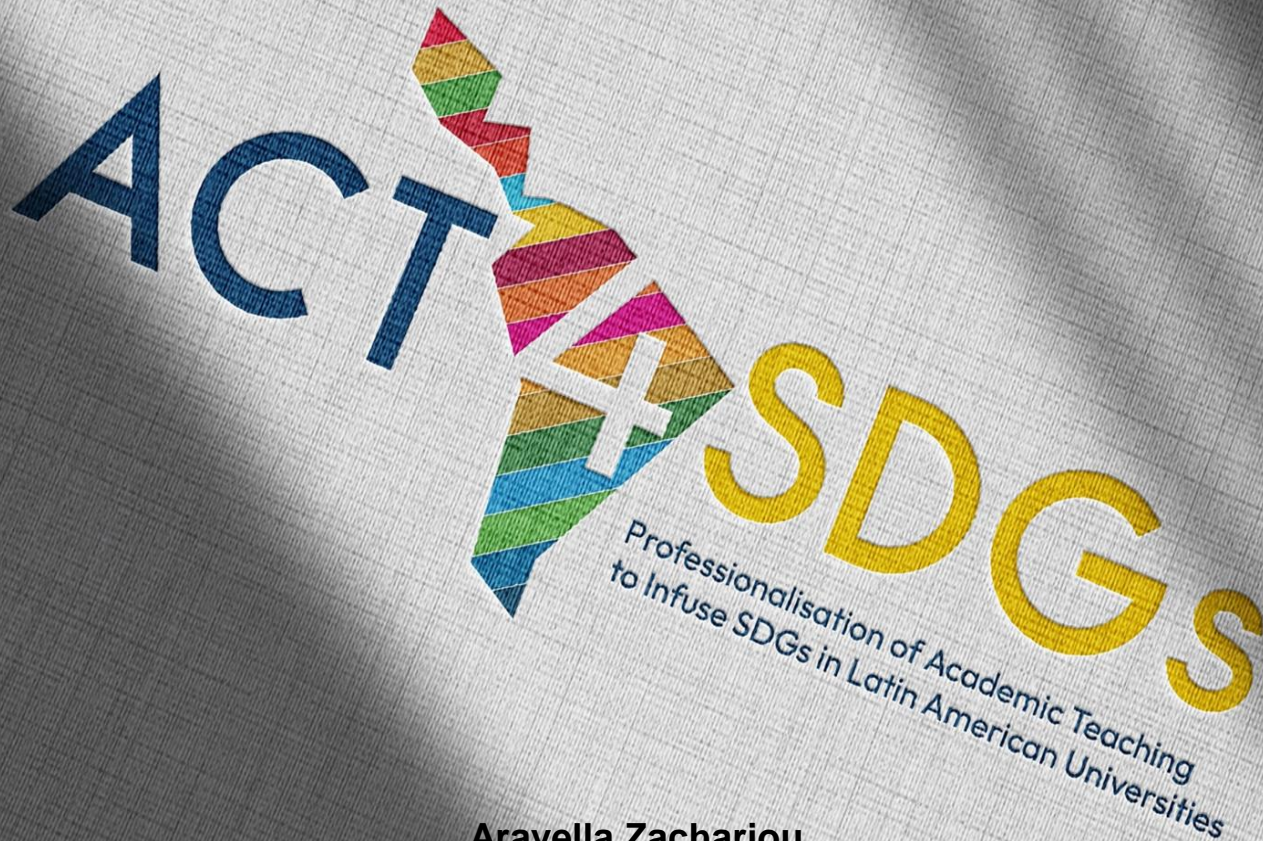




Learning Design- Design for Learning The CARE Methodology

ACT4SDGs

Professionalisation of Academic
Teaching to Infuse SDGs in Latin
American Universities



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Some introductory questions



What does sustainability mean to you; (in one word or phrase)!!!!

What inspired your interest for the environment and sustainability, and how has it influenced your actions or beliefs;

Do you believe that sustainability is utopia or can be feasible;

What do you think academic teachers can do to contribute to a more sustainable society and planet;



Objectives of the Workshop



1. **Understanding the CARE Methodology:** Understand the CARE framework and its components: Conceptualization, Activation, Reflection, and Engagement.
2. **Promoting Student-Driven Learning:** Explore strategies for designing and developing student-driven learning activities or course assignments, which are underpinned by transformative teaching pedagogy and foster student autonomy, engagement, and co-course curriculum construction.
3. **Integrating Sustainable Development Goals (SDGs):** Learn how to design, develop, and implement student-driven assignments that align with sustainability goals and address real-world challenges.
4. **Collaborative Development:** Collaboration to design impactful, student-driven learning activities that promote the 10Cs critical and transversal skills framework and real-world relevance, integrating SDGs into their courses and study programs in multiple academic disciplines.



LEARNING DESIGN: CLARIFYING THE CONCEPT



Learning Design (LD) or design for learning (DL) is a process

- ✦ of constructing student-driven learning activities
- ✦ enabled by certain pedagogies, resources and ICT tools
- ✦ aimed at achieving particular educational aims and objectives related to Education for Sustainability.



