

DEEM – Curriculum development and didactical skills workshop (intro)

Wageningen DEEM team

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Contents morning programme

1. Introducing ourselves
2. The DEEM project
3. Learning outcomes and programme of this workshop
4. Getting to know each other and expectations
5. Energy as a wicked problem
6. Implications for higher education (big picture)

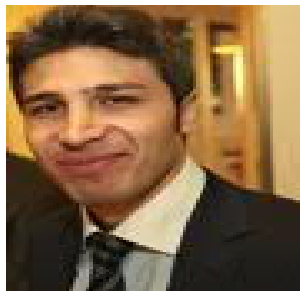
Introduction: Who is who?

- Environmental policy (ENP)



Mattijs Smits

- Education and Competence Studies (ECS)



Omid Noroozi



Hansje Eppink

Wageningen University



WAGENINGEN UR
For quality of life



Erasmus+

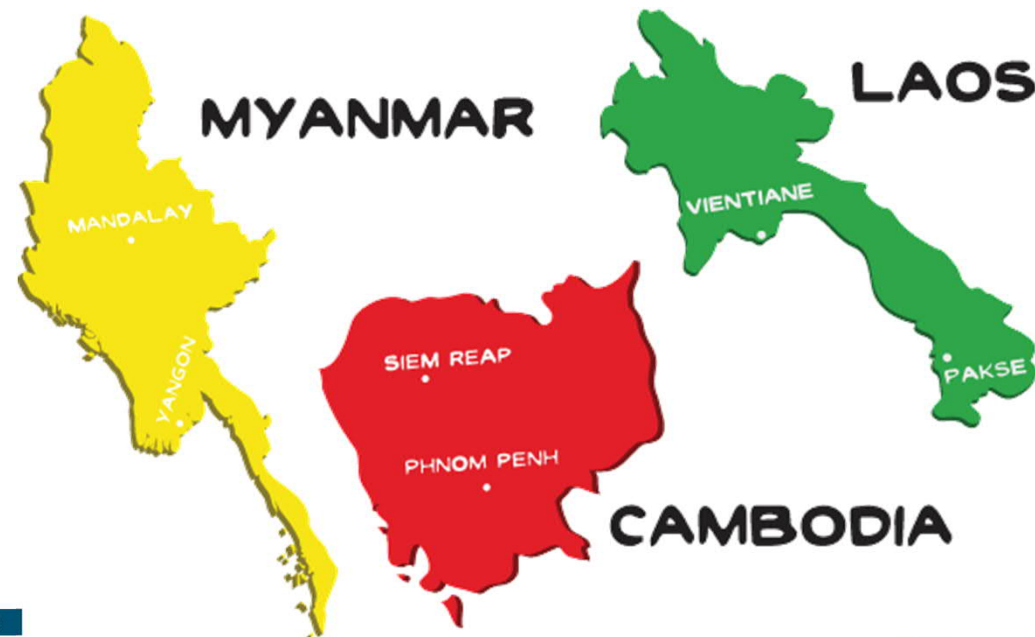
FINLAND FUTURES
RESEARCH CENTRE

DEVELOPMENT OF ENERGY
EDUCATION IN THE MEKONG AREA
2016 - 2019



DEEM project wider objective

To ensure that Higher Education Institutions (NUOL, ITC, RUPP, YU, YTU) are able to respond to capacity and employment needs of the sustainable energy development in Cambodia, Laos and Myanmar

