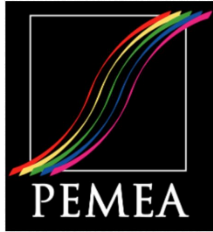




Exploring the AI-Induced Assessment-Related *Student Workload Estimation Disparity*



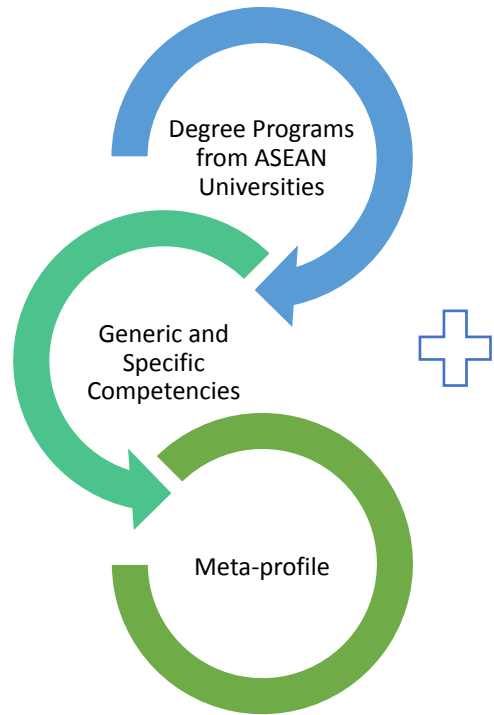
National Conference on Educational Measurement and Evaluation
The Verdure, De La Salle University, Manila
August 29 - 31, 2024

Richard R. Jugar, Ph.D., FHEA
Educational Practices, Instruction &
Curriculum (EPIC) Development Office
University of San Carlos



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& Curriculum (EPIC) Development
Office**
Cebu City, Philippines

Comparing the Achievements of Learning Outcomes of Higher Education in Asia (CALOHEA) Project Process



NATIONAL QUALIFICATION FRAMEWORKS (E.G. PHILIPPINE QUALIFICATION FRAMEWORK)

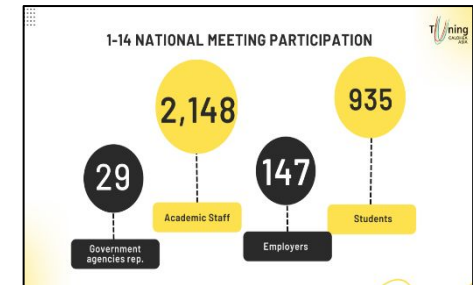
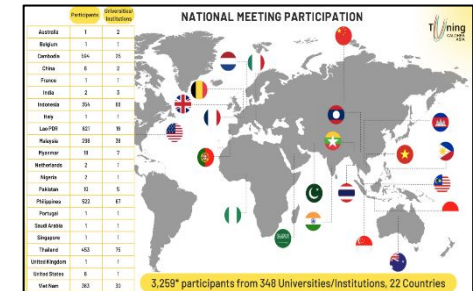
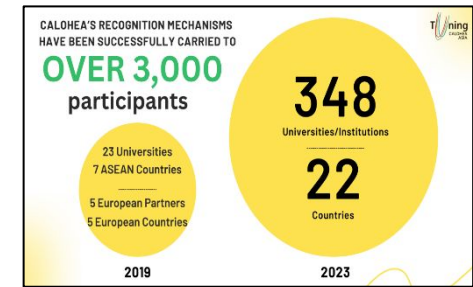
SUBJECT-SPECIFIC QUALIFICATION FRAMEWORK (E.G. PHILIPPINE PROFESSIONAL STANDARDS FOR TEACHERS)

FUTURE OF GRADUATE PROFILE (E.G. FLEXIBLE TEACHING AND LEARNING COMPETENT)

Dimensions & Sub-Dimensions	Knowledge	Skills	Responsibilities
Dimension 1			
Sub-dimension 1.1			
Sub-dimension 1.2			
Dimension 2			
...			

Student Workload Estimation and Accounting (Culture Installation)