FOUR steps into Independent / Student driven learning



- **Step 1: Assess readiness to learn (Signs of readiness for self-directed learning include being autonomous, organised, self-disciplined, able to communicate effectively, and able to accept constructive feedback and engage in self-evaluation and self-reflection)**
- **Step 2: Set learning goals (learning contracts)**
- **Step 3: Engage in the learning process (understand one's own learning preferences and approach to study)**
- **Step 4: Evaluate learning (engage in self-reflection and self-evaluation of their progress in achieving their learning goals with the support and feedback of their advising instructor)**



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Students' roles

-  **Self-assess your readiness to learn**
-  **Define your learning goals and develop a learning contract**
-  **Monitor your learning process**
-  **Take initiative for all stages of the learning process — be self-motivated**
-  **Re-evaluate and alter goals as required during your unit of study**
-  **Consult with your advising instructor as required**

Instructors' roles

- **Build a co-operative learning environment**
- **Help to motivate and direct the students' learning experience**
- **Facilitate students' initiatives for learning**
- **Be available for consultations as appropriate during the learning process**
- **Serve as an advisor rather than a formal instructor**

Self-Directed Learning (SDL) and the SDGACT SDGs

-  SDL – linked to transformation and social action: “a shift of consciousness that dramatically and permanently alters our way of being in the world”. (Morrell and O’Connor, 2002)
-  SDL – linked to critical learning: “...SDL ...supporting critical reflection and creating the potential for transformations (Boggs, 1986; Foley, 1991; Kastner, 1993).
-  SDL – linked to emancipatory learning: “self-directed learning that has at its focus the goal of promoting the emancipation of individuals from domination and exploitation” (Merriam & Caffarella, 1999).



Self-Directed Learning (SDL) and the SDGACT SDGs

- 🚩 **SDL – linked to skills and competences: e.g.**
 - 🚩 responsibility and ownership of the process and the outcome;
 - 🚩 learning to work independently and together,
 - 🚩 managing projects and holding leadership roles,
 - 🚩 communicating effectively in a variety of ways
 - 🚩 becoming self-aware and aware of the others;
 - 🚩 reflecting on the processes and outcomes;
 - 🚩 developing critical thinking and analytical skills;
 - 🚩 applying theory to real world examples and be able to solve problems across disciplines.



CARE methodology to promote SDL



What is CARE methodology?

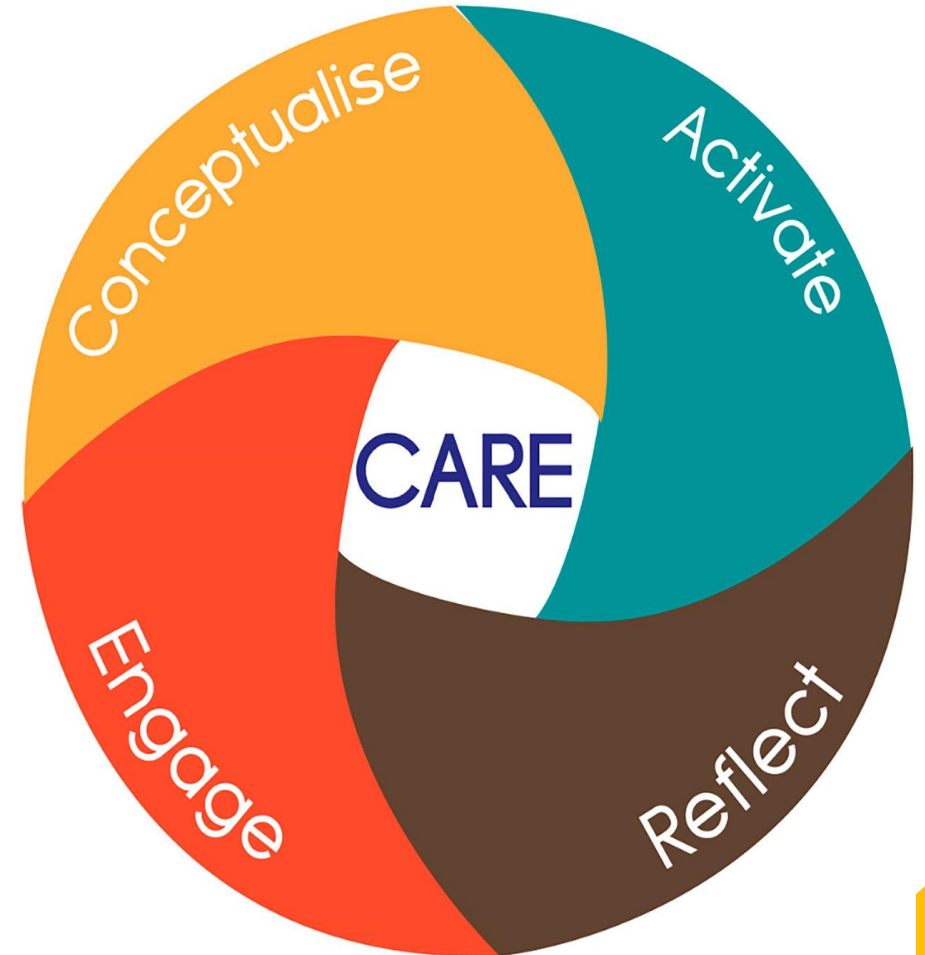
How does it promote Self Driven Learning?

