ADULT LEARNING XCHANGE

18 & 19 JAN 2024

# OUR LEARNING FUTURES

LEARN FAST | LEARN WIDE | LEARN WELL

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IAL INSTITUTE FOR ADULT LEARNING SINGAPORE | AN INSTITUTE OF SUSS SINGAPORE UNIVERSITY OF SOCIAL SCIENCES

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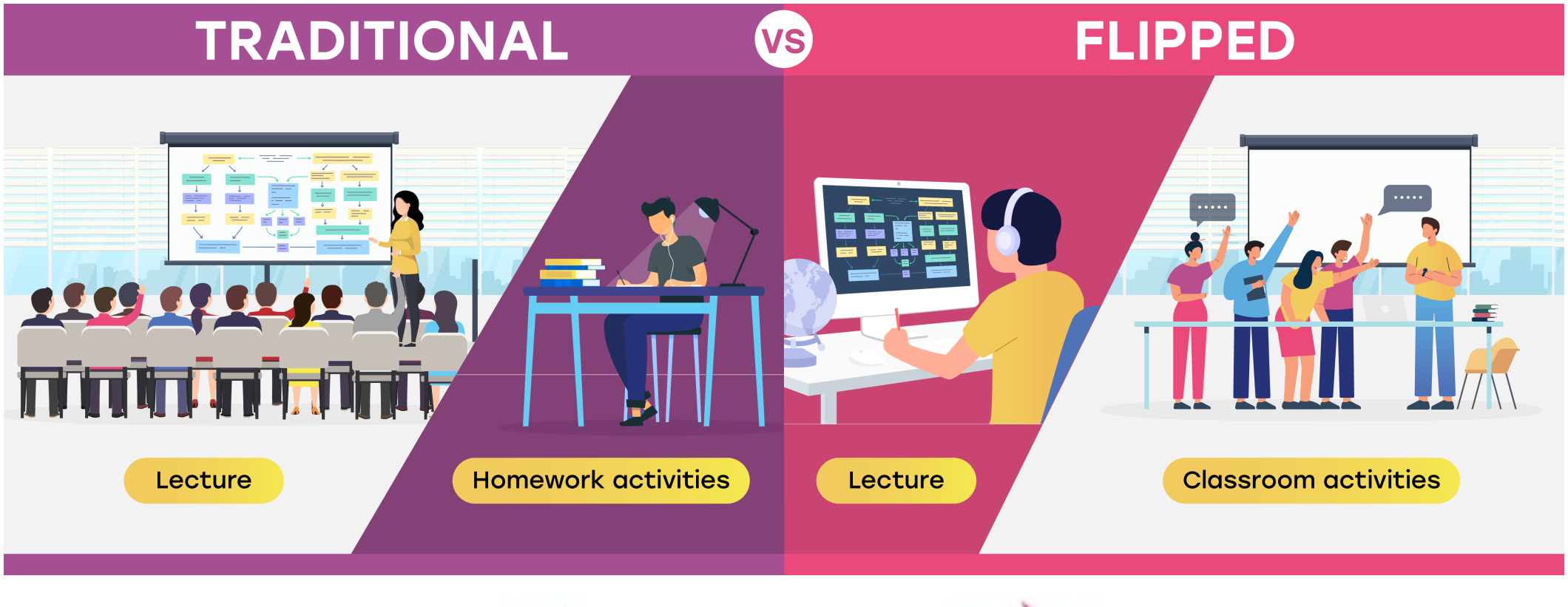
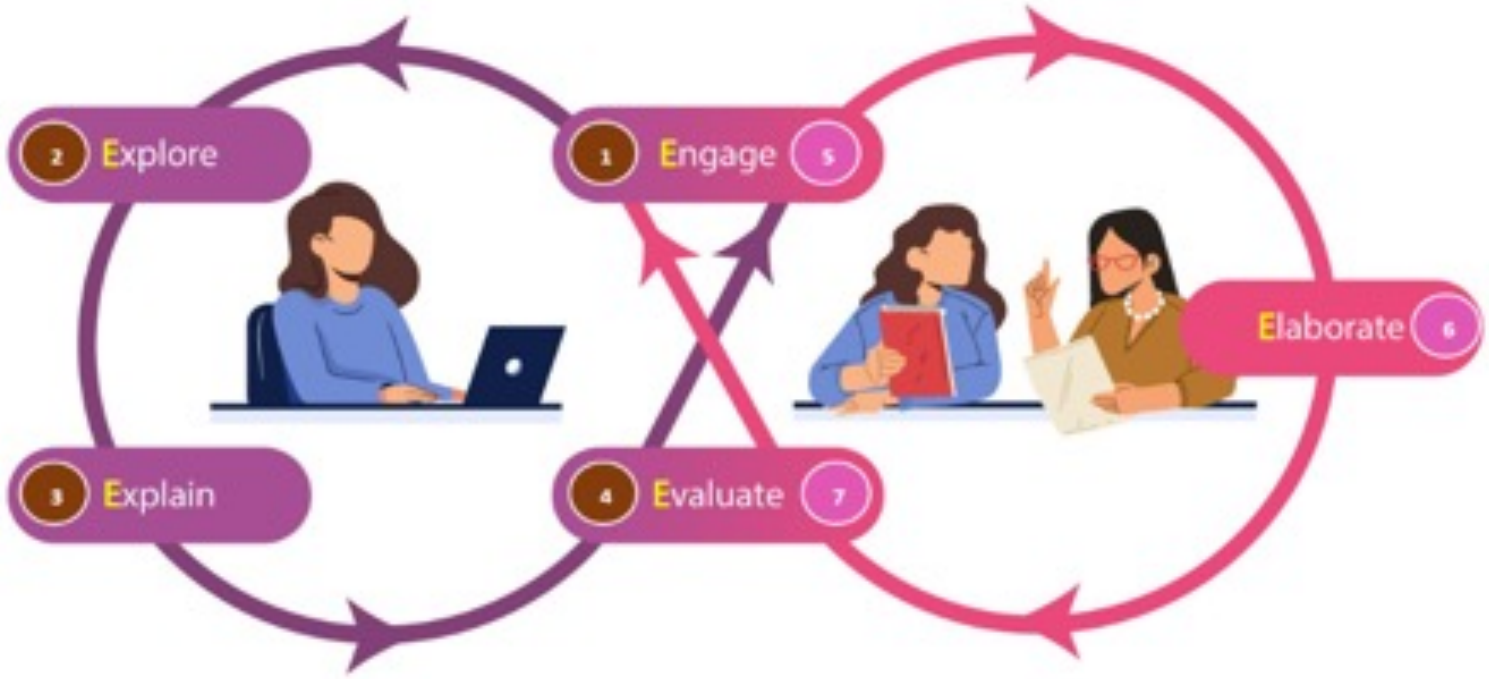
# Redefining Adult Learning through the power of Flipped Learning and the 5E Model

