



أساليب التعلم الحديثة في المناهج الجامعية
Modern Learning Methods in University Curricula
From Teaching To Learning: Shaping The Future of Higher Education

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AGENDA

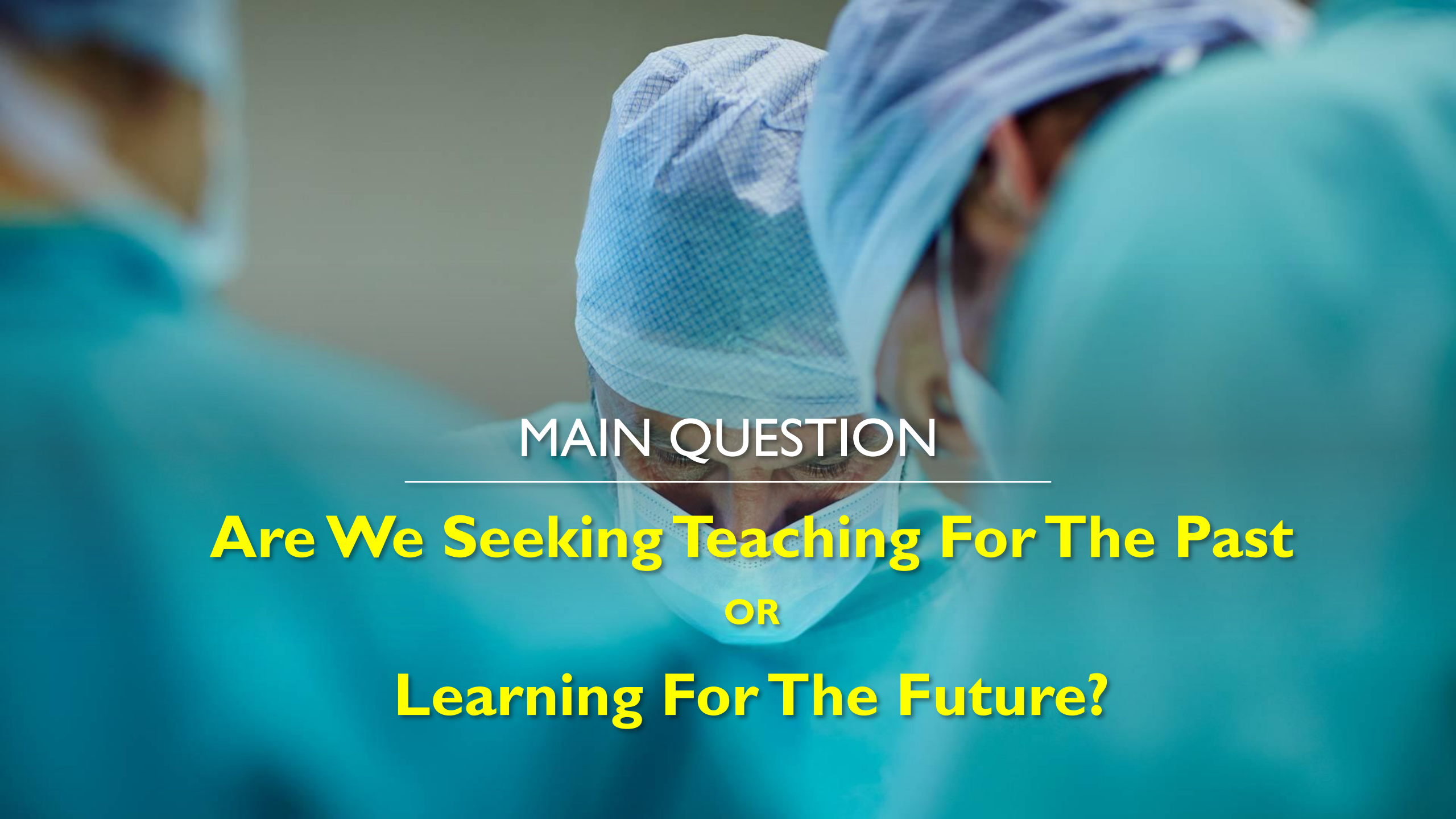
1- Where Is Our Medical Program??

2- Modern Learning Methods

- **Active Learning Methods**
- **Digital & Blended Learning Methods**
- **Collaborative Learning Methods**
- **Personalized & AI-Driven Adaptive Learning Methods**
- **Reflective Experiential Learning Methods**

3- Conclusion & Recommendations





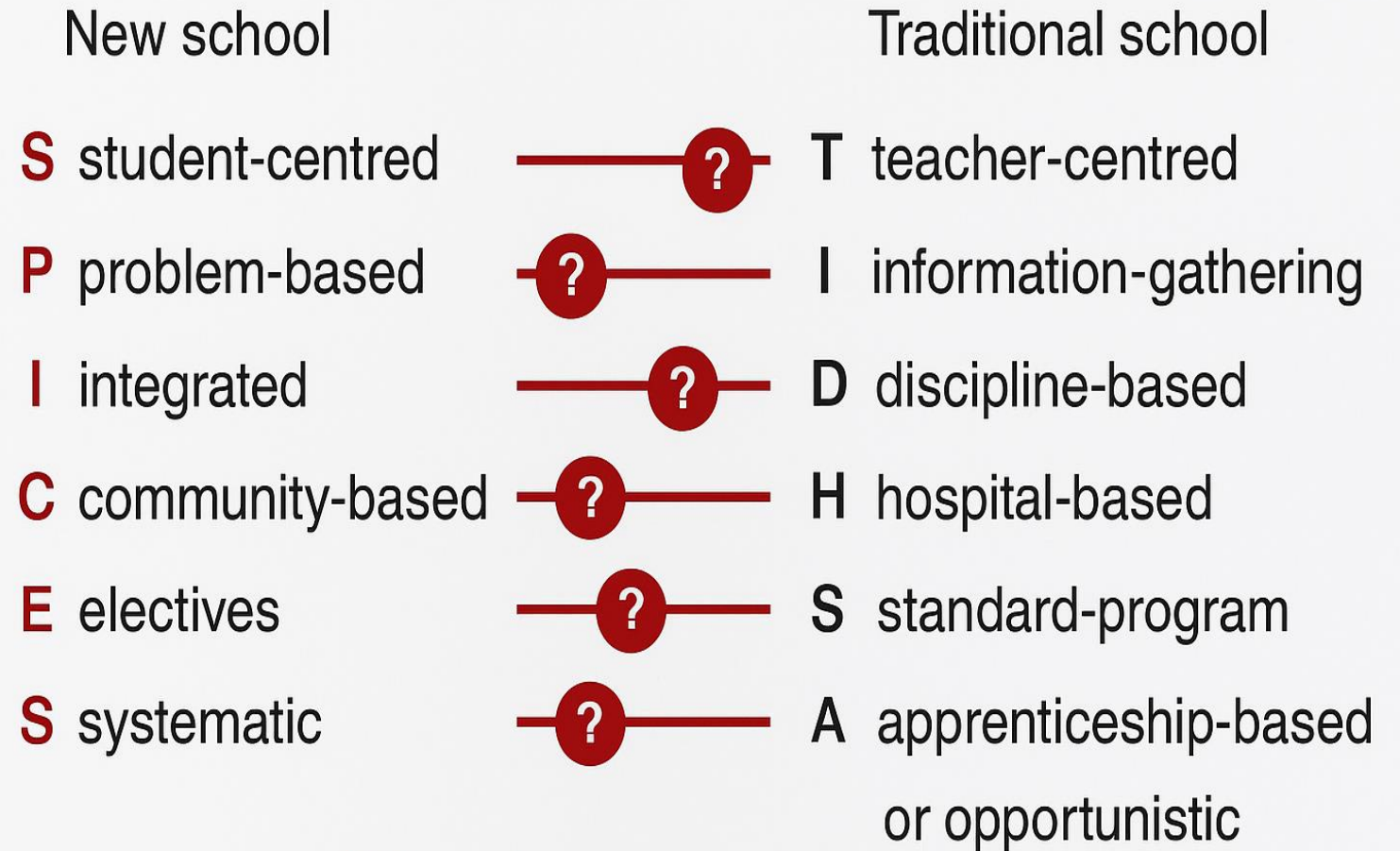
MAIN QUESTION

Are We Seeking Teaching For The Past

OR

Learning For The Future?

