

ADB

# Roong Aroon School

The Holistic Education for Life sustainability  
(STEM as in the Project-Based Approach)  
Thailand

**Suwanna Chivapruk**

8th International Skills Forum  
27–29 August 2019  
Asian Development Bank, Manila, Philippines

#ADBSkillsForum



**27 AUG 2019**



**8th International Skills Forum**  
**Future of Skills and Jobs in the Age of Digital Disruptions**  
27–29 August 2019 • Asian Development Bank, Manila, Philippines



# Roong Aroon School of Dawn

8th International Skills Forum  
27–29 August 2019  
Asian Development Bank, Manila, Philippines



**8th International Skills Forum**  
**Future of Skills and Jobs in the Age of Digital Disruptions**  
27–29 August 2019 • Asian Development Bank, Manila, Philippines



# Education is Life, Life is Education

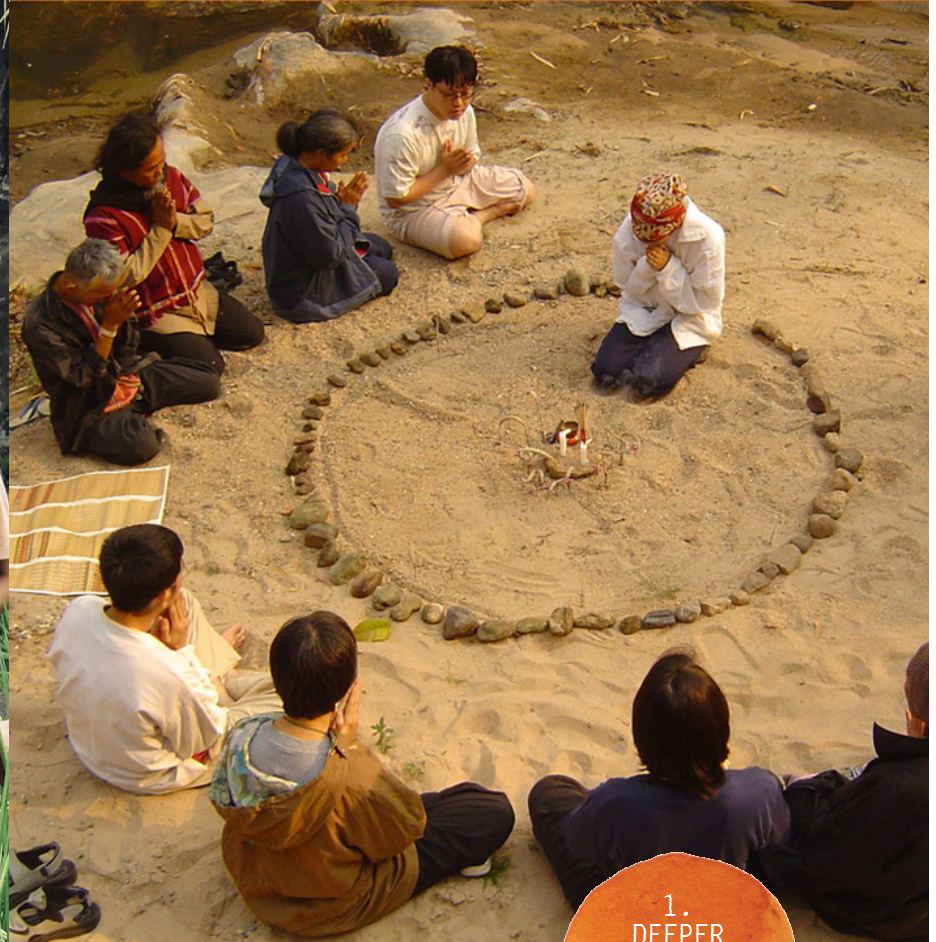
8th International Skills Forum  
27–29 August 2019  
Asian Development Bank, Manila, Philippines





## 8th International Skills Forum Future of Skills and Jobs in the Age of Digital Disruptions

27-29 August 2019 • Asian Development Bank, Manila, Philippines



### The **1st** LEARNING MODE : DEEPER LEARNING

**AIMING  
TO PROMOTE  
PRACTICES**

to nurture one's inner learning capacity.  
wisdom-based learners.  
mindfulness cultivation, self reflection, meditation,  
spiritual arts, public volunteer services, etc.





