



# First International Symposium of UNESCO Chairs in Anticipatory Systems, Futures Studies and Futures Literacy

June 19 - 20, 2019

Department of Sociology and Social Research, University of Trento, Italy







# First International Symposium of UNESCO Chairs in Anticipatory Systems, Futures Studies and Futures Literacy

## **FUTURES LITERACY IN ACTION**

Lydia Garrido Luzardo



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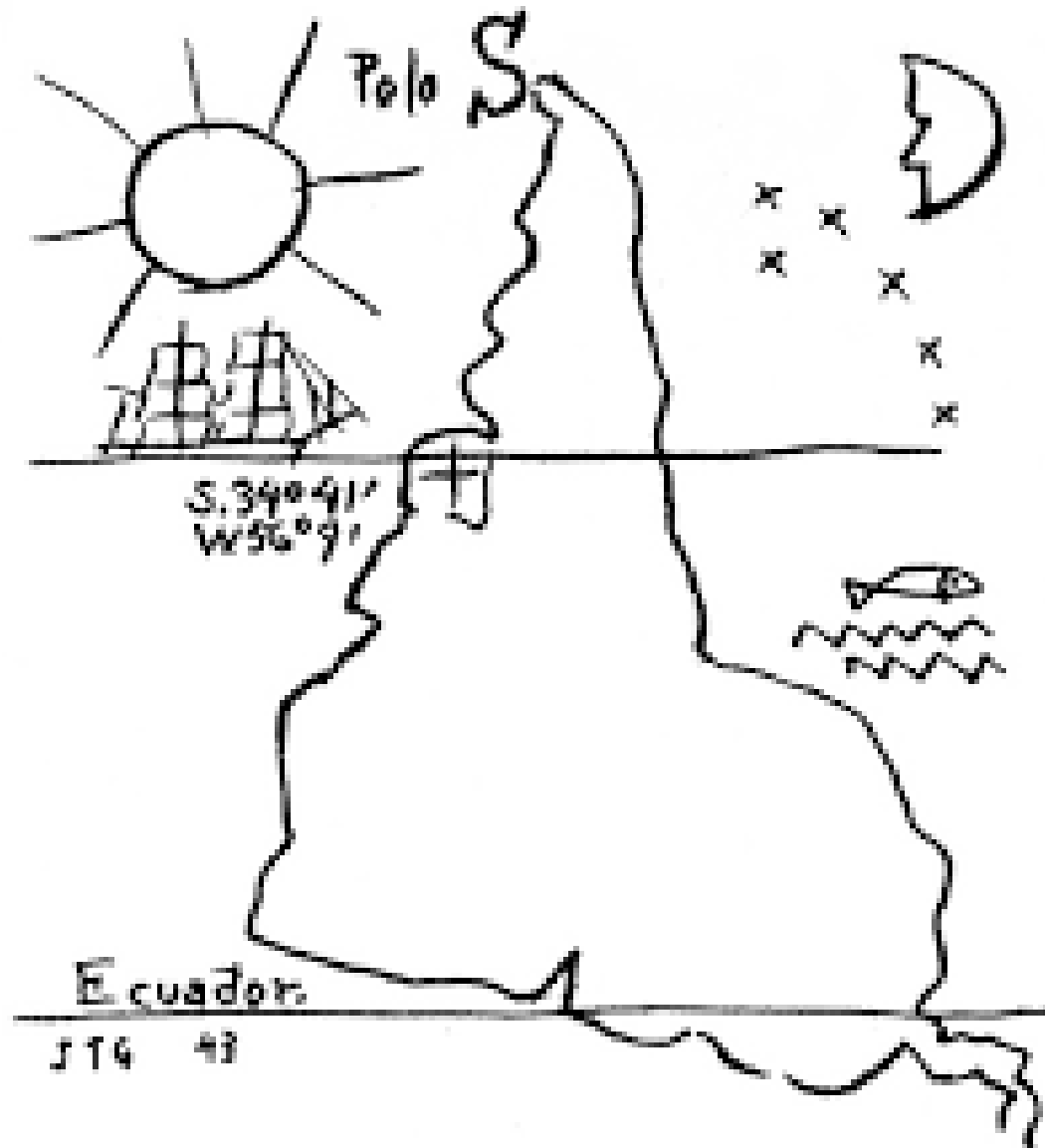
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- 
- An introduction of the UNESCO Chair on Sociocultural Anticipation and Resilience in SARAS, Uruguay
  - Main aspects of Futures Literacy Framework
  - Introducing examples with three cases on: education, innovation and heritage