Conceptualisation

Activation

Reflection

Engagement



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www.act4sdgs.net

Student-driven activities imply:













- 🚩 Learners take initiatives for their own learning and the instructor functions as a coach and mentor
- 🚩 Learning activities focus on real world issues
- 🚩 Learning activities are context-specific in which learning is relevant
- 🚩 Focus on problem posing questions for solving real-world problems
- 🚩 Evaluation is based on critical self-reflection



The CARE Components (Makrakis & Kostoulas-Makrakis; 2017,2020):

Conceptualize

The process of conceiving and clarifying

-  What
-  Why
-  Who
-  When
-  Where
-  The process for setting-up the key drivers for learning:
-  SDGs
-  10Cs
-  Six pillars for the 21st learning
-  Sustainability Justice



SDGs are not an alternative solution but is the only solution for creating a better, peaceful, healthy, just, prosperous planet



- **COMPLEXITY**
- **SYSTEMIC**
- **CONNECTIVITY**
- **HOLISTICALITY**



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10 Competences



A culture of sharing that necessitates shifting to less ego-centric principles and practices

Shift from consuming information to constructing knowledge

Ability to make decisions, solve problems and take appropriate action, using learning processes such as conceptualizing, applying, analysing, synthesizing and/or evaluating information gathered by multiple means

learners' capacity to communicate, collaborate and work in multicultural and global environments

Ability to synthesize and transmit ideas in both written, oral and virtual formats

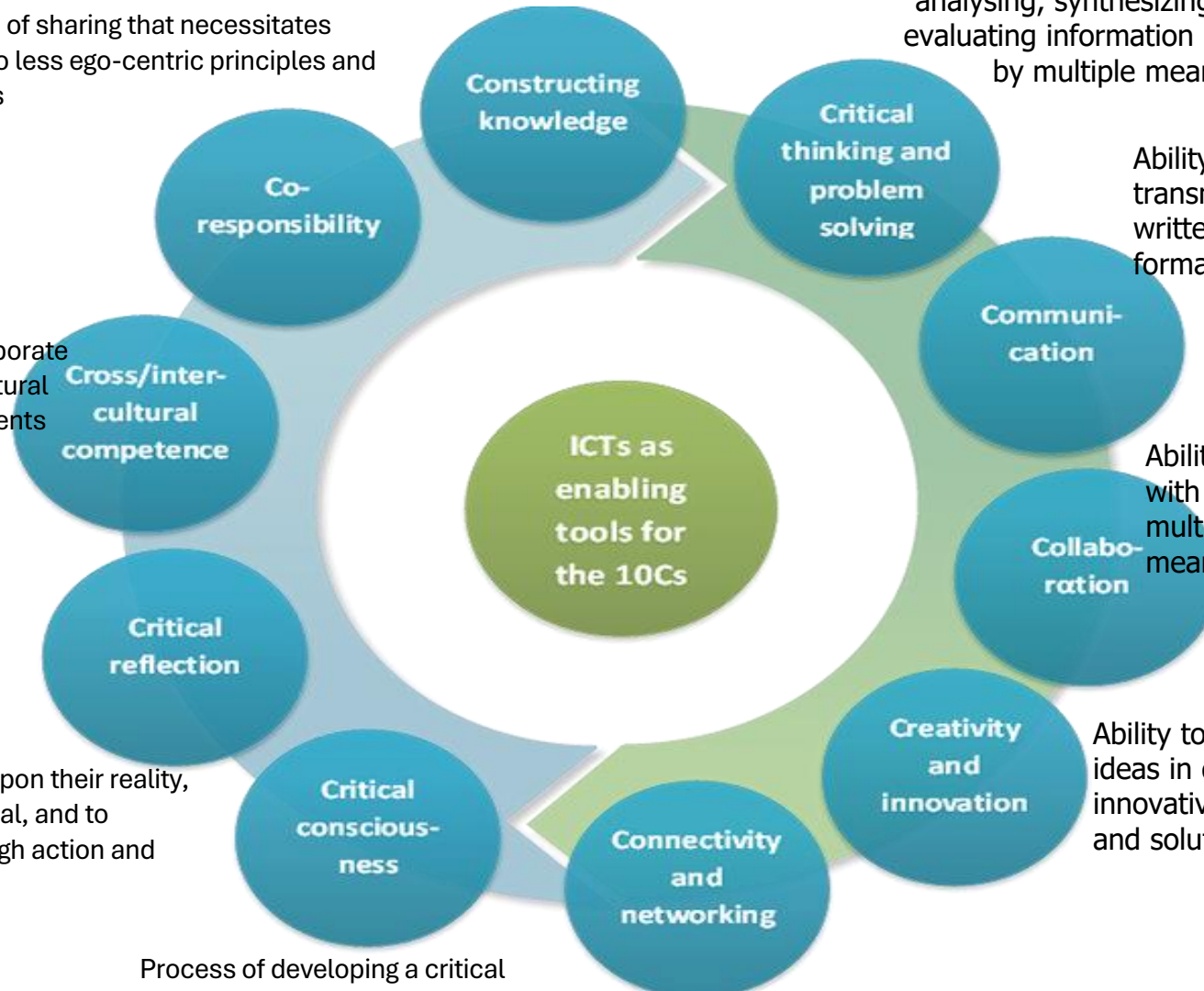
Ability to work effectively with others using multiple communication means

Ability to apply new ideas in developing innovative applications and solutions

Critically reflect upon their reality, personal and social, and to transform it through action and reflection

Process of developing a critical awareness of one's social reality through reflection and action

