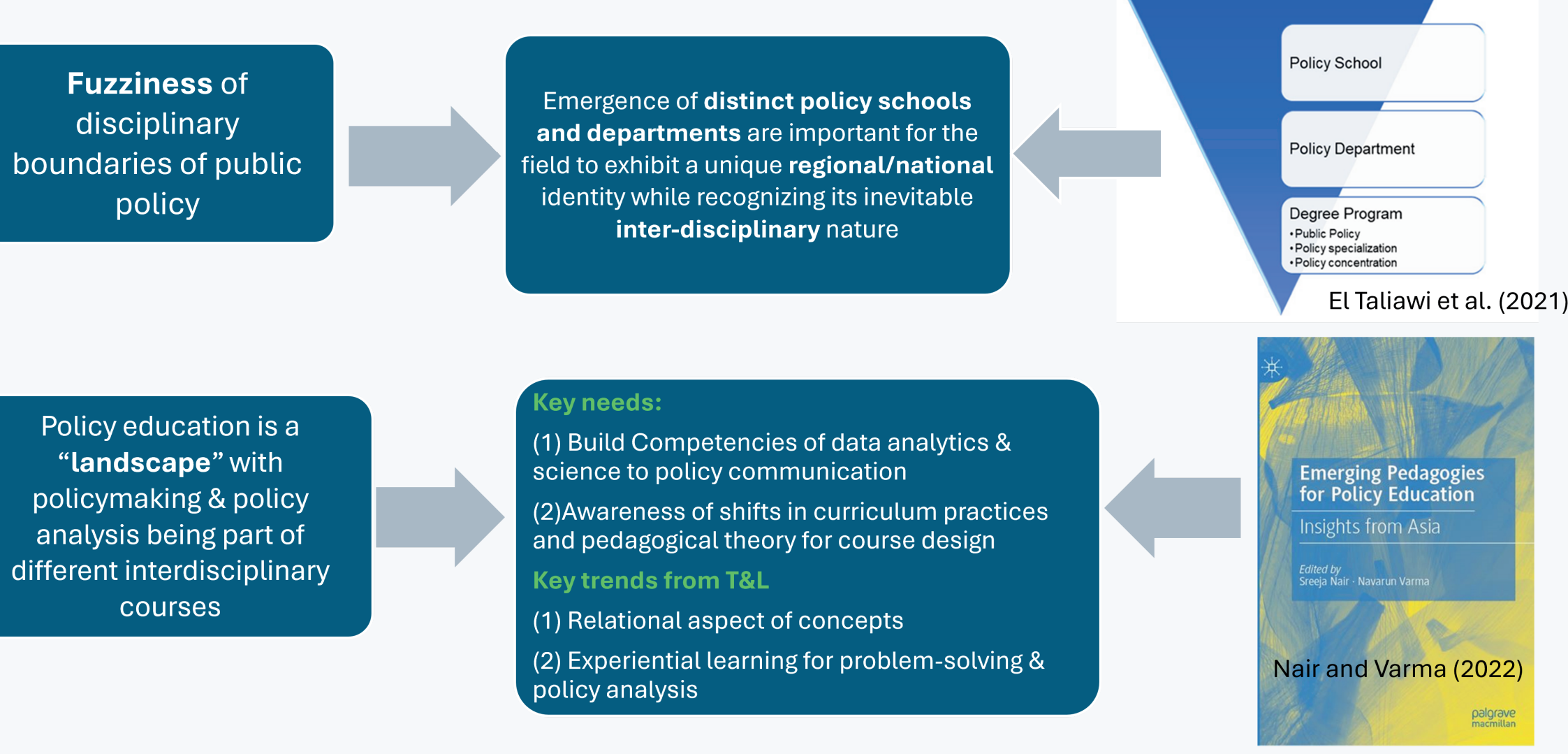


# Design Principles for Impact-Driven Policy Education

## 01.What ought to be taught – How it ought to be taught



## 02. Unpacking –Impact driven policy education

### Education for sustainable development

- pushes the boundaries of learning towards transdisciplinarity
- encourages co-production of knowledge through engaging students with real-world problem situations and wisdom of stakeholders

Focuses on competencies for-

1. Imagination for **transformative changes**
2. **Systems thinking** to understand the interdependencies of human-environmental health
3. **Emotional intelligence** to act and cope with crisis

Familiar repertoire of pedagogies: Fieldwork, Service to Simulation-based learning methods.