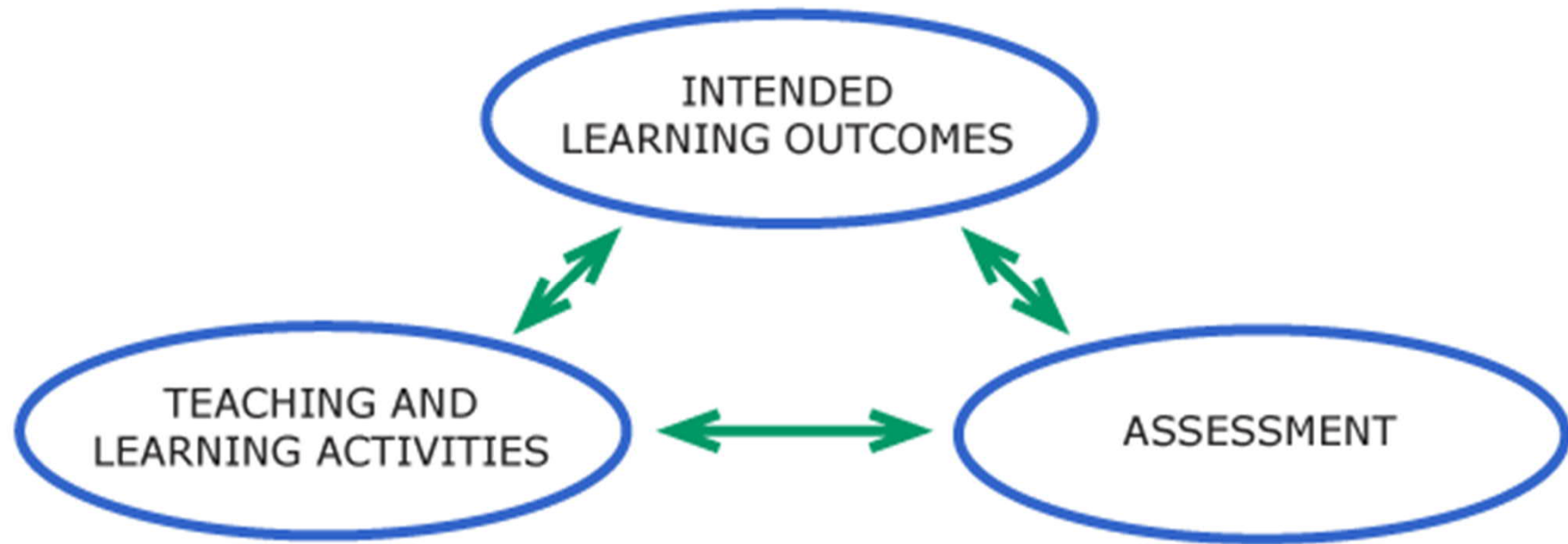


Learning goals and programme of the workshop

This workshop

- Goal: to empower professional staff working in the field of education by creating a learning platform aiming at innovative teaching practices
- 3-year programme, starting today
- Focus on
 - Didactical skills
 - Curriculum development
- Not exclusively related to sustainable energy

Framework of the workshop



Learning outcomes

1. To understand basic theory on curriculum development practices;
2. To formulate sound learning outcomes for your course or curriculum based on the taxonomy of Bloom
3. To explain a number of interactive and innovative teaching methods that allow for learning across various learning domains (knowledge, skills, attitude and interdisciplinary learning);

Learning outcomes (2)

4. To design a coherent assessment strategy
5. To reflect on own teaching competences and to develop an action plan accordingly.
6. To integrate the aforementioned aspects into (interdisciplinary) programmes and curricula related to sustainable energy development (and other interdisciplinary fields)

Programme

- Day 1: expectations, curriculum approaches, and learning outcomes
- Day 2: interactive and innovative teaching methods and assessment
- Day 3: learning styles and development of individual action plans

Programme day 1

- Group exercise: Getting to know each other
- Group exercise:
 - Teacher-centred versus student-centred learning
 - Control over curriculum and courses

Lunch break

- Presentation: example of alignment (course)
- Presentation: Learning outcomes
- Small group exercise: learning outcomes
- Learning journal

