



Department of Artificial Intelligence and Data Science

Academic Year 2023 – 2024 (Even Semester)

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

Course Code & Title: CCS368 & Stream Processing

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

Innovative Practice Description

- **Unit / Topic:** Unit IV / Event, Producer & Consumer
- **Course Outcome:** CO4
- **Topic Learning Outcome:** TLO 23
- **Activity Chosen:** Collaborative Learning
- **Justification:**

Collaborative learning involves group-based learning on various topics, contrasting with individual self-learning. Students engage in group discussions to explore concepts collectively, fostering learning within the group setting. Through active participation in small group discussions and debates, students enhance their understanding, facilitating more effective learning outcomes.

- **Time Allotted for the Activity:** 20 Minutes
- **Details of the Implementation:**

Procedure:

Step 1: Group Formation

- The students are organized into small groups each of four students.

Step 2: Introduction to the task

- The students were tasked to deliberate on the concepts of event, producer, and consumer within Apache Kafka.

Step 3: Discussion and Exploration

- The Groups engage in active discussion, sharing their understanding of the given topic, asking questions, and exploring different viewpoints.



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Step 4: Summarization and Presentation

- Each group summarizes their insights and presents them to the class, fostering communication skills and reinforcing learning through teaching.

Step 5: Assessment and Evaluation

- The course instructor assesses both individual and group performance, providing constructive feedback and evaluating the effectiveness of the collaborative learning process.

• Images / Screenshot of the practice:



• Reflective Critique:

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

- ✓ Students felt this activity as a stress free way of learning while also enhancing knowledge
- ✓ Students perceived that through this activity they can gain a deep understanding of the given concepts as they are sharing their views in groups
- ✓ Students feel they are more engaged and motivated through this activity



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- ❖ ***Benefit of the practice:*** (E.g.: Outcome attainment would have increased due to innovative practice over conventional practice)
 - ✓ This activity fosters teamwork and collaborate effectively within their groups
 - ✓ Students can think outside the box or from diverse perspectives by participating in this activity
 - ✓ Discussing answers within group and come together with a conclusion

- ❖ ***Challenges faced in implementation:***
 - ✓ Discrepancies in participation levels among group members. Some students being more active and engaged than others, potentially leading to unequal distribution of workload and limited contribution from certain individuals
 - ✓ Time constraints for in-depth discussions and collaboration

References:

1. <https://tltc.umd.edu/instructors/resources/collaborative-learning>
2. <https://teaching.cornell.edu/teaching-resources/active-collaborative-learning/collaborative-learning>



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Department of Artificial Intelligence and Data Science

Academic Year 2023 – 2024 (Even Semester)

FEEDBACK

Active Learning Best practices: Collaborative Learning Technique

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

Course Code & Title : CCS368 & Stream Processing

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

Theme of discussion: Event, Producer & Consumer

Date and Time: 25.03.2024 & 03.00 pm to 03.45 pm

Feedback collected in class and also through online

Feedback Questionnaire:

1. How useful was the collaborative learning activity that we did in class today?

Very much Useful **Not Useful**

2. Do you have a clear understanding about the Events, Producer, Consumer concepts?

Excellent **Very Good** **Good** **Satisfactory**

3. How effectively did your group communicate and collaborate during the learning activities?

Excellent **Very Good** **Good** **Satisfactory**



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Feedback Analysis:

Attempts: 57 out of 57 -0

How useful was the collaborative Learning activity that we did in class today? Discrimination Index ?

Very much useful	57 respondents	100 %	<div style="width: 100%;"></div>	100% answered correctly
Not useful		0 %	<div style="width: 0%;"></div>	

Attempts: 57 out of 57 +0.94

Do you have a clear understanding of the Event, Producer and Consumer concepts? Discrimination Index ?

Excellent	43 respondents	75 %	<div style="width: 75%;"></div>	75% answered correctly
Very Good	12 respondents	21 %	<div style="width: 21%;"></div>	
Good	2 respondents	4 %	<div style="width: 4%;"></div>	
Satisfactory		0 %	<div style="width: 0%;"></div>	

Attempts: 57 out of 57 +0.93

How effectively did your group communicate and collaborate during the learning activities? Discrimination Index ?

Excellent	46 respondents	81 %	<div style="width: 81%;"></div>	81% answered correctly
Very Good	8 respondents	14 %	<div style="width: 14%;"></div>	
Good	3 respondents	5 %	<div style="width: 5%;"></div>	
Satisfactory		0 %	<div style="width: 0%;"></div>	