

### MEF Project: UMP-Yonsei Collaboration Supported by KOICA Item Bank Establishing Project(IBEP) at UMP-HCMC *Why, what, and how do we?*

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\*IBEP: Iterm Bank Establishment Project







# An Epochal Change to an Integrated and competency-based ME Curriculum

# Transforming medical education to strengthen the health professional training in Viet Nam: A case study

Tuan D. Tran,<sup>a,1</sup>\* Phuc M. Vu,<sup>a</sup> Hong T.M. Pham,<sup>a</sup> Luan N. Au,<sup>a</sup> Hung P. Do,<sup>a</sup> Hoa T.T. Doan,<sup>a</sup> Nghia Huynh,<sup>a</sup> Quynh T.V. Huynh,<sup>a</sup> Bao K. Le,<sup>a</sup> Dat Q. Ngo,<sup>a</sup> Hanh T.M. Nguyen,<sup>a</sup> Khanh D. Nguyen,<sup>a</sup> Nghia A. Nguyen,<sup>a</sup> Phong H. Nguyen,<sup>a</sup> Tuan A. Nguyen,<sup>a</sup> Thang C. Tran,<sup>a</sup> Hoa N. Chau,<sup>a</sup> Lan N. Vuong,<sup>a</sup> and Nu V. Vu<sup>b,1</sup>

<sup>a</sup>University of Medicine and Pharmacy at Ho Chi Minh City, Ho Chi Minh City, Viet Nam <sup>b</sup>Unit of Development and Research in Medical Education, University of Geneva Faculty of Medicine, Geneva, Switzerland

### **Summary**

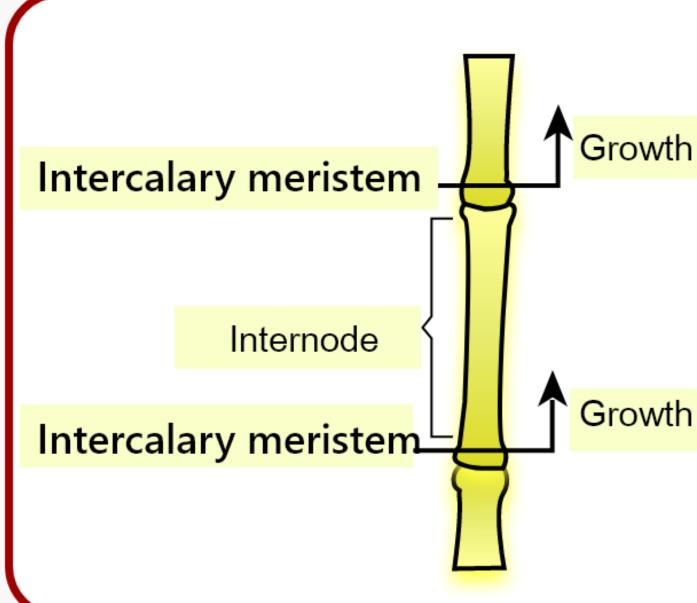
The competency-based undergraduate curriculum reform at the University of Medicine and Pharmacy at Ho Chi Minh City, Faculty of Medicine (UMP-FM) is detailed and reviewed in reference to the instructional and institutional reforms, and enabling actions recommended by the Lancet 2010 Commission for Health Professional Education. Key objectives are to: revise the overall 6-year curriculum to be more integrated and competency-based; reinforce students' knowledge application, problem-solving, clinical competence, self-directed learning and soft skills; develop a comprehensive and performance-based student assessment programme; and establish a comprehensive quality monitoring programme to facilitate changes and improvements. New features include early introduction to the practice of medicine, family- and community-based medicine, professionalism, interprofessional education, electives experiences, and a scholarly project. Institutional reform introduces a faculty development programme, joint planning mechanism, a "culture of critical inquiry", and a transparent faculty reward system. Lessons learnt from the curriculum reform at UMP-FM could be helpful to medical schools from low- and middle-income countries considering transitioning from a traditional to a competency-based curriculum.





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## Intercalary meristem







# **Wonderful Accomplishment: Curricular Reformation**

### Summary

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<ul> <li>Competency-based Learning</li> </ul>
= mastery learning(how to teach)
<ul> <li>Individualized</li> </ul>
= different preferences and needs
(what to teach)
= different learning styles
(how to learn)
<ul> <li>Respecting the learners</li> </ul>
= to let learners play active roles

- Excelling at learning Intrinsic motivation
- Experience-based learning
- Role of teacher
  - = from the sage on the stage to the guide on the side

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Intrinsic motivation	
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= from the sage on the stage	• A
to the guide on the side	



o our students have a chance to make up? **Remediation policy** o our students have a chance to choose? **Elective courses policy** 

**So our students have a chance to have varied teaching styles? Teaching and Learning Design** o our students have a chance to join in the planning and valuating process?

re we ready to change ourselves?





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# **Active Learning**

Flipped Learning/Team-based Learning
 = Provision of necessary resources



- Transformation of learners
   *from passive listeners to active problem-solvers*
- Much better educational outcome
- Learning Behaviors as a lifelong learner





# **Active Learning**



- More fun & Retainable
- Assessment for learning
- Accurate Assessment of Competencies
  - = Development of an accurate assessment system

Medical Education for the Future

**Research Project 2** 







# What has UMP-HCMC done after Curricular Transformation?

### Transforming medical education to strengthen the health professional training in Viet Nam: A case study

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## • Graduation Examination in 2022 → Confirmation of the student's graduation competencies → Policy decisions to determine the student's career path

## What would be the appropriate level of difficulty for the graduation exam according to UMP?

- CBME
- 2022, The 1st Cohort of CBME
- 2022, Change of

**UMP-HCMC Graduation Examination** 

the 1st Round of the New GEx

'Good' Physicians (Outcome)