Energy as wicked problem

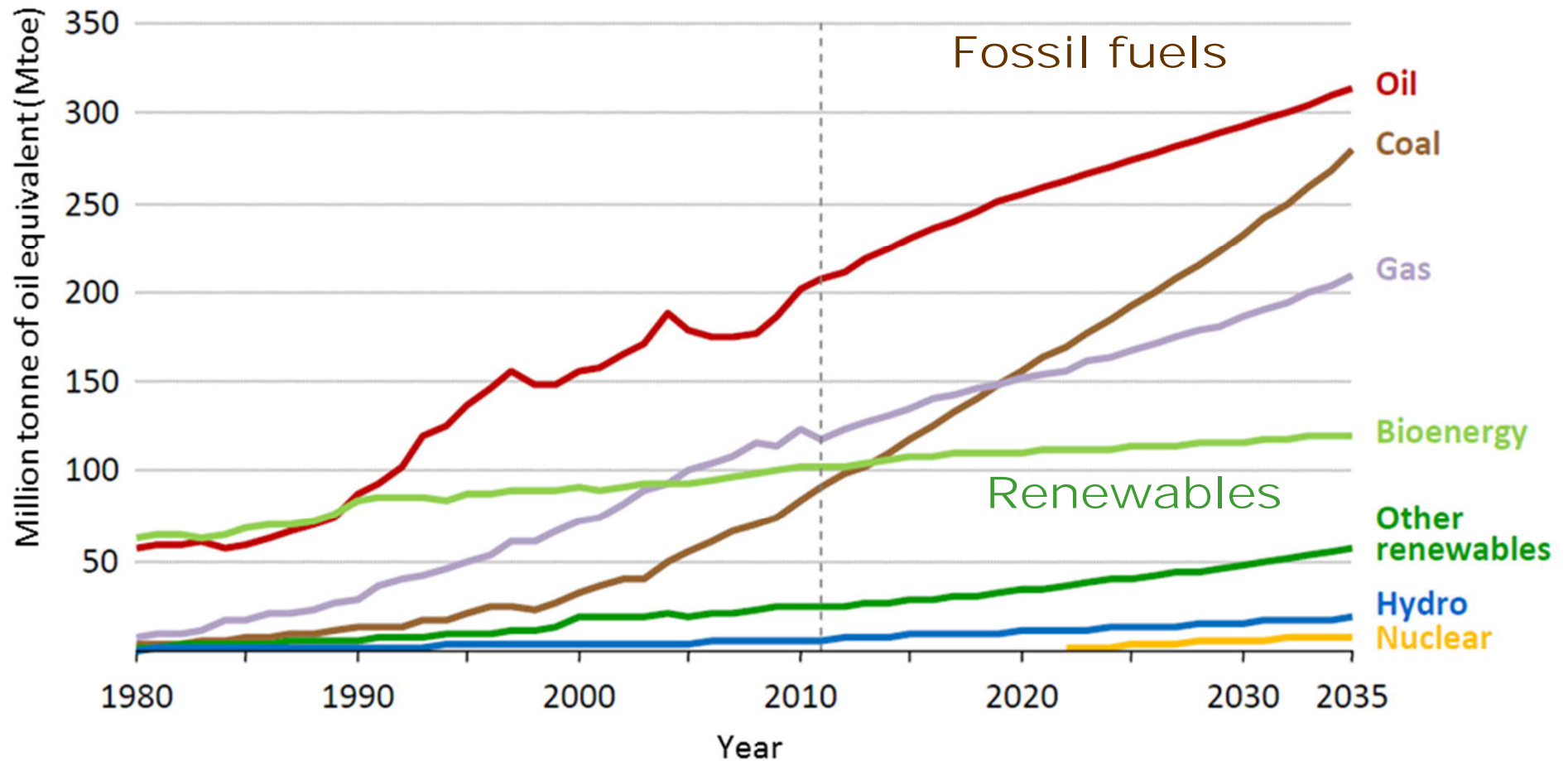
Energy as a wicked problem



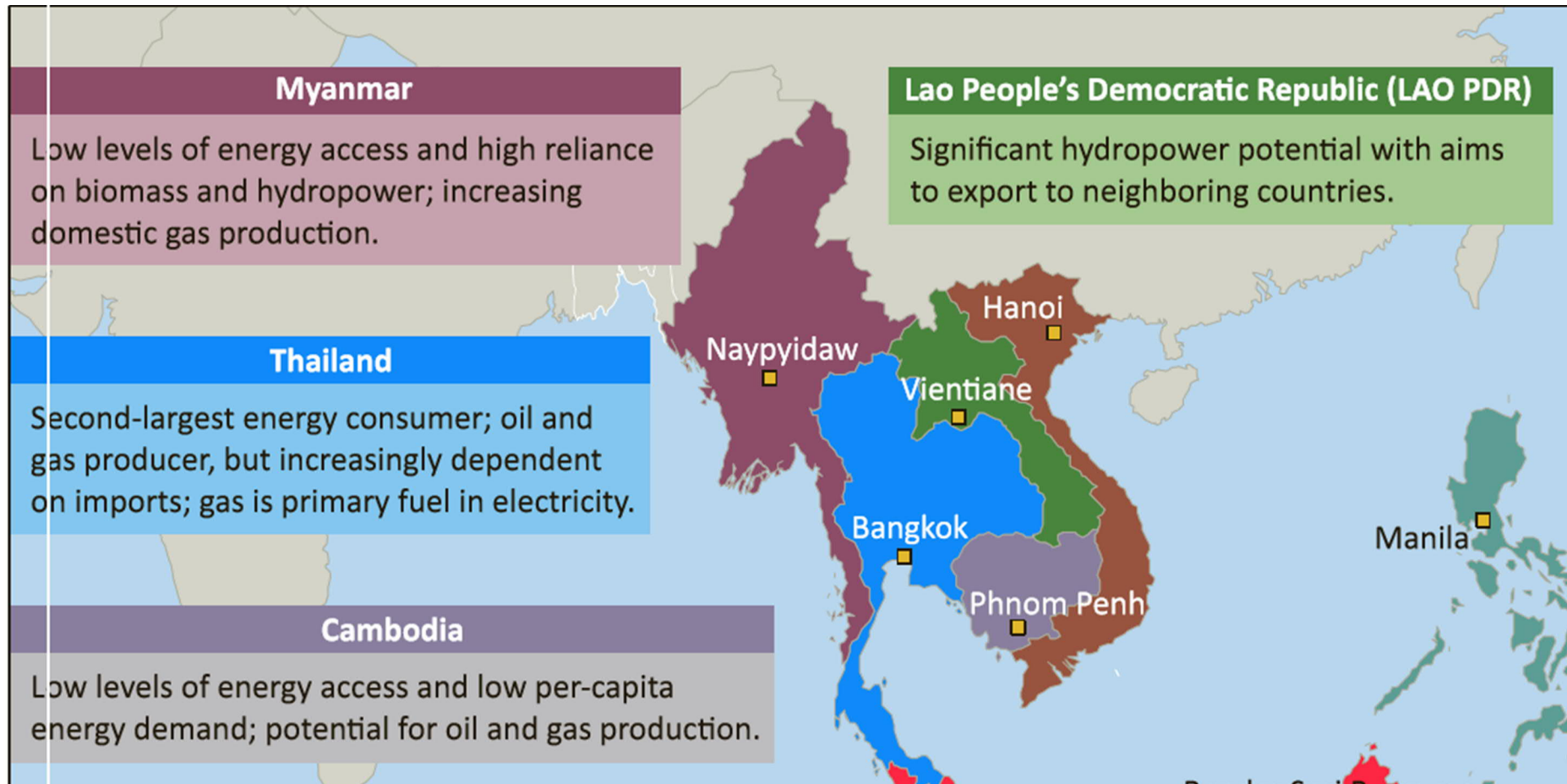
WICKED PROBLEM.
noun | wi-kəd | prä-bləm

= 'A problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize'