## 8th International Skills Forum Future of Skills and Jobs in the Age of Digital Disruptions

27-29 August 2019 • Asian Development Bank, Manila, Philippines



### The **2nd** LEARNING MODE : **LEARNING by DOING**

**AIMING  
TO PROMOTE  
PRACTICES**

**to practice with hands-on activities in the real situation.  
the self- directed and self-reliance learners  
activity-based, problem-based, project-based.,  
and research-based through learning**





# 8th International Skills Forum Future of Skills and Jobs in the Age of Digital Disruptions

27–29 August 2019 • Asian Development Bank, Manila, Philippines



## The 3rd LEARNING MODE : COMMUNICATIVE LEARNING

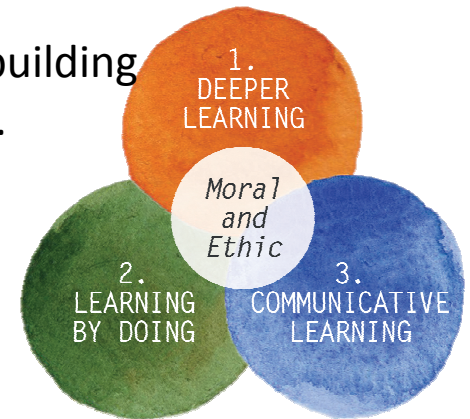
### AIMING

to the sharing of knowledge and understanding in building up learning organization or community of practices. the social engagement and learning partners with sustainability.

### TO PROMOTE

### PRACTICES

group learning, discussion, dialogue, knowledgemanagement, community sharing, group meeting, people mapping, ICT presentation.





Why

# Holistic Education



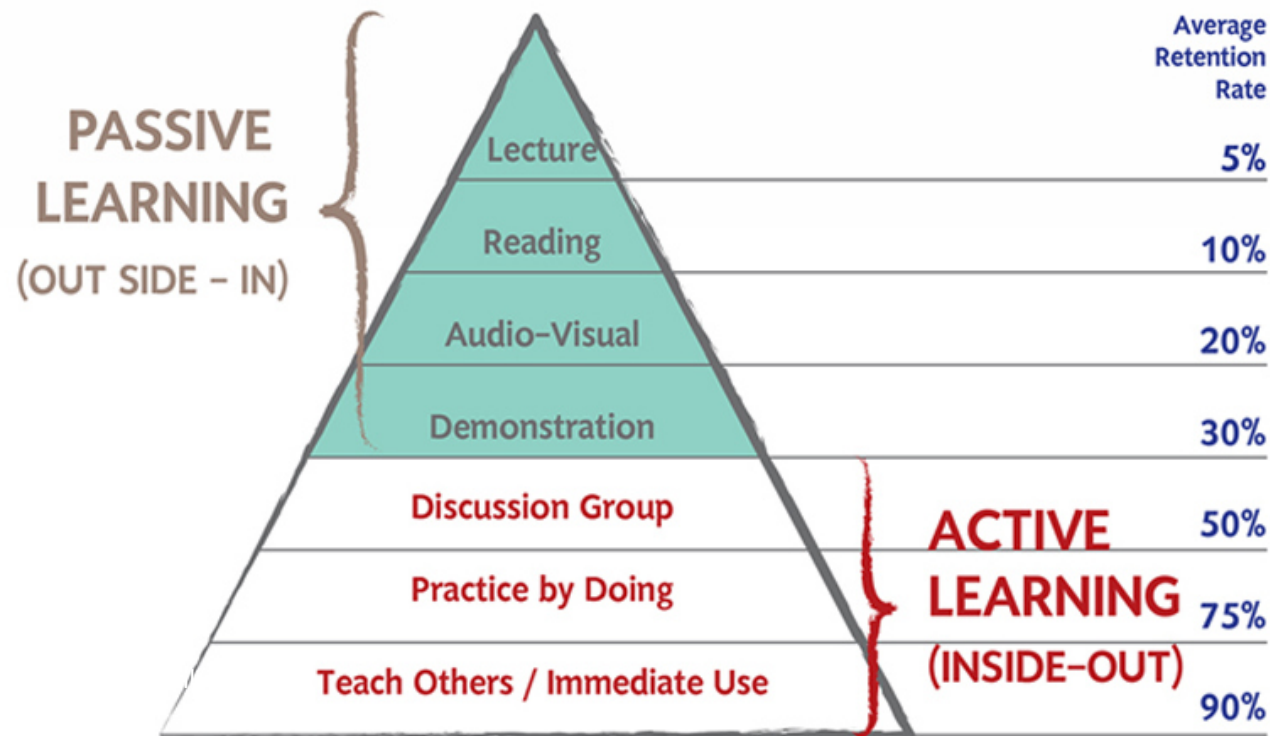
Teacher's Teaching & CONTENT ORIENTED



LEARNER'S OUTCOME ORIENTED



## Design learning pedagogy, Change teaching methods from Passive Learning to Active Learning



### LEARNING PYRAMID

National Training Laboratories Bethel, Maine 1-800-777-5227

Dale, Edgar, Audio-visual Methods

in Teaching, third edition, Holt Rinehart, Winston 1969.