Irene Chan
Temasek Polytechnic

# Integrated Approach - Flipped Learning Meets the 5E Model

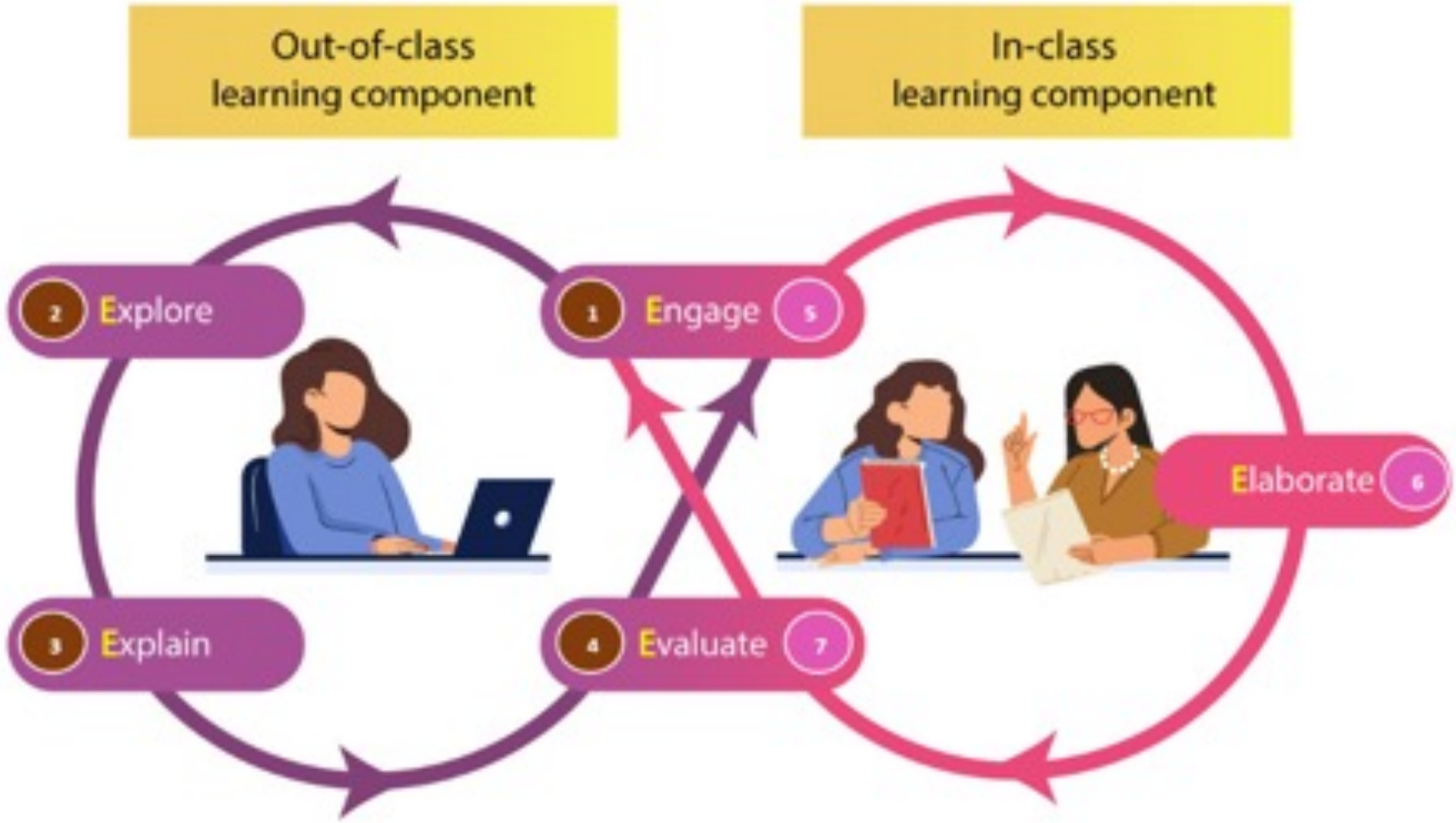



*Adapted from the 5E Flipped Learning Instructional Model by Lo (2017) and 5E model by Bybee and Landes (1990)*