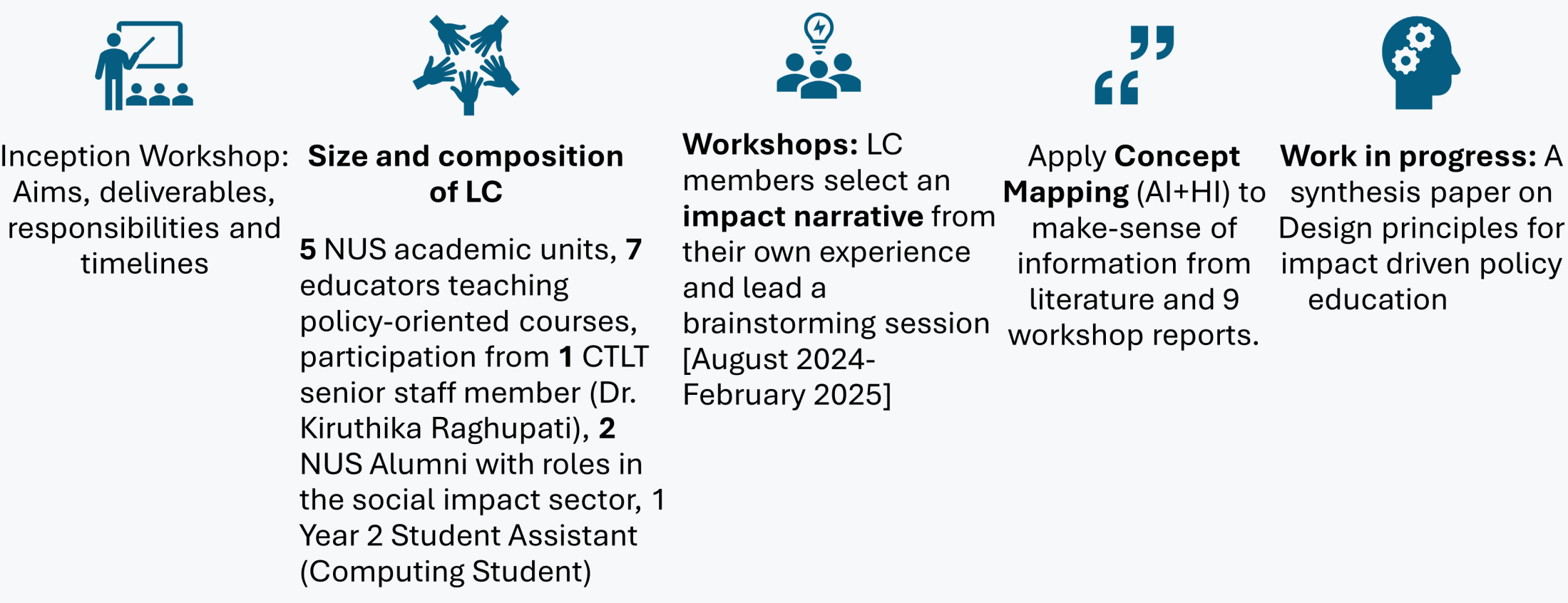
Dilemmas -

1. The static notion of Learning Outcomes amidst the **ambiguity and complexity** of the sustainability concept and the need to create space for emergence from the knowledge co-production process
2. Facilitating **collaboration** amidst a structure of competitive student evaluation.
3. Moving beyond students' learning, creating opportunities for **mutual learning** among stakeholders, and social impact

## 03. Aims of Our Learning Community

Explore and map	Explore and map the diverse pedagogical approaches used at NUS and other institutions across Asia for sustainability-related policy education.
Examine	Examine the impact of these approaches and explore opportunities for mutual learning among students, educators, experts, and non-academic stakeholders.
Synthesize	Synthesize key design principles for advancing impact-driven policy education.

## 04. The Process



## 05. Outputs



## 06. Thematic Analysis

Broad Themes	Session Topics	Insights on policy education
System Thinking and Complexity Science  SREEJA, NAVARUN, BERNISE	Integrating socio-political cultural dimensions for the context of urban lake management	Introduction of <b>multi-level</b> governance and ambiguity around natural resource management in Global South through
	Challenge based learning framework	Participatory Systems Modeling as a <b>boundary object</b> for co-creation of knowledge among students, educators and community leaders
	Systems Thinking for wicked problems	Problem articulation through community engagement and solving with <b>complexity</b> science tools
Space and design  VICTORIA & NIKI	Purposeful <b>place making</b> for active living and resilience	Community as a classroom
	Integration of political ecology theory and cost-benefit thinking into design studios	<b>Design studios</b> for imagining nature-society relations vis-à-vis policymaking
Community resilience and development  KEVIN & ASHIK	Empowering individuals and enable social change through interaction and social support	Awareness of community development frameworks and competencies for <b>community-based action/solutions</b>
	Exploring community preparedness to disaster and its interdependence with politics, empowerment for local response, and institutions	<b>Multiple streams framework</b> for exploring policy-practice nexus
Disciplinary rigor vis-à-vis accessibility  SASIDARAN & VISHAL NARAIN	Making macro-economics accessible to public policy students	<b>Active learning</b> tools with continuous feedback process
	Making theories from New Institutional Economics accessible to civil servants	Classroom as a <b>policy lab</b>

