



# University and School Collaboration in Agricultural and Environmental Education



Faculty of Education  
and Development  
Sciences

**Kasetsart**

**University**

**THAILAND**



## University-Local School Collaboration in Agricultural and Environmental Education

---

### 1. PROJECT RATIONALE

- **Why learning about agriculture?**

Quoting HRH Princess Mahachakri Sirintorn:

"I like agriculture subject.  
It has many benefits for pupils.  
Children can benefit from  
physical movements and exercises,  
and simply be with the nature."



## University-Local School Collaboration in Agricultural and Environmental Education

---

- How to make agriculture learning more interesting and relevant?
  - Meaningful integration of agricultural education and environmental education may be an answer.
  - sustainability concepts can fit nicely within the content of agr. and env.



## University-Local School Collaboration in Agricultural and Environmental Education

---

### About Kasetsart University

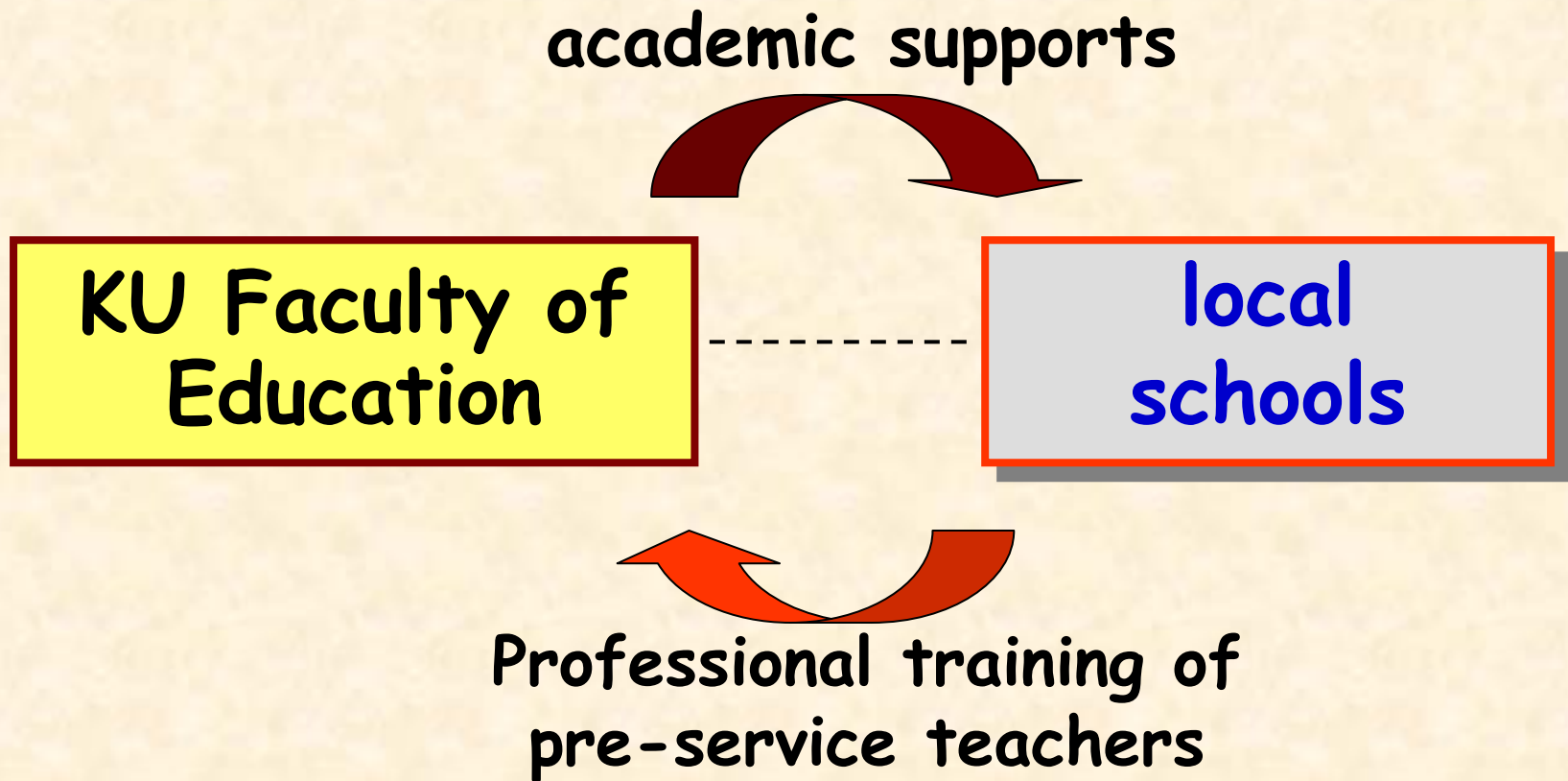
- ❖ **KU** is a comprehensive university with specialization in agriculture
- ❖ The **KU system** comprises  
1 main campus and 3 branch campuses
- ❖ The **KPS campus** (agricultural campus) with rich learning resources in agriculture and environmental sciences