# Holistic Mode of Learning

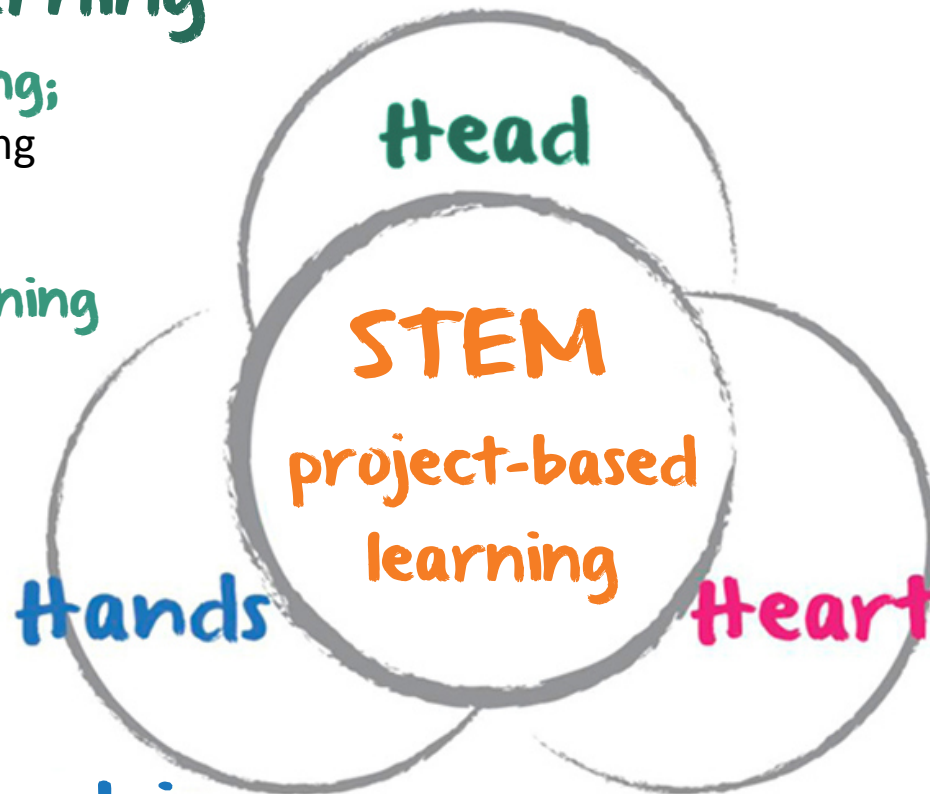
## Deeper Learning

### 1. Critical Thinking;

- Systematic thinking
- Problem solving

### 2 Scientific Learning

- STEM
- Human society
- Environment



## Core Value

- Self awareness
- Self reflection
- Value system

## Learning by doing

1. Collaboration
2. Investigation
3. Innovation
4. Active citizen



# Wastewater STEM project processes

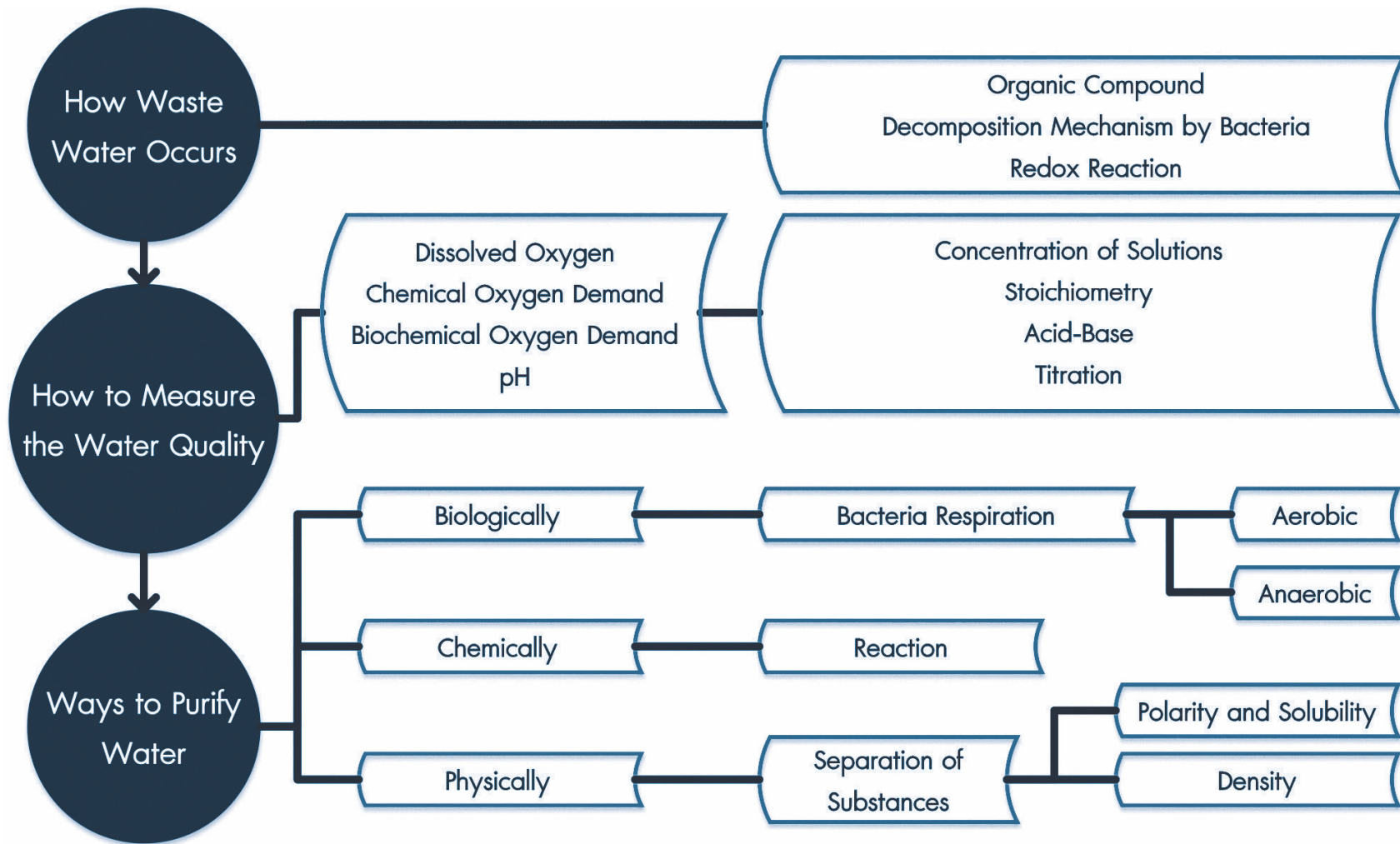
## I. In put for identifying the problem

- survey
- examine
- investigate
- Scientific test





## 2. Identifying and researching knowledge required





## 3. Planning design to solve the problem

### 3.1 First part: Wastewater treatment system construction

- Inquired into the problem
- System Designed
- Budget proposed
- Construction

### 3.2 Second part: Building up awareness

- Observed user behavior