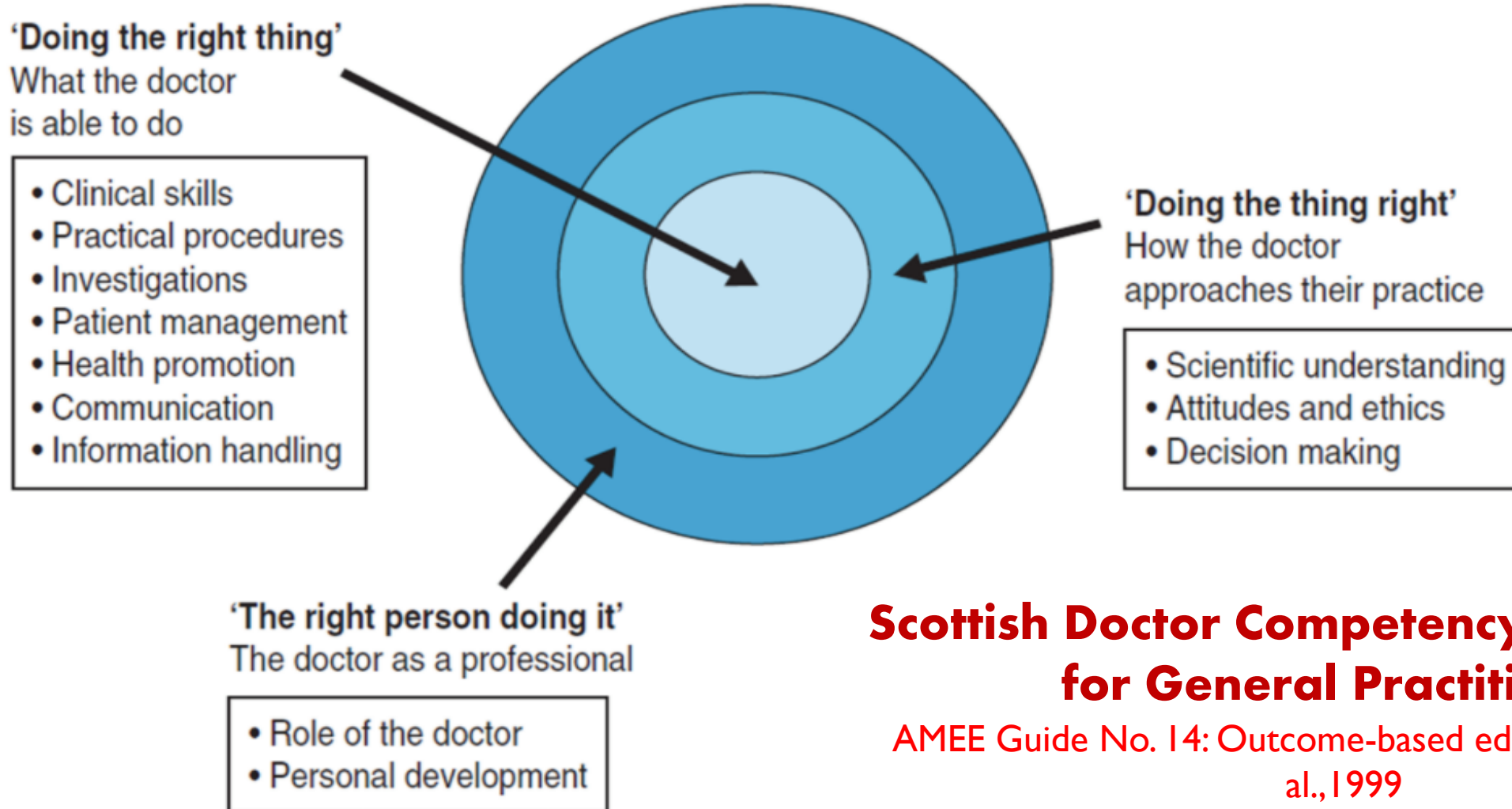
Where Is Our Medical Program??



Where is your program positioned on each issue?

The SPICES continuum. Source: Harden et al (1984).
Educational strategies in curriculum development: the SPICES

“ The right person does the right thing, right “



Scottish Doctor Competency Framework for General Practitioner

AMEE Guide No. 14: Outcome-based education; Harden et al., 1999

The gap: Traditional lecture-centered models vs 21st-Century Clinical, Research, and Teamwork Demands

AI, digital transformation, & lifelong learning are reshaping the skills we need For today.