Connectivity addresses the complexity of the human-society-nature interaction

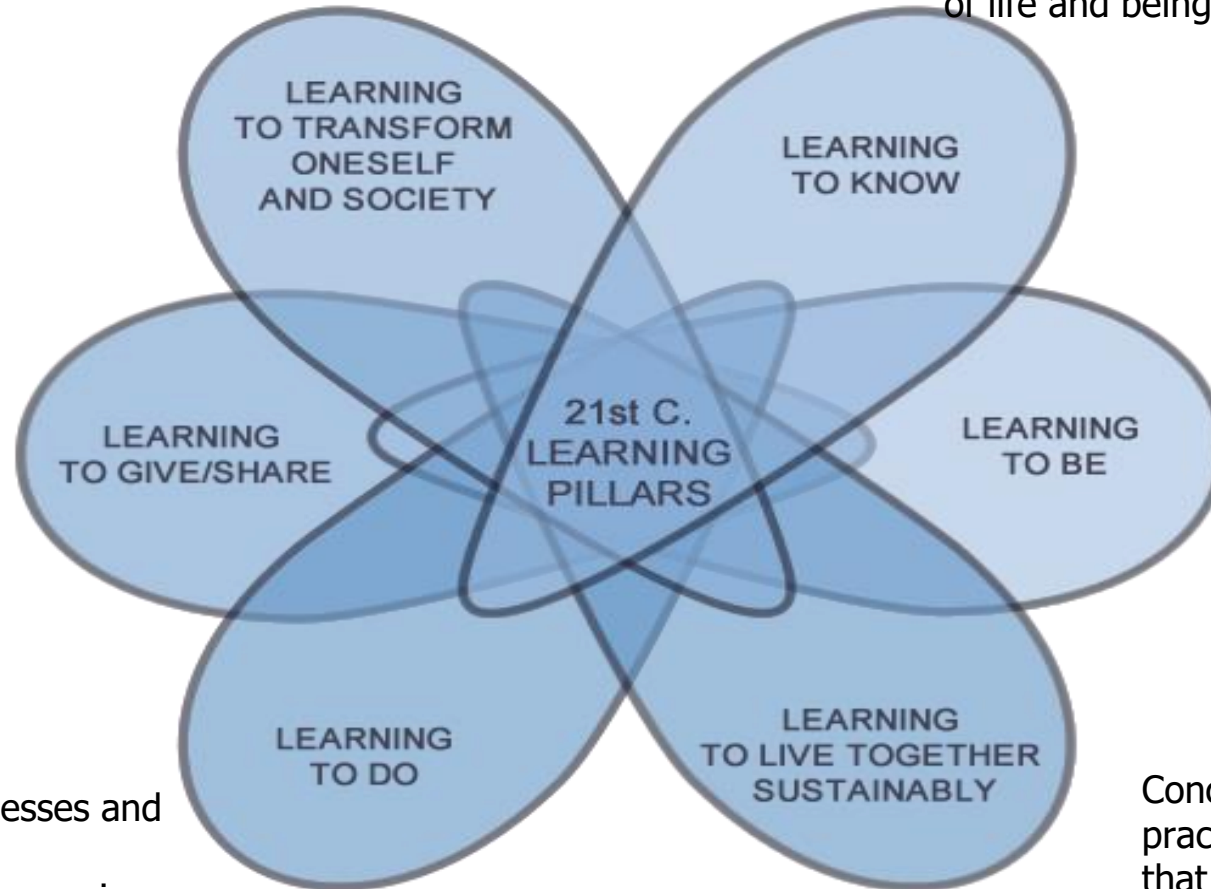


The 6 Pillars of Learning

All the processes and practices that lead people to transform their unsustainable values, behaviours and actions and collectively engage to change oneself and society towards sustainability

Concerns all the processes and practices that promote solidarity, generosity and caring to meet human needs as learners gain a sense of purpose and meaning for their learning and civic engagement

All the processes and practices that lead to merging knowledge with action for building a sustainable future



concerns all the processes and practices that lead people to construct and transform knowledge to making sustainability a mode of life and being



Concerns all the processes and practices that lead to human self-actualisation, self-regulation and cultivating a sense of being versus a sense of having

Concerns all the processes and practices that lead to a peaceful and non-discriminatory society and human co-existence with the natural world



Sustainability Justice

seeks to address systemic inequalities and their root causes to create societies that are both sustainable and equitable.



Environmental Justice

The idea that all people and communities have the right to live and thrive in safe, healthy environments with equal environmental protections and meaningful involvement in these actions.

Social Justice

Social justice is the view that everyone deserves equal economic, political and social rights and opportunities.

Economic Justice

Everyone has opportunities to participate and thrive in the economy, including those who are marginalized by our current economic systems. The principles of economic justice create a stronger economy because prosperity and equity go hand in hand.

Cultural Justice

Maintain harmony among various cultures by promoting equitable interactions. It protects a subordinate group of people in a dominant culture against prejudice and discriminatory practices.

CONCEPTUALISE



The stage of conceptualisation enables the teacher/designer to:

- 🚩 involve learners in the process of creating the learning activity;
- 🚩 the learning activity will be connected with more than one subject (inter-cross-disciplinary);
- 🚩 infused by the 10Cs, the 6 pillars of learning, the 17 SDGs and Sustainability Justice;
- 🚩 define learning objectives, key concepts, subject areas, time required, materials/resources and alignment with national curriculum standards.



Questions to be asked and deal with at the conceptualisation level



- ✦ What is the core theme or topic and how is it related to 17 SDGs?
- ✦ Which of the 10Cs, the 6 pillars and sustainability justice will be integrated into the theme?
- ✦ What are the learning outcomes or what learners should be able to do after the implementation of the learning activity?
- ✦ What pedagogical approaches will be used?
- ✦ What guidance and support will be provided?
- ✦ What learning materials and ICT resources are necessary for engaging learners with Education for Sustainability enabled by ICTs?