*La punta de América, desde ahora, prolongándose, señala insistentemente el Sur, nuestro norte." Joaquín Torres García. Universalismo Constructivo, 1941.*

QUINC



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The *South American Institute for Resilience and Sustainability Studies* (SARAS<sup>2</sup>) is an inter and transdisciplinary research institute (combining disciplinary domains from the social, natural and exact sciences), aimed at contributing substantially to the production of knowledge and capacity building in processes and frames for sustainability of socio-ecosystems.











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## TRANSFORMING WATER GOVERNANCE IN SOUTH AMERICA: FROM REACTION TO ADAPTATION AND ANTICIPATION

- SARAS
- Institute of Energy and Environment, São Paulo University
- San Luis Institute of Applied Mathematics, National University of San Luis
- Patagonian Institute for the Study of Continental Ecosystems
- Gopal Water Partnership (GWP), South America
- International Hydrological Program - UNESCO
- ICLEI South America – Local Governments for Sustainability
- The Nature Conservancy
- National Directorate for Environmental Management of Water and Aquatic Ecosystems (Argentina)
- Provincial Institute of Water of the Province of Chubut (Argentina)
- Ministry of Environment and Control of Sustainable Development (Chubut, Argentina)
- Ministry of Environment, Countryside and Production (San Luis, Argentina)
- AGEVAP Agency, Brazil
- Agencia das Bacias PCJ, Brazil)
- National Secretariat of Environment, Water and Climate Change, Uruguay)
- National Directorate of the Environment (DINAMA-MVOTMA, Uruguay)
- National Water Directorate (DINAGUA-MVOTMA, Uruguay)



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## THE COLLABORATORY NETWORK

- Tecnológico de Monterrey, Mexico
- Mayor de Tamaulipas, Mexico
- Universidad Unifranz, Bolivia
- Cátedra Ignacy Sachs, Pontificia Universidade Católica de São Paulo, Brazil
- Universidad del Externado, Colombia
- University of Lincoln, United Kingdom
- Hanze University of Applied Sciences, Groningen, The Netherlands
- Centro de Ciencia del Clima y la Resiliencia (CR)2, Universidad de Chile, Chile
- Stockholm Resilience Centre, Sweden
- Turku University, Finlandia
- Università degli Studi di Trento, Italy
- Forth/Praxi, Foundation for Research and Technology, Greece
- Centro Latinoamericano de Globalización y Prospectiva, CELGYP, Argentina
- Universidad de Buenos Aires, Facultad de Ciencias Económicas, Argentina





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## TRANSFORMING WATER GOVERNANCE IN SOUTH AMERICA: FROM REACTION TO ADAPTATION AND ANTICIPATION

- The project aim is to improve anticipatory water governance in South America, through strengthening adaptive and anticipatory capacities.



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## FUTURES LITERACY ENHANCES OUR UNDERSTANDING OF AND THE CAPACITY TO INTERVENE IN SOCIAL CHANGE

- Sociocultural change and continuity are, in large part, related to *why* and *how* we imagine the future, not only based on internal (psychological, sociocultural) or external determinants or conditions (without denying that they exist) but on anticipatory systems.
- We work helping to identify the underlying components and processes.





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## FUTURES LITERACY AS AN ENTRY POINT TO WORK WITH SOCIAL CHANGE

- The systems, models, and anticipatory assumptions used to frame 'reality' helps us to understand change and continuity, as entry points to reveal key sociocultural aspects.
- So, the ontological dimension of anticipatory systems is the path to capture 'the core' of anthropological aspects.



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## UNESCO CHAIR ON SOCIOCULTURAL ANTICIPATION AND RESILIENCE

- The aim of the Uruguay UNESCO Chair is to conduct action-research and learning-by-doing processes that will improve the anticipatory capabilities of individuals, communities and organizations by advancing the theory and practice of Futures Literacy.
- One immediate tangible outcome of a FL process is to amplify the capacity to discover/create alternatives of choice in the menu... and changing completely the menu...



One day...

A chicken, a duck, a turkey, and other birds of the farm were summoned and traveled together to the summit.