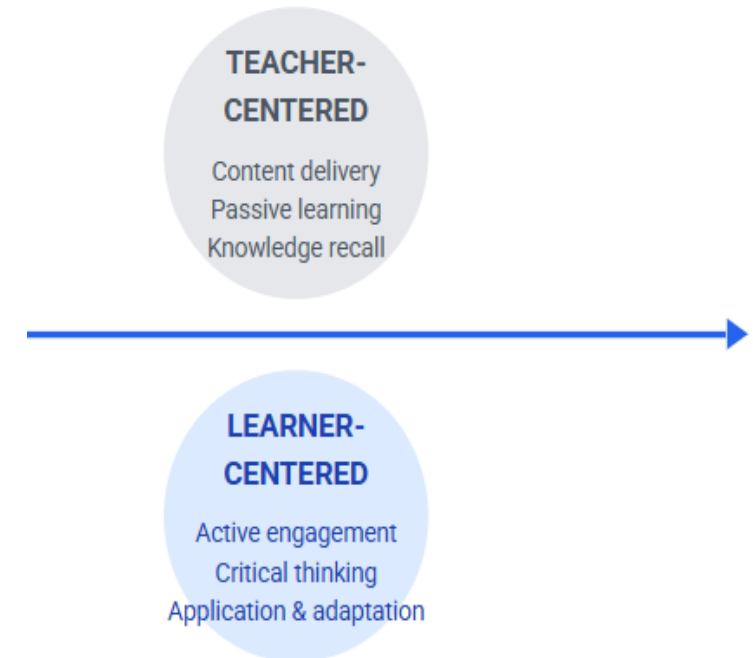
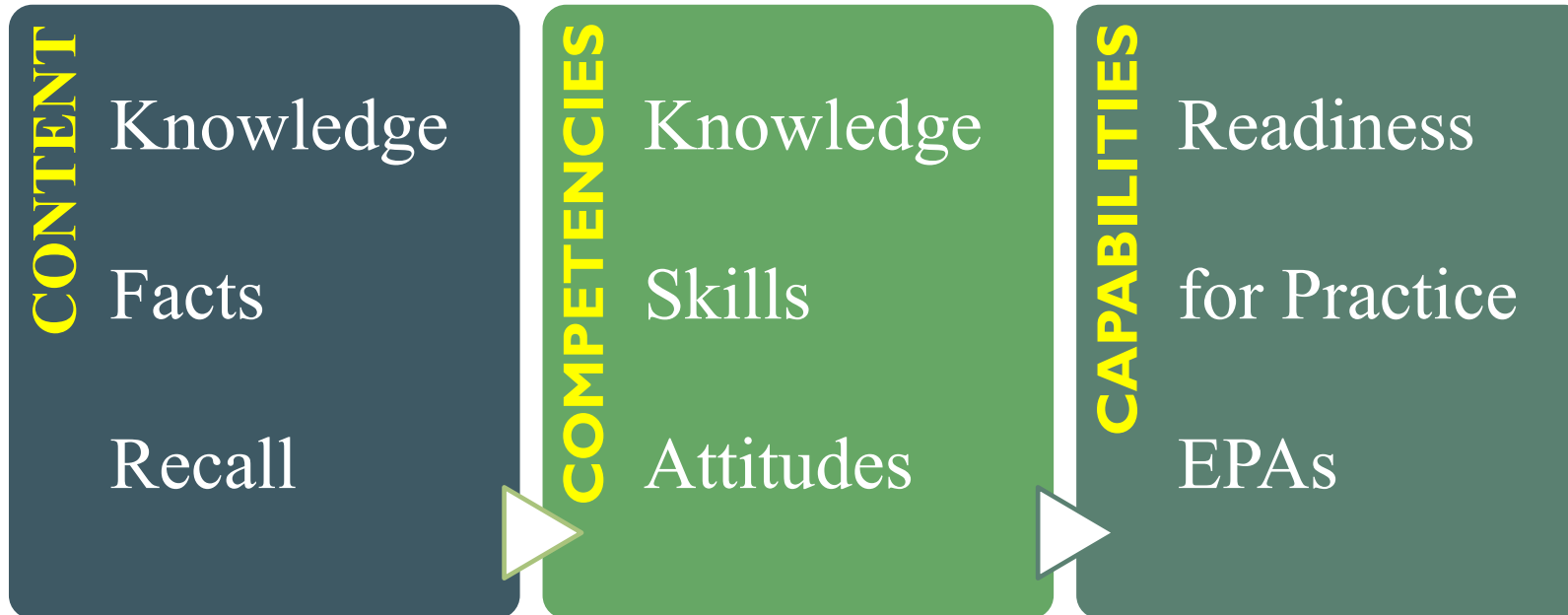
With globally interconnected community.....

Medical Curricula must be reformed to support medical mission with the global prospective and local applications.

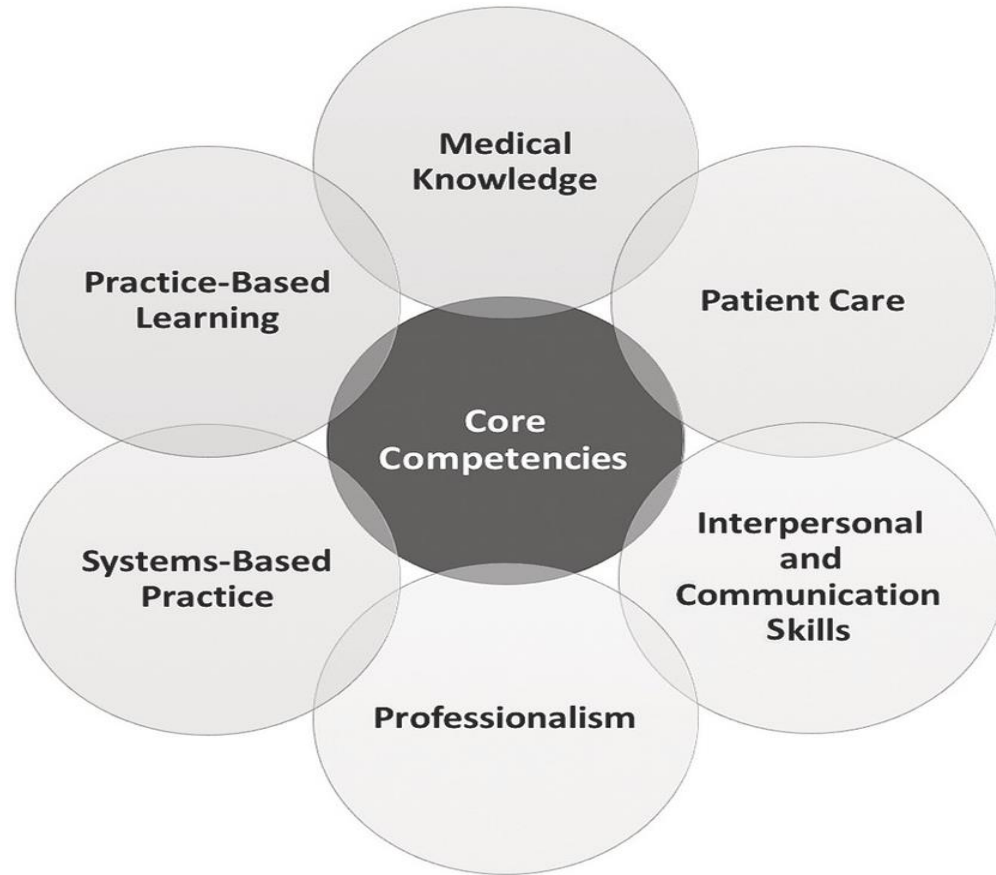
Today; The Goal of Higher Education is
Learning To Learn - Not Just Learning To Know

GLOBAL SHIFT: Teacher-centered → Learner-centered

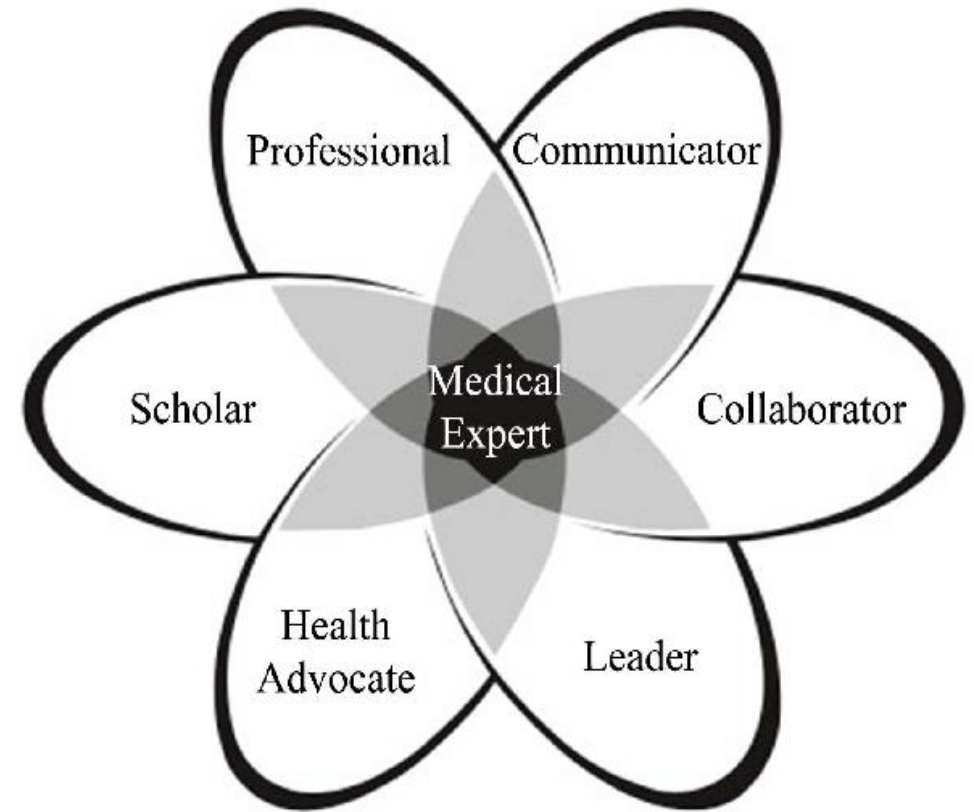
Medical Education Has Evolved From.....



