



RAMCO INSTITUTE OF TECHNOLOGY

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NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Artificial Intelligence and Data Science Academic Year 2023 – 2024 (Even Semester)

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

Course Code & Title: AL3451 & Machine Learning

Name of the Faculty member (s): Ms. S. Selva Birunda

Innovative Practice Description

- **Unit / Topic:** Unit I / VC Dimension & Probably Approximately Correct
- **Course Outcome:** CO1
- **Topic Learning Outcome:** TLO 1, 2
- **Activity Chosen:** One-Minute Paper
- **Justification:**
 - During the one-minute paper activity, students were allotted 60 seconds to compose a concise summary of the class session.
 - Understanding the VC dimension and PAC (Probably Approximately Correct) concepts is crucial for delving into the depths of machine learning.
 - To review the VC dimension and PAC, this activity has been selected.
- **Time Allotted for the Activity:** 5 Minutes
- **Details of the Implementation:**
 1. The faculty discussed the concept of VC dimension and PAC.
 2. Students were assigned the task of summarizing the key things in the discussed topic on paper within a minute to assess their level of understanding.
 3. The course faculty reviewed the one-minute paper written by all the students.
 4. Now, the course faculty could gauge the students' comprehension level based on their written works.
 5. Approximately, 15% of the students had trouble grasping the concepts once delivered.
 6. Others can understand the concepts and make a gist out of what had been taught.



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- Images / Screenshot of the practice:

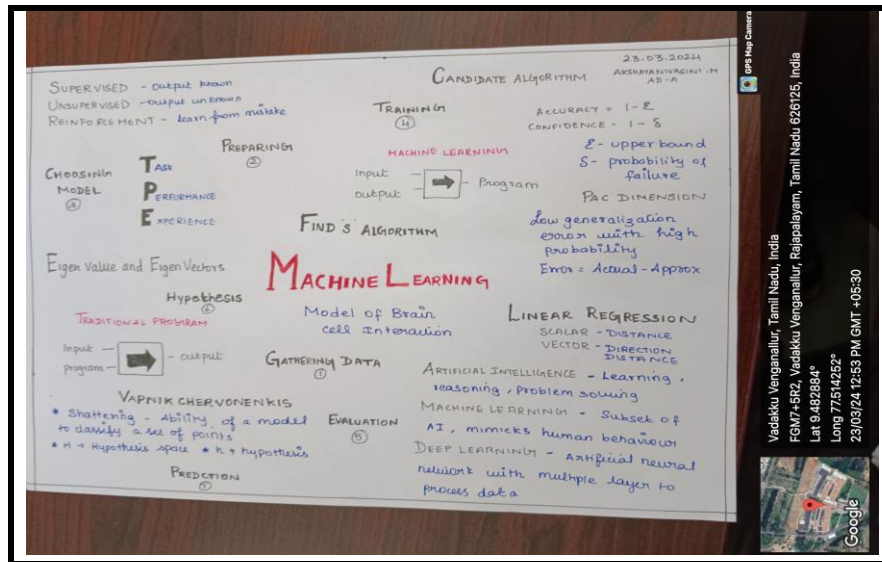
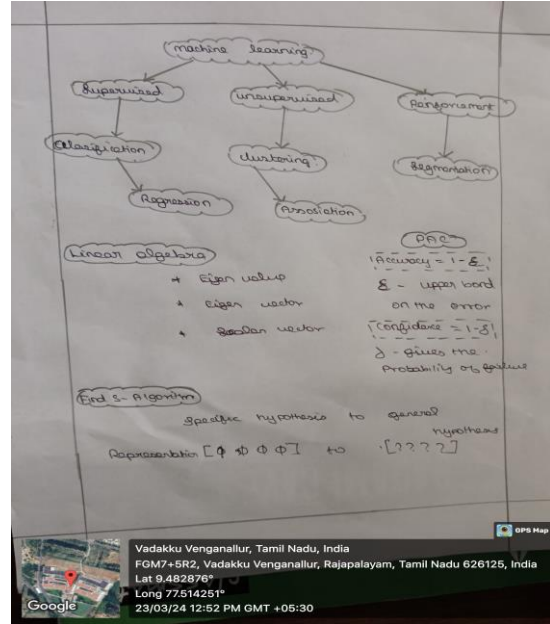


Fig 1: Glimpses of One Paper Activity

- Reflective Critique:

❖ Feedback of practice from students and other stakeholders:

- ✓ Students felt this activity made them recollect the points that have been discussed in class.
- ✓ Minute papers increase the likelihood that students will remain in class for the full duration of the class period.



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- ❖ ***Benefit of the practice:*** (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)
 - ✓ Minute papers serve as an effective method to engage all students in the class simultaneously.
 - ✓ It ensures equal participation of every class member, including anyone who may be too shy or fearful to participate orally.

- ❖ ***Challenges faced in implementation:***
 - ✓ Few students face difficulty in grasping the concepts as such discussed
 - ✓ They need some extra time to complete the activity

References:

1. <https://oncourseworkshop.com/self-awareness/one-minute-paper/>
2. <https://www.rochester.edu/college/teaching/teaching-guidance/one-minute-paper.html#:~:text=A%20one%2Dminute%20paper%20is,of%20that%20day's%20class%20session.>



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Department of Artificial Intelligence and Data Science

Academic Year 2023 – 2024 (Even Semester)

FEEDBACK

Active Learning Best practices: One Minute Paper Technique

Degree, Semester & Branch : IV Semester & B. Tech AI / DS

Course Code & Title : AL3451 & Machine Learning

Name of the Faculty member (s) : Ms. S. Selva Birunda, AP / AD

Theme of discussion: VC Dimension & Probably Approximately Correct

Date and Time: 23.03.2024 & 12.20 pm to 1.05 pm

Feedback collected in class and through online

Feedback Questionnaire:

- How useful was the one-minute paper activity that we did in class today?
Very much Useful Not Useful
- Do you have a clear understanding of the VC Dimension and PAC concepts?
Excellent Very Good Good Satisfactory
- Does this formative assessment strategy improve listening and grasping capability?
Yes No

Feedback Analysis:

Attempts: 51 out of 51				-0
How useful was the one minute paper activity that we did in class today?				Discrimination Index (?)
Very Much useful	51 respondents	100 %		100% answered correctly
Not useful		0 %		
Attempts: 51 out of 51				+1
Do you have a clear understanding of the VC Dimension and PAC concepts?				Discrimination Index (?)
Excellent	21 respondents	41 %		41% answered correctly
Very Good	25 respondents	49 %		
Good	4 respondents	8 %		
Satisfactory	1 respondent	2 %		
Attempts: 51 out of 51				-0
Does this formative assessment strategy improve listening and grasping capability?				Discrimination Index (?)
Yes	51 respondents	100 %		100% answered correctly
No		0 %		