- Interviewed school members
- Planning designed to educate
- Implementing



# Imprint Core value for life sustainability

- Awareness on affect and effect
- Identify the problem deeper into many dimensions:
  - field study
  - interview people in community
  - Connect to students' life
- Student-inquiry-driven



# Students learn to react to major problems consciously and be active

## Secondary: Wastewater treatment and Parabola around Us





## 8th International Skills Forum Future of Skills and Jobs in the Age of Digital Disruptions

27-29 August 2019 • Asian Development Bank, Manila, Philippines



We also use Geogebra program help us to explain that

CLIP

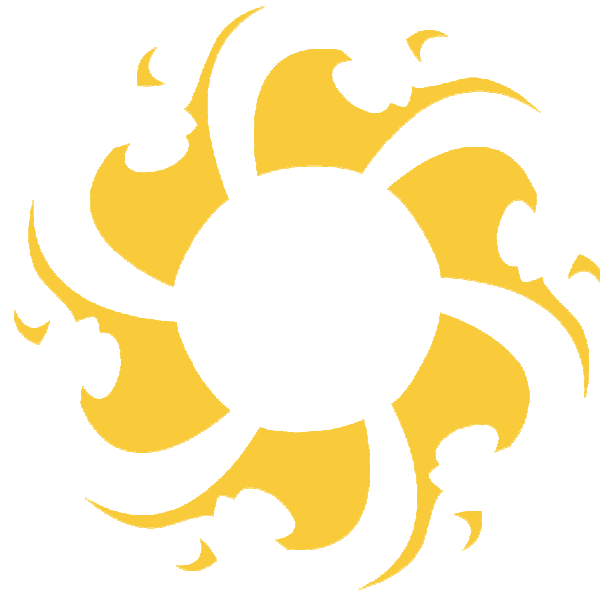


# Outcomes

## Students transform to:

1. Be aware of themselves
2. Encounter problems and solve creatively
3. Causing no harm unto others





*Roong Aroon*

**Thank You**