CBME In Practice: Core Components & EPAs



ACGME



CANMEDS



- 1- Problem-Based Learning (**PBL**)
- 2- Case-Based Learning (**CBL**)
- 3- Team-Based Learning (**TBL**)
- 4- Flipped Classroom (**FC**)

1-Virtual
Simulation

2- Massive
Open Online
Courses
(**MOOCs**)

1- Peer Instruction

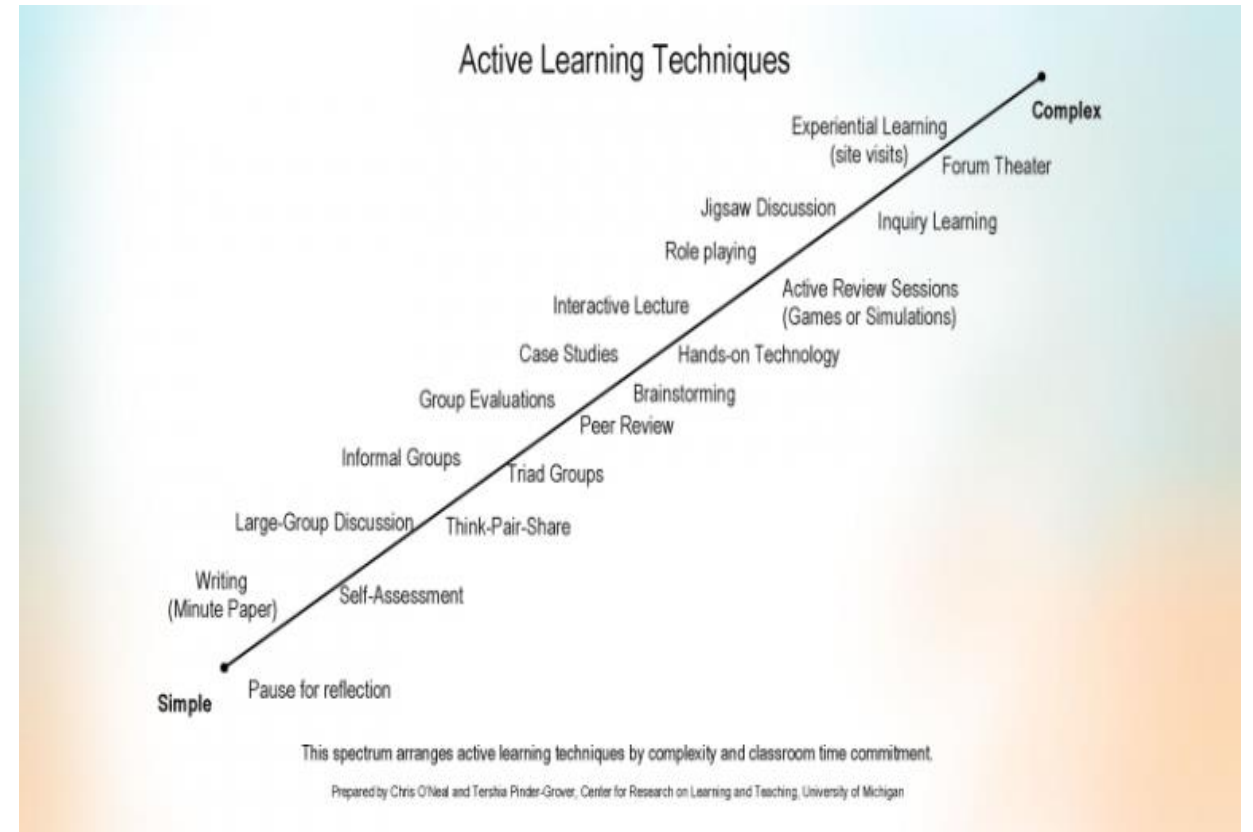
2-Learning Communities

3- Digital Collaboration Tools

- 1- AI-Driven Feedback
- 2- Adaptive Platforms
- 3- Analytics-Informed Coaching

- 1- Clinical based learning
- 2- Simulation based learning
- 3- Community Engagement
- 4- Portfolios

Active Learning Methods



Problem-based Learning (PBL): What The Evidence Shows

“7-jump Process For Structured PBL”

(I)
First Session
“In group”

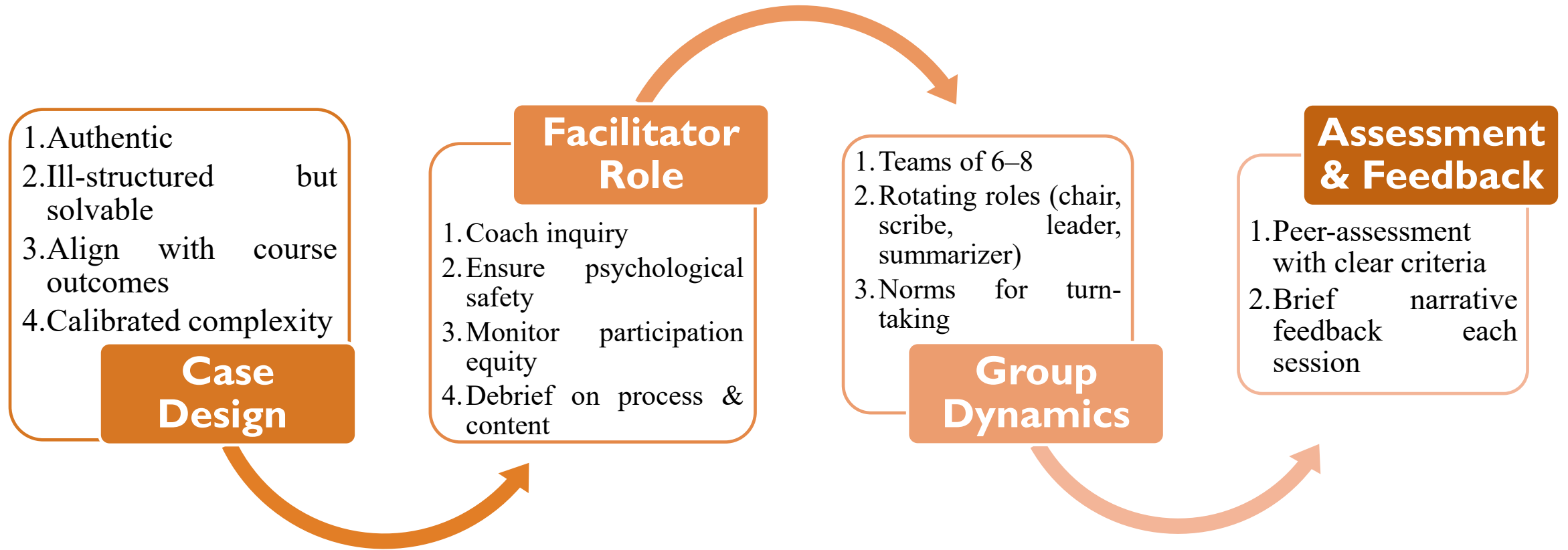
- Terminology
- Defining the problem or the situation
- Hypothesis generation
- Organisation of the hypotheses
- Learning objectives

(II) Independent Study
“Personal”

- Self-directed study

(III)
Second Session
“In group”

- Synthesis and verification of the learning issues



Success Factors

- 1- Early scaffolds to improve scientific thinking in juniors.
- 2- Longer exposure and facilitator efficacy correlate with better knowledge application.