# Integrated Approach - Flipped Learning Meets the 5E Model

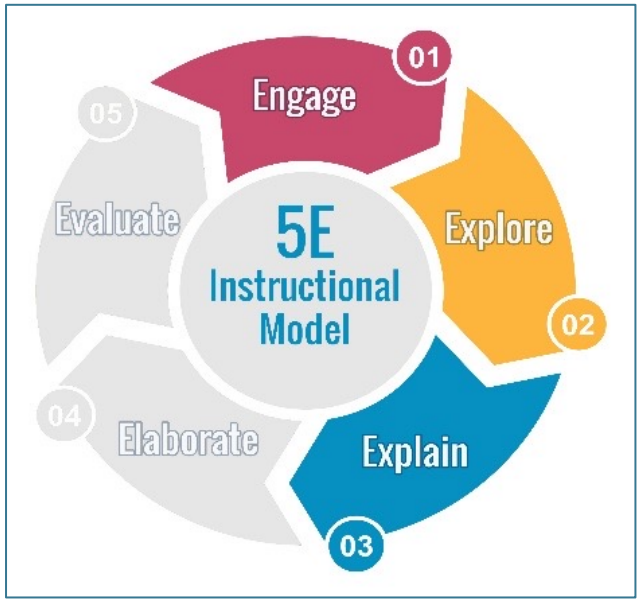
## Inquiry-based 5E Model + Use of Learning Analytics Strategy [Assessing Learning in Real Time (ALeRT)]



# Integrated Approach - Flipped Learning Meets the 5E Model

## Self-Directed eLectures – Flexible and Engaging Experience

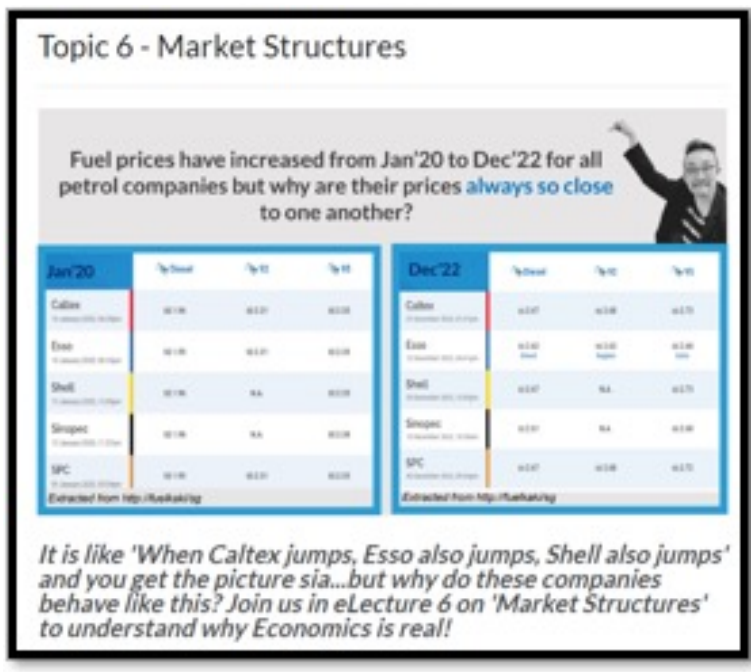
**Asynchronous eLectures**
**Articulate Rise**




**ENGAGE ->** Capture Learners' Attention

- *First phase of learning cycle*
- *Important to <u>trigger an interest</u> in the upcoming concepts*

Newspaper Articles




Thought-Provoking Question

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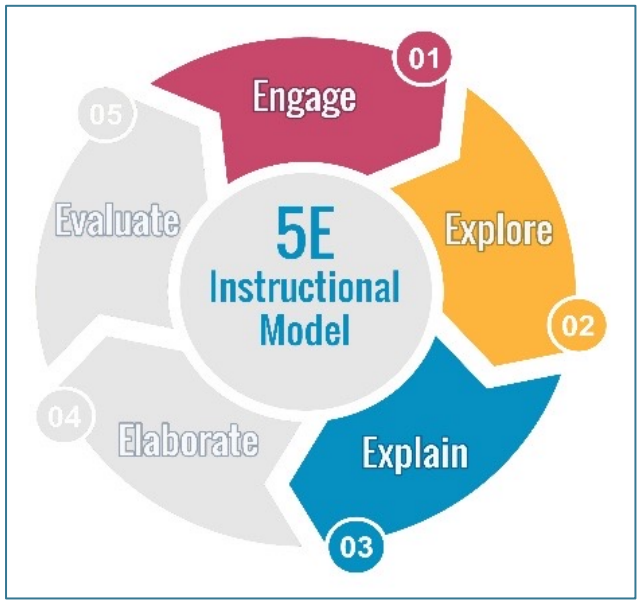