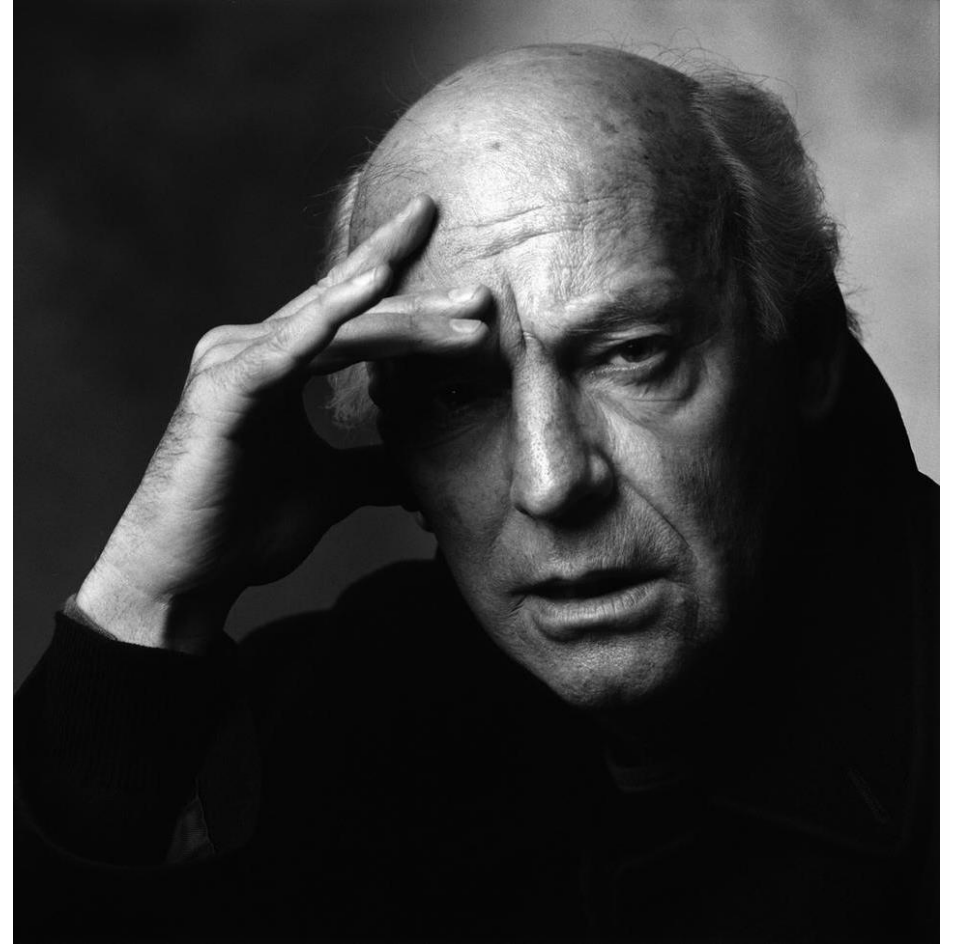
The king's chef welcomed them:

"I called you here," he explained, "so you can tell me what sauce you would like to be cooked with."

One of the birds dared to speak: "I don't want to be cooked/eaten at all."

The chef quickly set it straight: "That is out of the question," he barked.

Eduardo Galeano



**USING THE FUTURE FOR  
MAKING - SENSE AND  
SENSE MAKING OF NOVELTY**



<https://www.helenagusticoach.com/wp-content/uploads/2018/08/incertidumbre.png>





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## SOME OF THE TOPICS WE WORK TRANSVERSALLY

- learning and education
- creativity and innovation
- sustainable development and inclusion
- resilient social-ecological systems
- bioethical aspects
- knowledge co-creation for anticipatory governance
- art and science relations



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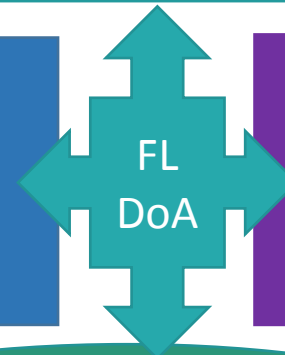
## FUTURES LITERACY FRAMEWORK

Enlargement of the freedom capacities (Amartya Sen)