Framing the student-driven learning activity at the conceptualization level

- 🚩 Title of the learning activity theme in the context of an SDG and target learner group(s)
- 🚩 List the 10Cs, 6 pillars and dimension(s) of sustainability justice supported
- 🚩 List the subject areas integrated
- 🚩 List the learning outcomes
- 🚩 List key concepts
- 🚩 Define the time-required
- 🚩 List the materials/preparation needed
- 🚩 Identify the alignment with the national curriculum for each subject area integrated






ACTIVATE



- ✦ Activation refers to a process shifting from the learning design to concrete learning activities.
- ✦ Providing opportunities for learners to meaningfully dialogue, reflect and engage before, during and after learning intervention. Through problem-posing questions, activation.
- ✦ Attempts to make the classroom a space of negotiation in which teachers and students.
- ✦ Co-construct knowledge.



Questions to be asked and deal with the activation process

-  What Open Educational Resources are going to be used and what other resources need to be developed?
-  What is the nature of the learning intervention the learners will engage with?
-  What kinds of learning activities will the learners engage with?
-  What types of communication will the learners be using?
-  What types of collaboration will learners be doing?

Organising activities

Among the key strategies for activation are:

- 🚩 concept mapping enabled by ICTs,
- 🚩 journals,
- 🚩 virtual field trips,
- 🚩 brainstorming,
- 🚩 diaries,
- 🚩 infographics,
- 🚩 peer-teaching/reviewing,
- 🚩 role-playing,
- 🚩 gamification.

Framing student-driven learning activity at the activation level



A. Each theme could be divided into more than one activity (e.g. Activity 1, 2, 3, etc.). All the key activities and their steps (Step 1.1, 1.2, 1.3, etc.) should constitute a whole and not an end by themselves.

 List your procedures or steps for each key student-led activity in the order that make sense.

B. As you list each procedure step, you should use the following checklist to check for completeness:

 1. What do my learners already know that will help them meet the desired learning outcomes or objectives?

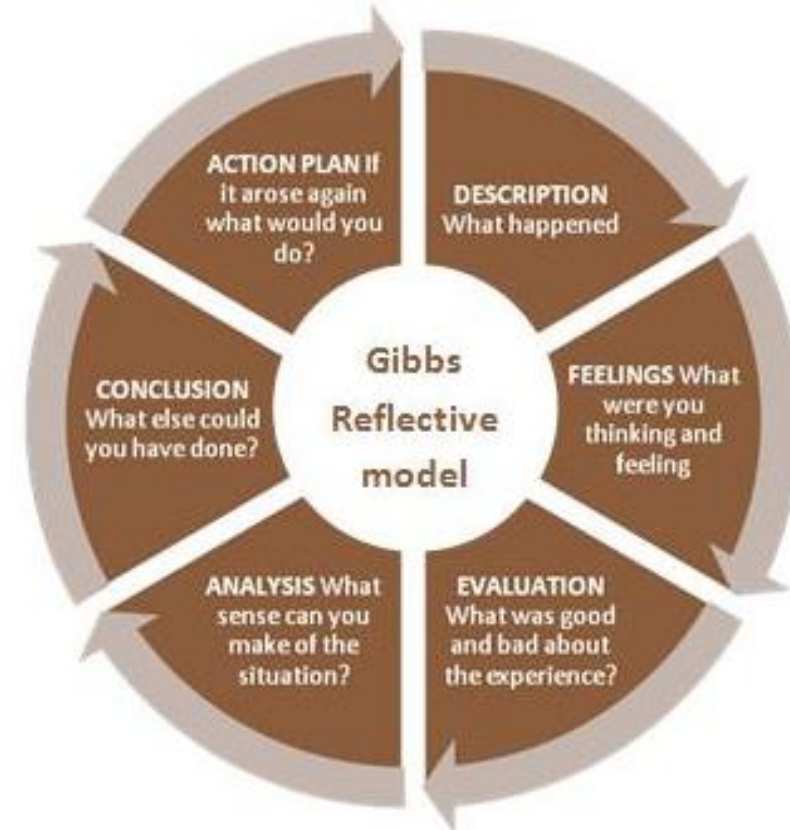
 2. Are the activities and their steps help learners meet the expected learning outcomes?

 3. Does the content across all activities reflect the 10Cs, the 6 pillars, the SDG focusing and sustainability justice?

REFLECT

- Helps students and educators to understand the subject in depth.
- Reflection takes place in many different stages, namely, before each activity, during its implementation and after its completion.
- Reflection is even useful the “day after” that is beyond the time the learning activity constructed will be implemented.

Gibbs’ reflective learning cycle consists of the following six stages of reflection following-up by Shon model of reflection in action and on action:



Reflection in action (at the time the event is happening)

- The experience itself
- Thinking about it during the event
- Deciding how to act at the time
- Acting immediately

Reflection on action (after the event)

- Reflecting on something that has happened
- Thinking about what you might do differently if it happened again
- New information gained and/or theoretical perspectives from study that inform the reflector's experience are used to process feelings and actions

Four processes of reflection






- ✦ Reflection-before-action (Taking place before activation)
- ✦ Reflection-during-action (Taking place during activation)
- ✦ Reflection-after-action (Taking place when the learning activities have been carried out)
- ✦ Reflection-beyond-action (Thinking about future actions related to the incurred learning activities).