Case-Based Learning (CBL): Evidence and Educational Impact

It is an active learning pedagogy that immerses students in real-world scenarios to foster critical thinking and problem-solving skills, supported by educational research.



Case-Based Learning

Authentic, Complex Cases

- ❖ Real-life scenarios
- ❖ Ill-structured problems
- ❖ Activate Prior Knowledge

Small-Group Collaboration

- ❖ Learners work in groups promoting (Peer learning)
- ❖ They actively construct knowledge through experience & reflection

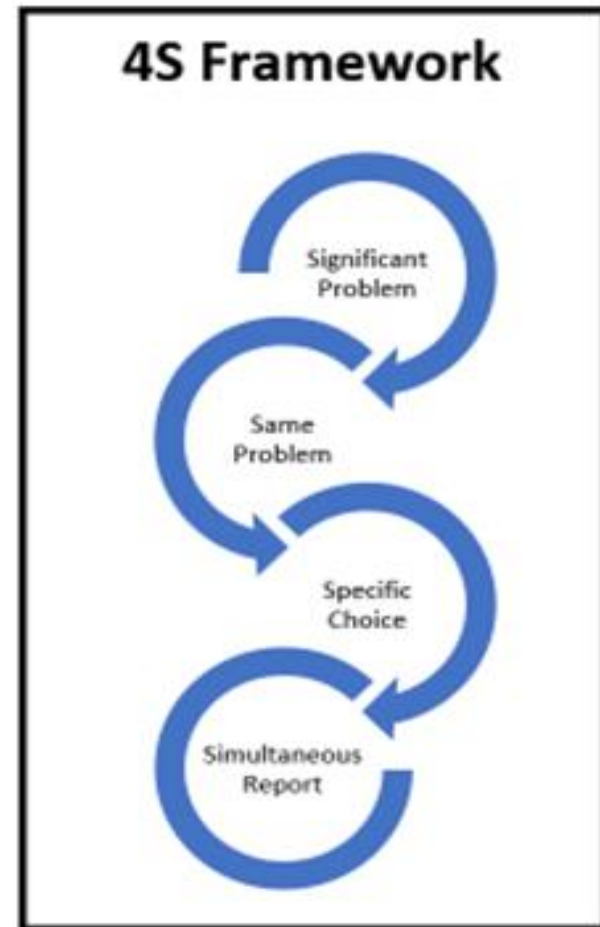
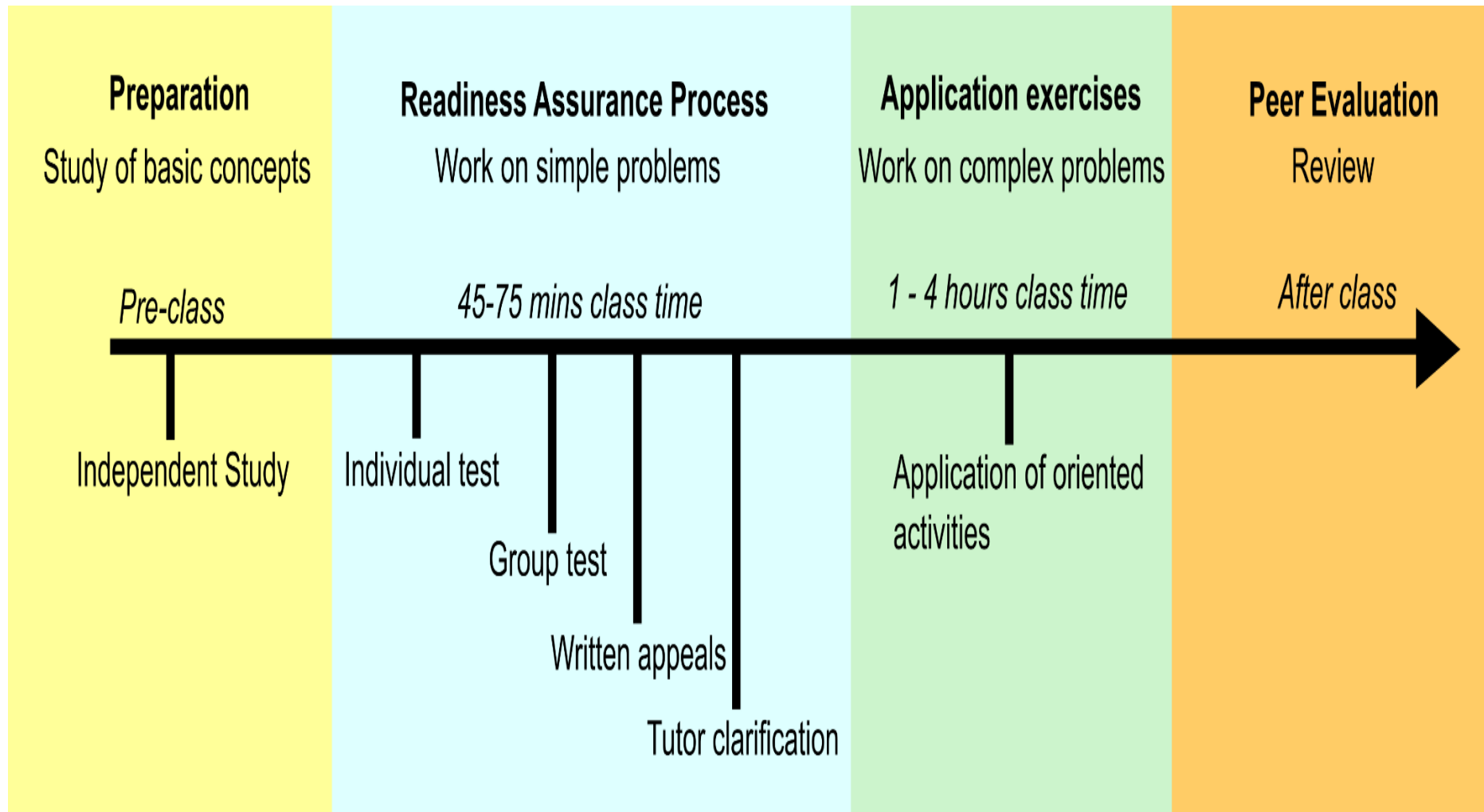
Facilitator Guidance

- ❖ Instructors Only guide discussions, encouraging deeper analysis.