## 07. AI-assisted concept mapping

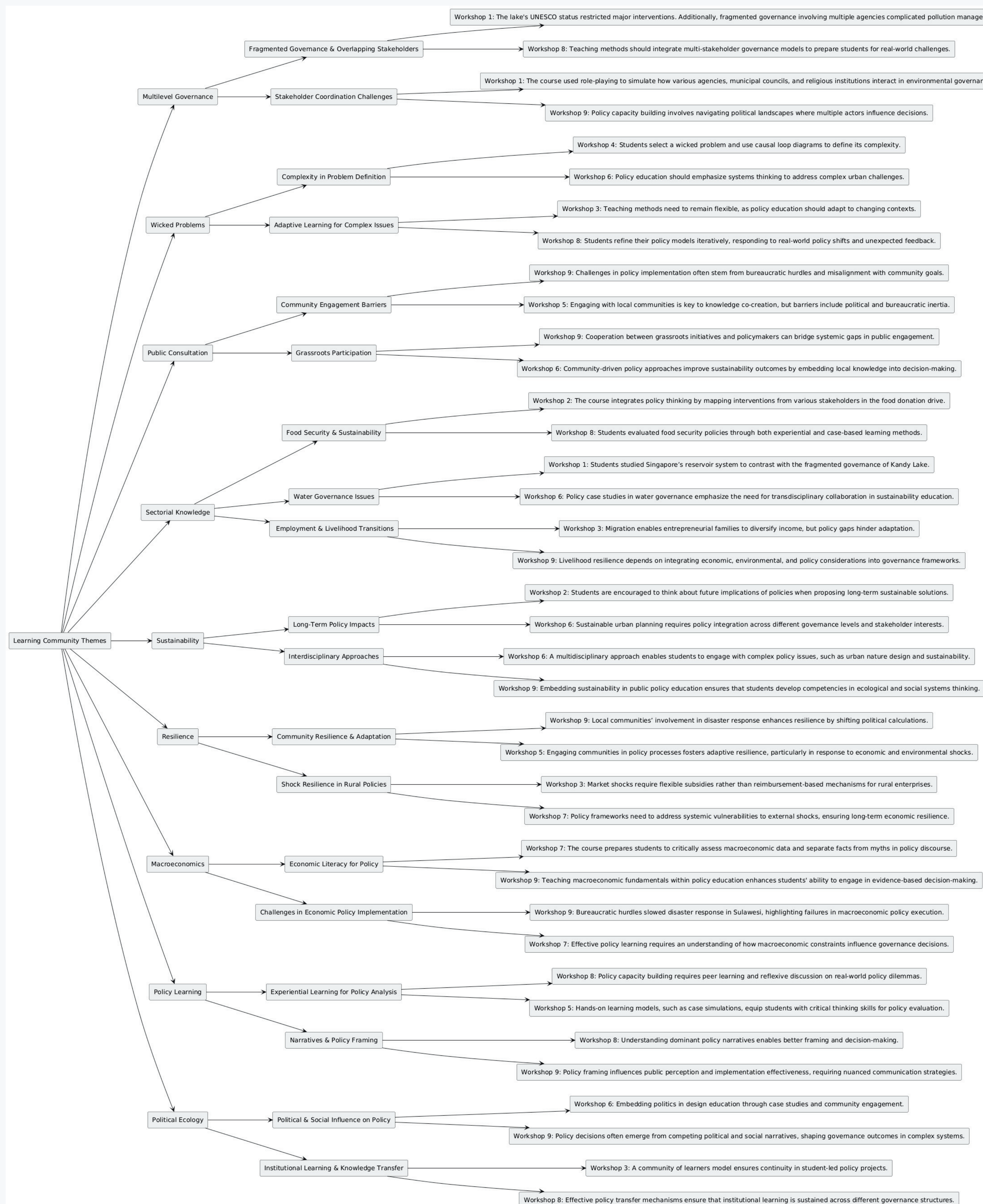
AI-Assisted Transcript & Validation	Transcribe workshop discussions using AI, then validate with speakers to ensure accuracy.
AI-Based mapping with Structured Prompts	Use ChatGPT to generate concept maps based on Learning Community aims (proposal) and workshop questions (shared with members during Inception workshop to structure narratives).
Hierarchical Thematic Structuring	Organize concepts into four levels, refining themes with insights from workshop reports.
Final Thematic Categorization	Consolidate themes into three key areas: Content, Pedagogy, and Competency, for synthesis and reporting.

## 08. Levels of concept map

Level 1: Themes from proposal	-Sustainability related policy education -Evidence of impact of pedagogies -Design principles for impact-driven policy education
Level 2: Themes from Questions shared	Linkage of impact-narratives shared with: -Policymaking/ Policy analysis/Policy education -Sustainability education
Level 3: Categorization of emergent themes	Content: Multilevel Governance, Ambiguity (Wicked problem), Public consultation, sectoral knowledge, Long term impacts (sustainability), interventions for shocks (resilience), Macroeconomics, Policy learning, Political ecology for space design Pedagogy: Peer learning, Fieldwork & Community engagement, Design studio, Case-based learning, Classrooms as policy lab, Policy simulation, Continuous feedback Competency: Policy Capacity Building (analytical/political/operational skills to refine policymaking, Systems Thinking (across frames and disciplines), Co-creation of knowledge to refine policymaking)
Level 4: Emergent sub themes from quotes	Work in progress- Experimentation to derive relationships between Pedagogy-Content-Competency through nuances of Level 4



## 09. Concept map (Content)



## 10. Concept map (Pedagogy)



## 11. Concept map (Competency)



## 12. Experimentation Progress