Questions include:

Integrating the four-types of reflection into the Conceptualisation, Activation and Engagement processes, besides the questions raised in the Gibbs's model, consider also the following:

-  Are the learning activities include reflection as part of the assessment strategies?
-  Are the learners actively encouraged to reflect at key points and procedure steps along all CARE phases?
-  Is there provision for reflecting on the strengths and weaknesses of the learning activities as well as possible interventions for improvement during and after the implementation of the activities?

It is stressed that the four chronological types of reflection represent diagnostic, formative, summative and prospective assessment.

Framing student-led activities at the reflection level ACT

-  Provide reflective thinking worksheets that prompt learners to think about what they knew, what they learned, and what they need to know as they progress through the CARE processes.
-  There are specific strategies and tools that can assist learners in engaging in reflection, including: Logs and journals, concepts maps, service learning, discussion forums, 3self-reflect (actual, ideal, ought), empathy mapping worksheets, etc.

ENGAGE



Engagement is to put the learner in charge of his/her own learning. Involving learners in activities that activate them to get engaged by reflecting upon their own EfS learning enabled by ICTs means:

- ✈ Merging theory with praxis for building a sustainability-just society.
- ✈ Cutting across all the CARE processes focusing on human agency, active citizenship and curriculum as a living organism.
- ✈ Providing learners with a sense of agency with respect to the activities.



Questions to deal with engagement



- ✦ What are the process skills that learners need to possess for engaged learning?
- ✦ What are the appropriate ICT tools to use so as to foster learners' learning?
- ✦ How do you plan to evaluate the processes and products of learners' learning?

Strategies for engagement

- 🚩 Use warming-up strategies and activities to encourage learners' engagement.
- 🚩 Reflective questions provide a good means for engaging learners actively across all learning processes.
- 🚩 Do students participate in the activity? Do they discuss with peers (Behavioral engagement)?
- 🚩 Do students perceive that the activities make sense or have meaning to them? (Emotional/cognitive engagement).

Continue

- ✦ Pose challenging questions that provoke students' curiosity
- ✦ Encourage students to get involved with controversies, arguments, and intellectual disagreements. Invite students into the controversy.
- ✦ Web 2 and social media (Podcasts and videos) virtual field trips, infographics, interactive whiteboard, educational games can be considered.
- ✦ Giving students more opportunities to make selections and decisions about their learning.

Framing student-driven learning activities at the level of engagement



- ✦ **Behaviorally engaged** learners are motivated to adhere to the rules, values, norms and actions associated with learning to give and share as well as learning to do.
- ✦ **Emotionally engaged** learners are motivated to learning to live together sustainably.
- ✦ **Cognitively engaged learners** are motivated to learning to know and learning to be.
- ✦ **Reflectively engaged** learners are motivated to learn to reflect on own values.
- ✦ **Transformationally engaged** learners are motivated to learning to transform oneself and society.



Basic principles for designing a course or activity



Meaningful: This principle refers to the need for the course content to be meaningful, that is, be real-life, make sense to students, relevant to the curriculum and make it possible to positive changes.

Engaging: Instructors can provide immediate feedback to their students and encourage them to participate in discussion groups. Such practices probably help students not to stop attending the course.

Measurable: measuring student performance should also be a priority for educators. There is a risk that an educator will not be able to monitor the progress of their students due to their large number and consequently the large amount of data collected.

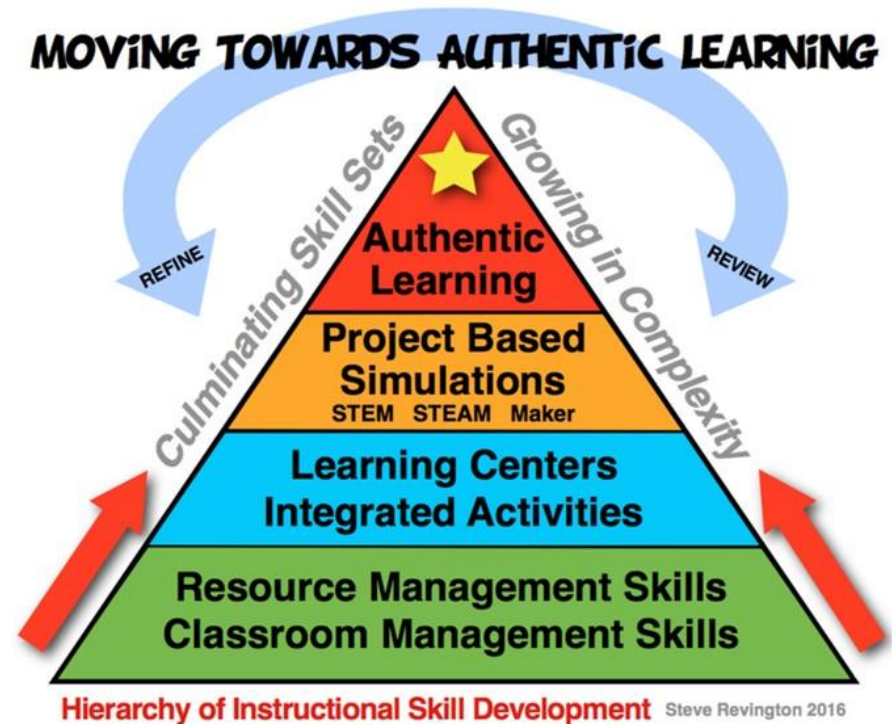
Accessible: This design principle refers to the ability to be given to learners for easy and unhindered access to content.

