D.N.R COLLEGE OF ENGINEERING & TECHNOLOGY
Department of Electronics and Communication Engineering
Academic Year: 2020- 2021 (ODD Semester)
Innovative Teaching Method

B-Tech, Semester& Branch: IV/ I Semester ECE
Title: Radar Systems
Name of the Faculty member: V.BALAJI
Name of the Topic: Transmission System Losses
Name of the Innovative Practice: Think-Pair- Share
Date& Duration: 29.06.2020 & 20 Minutes

Description:
Think-Pair- Share activity has three parts:
1. Think - The teacher poses a question and gives students thinking time on their own (up to two minutes). Questions with several possible solutions are more likely to generate discussion.
2. Pair - Each pair compares their ideas and reaches a mutually agreed response to the question. Circulate around the class and listen to the conversations.
3. Share - The teacher then gathers ideas across the classroom about student's thinking. Teacher can allow each pair to choose who will present their ideas to the class.

Goals (Learning Outcomes):
1. The students will be able to identify the difference between various types of transmission losses.
2. The students will be able to analyze the effect of transmission losses in a satellite link.
Use of appropriate methods:
Justification for choosing the topic using Think-Pair- Share activity:
In commutations, when the signal is transmitted from one end to other end, losses may occur. The losses which are constant or variable one. No matter what precautions we might have taken, still these losses are bound to occur. Such losses may be inexplicit to understand and to remember. This activity enables them to list the losses and its types without any confusion.

Effective presentation Implementation (Plan & Execution) with Proof:

- I have planned this activity for 15 minutes
- Initially I have explained what students need to try and asked the students to form a pair
- Made all the students to engage in participation
- Students were discussed about the given topic with each other in talk partners for five minutes.
- After that, they are asked to express their thoughts to an audience and contribute to a shared solution.
- Make sure there is enough time for both students in a pair to discuss their ideas.

Reflective Critique:

Benefits:

This step ensures that every student has the opportunity to explain their thoughts to others and listen to others conversations.

Particularly students who are uncomfortable speaking in front of the whole class got chance to express their views also.

Due to this activity, even though one student leaves any type of losses the other student will help to recollect the ideas. So they felt comfortable to think back to the types of losses and share it.

Students were able to remember the content of the topic by conducting this activity and maximum students were attended the questions under this topic in Internal assessment Test.

Challenges:

One of the biggest challenges of the think-pair-share is to get all students to truly be engaged. Most pairs shared the same ideas about the topic

REFERENCE BOOKS:

1. Introduction to Radar Systems, 3rd edition – M.I. Skolnik, TMH Ed., 2005
2. Radar: Principles, Technology, Applications – Byron Edde, Pearson Education, 2004.
3. Radar Principles – Peebles, Jr., P.Z., Wiley, New York, 1998.
4. Principles of Modern Radar: Basic Principles – Mark A. Richards, James A. Scheer, William A. Holm, Yesdee,

D.N.R COLLEGE OF ENGINEERING & TECHNOLOGY
Department of Electronics and Communication Engineering
Academic Year: 2020- 2021 (Even Semester)
Innovative Teaching Method

B-Tech, Semester& Branch: IV/ II Semester ECE
Title: Cellular And Mobile Communications
Name of the Faculty member: V.BALAJI
Name of the Topic: Sketch Noting
Name of the Innovative Practice: Think-Pair- Share
Date& Duration:11.02.2021 & 10 Minutes
ICT Tool Used: Smart Class Room