**Expected Competencies** 

**Knowledge-Skills-Attitude** 





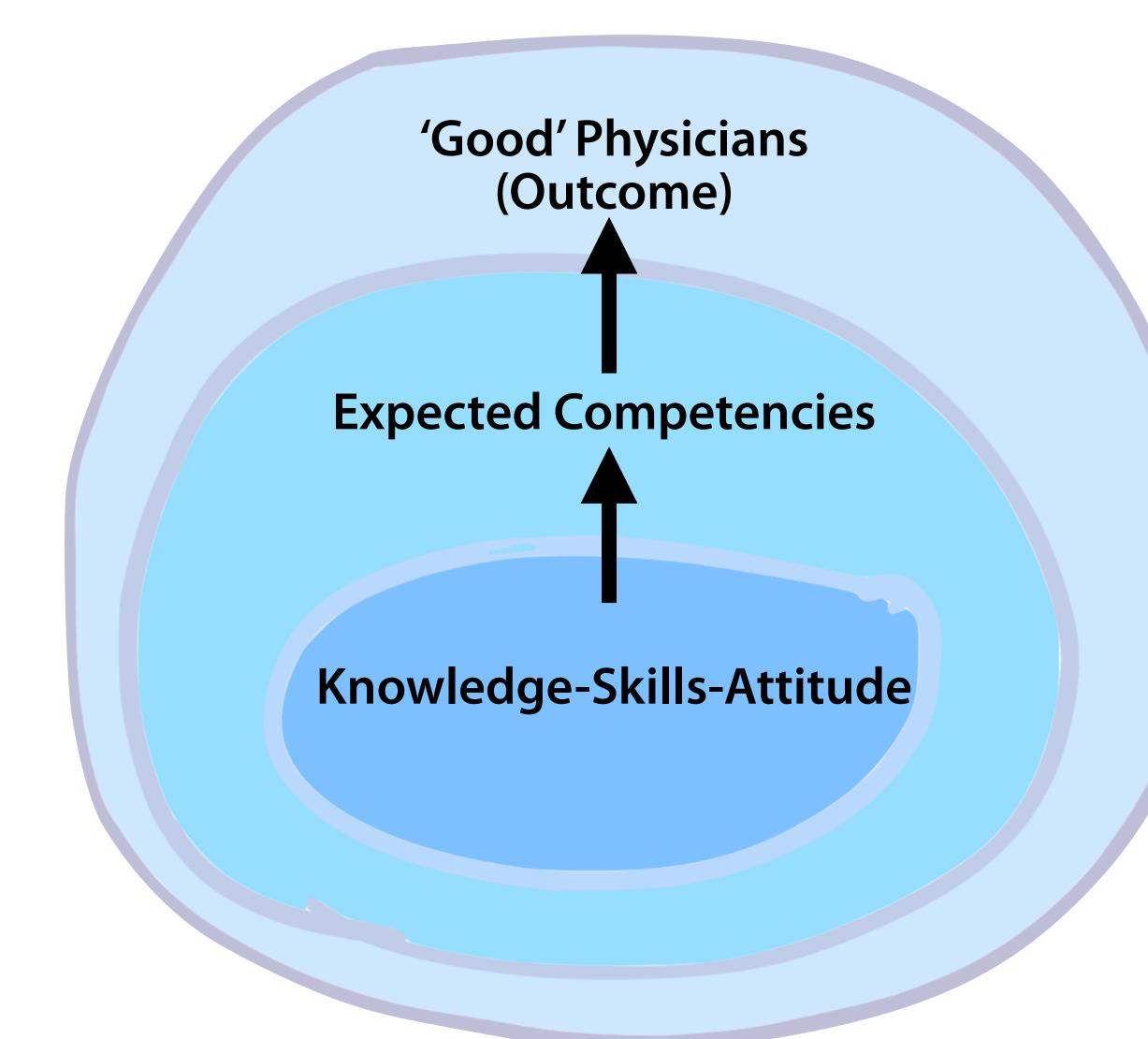
- to optimize the capabilities of all learners & practitioners by providing motivation and direction for future learning,
- to protect the public by identifying incompetent physicians,
- and to provide a basis for choosing applicants for advanced training Ronald M. Epstein. Assessment in Medical Education. NEJM 2007;356:387-96