## University-Local School Collaboration in Agricultural and Environmental Education

---

- **Outreach to local schools:**  
**Mutual benefits from collaboration**





## University-Local School Collaboration in Agricultural and Environmental Education

---

### 2. Project Objective

- To initiate a **learning network** of university and school in ag-en-ed  
Participatory development of school-based curriculum provides a **channel for sharing-learning**



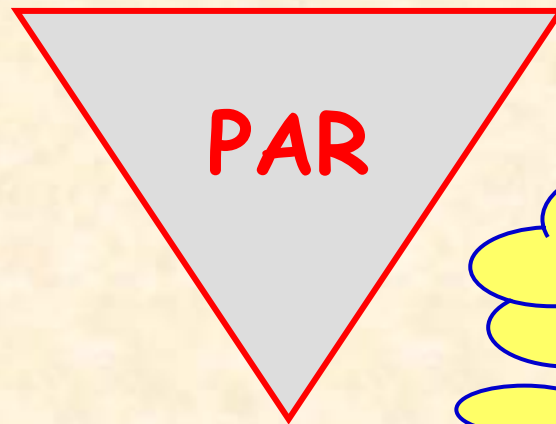
## University-Local School Collaboration in Agricultural and Environmental Education

---

### 3. The Participatory Research Process

University  
researchers  
(as academic  
supervisor)

Cooperative  
teachers  
(as field supervisor)



Pre-service teachers  
(as key actor)



## University-Local School Collaboration in Agricultural and Environmental Education

---

### Three research steps

#### ① Planning:

designing curriculum and teaching strategies  
through learning-together-workshops

#### ② Implementing in 2 schools

by student teachers (one semester)