Scalable: The lesson should be able to adapt to the large number of students and be designed from small to large. Instructors should consider the above feature when creating content, managing functions and assessing student progress.

Authentic Learning

Authentic, relevant, real projects, interesting and meaningful for the learners

- Active participation
- Exploration and Analysis
- Meaningful learning with purpose
- Practical outcomes



The Living Lab

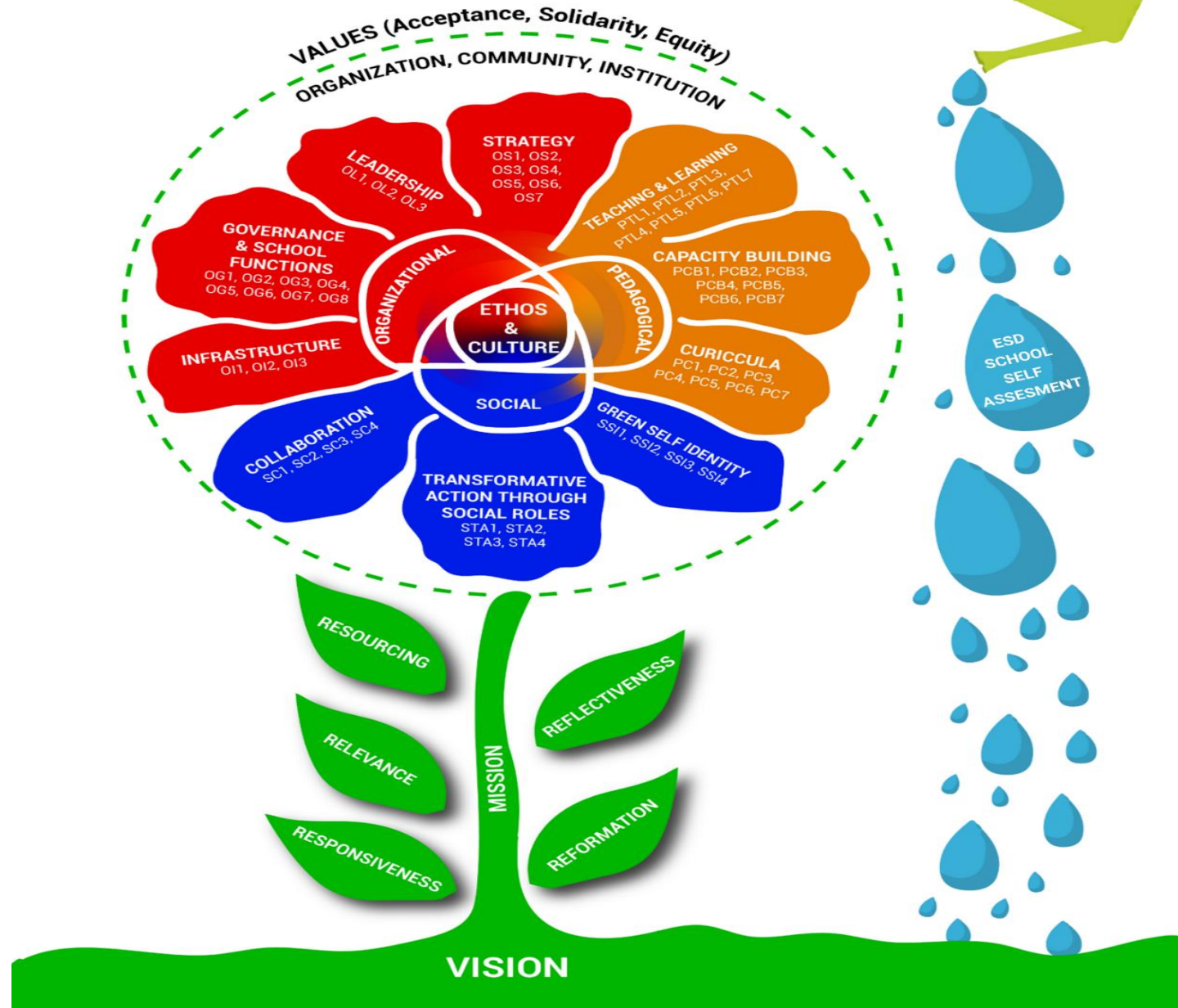
The Living Lab is a **methodology for learning and creating** through which learners participate in a process of innovation to co-create **solutions** to **real** problems, in collaboration with organisations, institutions, agencies and other partners.

Authentic Learning

- Project / Problem / Place based learning
- Participative / active learning
- Collaborative learning
- Development of Competence
- Professional identity



Whole Institution Approach and ESD





3 pillars - (a) Social



S O C I A L (S)	SC	Collaboration	STA	Transformative action through social roles	SSI	Green self-identity
	SC1	Among school stakeholders	STA1	Responsibility for promoting sustainability in the community	SSI1	Developing strong sense of self-worth
	SC2	Among school and local community	STA2	Active role of students for school functioning	SSI2	Clear understanding of meaningful roles in society
	SC3	Among school and labour market	STA3	Students as leaders in school operations		
	SC4	Established networking mechanisms	STA4	Educating to manage socio-environmental issues and transform society		