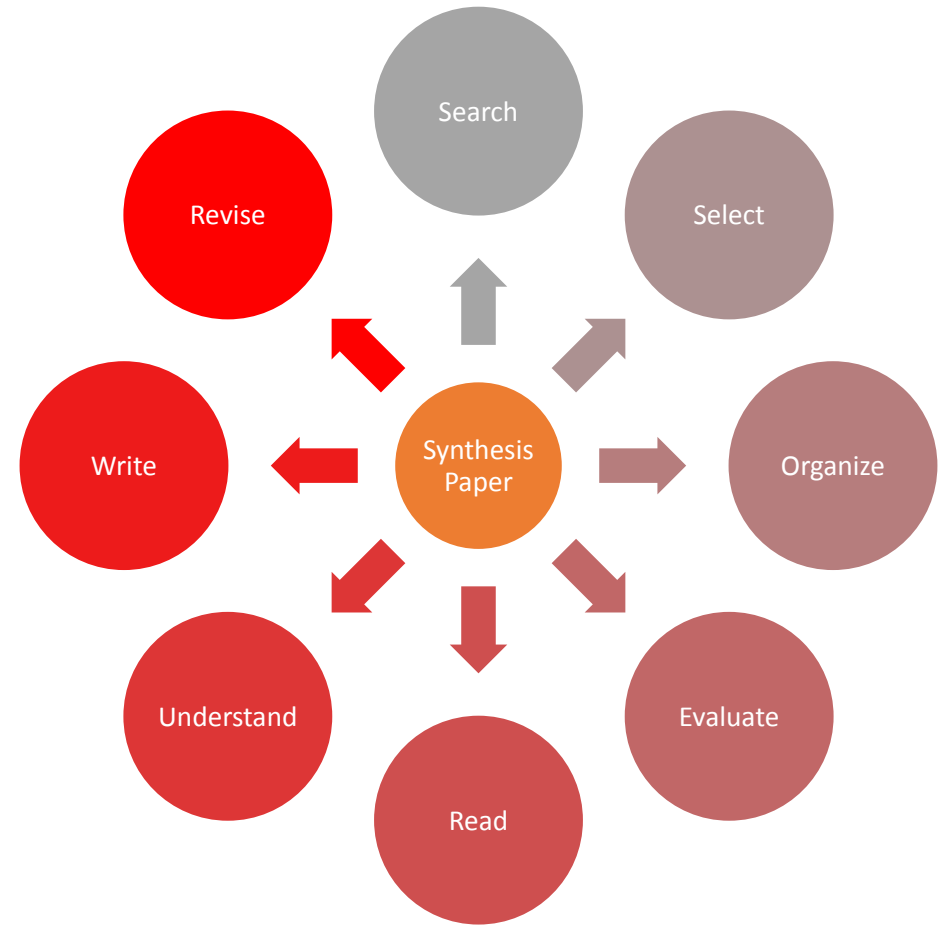
Authentic Assessment Exemplars



Educational Practices, Instruction & Curriculum (EPIC) Development Office

Cebu City, Philippines

What constitute student workload?



Student Workload

Based around time for study

Karjalainen,
Alha, & Jutila
2006

Time students need to study vis-à-vis the materials

Encompasses both contact and independent study

Objective measure of an average student

Bowyer,
2012

Subjective measure for specific students



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Student Workload in the ASEAN (Teacher Education)



The Philippines does not consider student workload in the development and deployment of curricular programs. As a result, only actual contact time is reflected in the students' academic load. This practice consequently treats non-contact student learning activities as non-existent thereby creating huge discrepancies in what is reported and what is implemented (Jugar, In Press).