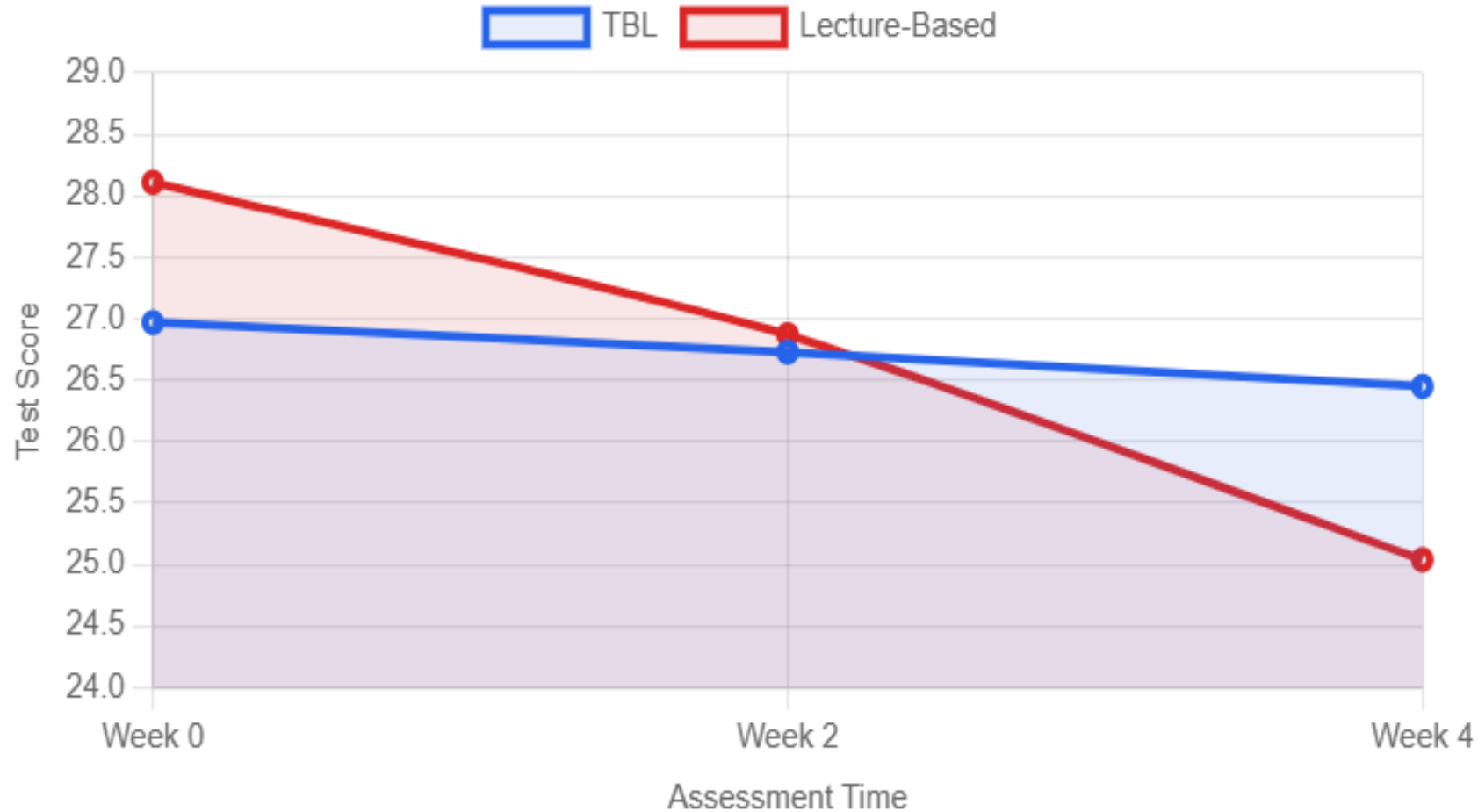
Self-Directed Learning

- ❖ Students identify knowledge gaps and engage in self-directed research to fill them.

Team-Based Learning (TBL): Engagement and Retention



Team-Based Learning (TBL): Engagement and Retention



The effects of implementing Team-Based Learning on student engagement, accountability, satisfaction, and preference for lecture or team-based learning. BMC Medical Education (2017) 17:5. DOI: 10.1186/s12909-016-0843-6

Flipped Classroom: Effects on Knowledge and Satisfaction

Traditional Classroom Learning Approach

Before the Class



The learners come to the classroom based on the topic and schedule given to them.

In the Classroom



The instructor delivers the lecture to the classroom and provides with the study material.

After the Class



The learners are given practice exercises or activities to enhance their learning.

Flipped Classroom Learning Approach

Before the Class



The learners are given study material to read and assimilate the learning content.

In the Classroom



The learners discuss the content with their peers and the instructor.

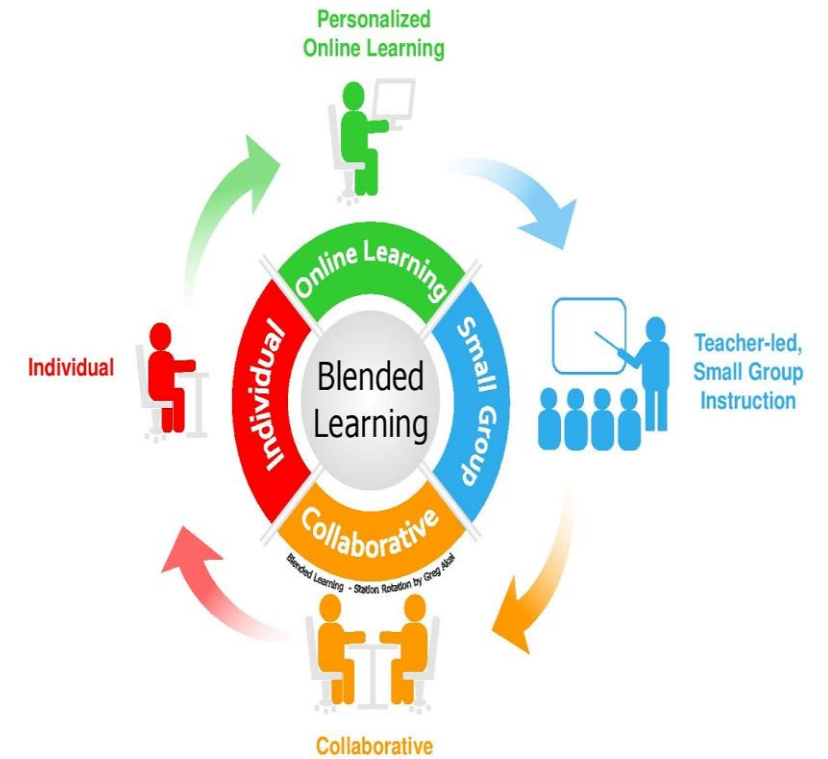
After the Class

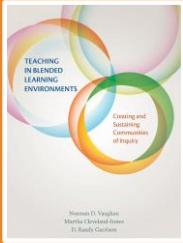


The learners check and confirm their understanding by doing further learning activities.