Rapid energy demand growth in Southeast Asia



(Geo-)political issue



Fossil fuel vs. renewable energy



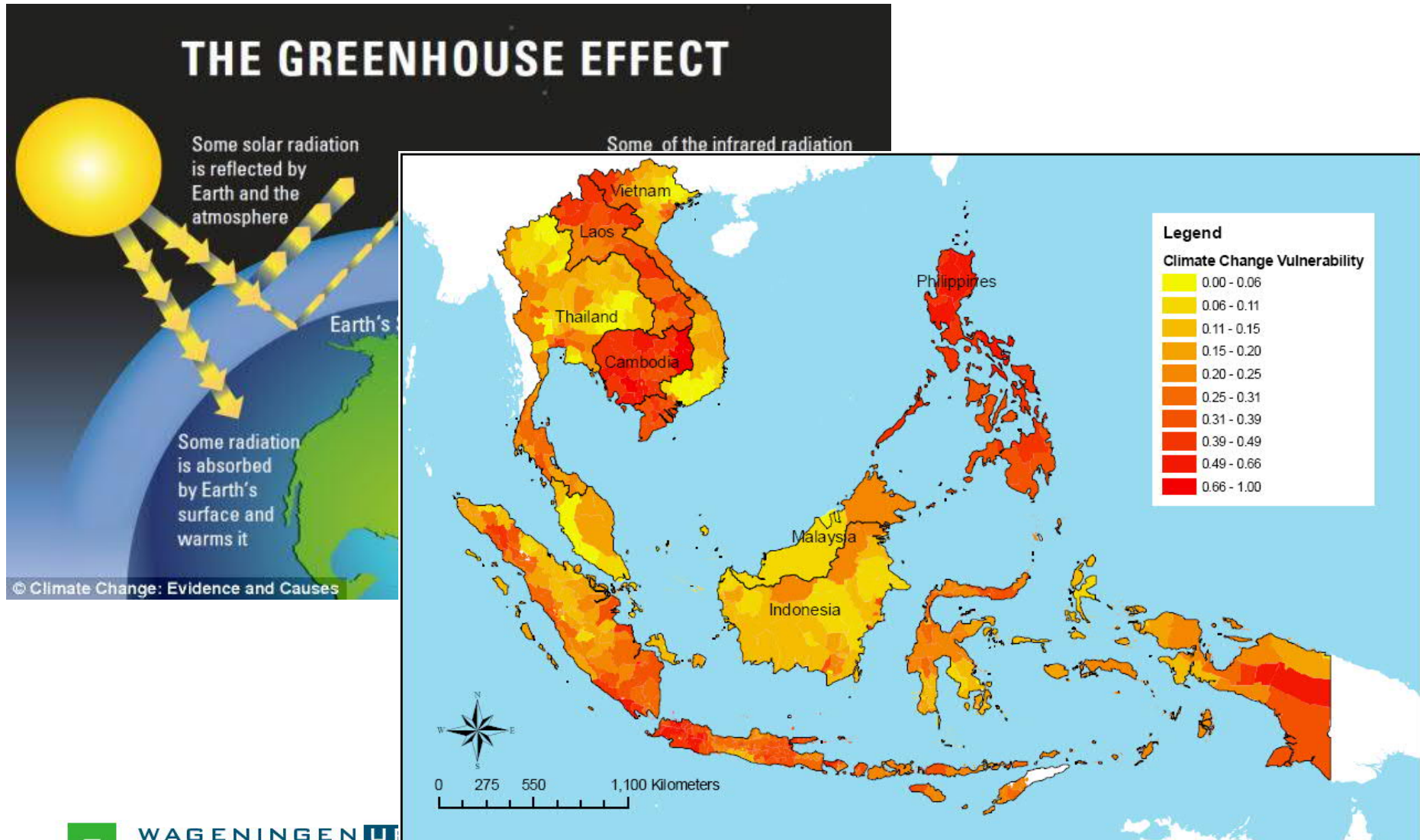
Energy poverty and development



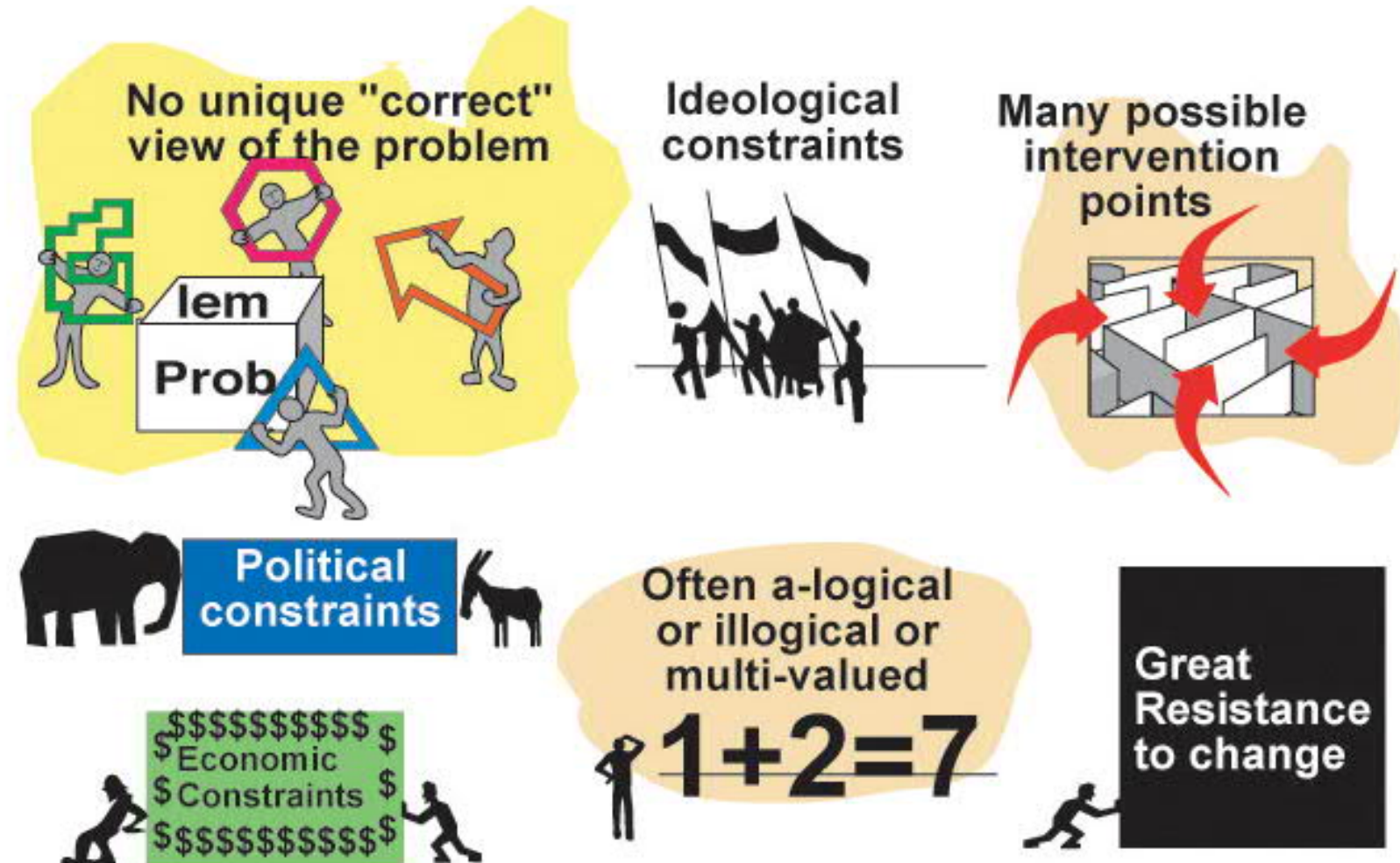