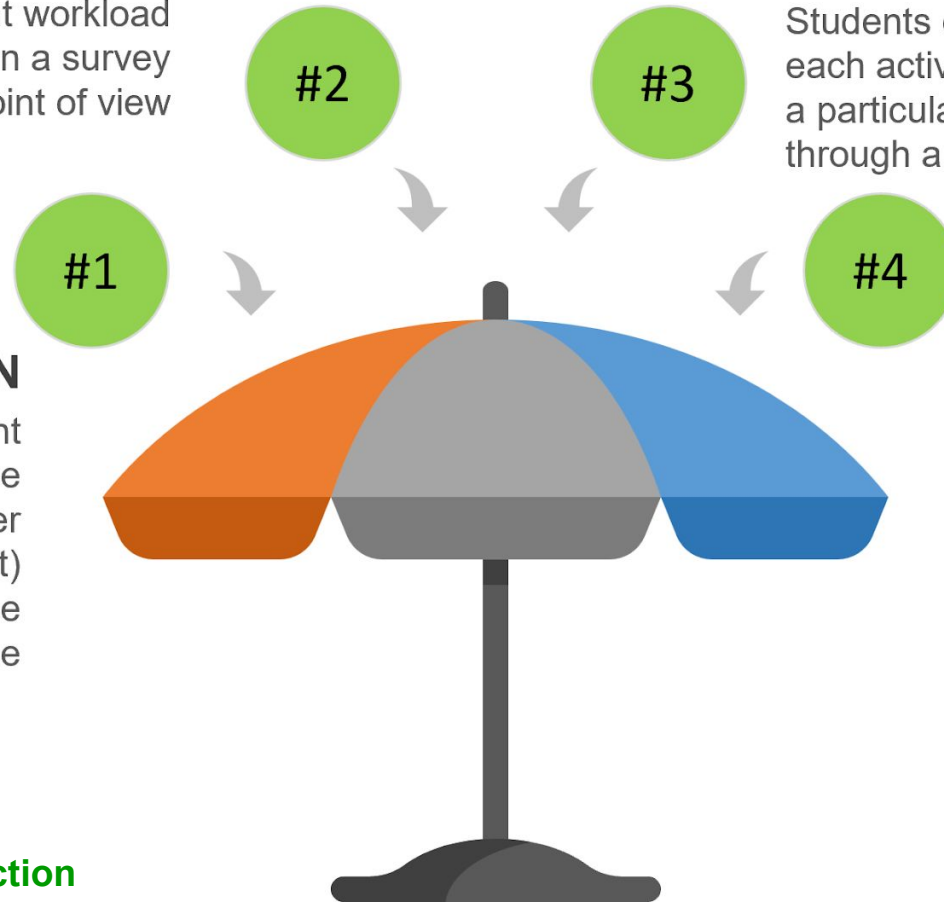
Measurement of Student Workload

STUDENT WORKLOAD SURVEY

Estimate the total student workload (contact + independent) based on a survey from student and academic point of view

LOGBOOK/DIARY

Students estimate time they spend on each activity beyond the contact hours for a particular course over a 3-week period through a weekly diary/logbook.



DESK ESTIMATION

Estimate the total student workload for a complete degree programme, allocating a number of hours (contact + independent) for each component of the degree programme

FOCUS GROUP

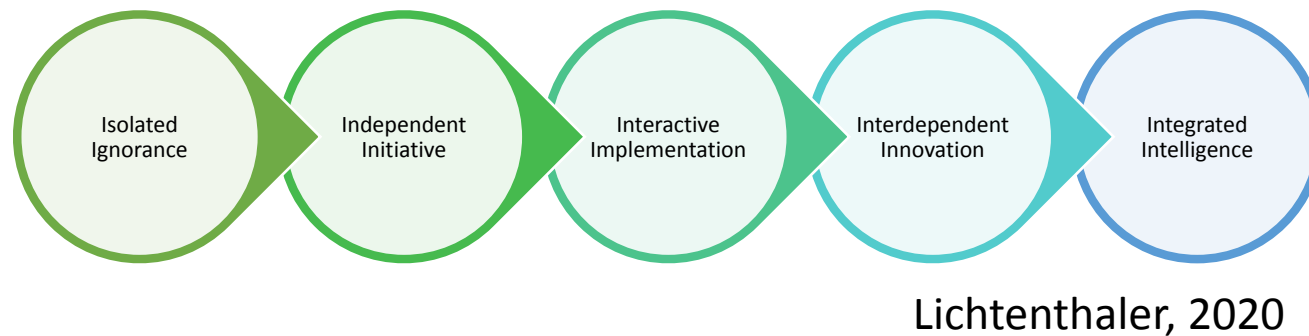
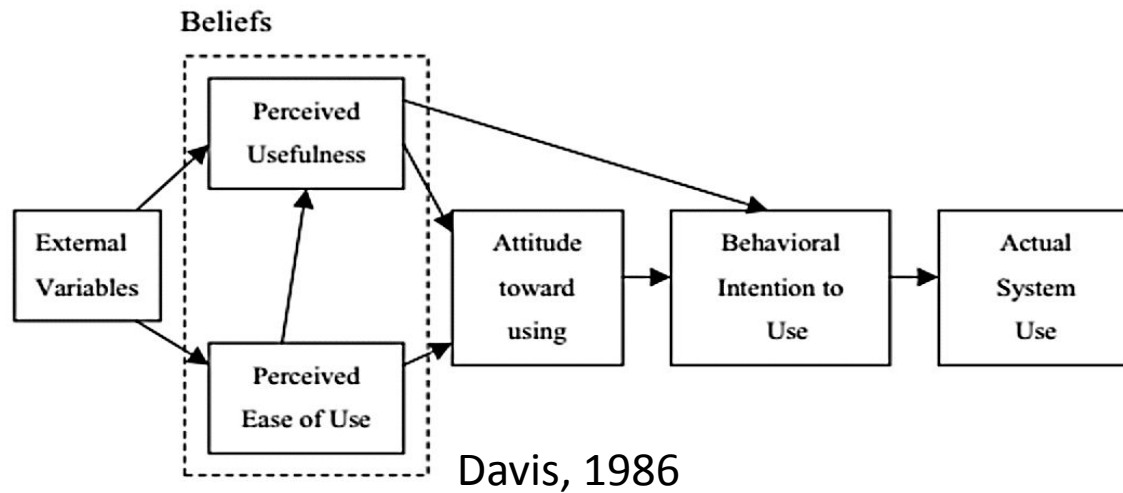
Explore students' experience and perceptions about their workload (contact + independent) of the last semester through group dialogue



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Generational Theory, Technology Acceptance Model, and the 5 Maturity Levels of Managing Artificial Intelligence



Generational Theory

- *Pulse-Rate Hypothesis* (Hans Jaeger, 1980s): Discrete cohorts, formative years (ages 0–12).
- *Strauss–Howe Generational Theory* (Fourth Turning Theory) (William Strauss & Neil Howe, 1990s): Cyclical history, generational archetypes.
- *Impulse Hypothesis* (Hans Jaeger, 1980s): Historical events, generational worldview shifts.
- *Theory of Generations* (Sociology of Generations) (Karl Mannheim, 1920s): Shared historical experiences, social/cultural transformation.