**** Alignment between pre-class content and in-class Activities**

Digital & Blended Learning Methods

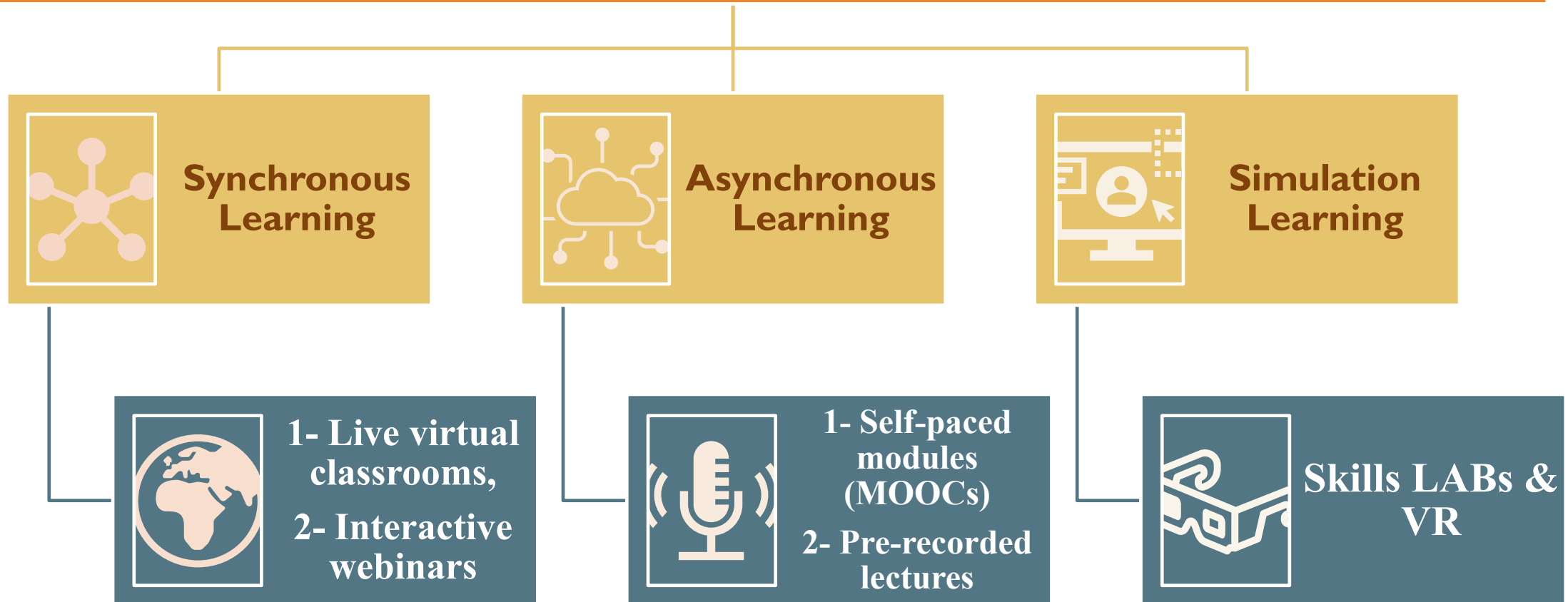




Digital & Blended Learning

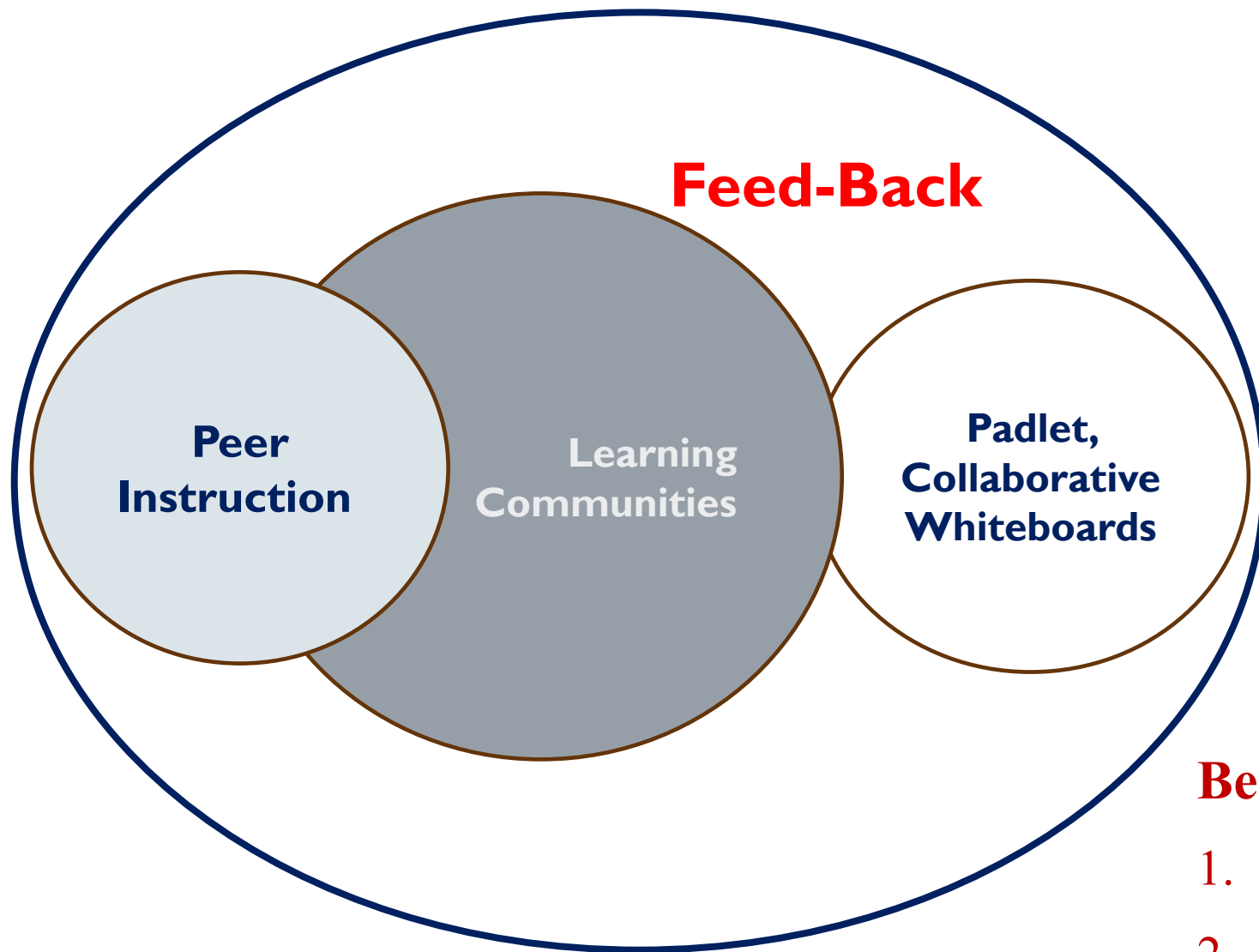
"Simulation is effective for skills acquisition, deliberate practice, and feedback when used with clear learning objectives and faculty development."

