



# Six Research Themes of Center for Science and Technology of Learning

---

Tak-Wai Chan

National Central University



# Goal

---

Building a Globalized Research  
Infrastructure for Active Social Learning

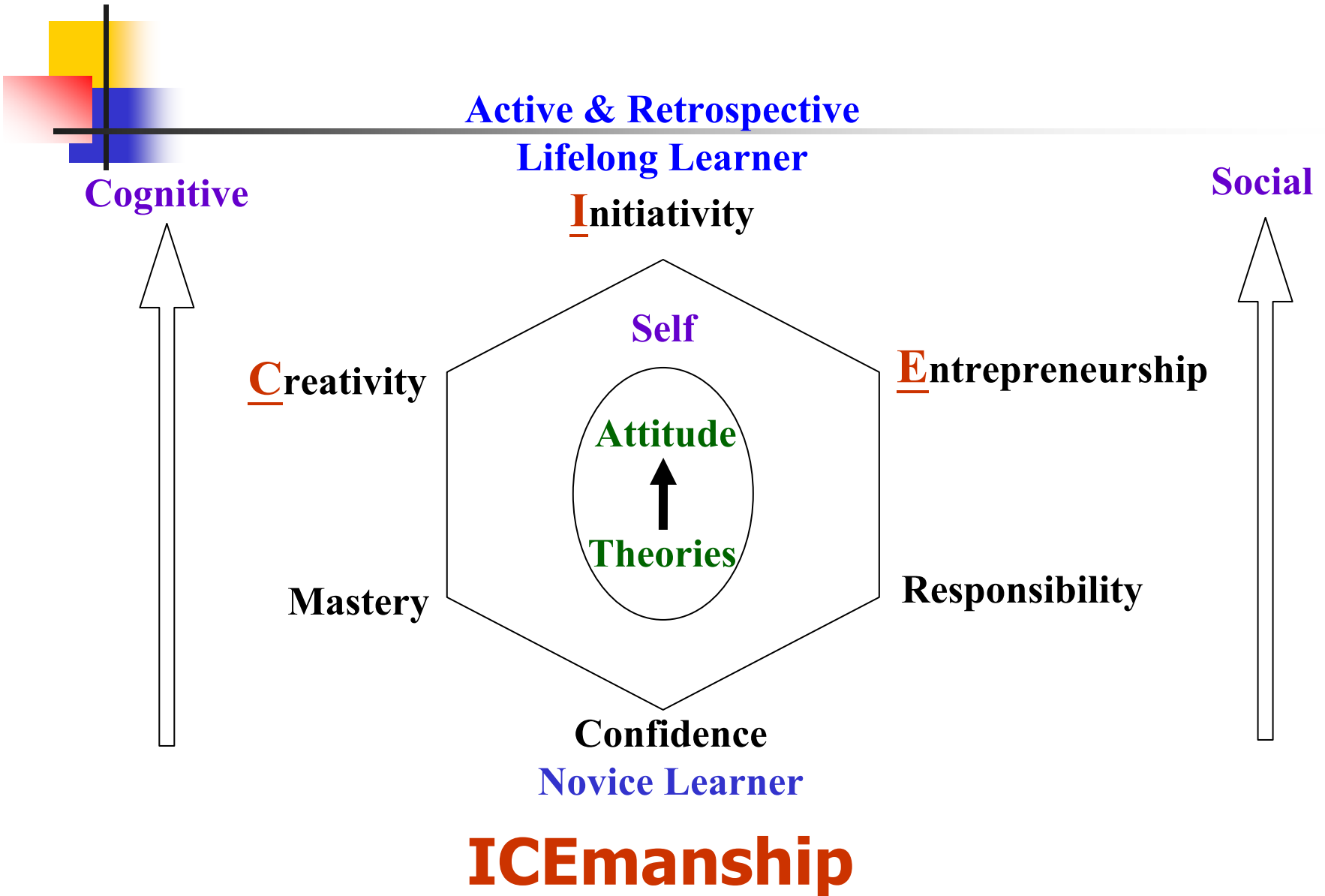


# Six Research Themes

---

1. Active Social Learning Theory and Design Principles
2. Design of Content for Building Critical Abilities
3. Scalable Architecture of Structured Network Learning Society
4. Design of Mobile Learning Communities
5. Smart Learning Devices and User Interfaces
6. Learning Technology Research in the Interest of Society (C.H. Liu)

