

# **ESD!**

## **Working with heritage knowledge on action learning pathways to more healthy lifestyles with greater food security**



**Rob O'Donoghue**

# OVERVIEW: ESD action learning pathways in school subject teaching



**Cultural history and heritage** as a foundation for situated learning (3)

How are histories and heritage foundations for learning?

Working with the **SDGs** as a tool for clarifying complex patterns of risk (4)

How do the SDGs enable a grasp of complex concerns?

Expanding subject **pedagogy** to include action learning . (5&6)

How can conventional subject teaching be expanded for ESD?

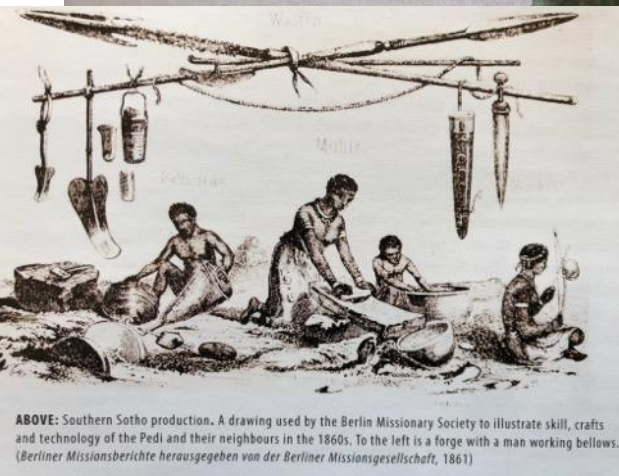
**Three action learning exemplars** of heritage-led action learning. (7-9)

How can heritage inform food security and health innovation?

The inclusive **assessment** of learning and competence. (10-12)

How can we best assess learning and competence?

# PAST: Forgotten Worlds of early agriculture in East and Southern Africa



ABOVE: Southern Sotho production. A drawing used by the Berlin Missionary Society to illustrate skill, crafts and technology of the Pedi and their neighbours in the 1860s. To the left is a forge with a man working bellows. (Berliner Missionsberichte herausgegeben von der Berliner Missionsgesellschaft, 1861)



# PRESENT: Sustainability and health concerns in colonial modernity



- Early-onset diabetes
- Obesity and heart disease
- Anaemia (iron deficiency)
- Candida (Gut bacteria)
- Access to food (hunger)

**Food security risk**

Fermented grain foods



Cultured milk (curds)