# **Goal of Evaluation & Assessment**



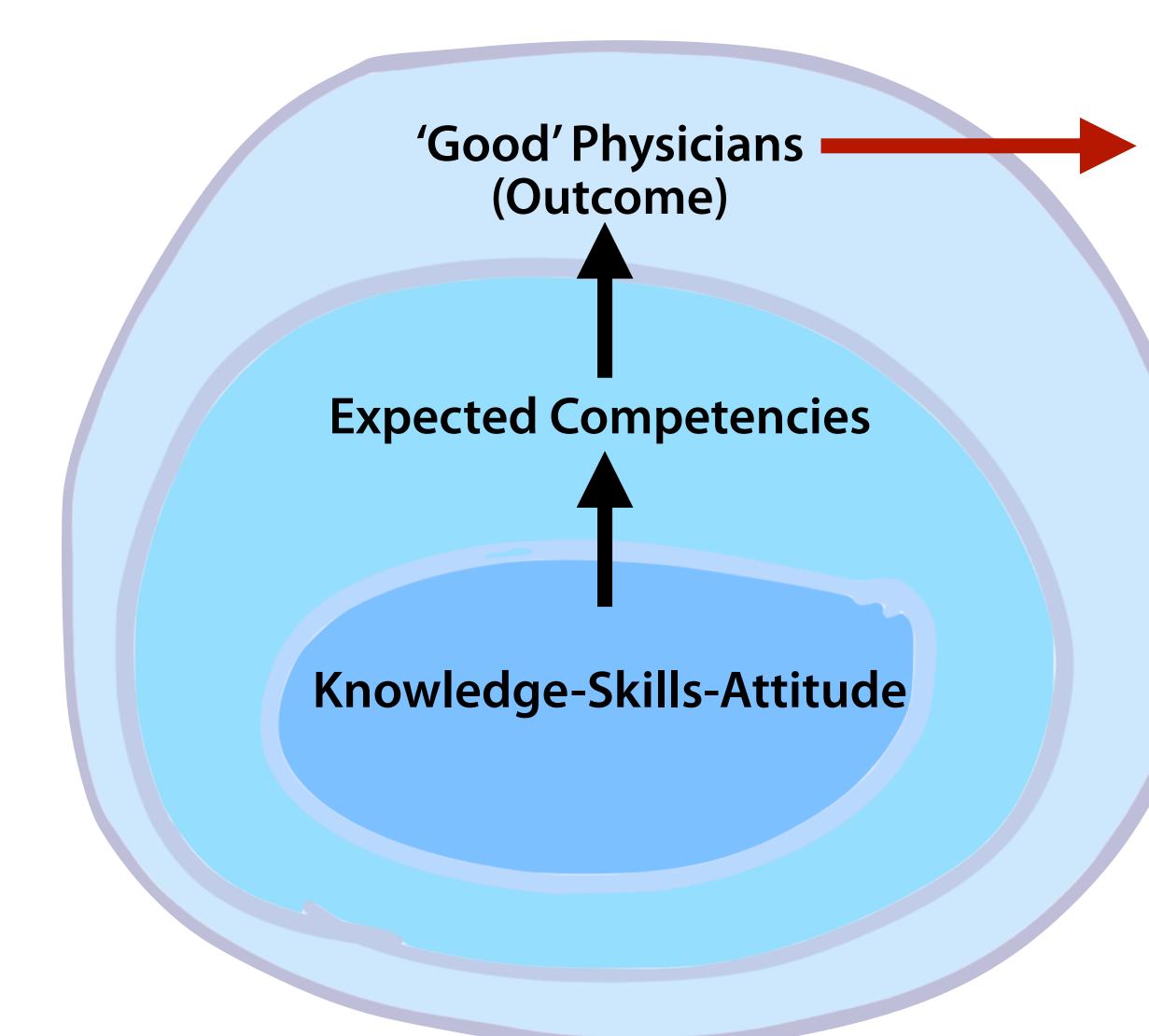


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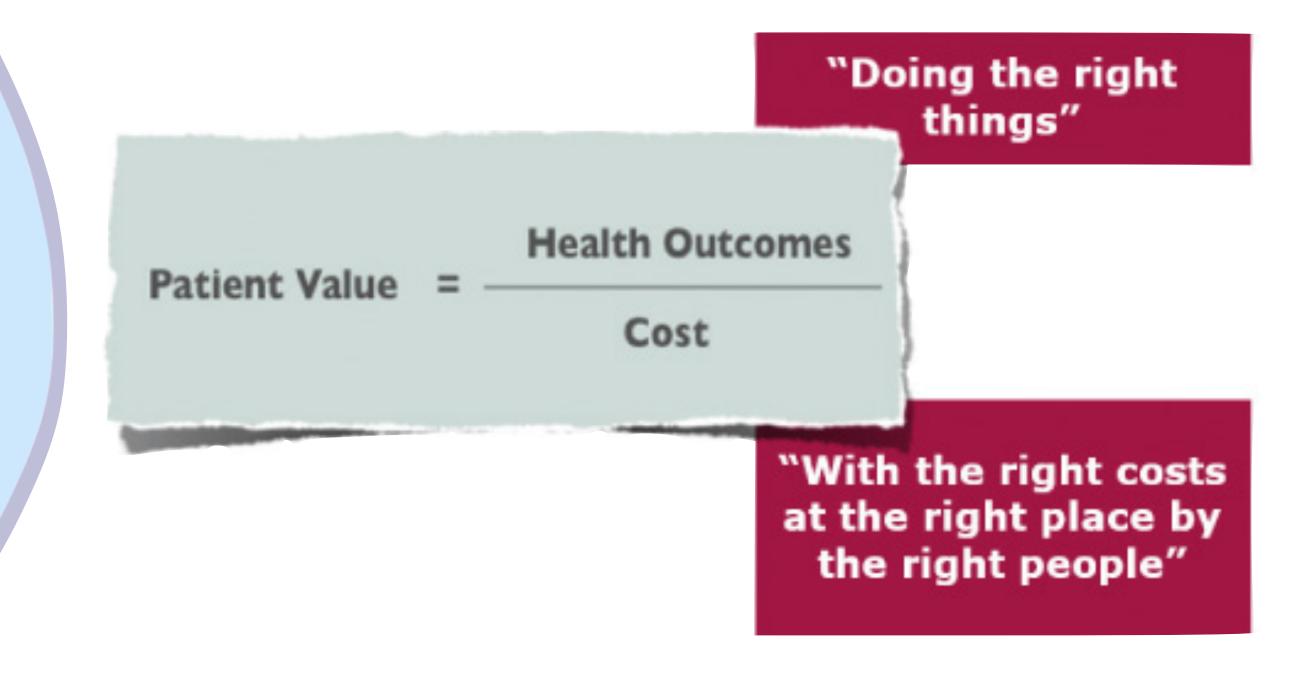