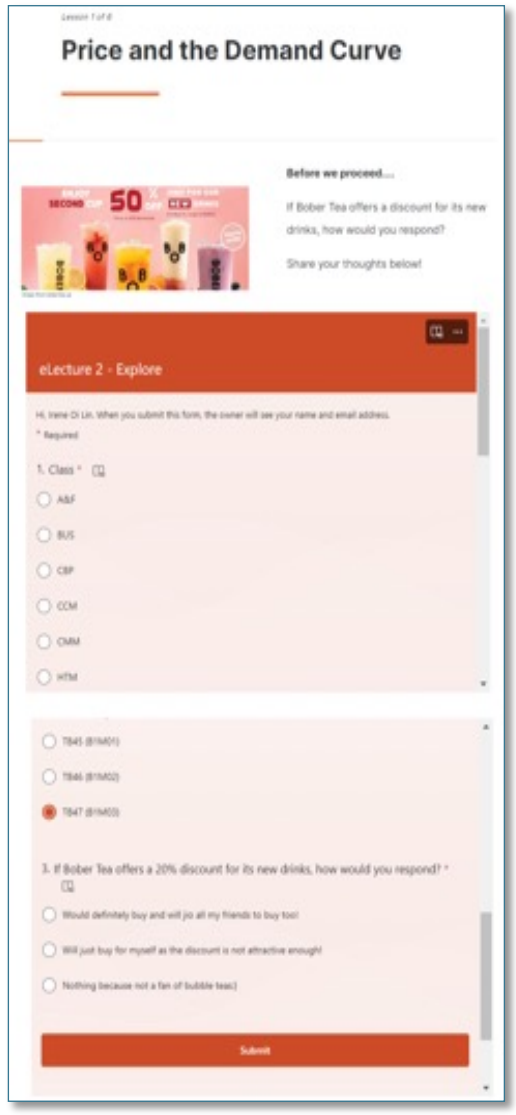


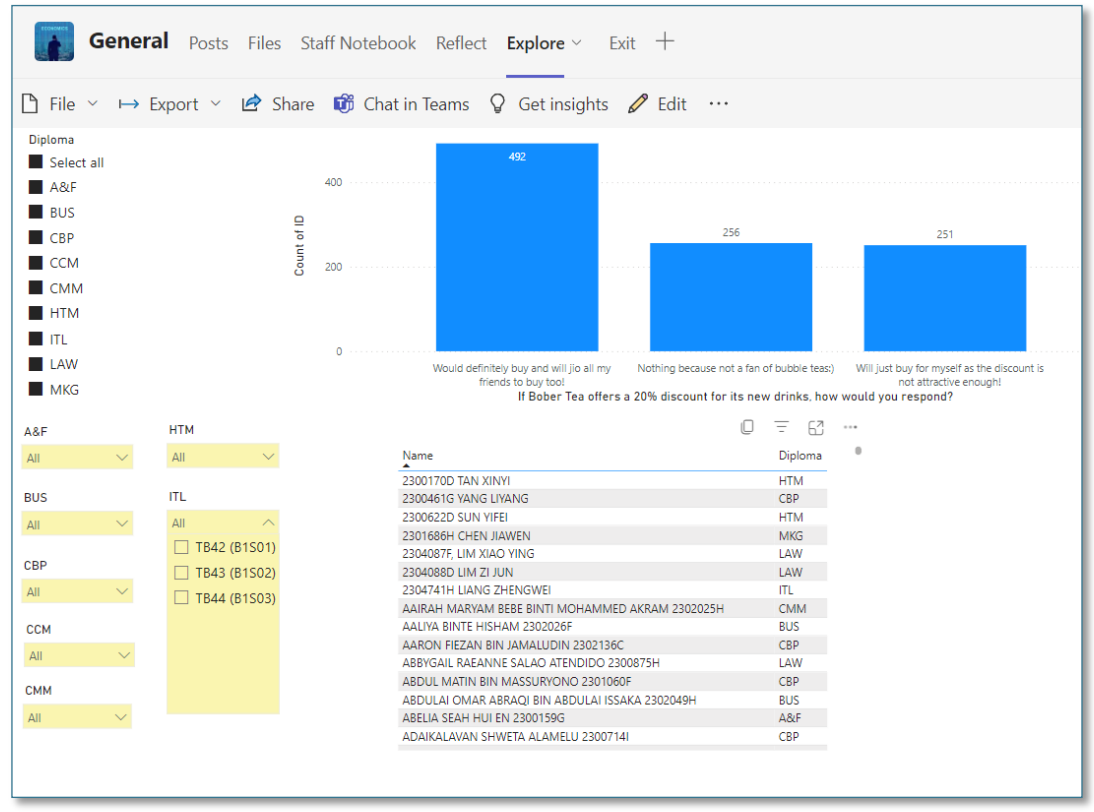


**EXPLORE ->** Assess Prior Knowledge

- *Second phase of learning cycle*
- *Understanding of learners' prior knowledge*