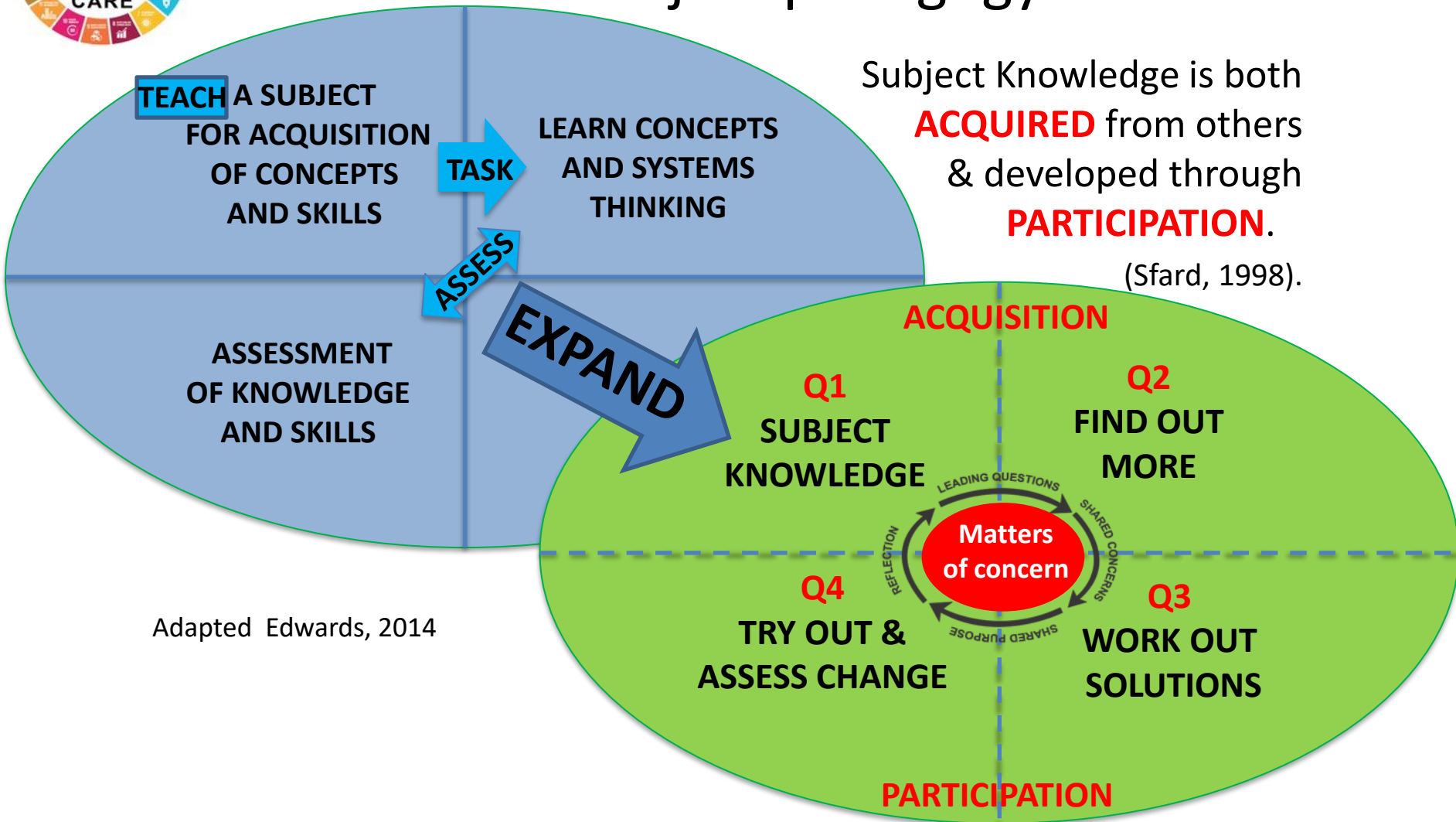


Leafy green vegetables



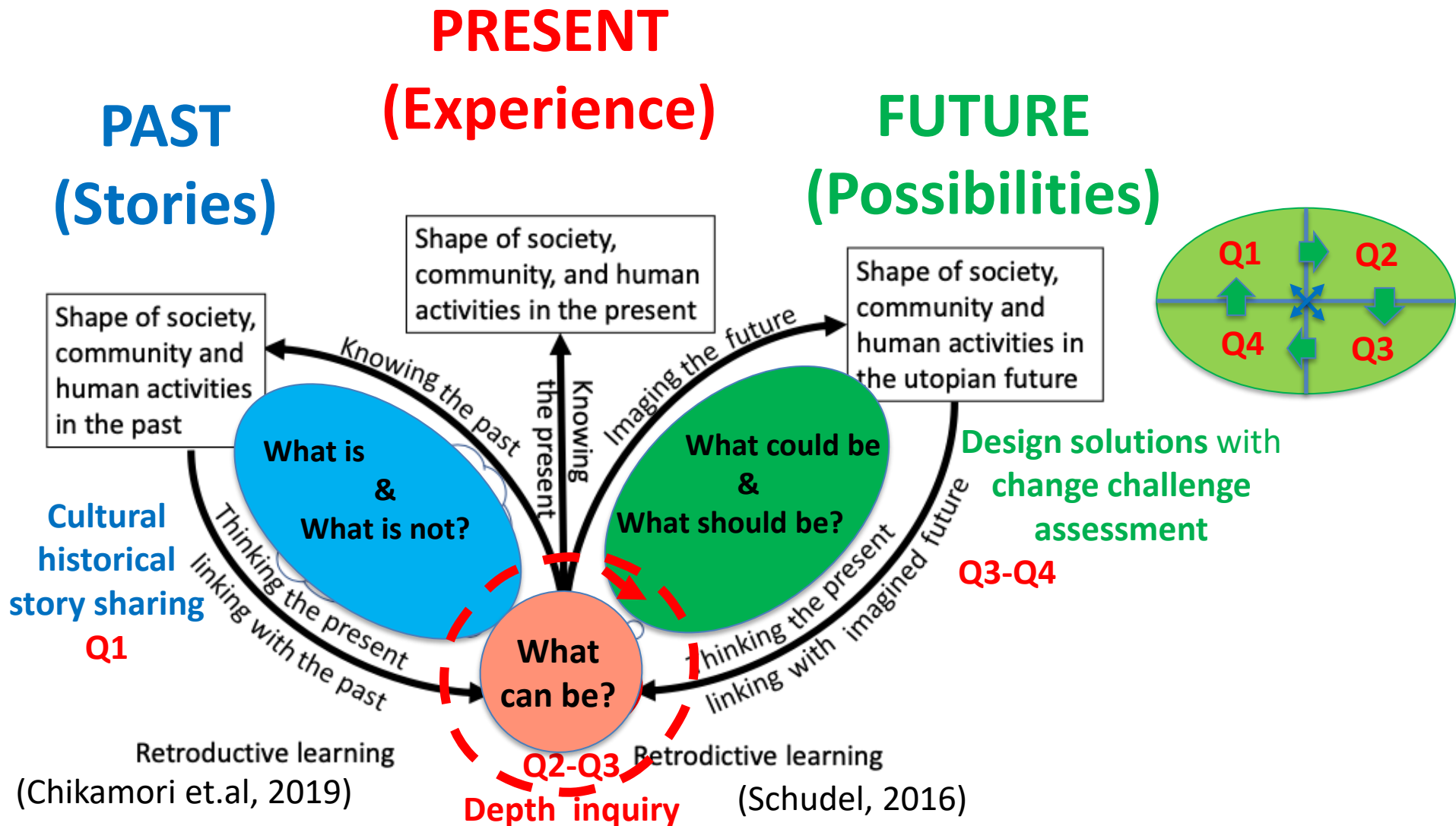


# FUTURE: An action learning expansion of conventional subject pedagogy



Adapted Edwards, 2014

# Critical Realist Learning across **PAST** and **PRESENT** to re-imagine a sustainability **FUTURE**





# FERMENTED GRAIN FOODS (*maRewu*)



1 Tune-in

How were things in the past?



2

How are things today?



4

How can we make things more sustainable together?



Either – or,

Both

or

Home-Made?



3

What does this mean for us today?



LEADING QUESTIONS

SHARED CONCERNS

Diabetes  
Obesity  
Candida

REFLECTION

SHARED PURPOSE

*Touch the past with our memories, feel the future flying on the wings of imagination*  
(Mhlope, 2021)

# CULTURED MILK (*Amasi*)



## 1 Tune-in How were things in the past?



## 2 How are things today?



## 4 How can we make things more sustainable together?

Shop-bought

Home-Made?  
or  
Both



## 3 What does this mean for us today?



*Touch the past with our memories, feel the future flying on the wings of imagination  
(Mhlope, 2021)*



# GREEN LEAFY VEGETABLES (*imifino*)



1

Tune-in

How were things in the past?



2

How are things today?



4

How can we make things more sustainable together?

Wild-picked,

Shop-Bought,  
Home-Grown

or all of the above?



3

What does this mean for us today?