# **Dimension of Evaluation & Assessment**



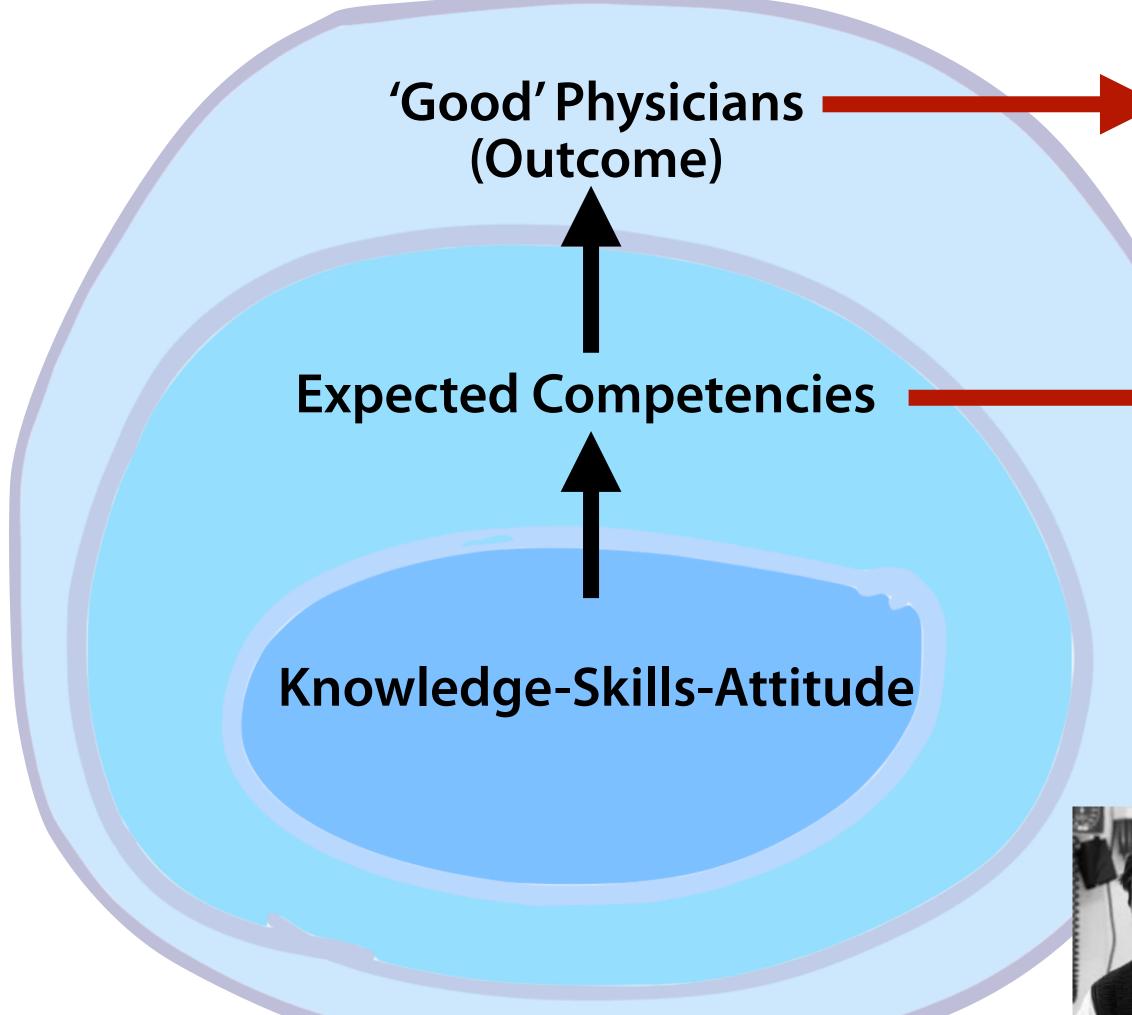


### 'Better' Outcomes of Patients Value-based Medicine





# **Dimension of Evaluation & Assessment**





### 'Good or Better' Outcomes of Patients Value-based Medicine

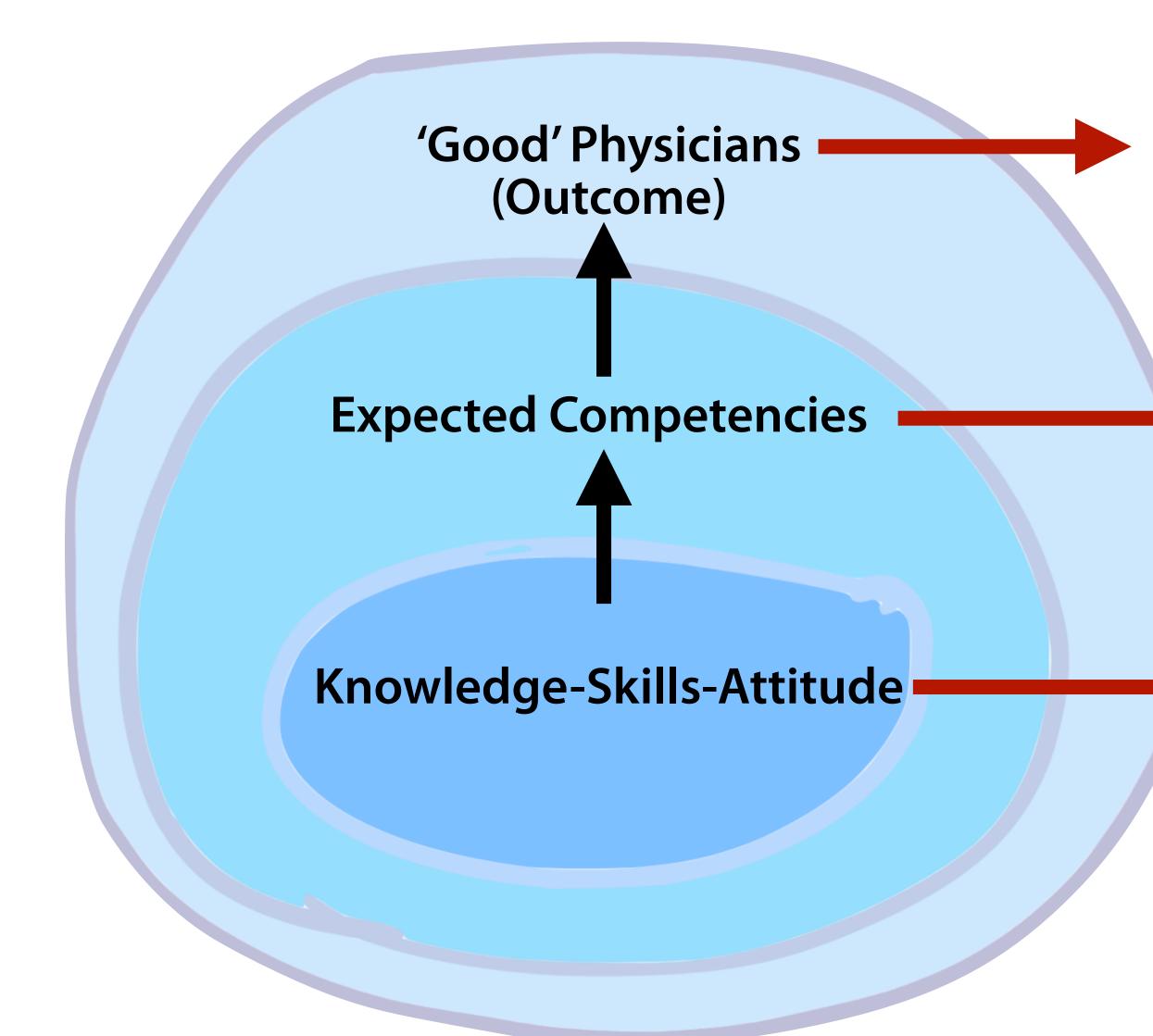
# To Be Confirmed in Real Situations

the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individuals and communities being served. ... **Competence is not an achievement** but rather a habit of lifelong learning. Competence is contextual. Competence is also developmental. Ronald M. Epstein. Assessment in Medical Education. NEJM 2007;356:387-96.





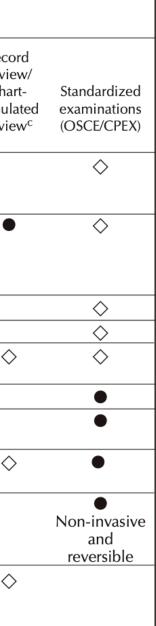
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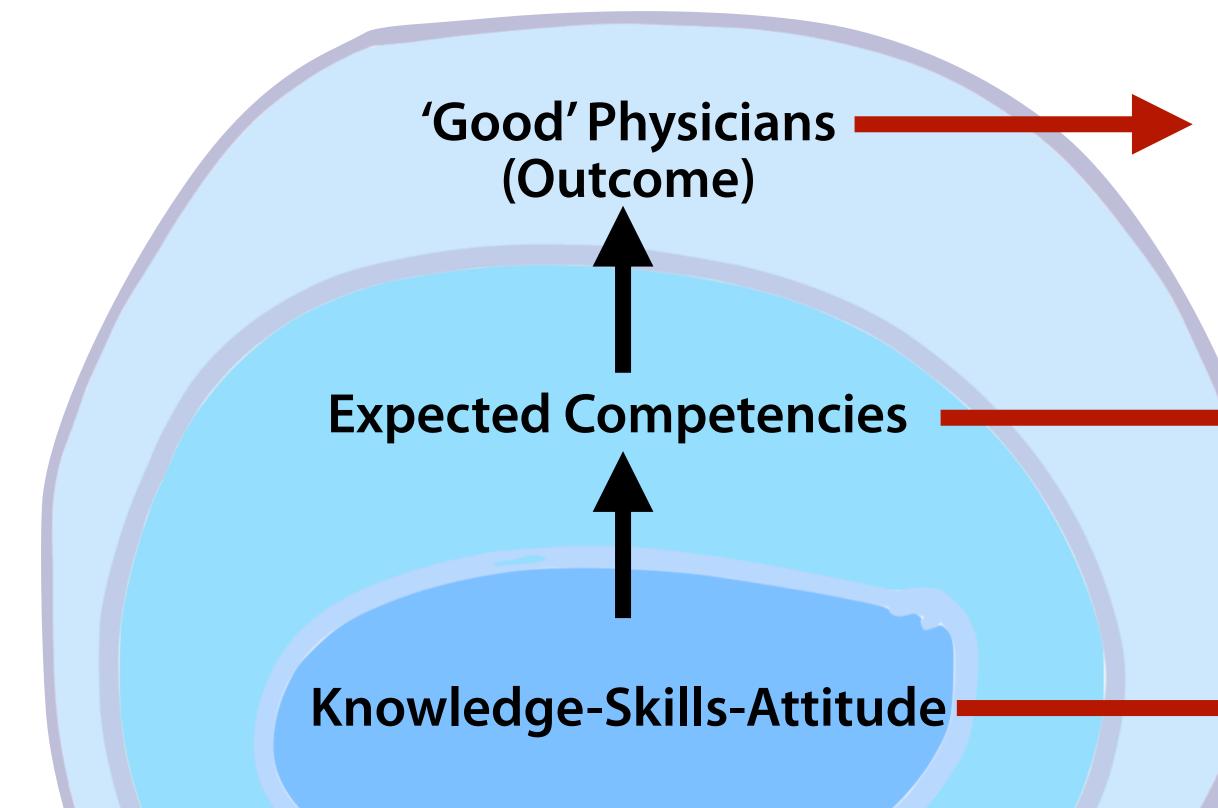


## **Proxy, Benchmarks** *at Med. Schools to predict competencies* & Outcomes *at Communities*

		◆ Blank	Good,	mended but may have nsidered optir		
Domains	MCQ	Essay	Oral (verbal) exam	Single encounter direct observation by faculty <sup>a</sup>	Longitudinal assessment by faculty across many domains <sup>b</sup>	Reco revie cha stimul revie
Biomedical knowledge (recall and recognition level of cognition)	•	$\diamond$	$\diamond$			
Problem assessment	♦ Case- based MCQ	٠	•	$\diamond$	$\diamond$	
Professional behavior			$\diamond$	$\diamond$	٠	
Personal qualities				$\diamond$	٠	
Concern for patient's well-being				•	$\diamond$	$\diamond$
Patient examination skills				۲	$\diamond$	
Patient interviewing and communication skills				٠	$\diamond$	
Ordering/interpreting diagnostic (lab) tests	$\diamond$	•	•	$\diamond$	$\diamond$	$\diamond$
Performing technical procedures				•	$\diamond$	
Resource use and functioning within health care system					•	¢



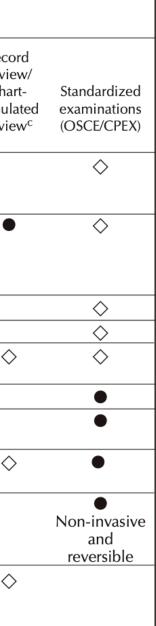
# Every test is a proxy of reality.