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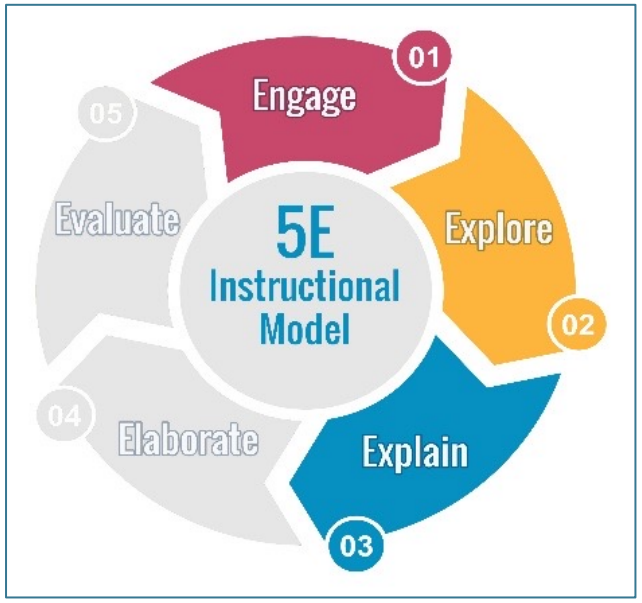
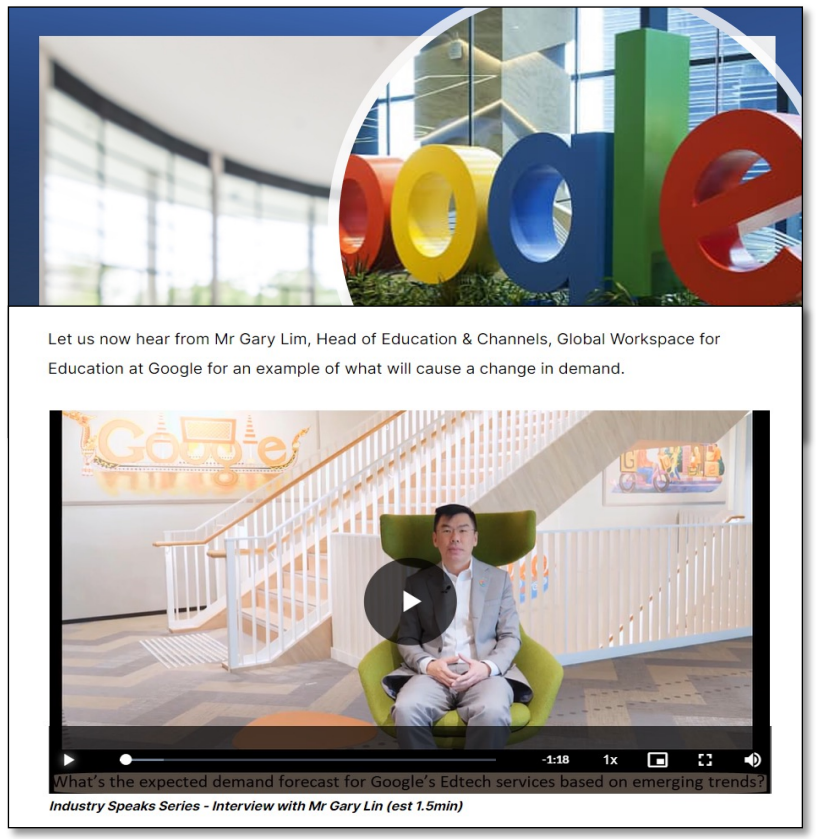


Strong Teacher Presence
Chunked Videos, Transitions & Visual Effects

**EXPLAIN ->** Learn new knowledge

- *Third phase of learning cycle*
- *Improving quality of online resources to improve learner engagement and learning*




Relevant and real-world examples, 'Industry Speaks' Series

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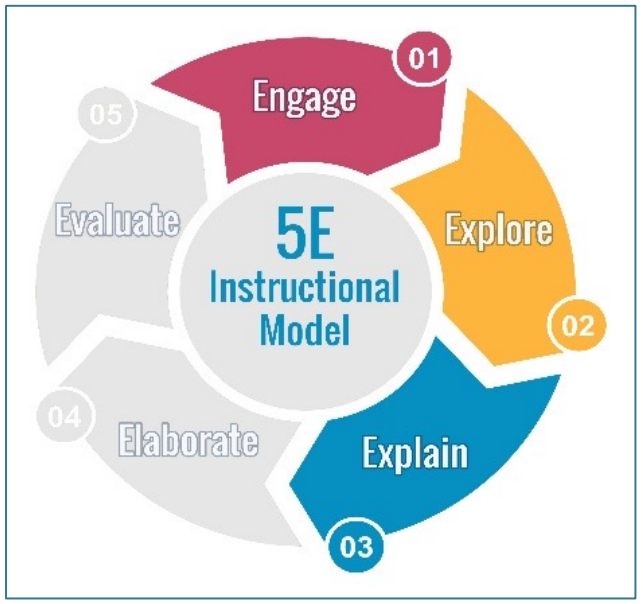
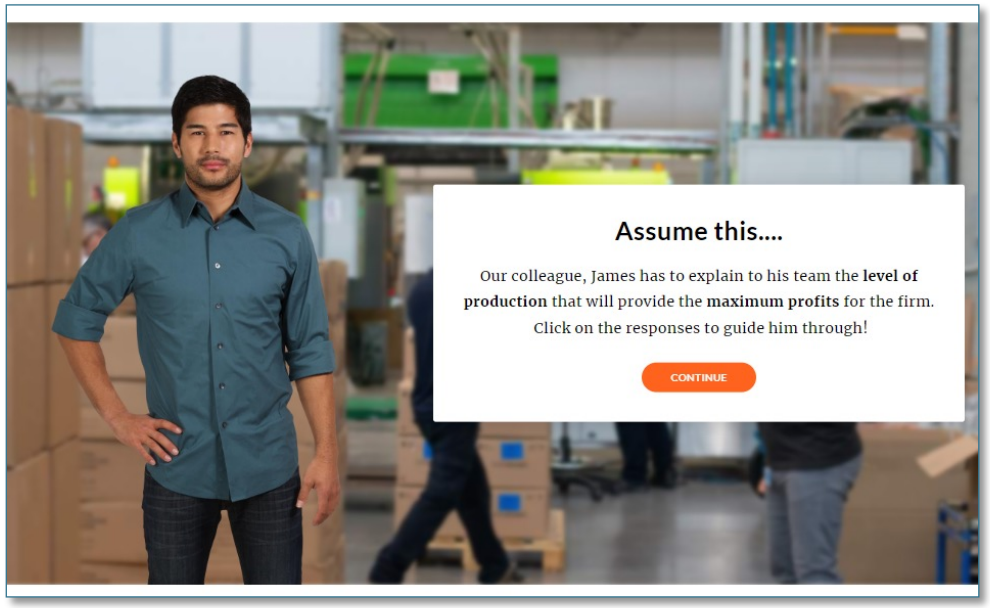