LEADING QUESTIONS

SHARED CONCERNS

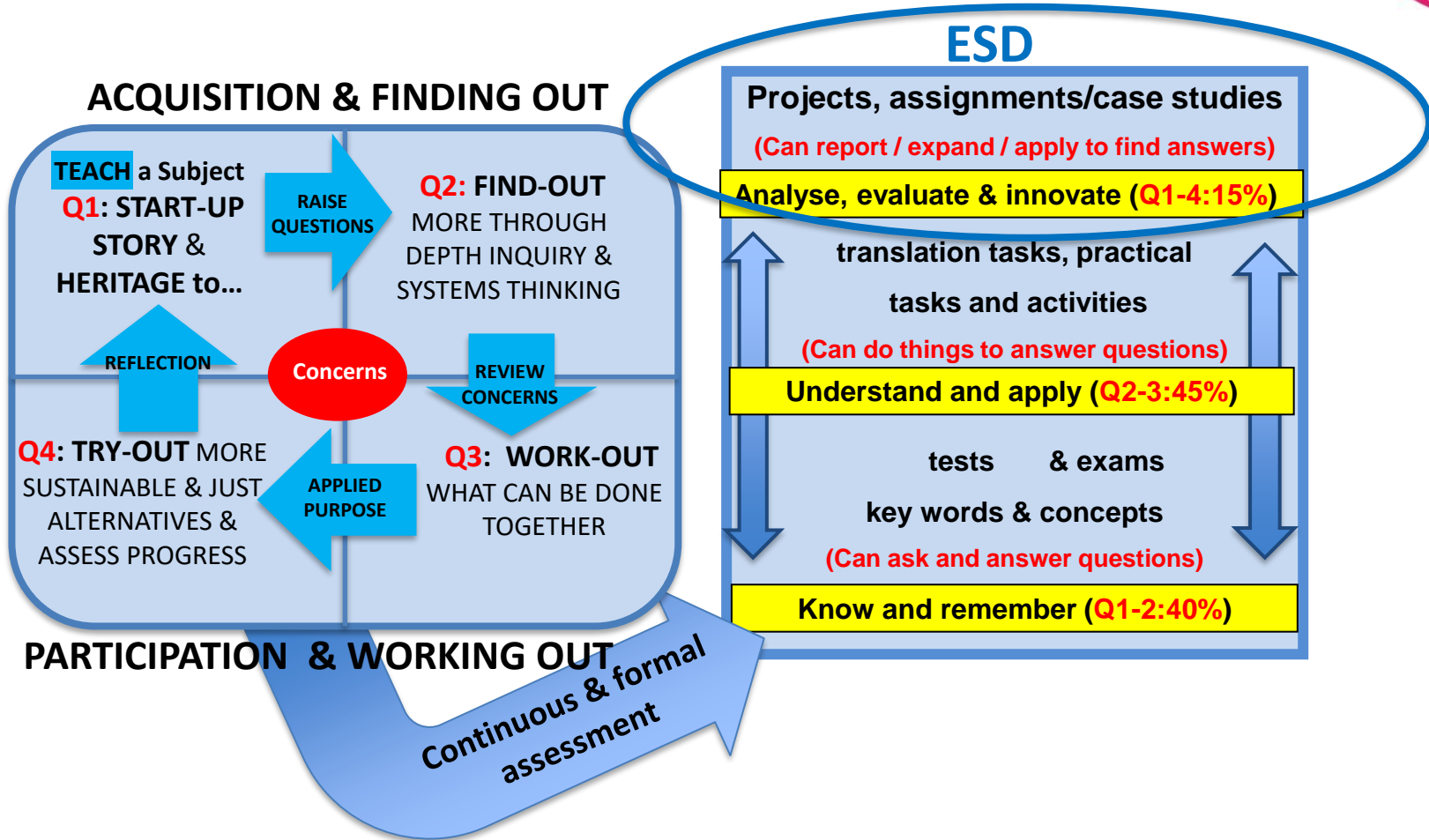
Anaemia  
and locally  
produced  
food

REFLECTION

SHARED PURPOSE

*Touch the past with our memories, feel the future flying on the wings of imagination*  
(Mhlope, 2021)