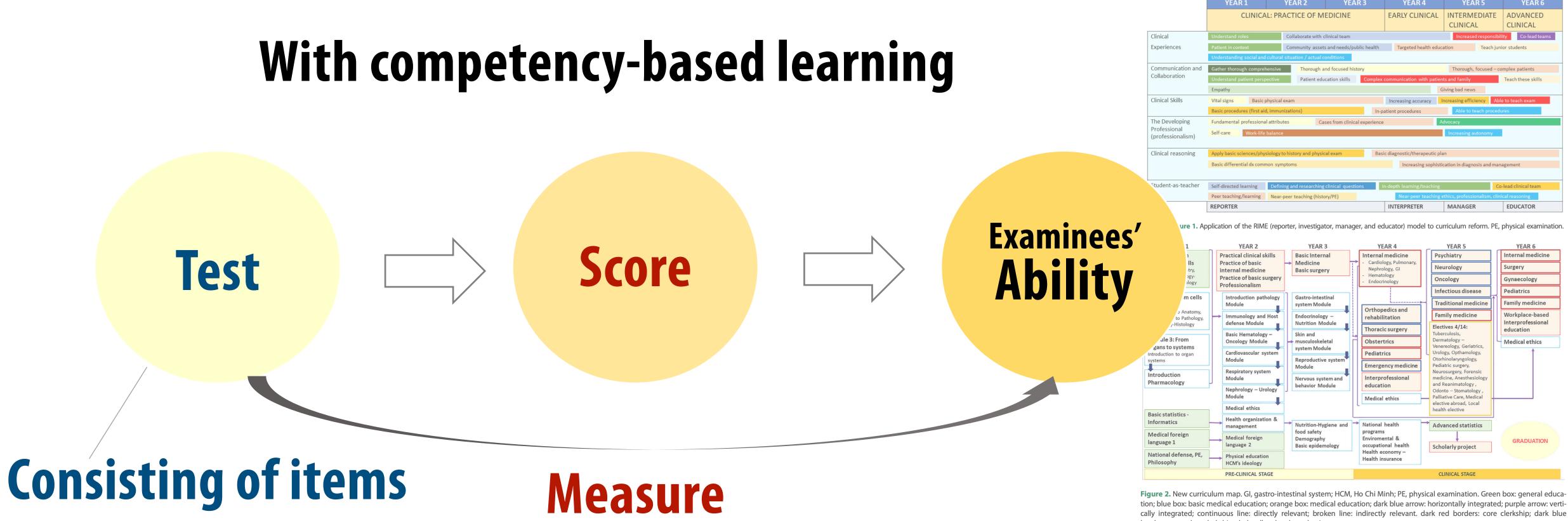
## Examinee's latent traits(ability) are not directly measurable!

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Performing technical procedures				•	$\diamond$	
Resource use and functioning within health care system					•	\$



# Why does UMP-HCMC need to have 'good' tests?



YONSEI UNIVERSITY OLLEGE OF MEDICINE

### Why does the examinee take tests? Why should test developers make reliable and valid tests? Why should item writers make high-quality items?

borders: secondary clerkship; dark yellow borders: electives.

YEAR	6
Internal m	edicine
Surgery	
Gynaecolo	уgy
Pediatrics	
Family me	dicine
Workplace Interprofe education	essional
Medical e	thics
	*



Global Leader

# Why does UMP-HCMC need to have 'good' tests?

Why does the examinee take tests? Why should test developers make reliable and valid tests? Why should item writers make high-quality items?

Mid-term exam **Final exam** Quiz

**KMLE** USMLE MCAT GAMSAT UCAT

Classroom-level test

- Standardized test:
- Standardized test is

a test where all procedures and methods are standardized to ensure consistent administration, scoring, and interpretation of results

a time-consuming, high-stakes and advanced task



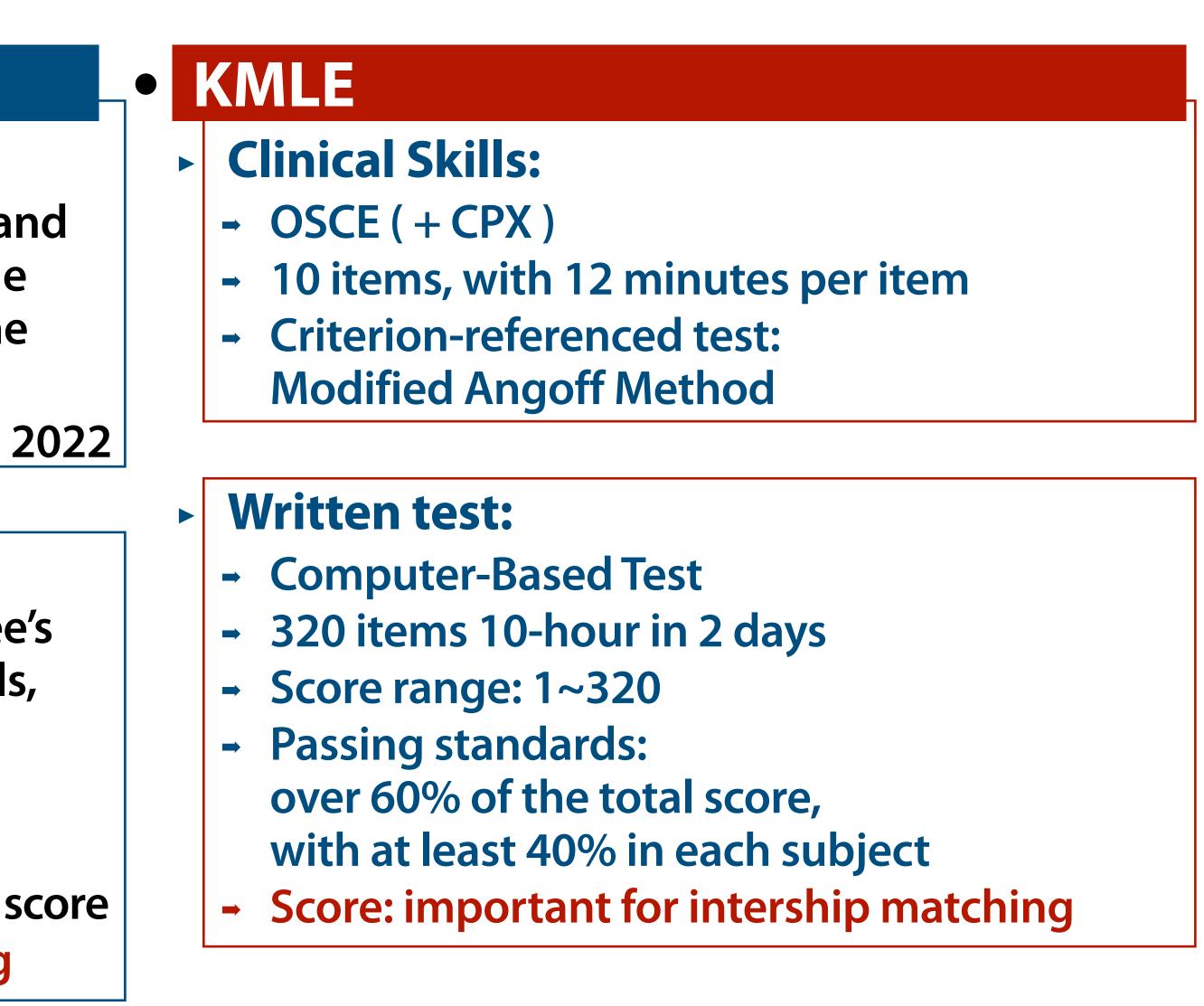
# Medical Licensing Examination as a Standard Test