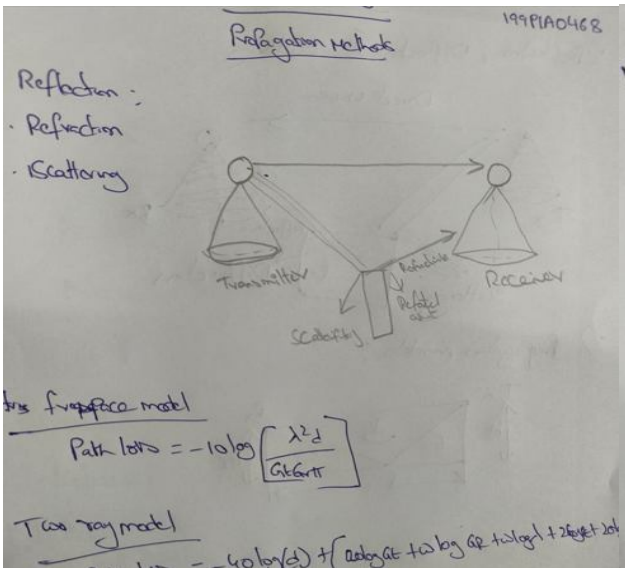
Description:

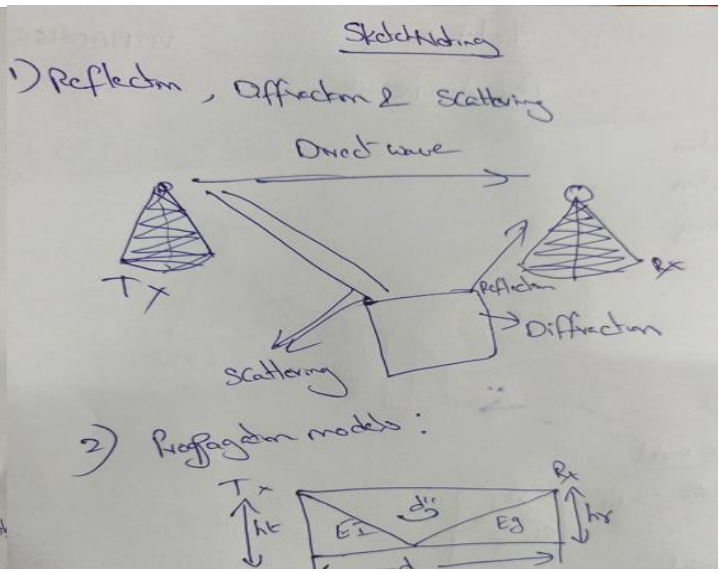
Sketch noting is a form of note-taking, hence the "noting" part of it, but as we might guess it involves bringing more visuals into the process compared to typical note-taking, hence the "sketch" part. The whole idea behind adding sketches to our notes is that it taps into parts of our brain that would lie dormant if we only use words to explore ideas. It's the combination of the two that's most powerful – using both words and visuals while taking notes.

Goals (Learning Outcomes):
The students will be able to know about the propagation mechanisms and its types

Use of appropriate methods:
Justification for choosing the topic using Sketch Noting activity:

The students will be able to understand the concepts of propagation mechanism and its types if he visualizes the concepts and able to write or note or sketch the points or drawings in the paper. The students will be able to easily remember the concepts if he is able to sketch the notes.
Effective presentation
Implementation(Plan & Execution) with Proof:
The students were in the class room. The topic was explained to the students first through the slides. Then they were asked to do sketch noting on the paper so that they could remember some points and diagrams. They were able to understand the concepts by doing sketch noting.





Significance of Results:

Assessment of Effectiveness/Success of the Activity:

 The assessment of effectiveness of the activity was felt when the students were asked questions on the topic on the next week they were able to answer easily

Reflective Critique:

 Benefits:

The students were more interested in learning the concepts if they are doing sketch noting the points. They clarified their doubts with the neighbouring students and the faculty. They learnt the concepts of propagation mechanism clearly by performing sketch noting. They asked more doubts in the topic and learnt many things.

Challenges:

Basically some time is needed to explain the basic concepts of propagation mechanism. Then after explaining the students have to register the concepts in their mind and need to execute the concepts in terms of drawings or points in the paper.

REFERENCES :

1. Wireless Communications – Theodore. S. Rapport, Pearson education, 2nd Edn., 2002.
2. Wireless and Mobile Communications – Lee McGraw Hills, 3rd Edition, 2006.
3. Mobile Cellular Communication – G Sasibhushana Rao Pearson
3. Wireless Communication and Networking – Jon W. Mark and Weihua Zhqung, PHI, 2005.