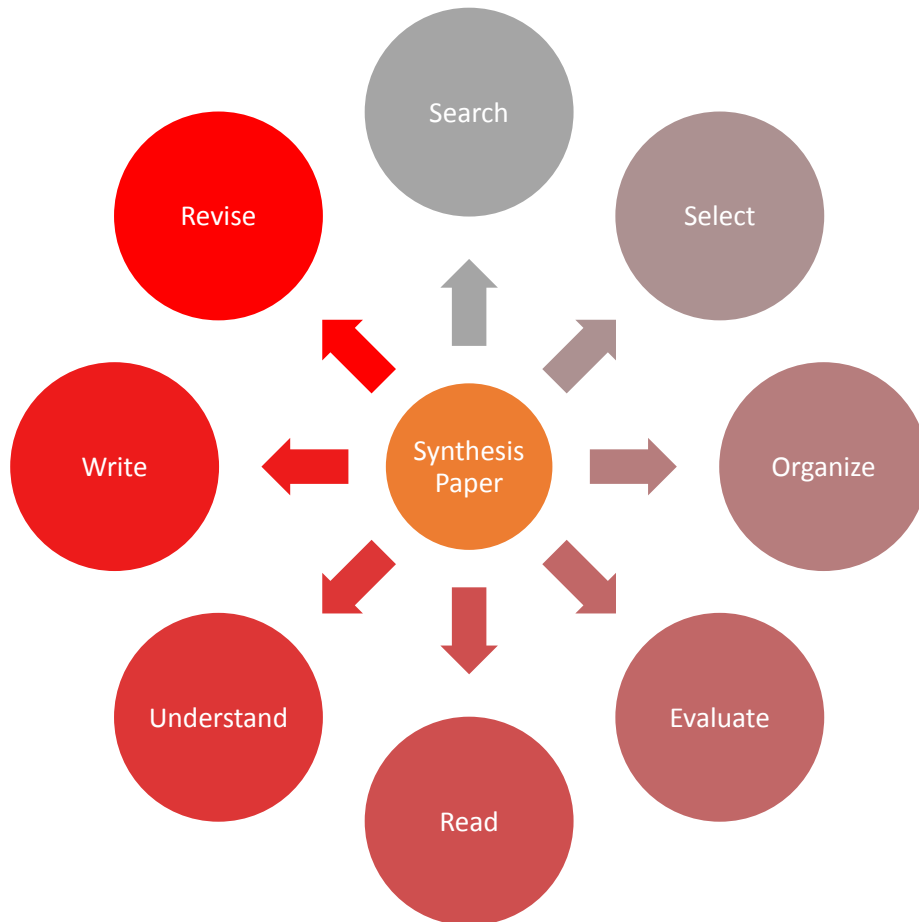
Southeast Estimation (TE, CE, Med/MedEd)

Country	University	Academic vs. Student
Cambodia	SRU	>
Indonesia	SDU	<
	UPI	<
Malaysia	USM	<
	UTM	>
Myanmar	YUOE	*
Philippines	USA	<
	WVSU	>
	ADMU	<
Thailand	USC	>
	PSU	>
	CU	>
Vietnam	NLU-HCMC	<
Laos	NUOL	>
	SU	>

- 8 HEIs signified academic estimation is greater than that of students
- 6 HEIs where academics has lesser estimation that students
- Even within a country, estimation disparity is not consistent (e.g., Philippines has 2 vs. 2; Malaysia has 1 vs. 1)



Re-accounting of Processes: AI-mediated



Integration (Multiprocessing)

Deletion (Removal of Steps)

Facilitation (Reduction of Load)

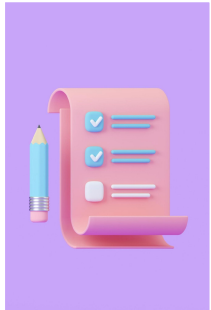
Depending on what AI-mediation the teachers expect/know/use from that of the students, workload may either be underestimated or overallocated DISPARITY



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Implications and Future Directions



Theory

- Generational Conversation
- AI-Mediation



Policy

- Multi-layered Assessment
- Quality Assurance and Accreditation



Practice

- Institutional Processes
- Capacity Building



Reach me through
rrjugar@usc.edu.ph
Daghang salamat.



USC School of Education
Cebu City, Philippines

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