# How do we assess TMESD learning with conventional assessment practices

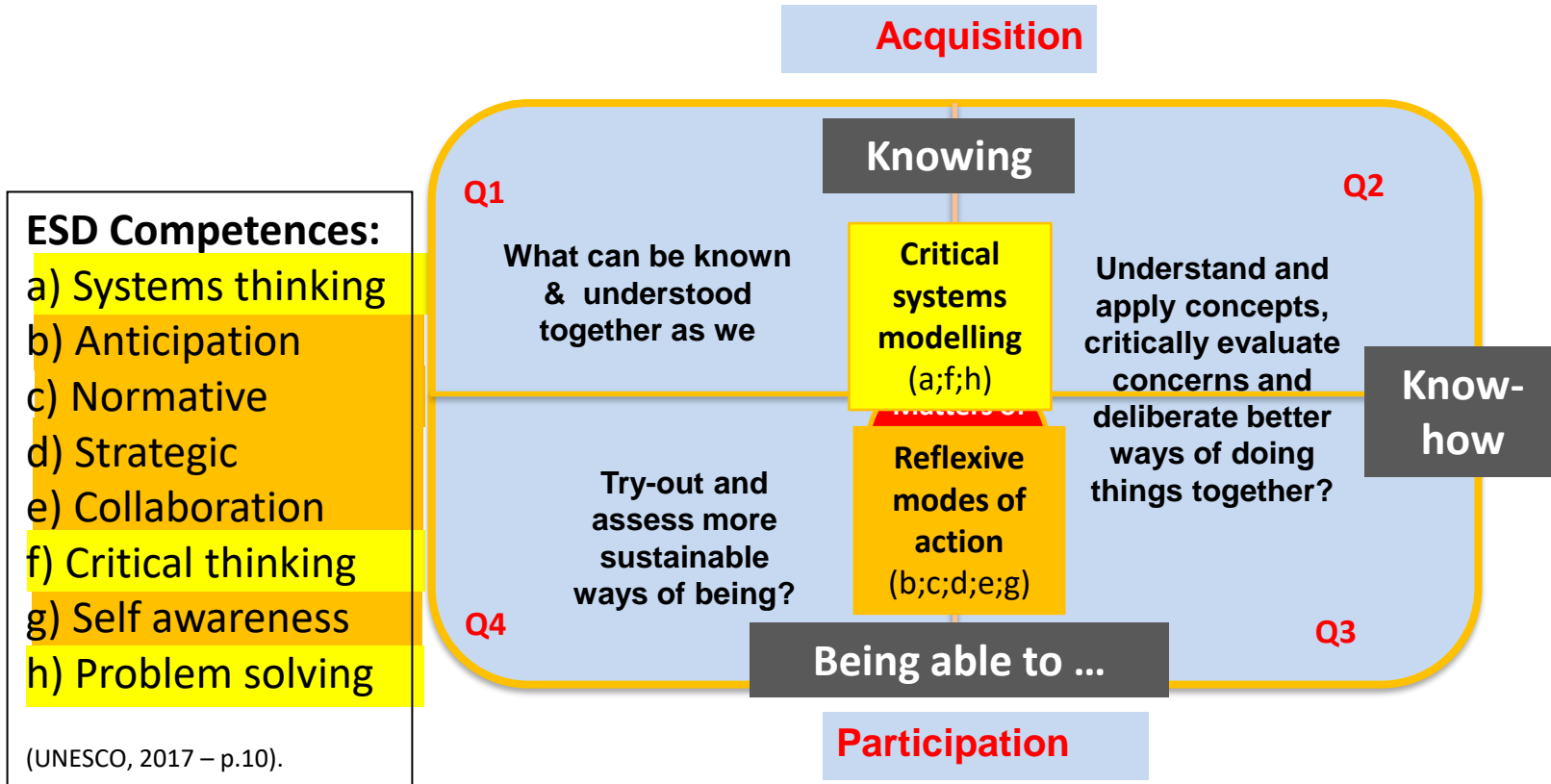


# How do we work with competence assessment for ESD in subject teaching



Cultural and personal competences develop with heritage and life experience as the knowledge, dispositions and aesthetics enabling us to:

- **Know things** in relation to a context and concerns with (**Q1**)
- Developing **Know-how** to resolve concerns and (**Q2 & Q3**)
- **Be able to** develop more sustainable ways of being together (**Q2-4**)





# Assessing significant learning actions together



Is the learner able to critique, evaluate, review, formulate and generate new ideas and suggestions for change?

**LEARNING HOW TO LEARN Q1-4**

Can the learner identify, critique, understand and describe a matter of concern using systems thinking with in-depth understanding?

**FOUNDATIONAL KNOWLEDGE Q1**

Can the learner analyse, interpret and apply knowledge to solve problems in relation to SD matters of concern in a particular context?

**APPLICATION Q2....**

Can the learner reflect on a situation and show empathy and compassion for self, community and other life forms ?

**CARING UBUNTU Q1-4**

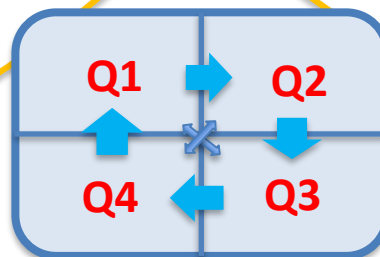
**SIGNIFICANT LEARNING**

Can the learner describe, synthesise and align different types of knowledge(s), values and skills in order to contribute to problem solving and change processes?

**INTEGRATION Q3...**

Is the learner able to show care and concern for others and surroundings

**HUMAN AND ECOLOGICAL DIMENSIONS Q1-4**



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