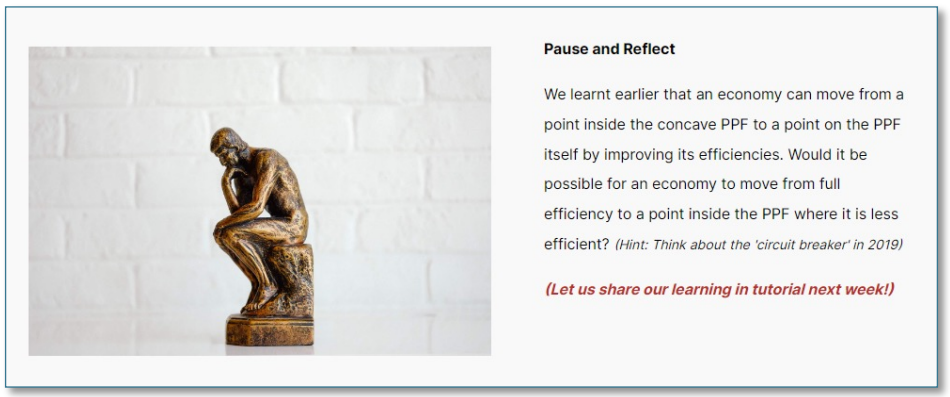

**EXPLAIN ->** Learn new knowledge

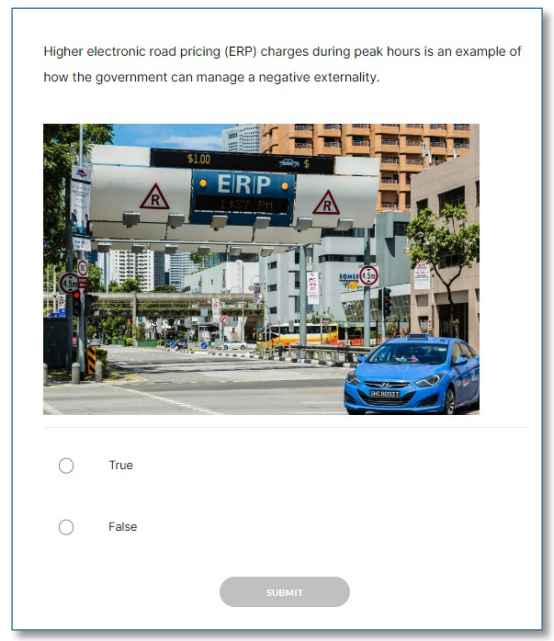
- *Third phase of learning cycle*
- *Improving quality of online resources to improve learner engagement and learning*

Interact with Content




Learners' Self-Reflection & Self-Assessment

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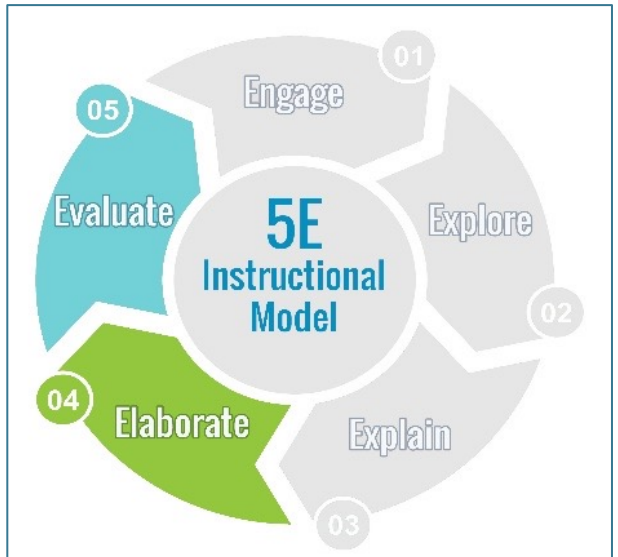
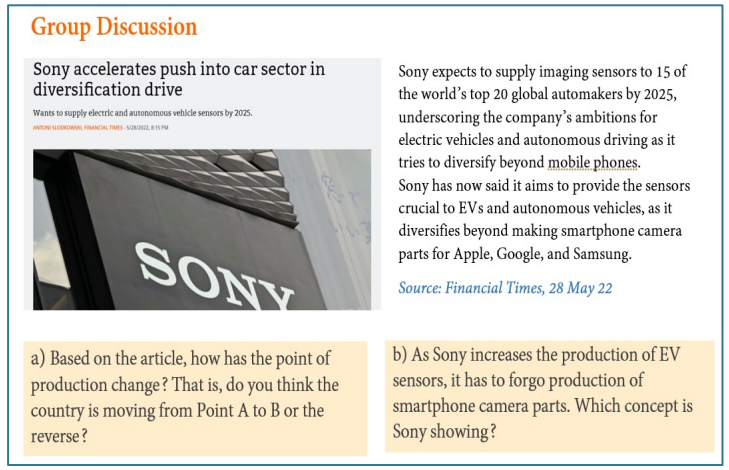
# Integrated Approach - Flipped Learning Meets the 5E Model