Contested models of energy development



Climate change



Features of wicked problems

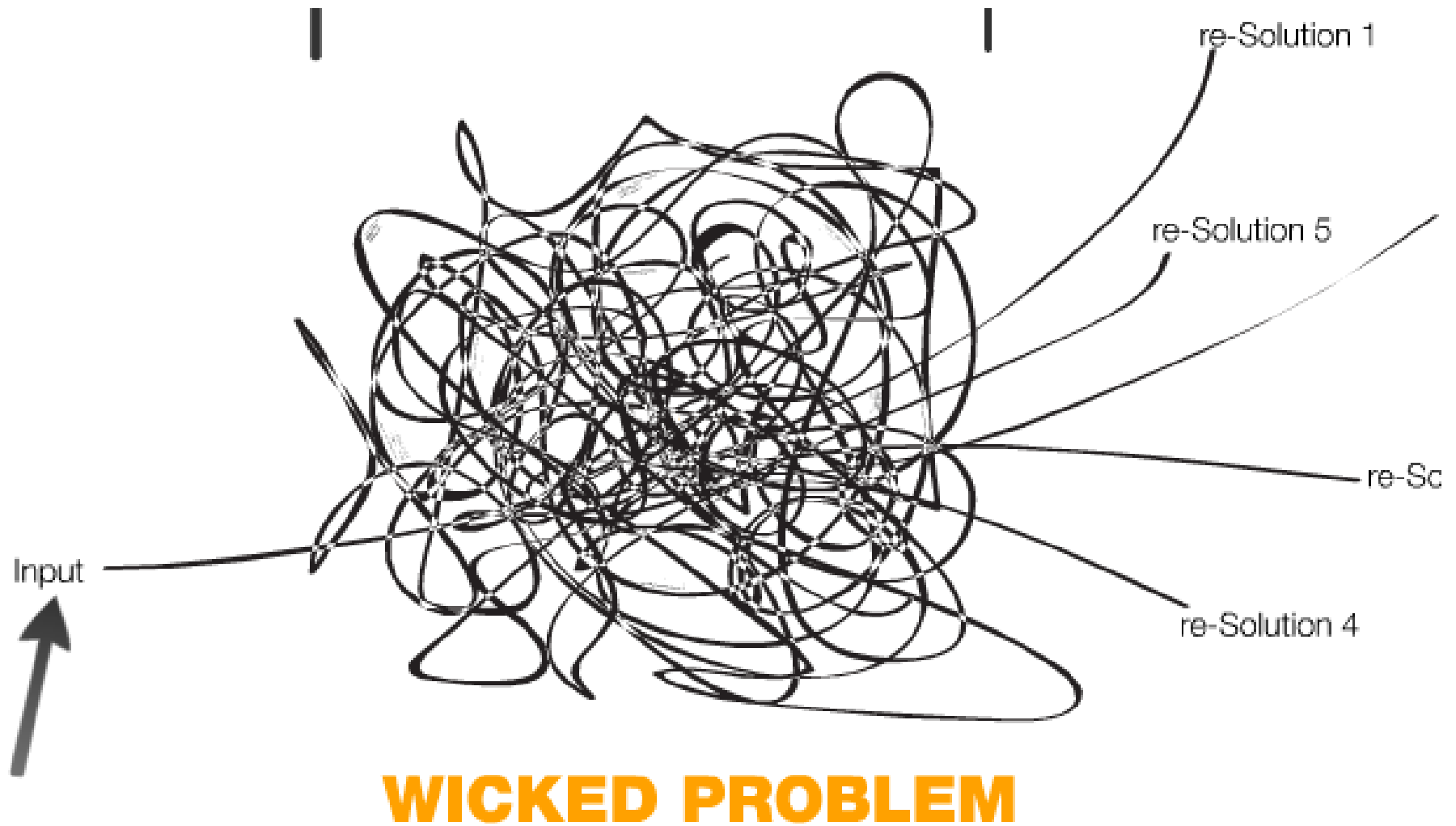


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Other examples



How to deal with wicked problems?