#### ③ Reflecting from

-project participants

-seminar with other schools

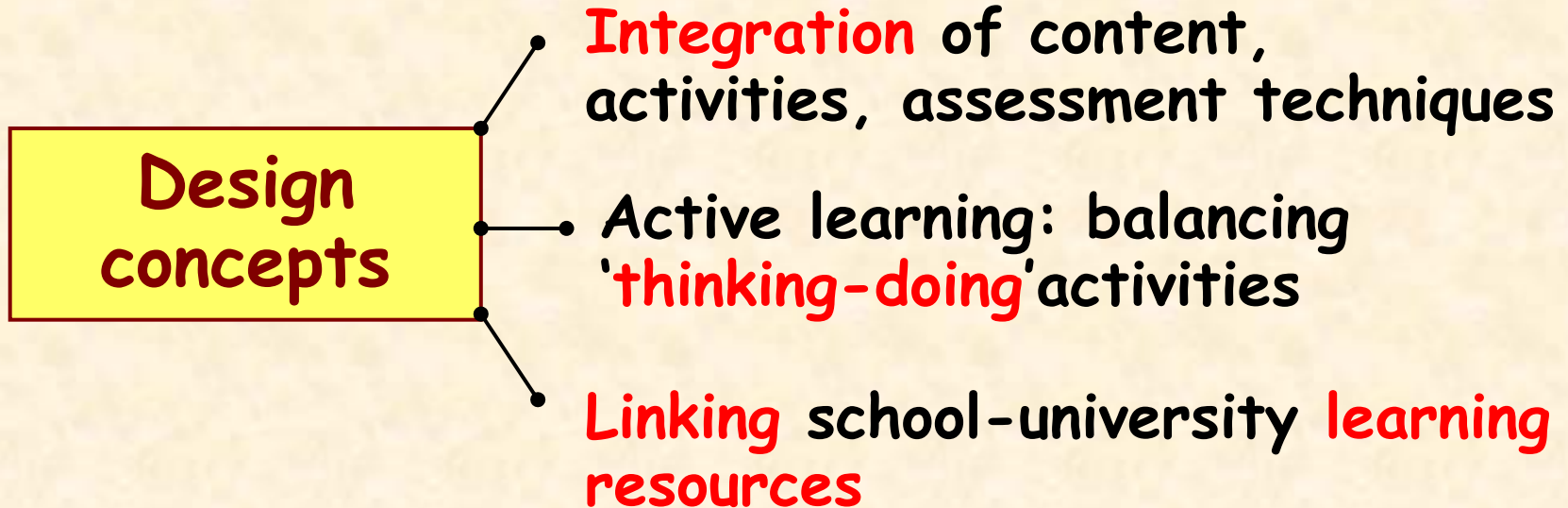


## University-Local School Collaboration in Agricultural and Environmental Education

---

### 3. Results

#### 3.1 OUTPUTs : Two integrated courses in agriculture and environment





## University-Local School Collaboration in Agricultural and Environmental Education

---

- ❖ course for primary level: "green life",  
integrating agriculture--environment--  
sciences--social studies.
- ❖ Course for secondary level: "agriculture  
and environment in our daily life",  
integrating...  
science with agriculture and environment  
(AgriScience)





## University-Local School Collaboration in Agricultural and Environmental Education

---

### 3.2 Outcomes of course implementation

- ❖ Three domains of pupils' learning achievement were assessed:
  - knowledge/cognitive skills
  - working/process skills
  - desirable characteristics and attitude
- ❖ Results were satisfied, particularly with primary pupils.



## University-Local School Collaboration in Agricultural and Environmental Education

---

### 3.3 Participants' learning experiences

#### 1) Pre-service teachers, gaining :

- ❖ Actual experiences in designing curriculum and learning management.
- ❖ Hands-on experiences in research process: planning, data collection, analysis, presentation.



# University-Local School Collaboration in Agricultural and Environmental Education

---





## University-Local School Collaboration in Agricultural and Environmental Education

---

### 2) Reflections from cooperative teachers :

- ❖ gaining practical knowledge on creating relevant content of agriculture and environment.
- ❖ The integrative approach can be applied.
- ❖ having access to learning resources from university, very fruitful for pupils.



## University-Local School Collaboration in Agricultural and Environmental Education

---

### 3) Reflections from university researchers:

Enriching their experiences  
as teacher educator in ...

- ❖ school-based curriculum development.
- ❖ PAR with local schools



## University-Local School Collaboration in Agricultural and Environmental Education

---

### 5. Further implications

- ★ Follow-up activities were extended to 13 network schools (e.g. school-based mushroom production for local community)
- ★ A Pilot study on research-based teacher education. (new 5-year program)
- ★ Extending the network: university-school-community



**Thank you**





## University-Local School Collaboration in Agricultural and Environmental Education

---

### 4. Limitations

- ❖ **Academic background of pupils.**  
For AgriScience integrated course,  
intensity level of content and activities  
may need to be adjusted to suit pupils'  
cognitive level.
- ❖ **Teacher's time constraints**  
for collaborative research