AMEE Guide No. 82 (Motola et al., 2013)



Collaborative Learning Methods

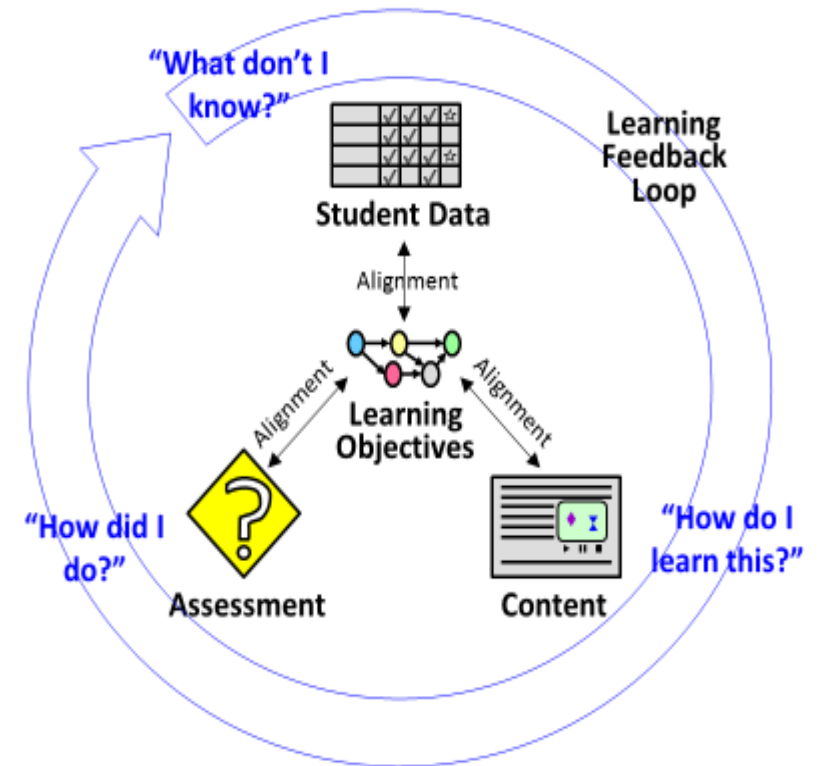




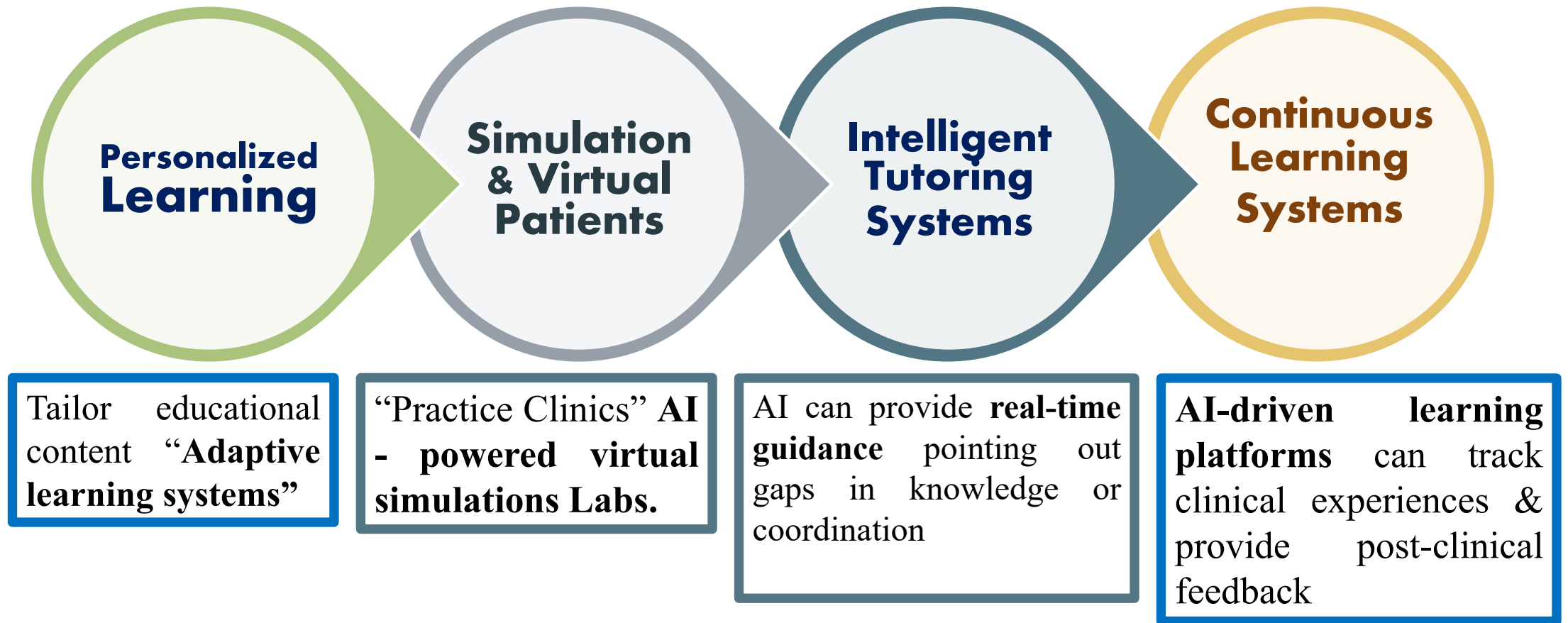
Benefits

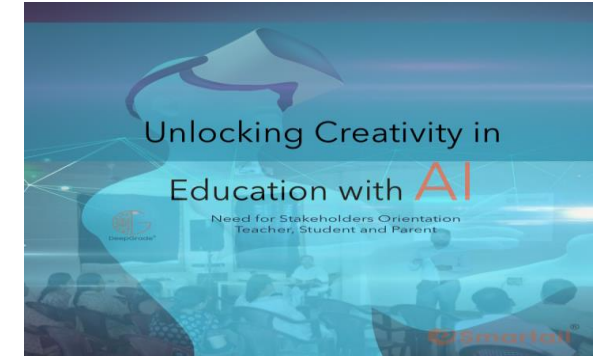
1. Enhanced communication skills
2. Social accountability & Professional Responsibility

Personalized & AI-Driven Adaptive Learning Methods



AI As a Learning Catalyst





AI tools can **integrate input from multiple HPs** & offer recommendations care plans

Natural Language Processing (NLP) tools highlight communication breakdowns or suggest improvements in care coordination.

AI can **assist in assessing soft skills** like teamwork, empathy & communication using tools like sentiment analysis and behavioral tracking in simulations

The Future is AI Collaborative

However, **Human Oversight is Crucial**

Expertise of medical educators can enhance the quality,
diversity, and relevance of AI tools.

Reflective Experiential Learning Methods

Reflective Thinking



Clinical Based Learning

Simulation Based
Learning

Community Engagement

Experience

Reflection

Portfolio

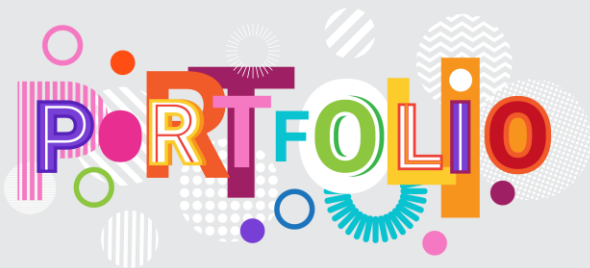


Figure 1: Gibbs' reflective cycle

Future-Ready Universities In The Arab World: Recommendations

1-

- **Build learning ecosystems:** integrative curricula, portfolios, for achieving EPA

2-

- **Faculty development priorities:** Active learning strategies, AI literacy

3-

- **Embed digital literacy & AI readiness across Medical programs**

4-

- **Scale interprofessional, interdisciplinary learning and innovative learning**

Take-home Message

Modern learning strategies are not about technology alone

*They are about **Transforming** mindsets, **Empowering** learners, and **Re-imagining** Universities as engines of future-ready Competences.*

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THANK YOU

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