Implications of wicked problems for higher education

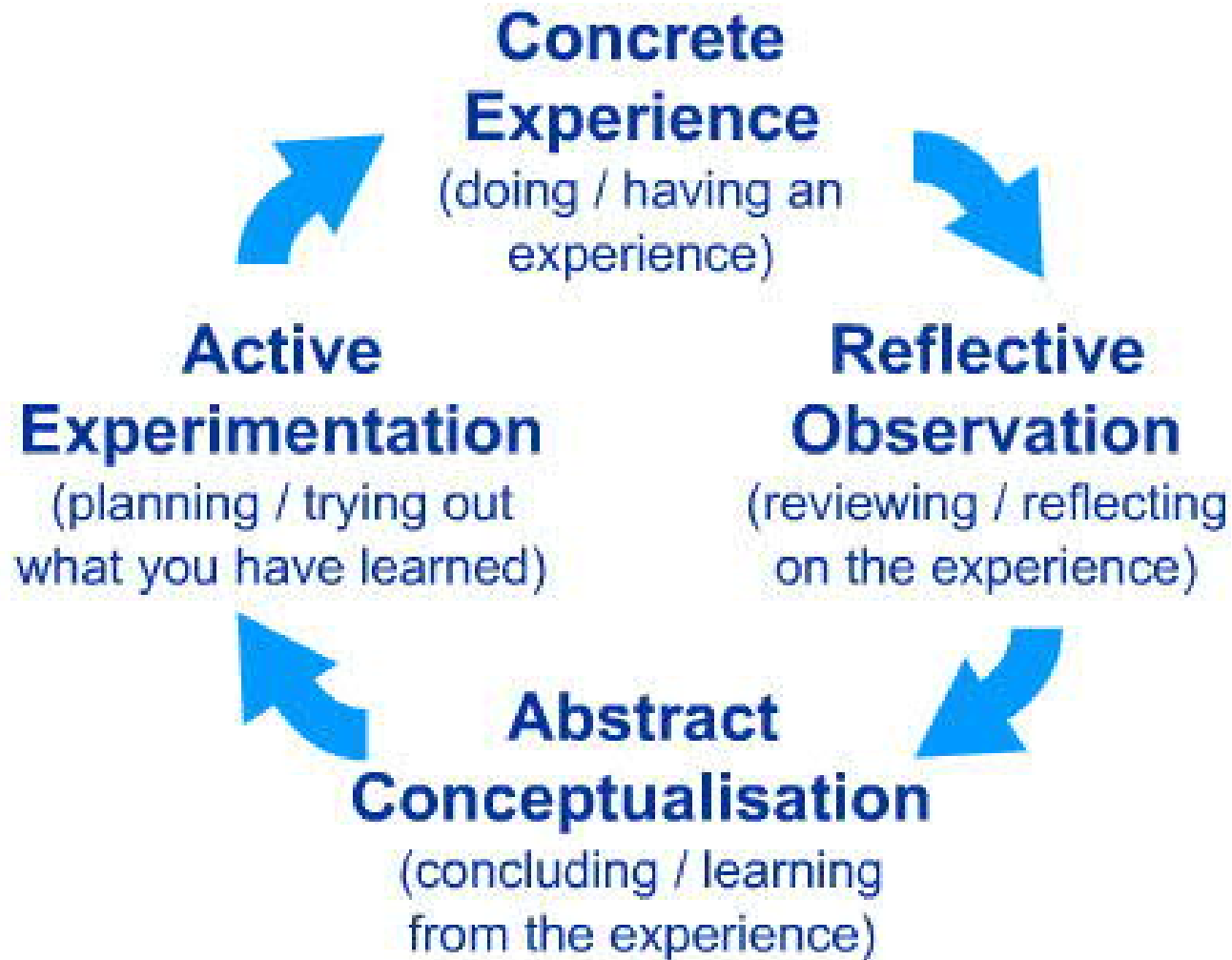
What can higher education do?