# 1. Active Social Learning Theory and Design Principles



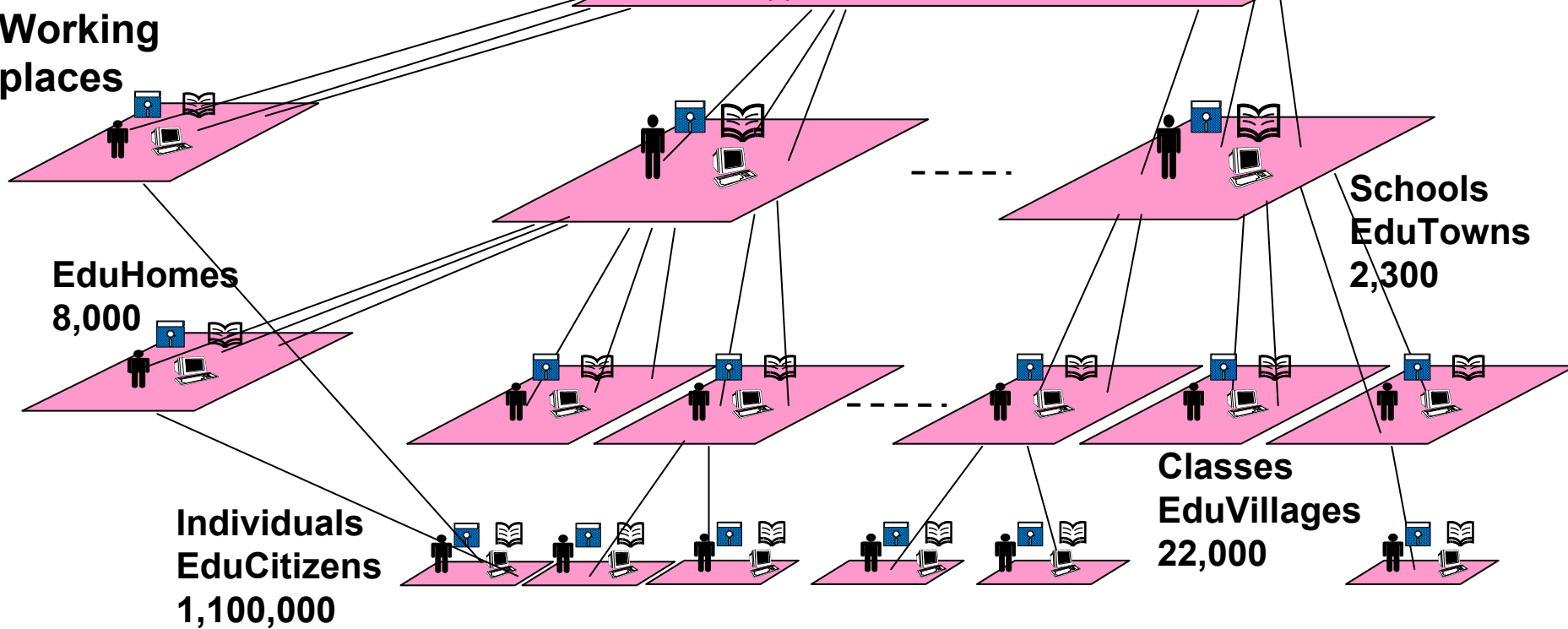


## 2. Design of Content for Building Critical Abilities

---

- Critical content
  - Critical content design methodology for network and mobile learning
  - Critical content and tools to support building critical capability, e.g. reading, writing, science inquiry...
  - Immerse learning portfolio analysis
- Content driven intelligent agents
  - Content enabled intelligent agents for network and mobile learning
  - e-Pet for individual or group learning

# 3. Scalable Architecture of Structured Network Learning Society





## 4. Design of Mobile Learning Communities

---

- Mobile outdoor classroom
  - Nature classroom
- Mobile indoor classroom
  - Classroom activities design and management
  - Mobile learning portfolio
- Mobile connected classroom
  - Connecting strategies for mobile classrooms
  - Interactivities in mobile connected classroom
- Mobile informal learning
  - Museum learning
  - After class learning
- Mobile campus



## 5. Smart Learning Devices and User Interfaces

---

- Multi-sensory learning
- Intelligent learning toys
- Intelligent Barbie for story telling
- ePet



# Relationship of 6 themes

---