3 pillars - (b) Organizational



O R G A N I Z A T I O N A L (O)	O	Infrastructure	OG	Governance & school functions	OL	Leadership	OS	Strategy
	OI1	Creating & mobilizing sustainability on location	OG1	Taylor-made administrative tasks	OL1	Youth leaders	OS1	Adjustability
	OI2	Outdoor spaces as classrooms	OG2	Policy formation	OL2	Participatory decision making	OS2	Facilitates collaborations
	OI3	Building local energy sources	OG3	Monitoring mechanisms	OL3	Role models	OS3	Commits teachers to engage in ESD
			OG4	Coordination mechanisms			OS4	Integrates non-formal education
			OG5	Networking mechanisms			OS5	Promotes accountability as to how ESD-related WIA is implemented
			OG6	Top-down support			OS6	Alignment with Agenda 2030
			OG7	Allocated time for ESD-related actions			OS7	School action plans



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3 pillars - (c) Pedagogical



P E D A G O G I C A L (P)	Curricula (PC)		Capacity building (PCB)		Teaching and learning (PTL)	
	PC1	Interdisciplinary, horizontal, coherent	PCB1	Employability	PTL1	PTL1 Formal & non-formal
	PC2	SDGs integration	PCB2	Scaling of skills (different sets and levels) i.e. Teachers, school leaders, ESD coordinators	PTL2	PTL2 Connection to labour market
	PC3	Skills for the future	PCB3	Monitoring	PTL3	PTL3 Student-led
	PC4	Localized/ adaptable	PCB4	Mentoring	PTL4	PTL4 Promotes awareness of changes on the planet and impact on human life
	PC5	Promotes critical thinking	PCB5	Facilitating teachers' integration in community- Shaping of social identity of professional	PTL5	PTL5 Practical, hands-on experiences
	PC6	Extracurricular ESD activities	PCB6	Sustainability of school actions through time	PTL6	PTL6 Alternative learning processes
	PC7	ICT	PCB7	Recognition of work	PTL7	PTL7 Multimodal learning environments



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WORKSHOP-ACTIVITY ONE:

Share a course assignment or activity you currently use, outlining how it supports student engagement:

Remember the intrinsic elements:

Learning outcomes

Competences

Process

Pedagogy

Tools

Can you share:

- Strategies and activities to encourage learners' engagement?
- Reflective questions that engaging learners actively across all learning processes.
- Example of students' participation in the course/activity?
- Example of discussions with peers (Behavioral engagement)?
- Example that shows that the activity make sense or have meaning to them? (Emotional/cognitive engagement).

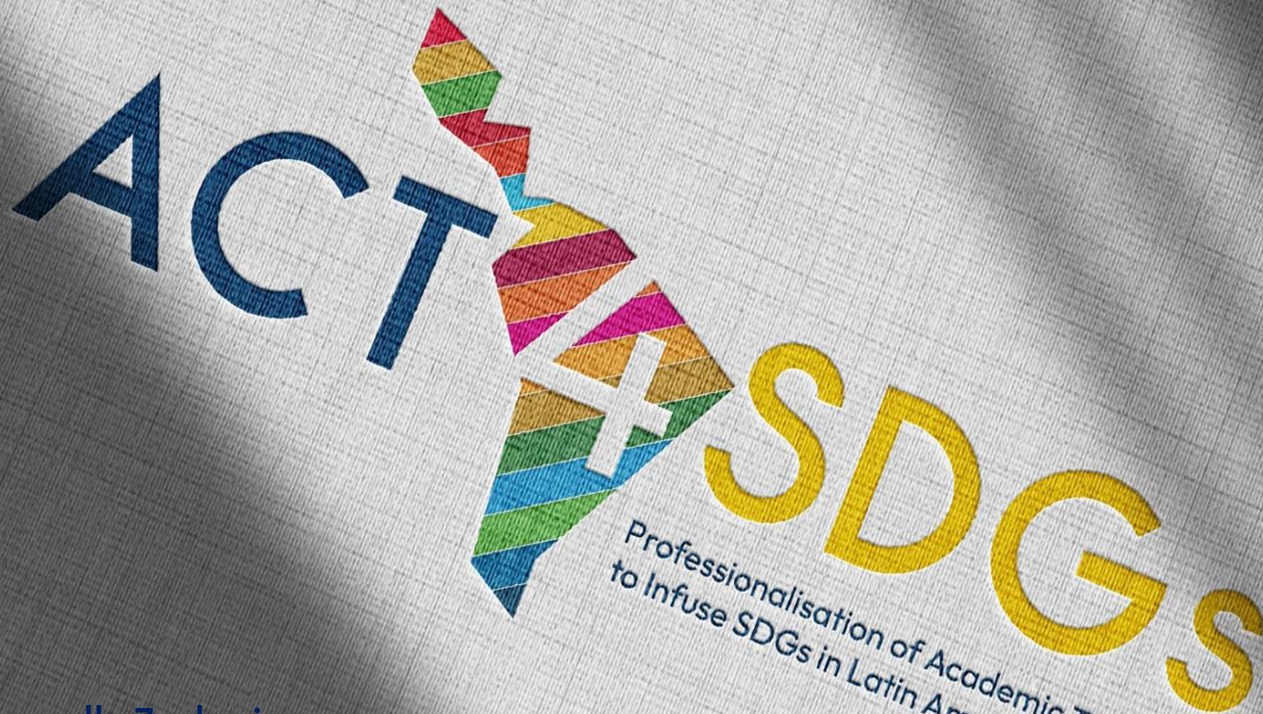
What obstacles and challenges are you phasing for students' engagement? How can CARE methodology support you to overcome them?



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THANK YOU!!!



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