- Provide a safe environment for learning
- Make connections between people, issues, disciplines, universities and countries
- Encourage innovative and critical thinking
- Train new generations to deal with (new) wicked problems

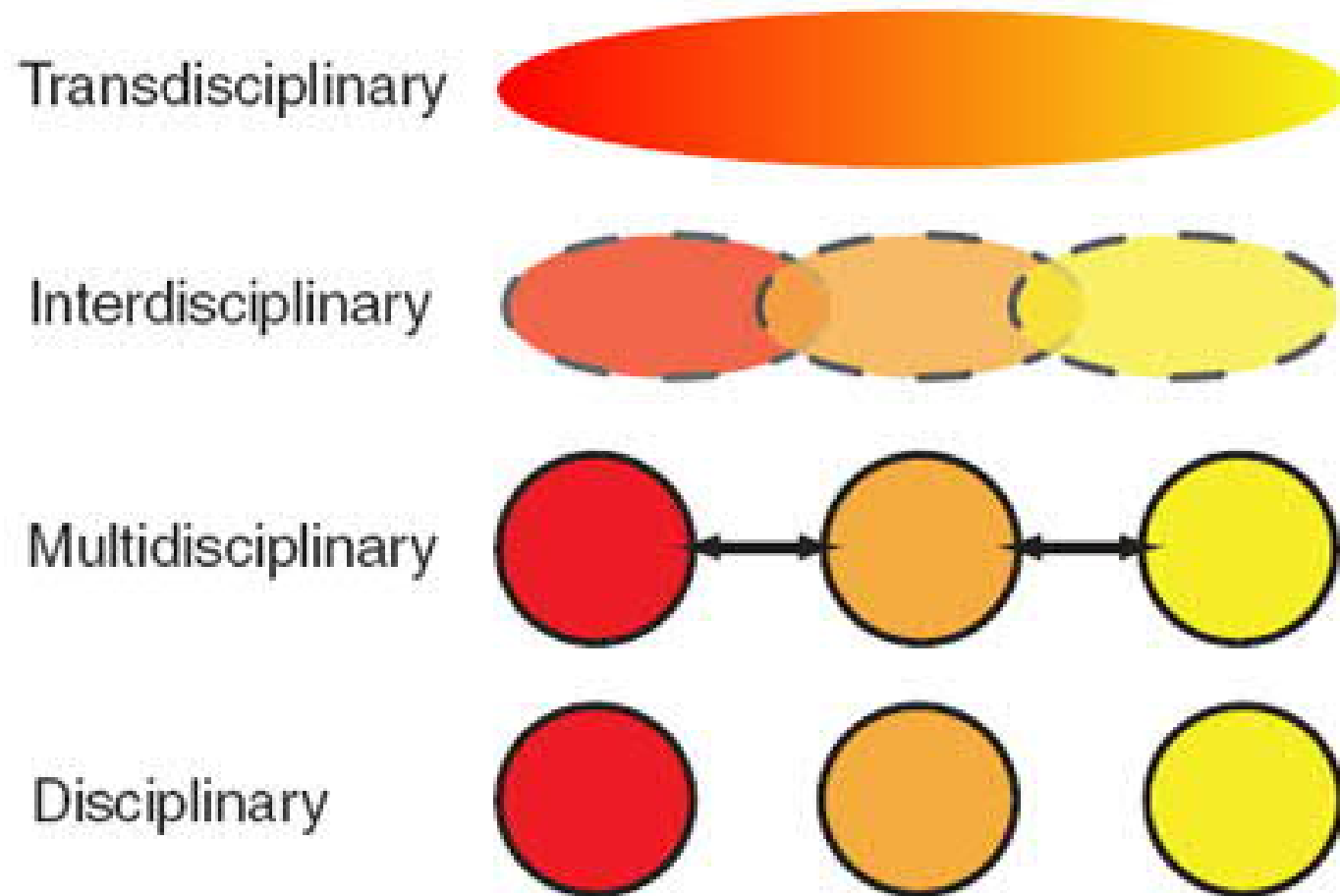
How?

- Supporting various learning styles
- Facilitating interdisciplinary education
- Using new tools for learning and assessment
- Didactical staff training

Supporting various learning styles



Facilitating interdisciplinary education



Using new tools for learning

A diagram on a yellow background showing a central question mark with arrows pointing to various logos: Blackboard (Bb), ANGEL LEARNING, Sakai, and Desire2Learn (Innovative Learning Technology). A graduation cap icon is also present. The Wageningen University logo is visible in the bottom left corner.

WAGENINGEN University

Blackboard

ANGEL LEARNING

Sakai

Desire2Learn
Innovative Learning Technology

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Didactical staff training