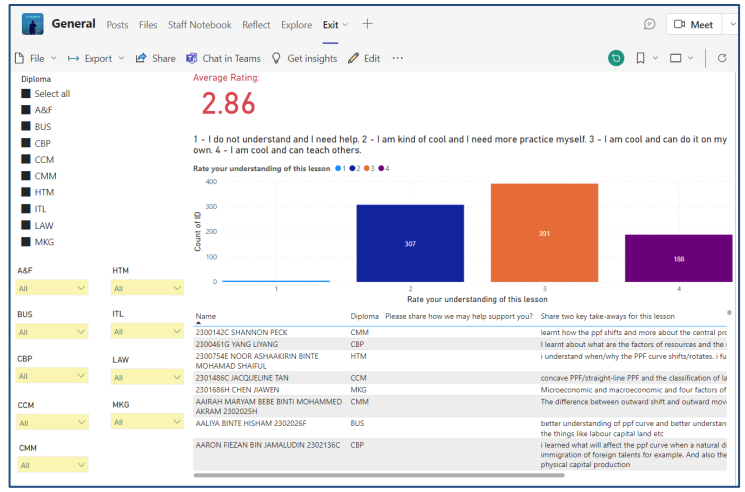
## Collaborative Learning – Relevant and Meaningful Experience

**Face-to-Face Tutorials/ Practical/Studio/Lab Sessions (Group - Application & Analysis**




***Elaborate***
***Redesign Learning Activities***
***Collaborative & Peer Learning, Application & Analysis***





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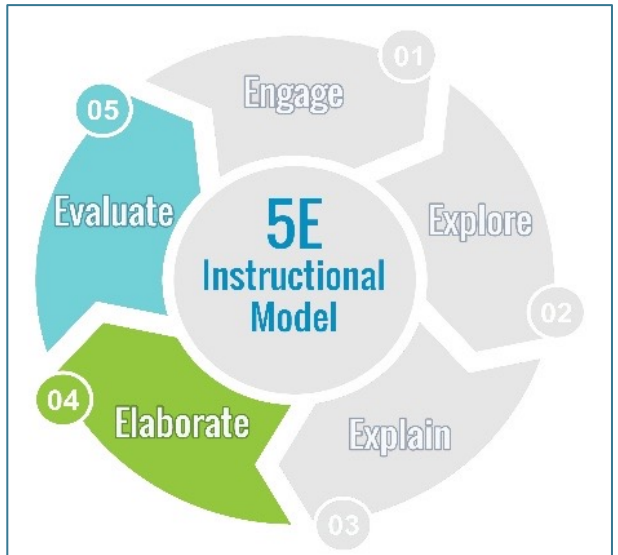


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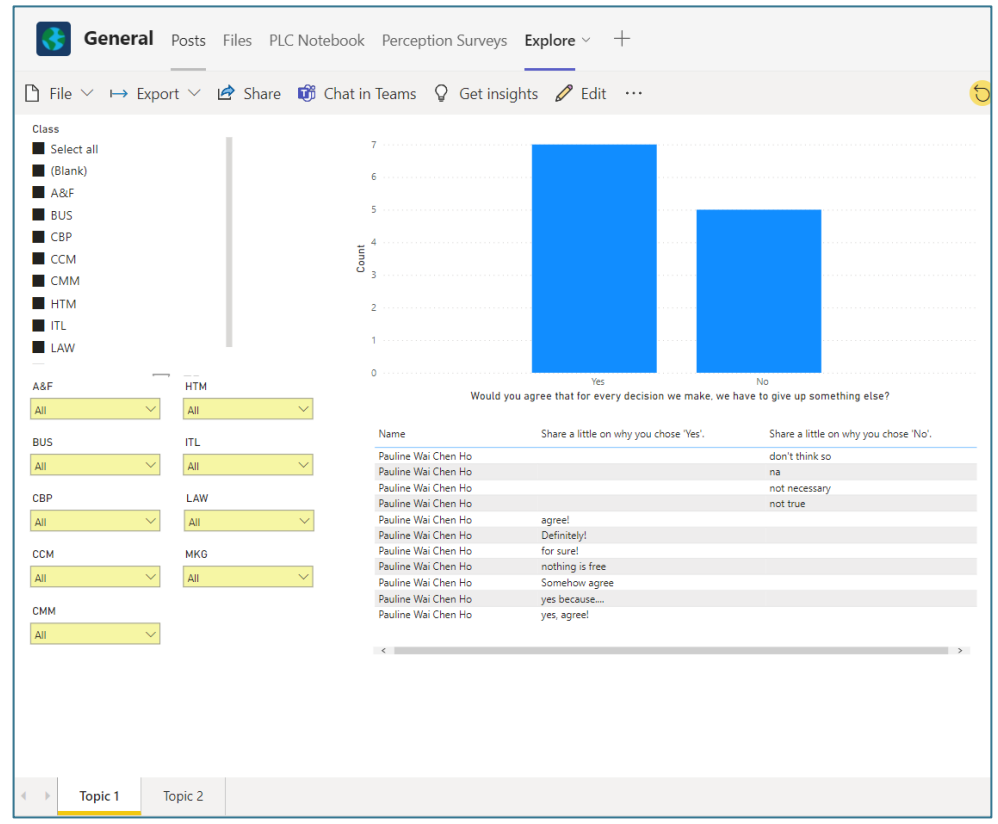