### • USMLE

- ► **STEP 1:** 
  - Determine whether examinees understand and can apply important concepts of the sciences basic to the practice of medicine
  - 280 items over an 8-hour a day
  - Criterion-referenced test: Pass/Fail since 2022

### • **STEP 2:**

- Clinical Knowledge Measure of examinee's ability to apply medical knowledge, skills, and understanding of clinical science
- 318 items over an 9-hour in a day
- Score range: 1~300
- Passing standards: over 60% of the total score
- Score: important for residency matching





# The Path We've Taken for IBEP

### Transforming medical education to strengthen the health professional training in Viet Nam: A case study

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the 1st Round of the New GEx

2023



2022

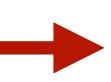
# **VMLE in 2027**

### Vietnam Medical Licensing Examination as a Confirmed National Agenda:

 National Item Bank Establishment Experts for VMLE preparation, execution and QA Last but not least: Money, Places

the 2nd Round of the New GEx





KMLE or USMLE score has a significant impact on career path, therefore, the test should be Reliable and Valid!

### **Reliability:** Consistency of a test(assessment). A reliable test consistently produces the same results under the same conditions.

### Validity: Accuracy of a test measuring what it is intended to measure A valid test ensures that the results are an accurate reflection of the dimension undergoing assessment.







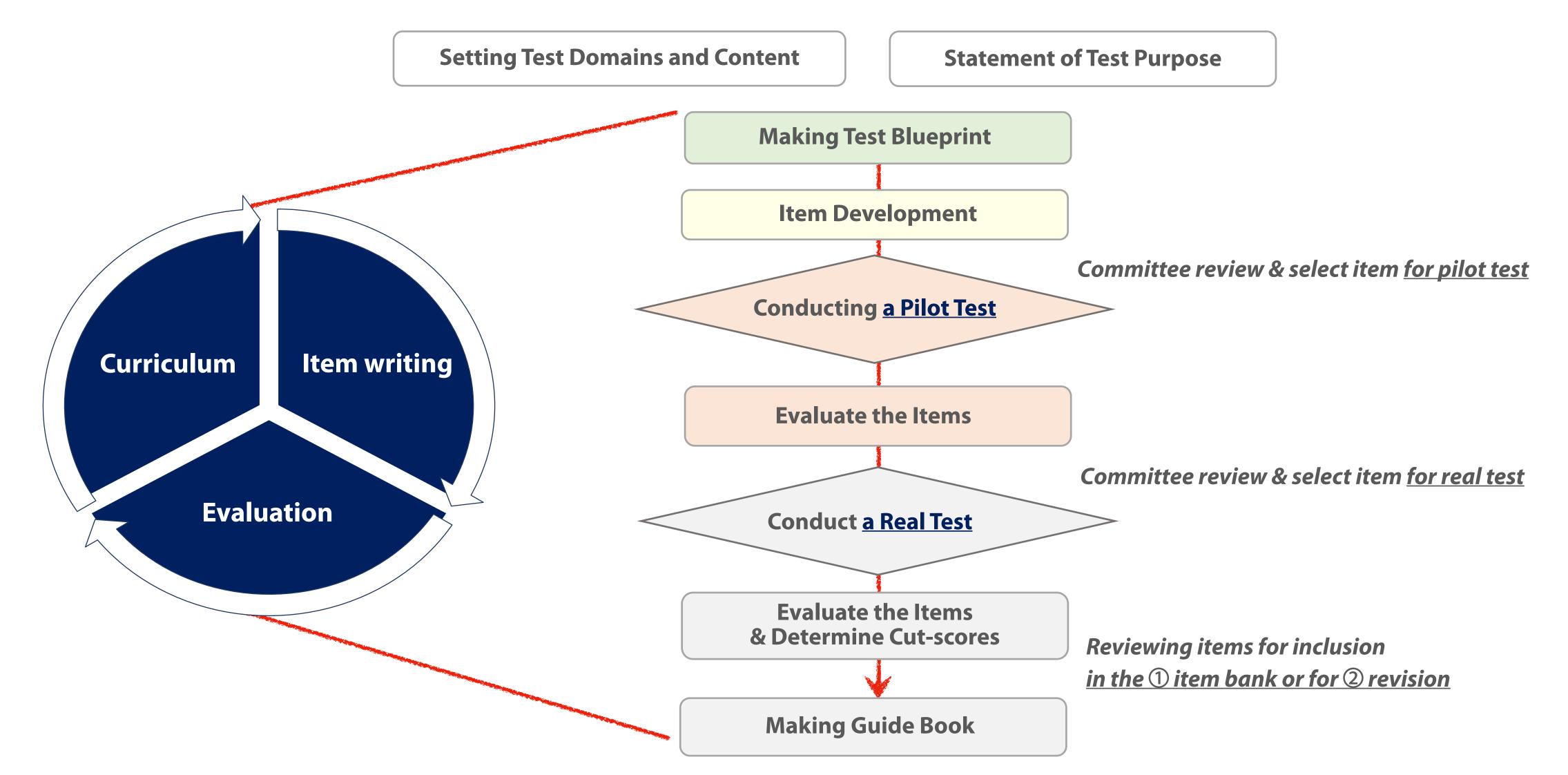


## Reliable Valid





## therefore, the test should be Reliable and Valid Model Process to Write a Reliable and Valid Test







# The Path We've Taken for IBEP

Activities & Outcomes: Expectations					
	06/2023- 12/2023		01/2025-06/2025		
	Train 40 faculty in writing and 40 faculty in reviewing test items				
Activities	Write and review 300 items for each period				
		Pilot 450 items for eac	h period		
			Build item bank SOP		
	<ul> <li>3 workshops</li> </ul>	<ul> <li>2 workshops</li> </ul>	2 workshops		
Outcomes • 1 <sup>st</sup> set of 300 items written,	• 2 <sup>nd</sup> set of 300 items	• 3 <sup>rd</sup> set of 300 items written,			
	written, reviewed	reviewed			
	• 1 <sup>st</sup> set of 450 items	• 2 <sup>nd</sup> set of 450 items tested			
	reviewed	tested	• 1 item bank SOP suggested		

- 80 Experts (W&R) for IB at UMP for preparation, execution & QA
- Important but it won't be the same: Money, Places

