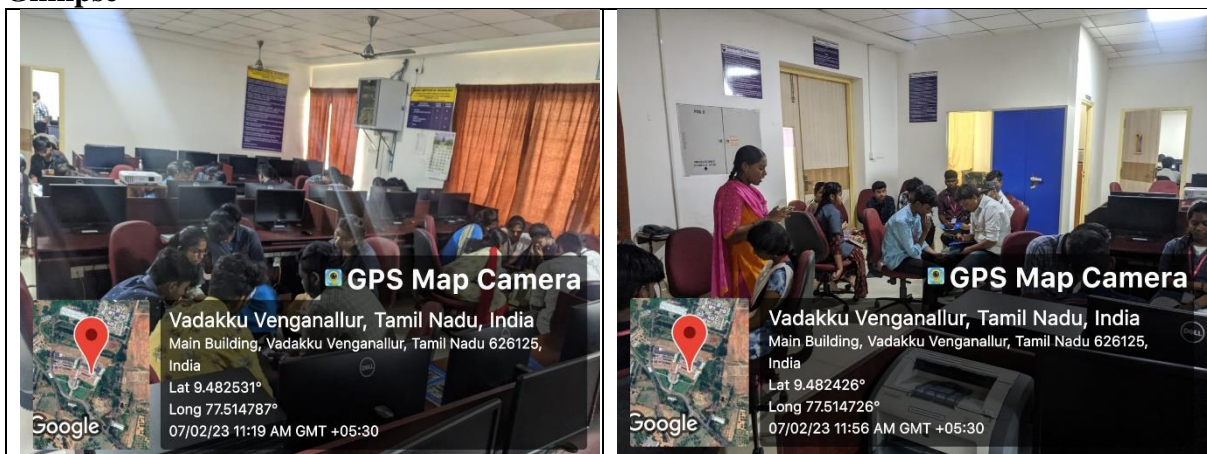


Followed the Step 5

- Bring the students back into their jigsaw groups.
- Then, asked each student to present her/his segment to the group and encourage others in the group to ask questions for clarification

At the end of the session, student from each group shared the knowledge what they learnt.

Glimpse



1.5 Reflective Report

1.5.1 Challenges and strategies:

- Make the slow learner participation in the activity
- To form the heterogeneous group (male and female).
- Motivate the slow learners to involve the activity.
- Given materials about the OSI layer while doing the activity

1.5.2 Observations:

The Jigsaw technique is designed for cooperative learning in small groups. Students are provided the opportunity to become experts in a particular content, and share that knowledge with their peers. This technique promotes both self and peer teaching which requires students to understand the material at a deeper level and engage in discussion, problem solving, and learning

Students are interested to involve the activity. The Jigsaw technique helps the students to develop expertise in a particular topic and practice self and peer teaching.

1.5.3 Students Response:

- Students are not got comfortable after form a heterogeneous group and done brainstorming with their team members about the segments actively.
- Bright students were actively participated to prepare the OSI layers.
- Slow learners expect to assist the content delivery and presentation.
- Most of the students were enjoyed the session.

Students response ensures the students could improve listening, communication, creativity and problem-solving skills.



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Feedback

Innovative practice: Jigsaw cooperative learning technique.

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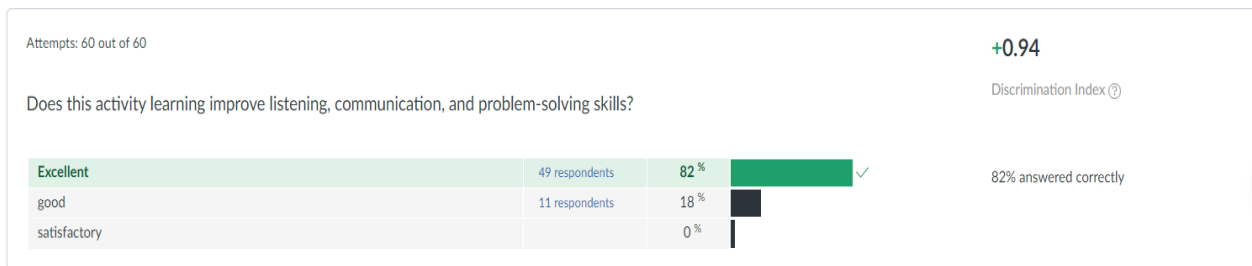
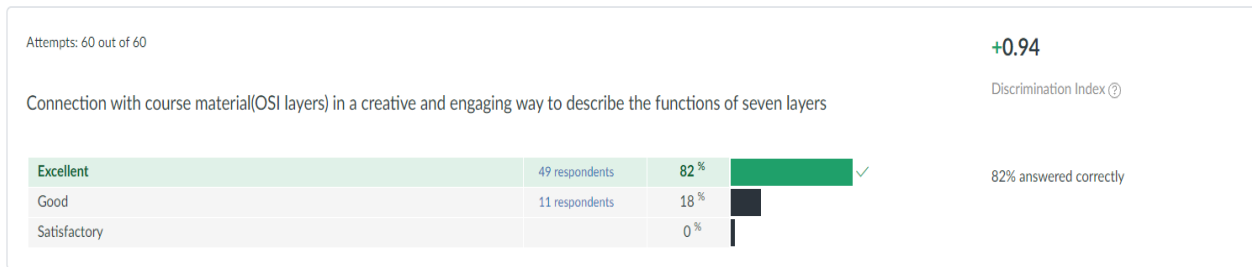
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Does it encourage cooperative learning among yourself ? Yes No

Connection with course material (OSI layers) in a creative and engaging way to describe the functions of seven layers **Excellent** **Good** **Satisfactory**

Does this activity learning improve listening, communication, and problem-solving skills? **Excellent** **Good** **Satisfactory**

Feedback



Reference: <https://www.jigsaw.org/>