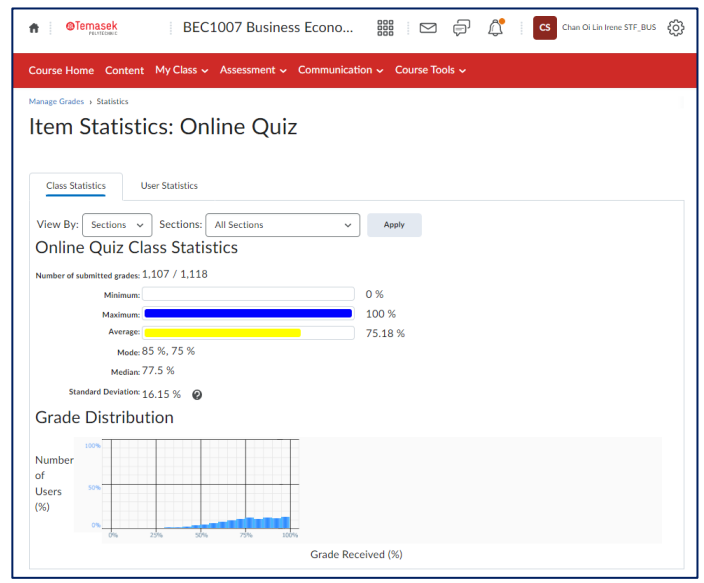


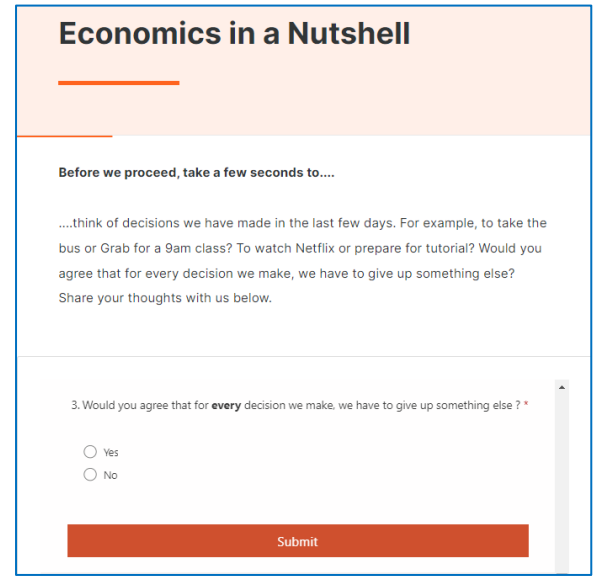

# Research Findings

## Learners' Perceptions of Integrated Approach (Flipped Learning & 5Es) at TP

| Survey Questions | BUS (N=755) Agree or Strongly Agree | ENG (N=123) Agree or Strongly Agree |
|---|---|---|
| 1.The overall structure of this course helped me with my learning. | 97.8% | 97.46% |
| 2. The activities designed online and face-to-face were engaging. | 96.51% | 97.48% |
| 3. The topics for this course were well-organised with each activity having a clear purpose. | 97.79% | 96.52% |
| 4. The pre-class online activities were helpful to my learning. | 96.40% | 94.55% |
| 5. The pre-class online activities gave me greater opportunities for learning independently. | 96.77 | 95.65% |
| 6. The pre-class online activities helped me prepare well for the in-class activities and discussions. | 96.59% | 95.41% |
| 7. The in-class activities helped in deepening my learning of the pre-class content learned. | 97.93% | 98.33% |
| 8. The in-class activities gave me greater opportunity for collaborative learning with my classmates. | 97.06% | 99.19% |
| 9. Meeting the lecturer face-to-face in class gave me an opportunity to clarify doubts I had about the online content. | 98.15% | 98.31% |
| 10. The online and in-class quizzes (ICQ) helped me assess my learning. | 97.84% | 97.27% |

# Flipped Learning & 5E for Adult Learners

**Engage** - Stimulating learners' interest in the topic and emphasising how it is relevant and applicable in real-world industry settings

**Explore** - Actively engage with new topic through activities such as preliminary research or reflective questioning

**Explain** – Learners engage with new content through asynchronous resources like micro-learning units, fostering self-directed learning

**Elaborate** - Authentic, industry-relevant discussions and projects based on concepts learned online focused on fostering deeper learning and active participation

**Evaluate** – Assess and reflect on learning experience

# Flipped Learning & 5E for Adult Learners

## Learning Preferences of Adult Learners

- Constructive and flexible approach to balance myriad responsibilities

## Motivation of Adult Learners

- Prioritises active engagement and relevance through diverse life experiences and perspectives

## Preparing for Lifelong Learning

- Emphasises self-directedness and collaboration, fosters a sense of community and shared learning

# Conclusion and Future Vision

- Integration of Flipped Learning with 5E Model presents a transformative approach that respects the unique challenges and motivations of adult learners.

- Adapting this to adult learning prepares us for a future-oriented learning landscape where adult education is not just imparting knowledge but fostering a lifelong learning mindset and one that values adaptability and continuous learning.

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# Thank You

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