- CBME
- 2022, The 1st Cohort of CBME
- 2022, Change of **UMP-HCMC Graduation Examination**

the 1st Round of the New GEx

2022

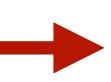
2023

2



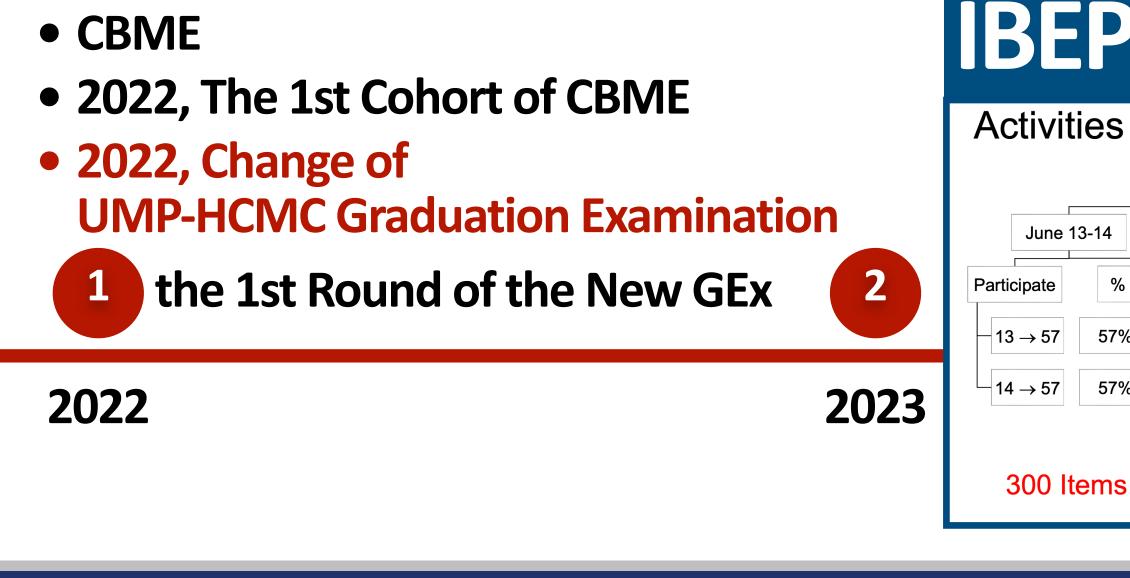
# **IBEP Expectation by 2025**

- Item Bank Establishment Project of UMP-HCMC x MEF as a Possible Model for VMLE:
- UMP-HCMC Item Bank Establishment



# The Path We'd Better to Take for IBEP

Activities & Outcomes: Expectations					
	06/2023-12/2023		01/2025-06/2025		
Activities	<ul> <li>Train 40 faculty in writing and 40 faculty in reviewing test items</li> <li>Write and review 300 items for each period</li> </ul>				
		• Pilot 450 items for eac	•		
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items written,	written, reviewed	reviewed			
		• 1 <sup>st</sup> set of 450 items	• 2 <sup>nd</sup> set of 450 items tested		
	reviewed	tested	• 1 item bank SOP suggested		





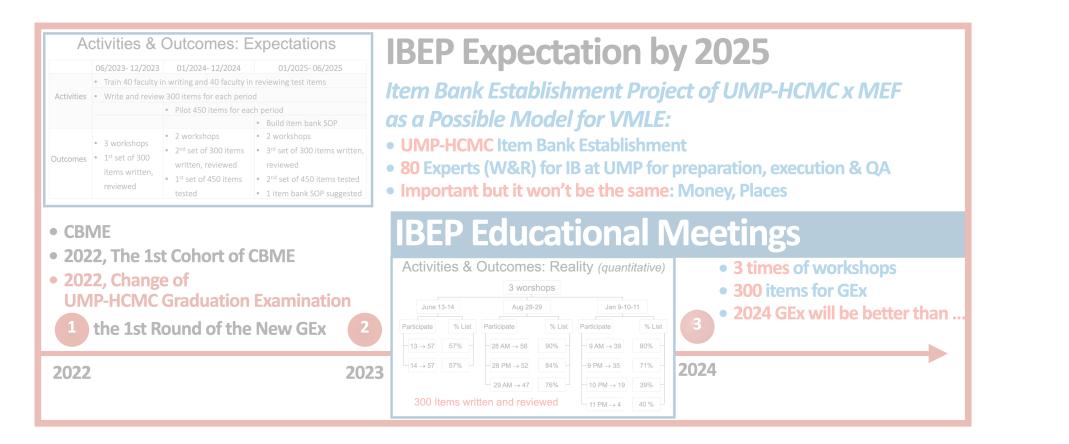
# **IBEP Educational Meetings**

s & Out	comes: R	eality (quant	itative)	<ul> <li>3 times of workshops</li> </ul>
	3 worshopsAug 28-29cipate $\%$ IAM $\rightarrow$ 5690%		-11 % List 80%	<ul> <li>300 items for GEx</li> <li>2024 GEx will be better</li> </ul>
2	PM $\rightarrow$ 52 84% PAM $\rightarrow$ 47 76% and reviewed	- 10 PM → 19	71% 39% 40 %	2024





# The Path We'd Better to Take for IBEP



# Layered Approach: Consolidation and Expansion

### • A New round for the Core:

- Make the core as trainers for the beginners

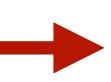
### 2024

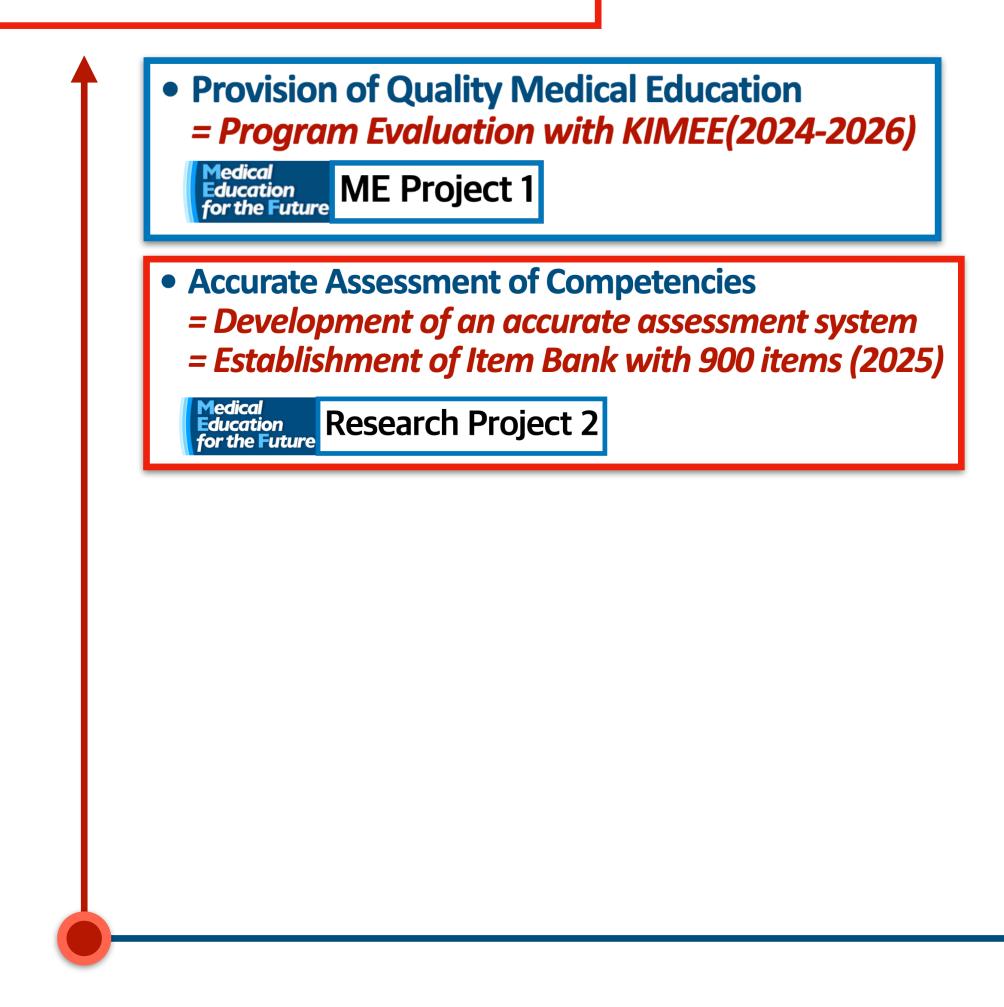


• Consolidate of the trained as the core of IB-UMP: Writer, Revisioner, Manager, Researchers

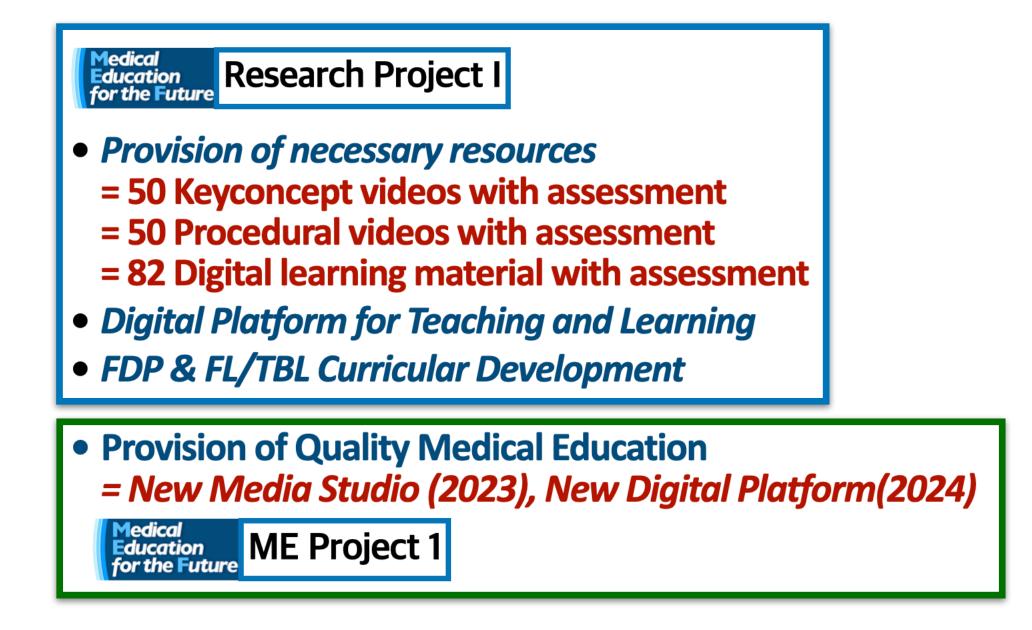
Another Round for the Expanded: Repetition of 2023 training contents











# **Active Learning**







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Research Project 2: Stem Bonk // Faculty Development Workshop (2027,~) --> VNMLE (2027)



Il Faculty Developmon i Workshop (2023,~) Research Project I/ New Media Studio

KIME Collaboration Project (2014, 2016)

& Better ULUP ME Propring

'Ces assessment issessment with assessment

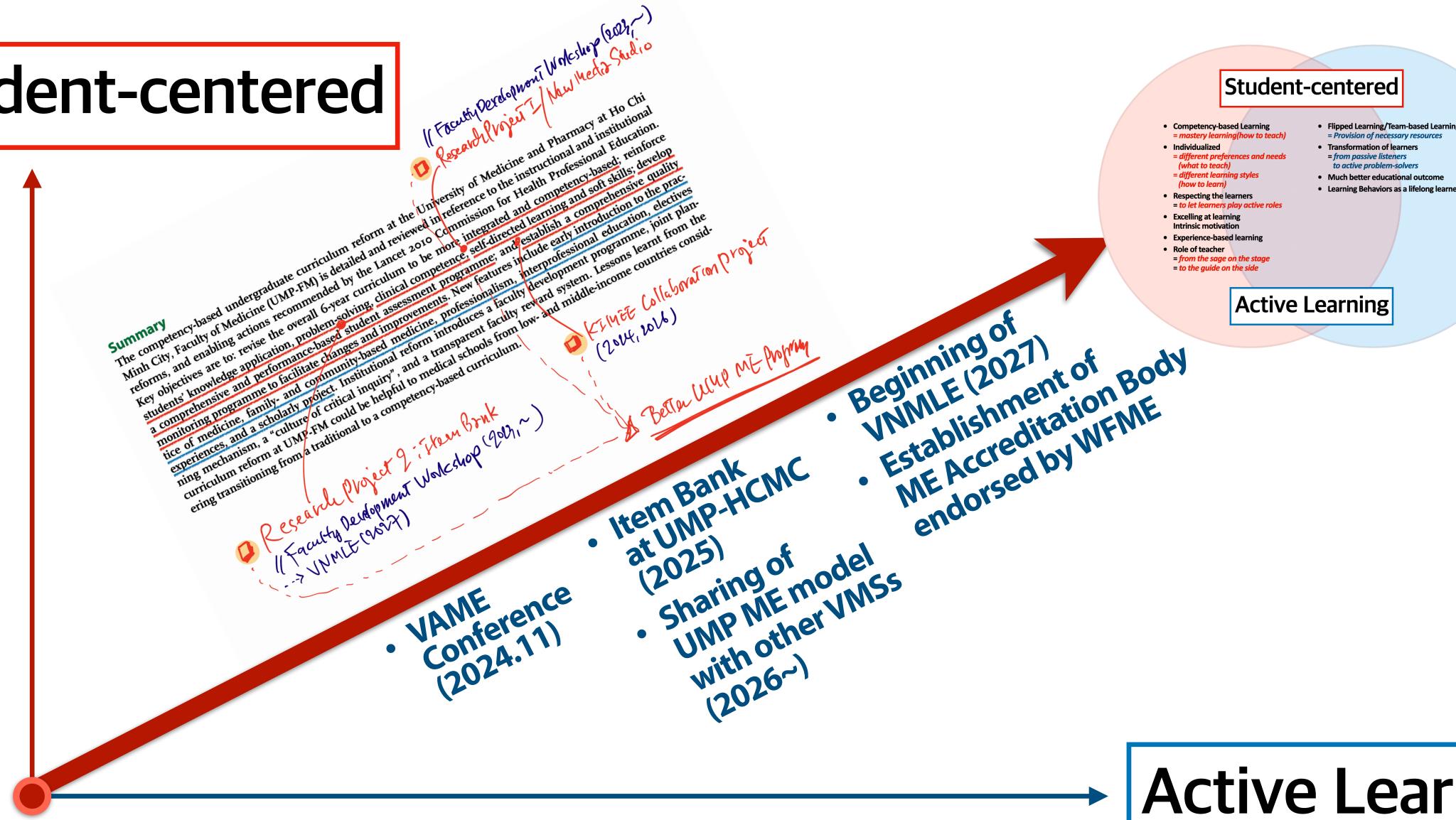
and Learning

lopment

Education New Digital Platform(2024)

# **Active Learning**







# **Active Learning**