Empowers learning, creativity, decision making and transformation

Empowerment in anticipatory capacities and competences

Action – research  
methodologies.  
Pedagogies of practice  
learning



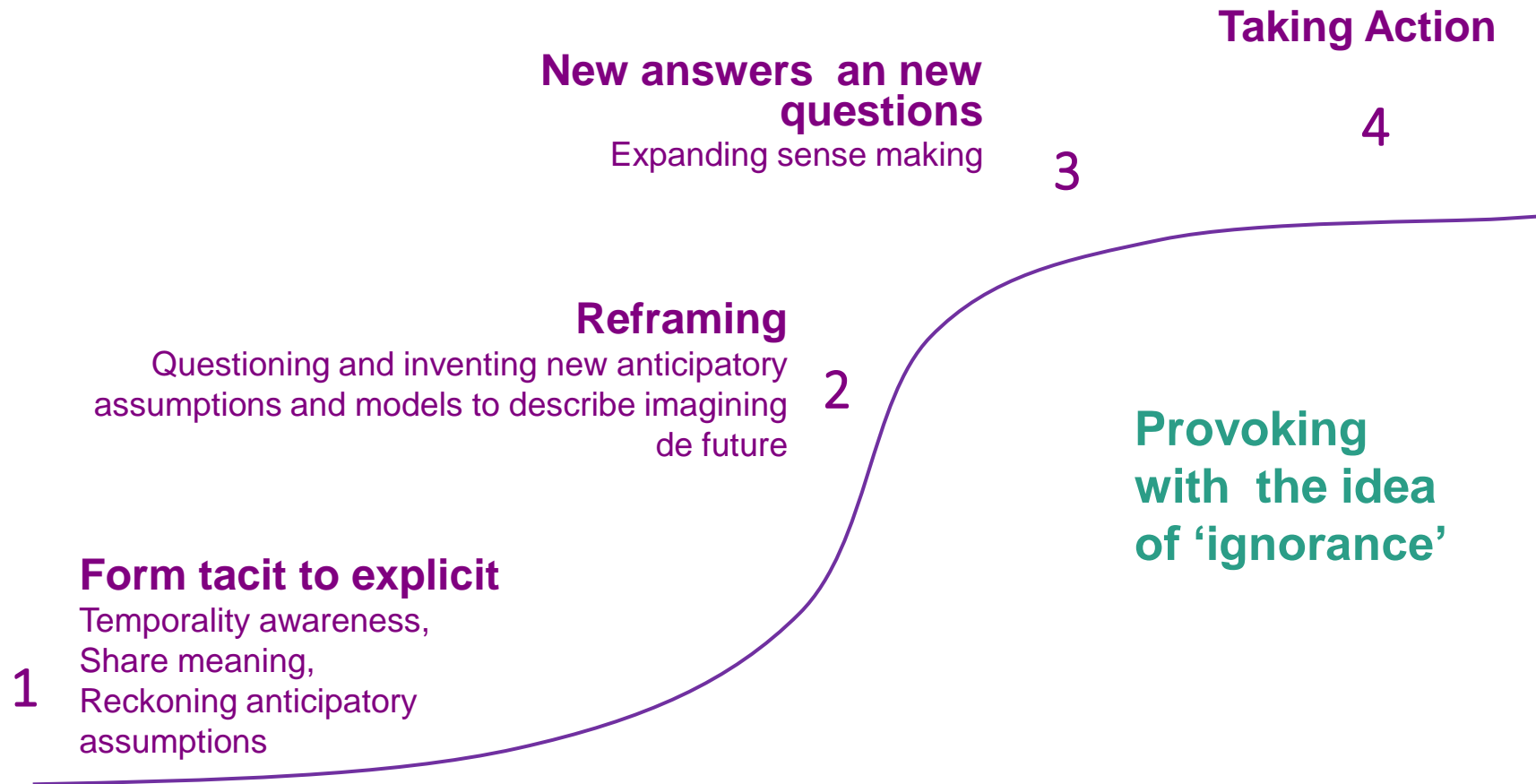
Pedagogies of experiential  
learning  
Based on collective  
intelligence in co-creation

'Use of the future' in the present  
(imagination, anticipation) in  
cognitive, emotional and action  
processes



# FUTURES LITERACY LABORATORIES COCREATION KNOWLEDGE PROCESSES

'making sense' and 'sense making'





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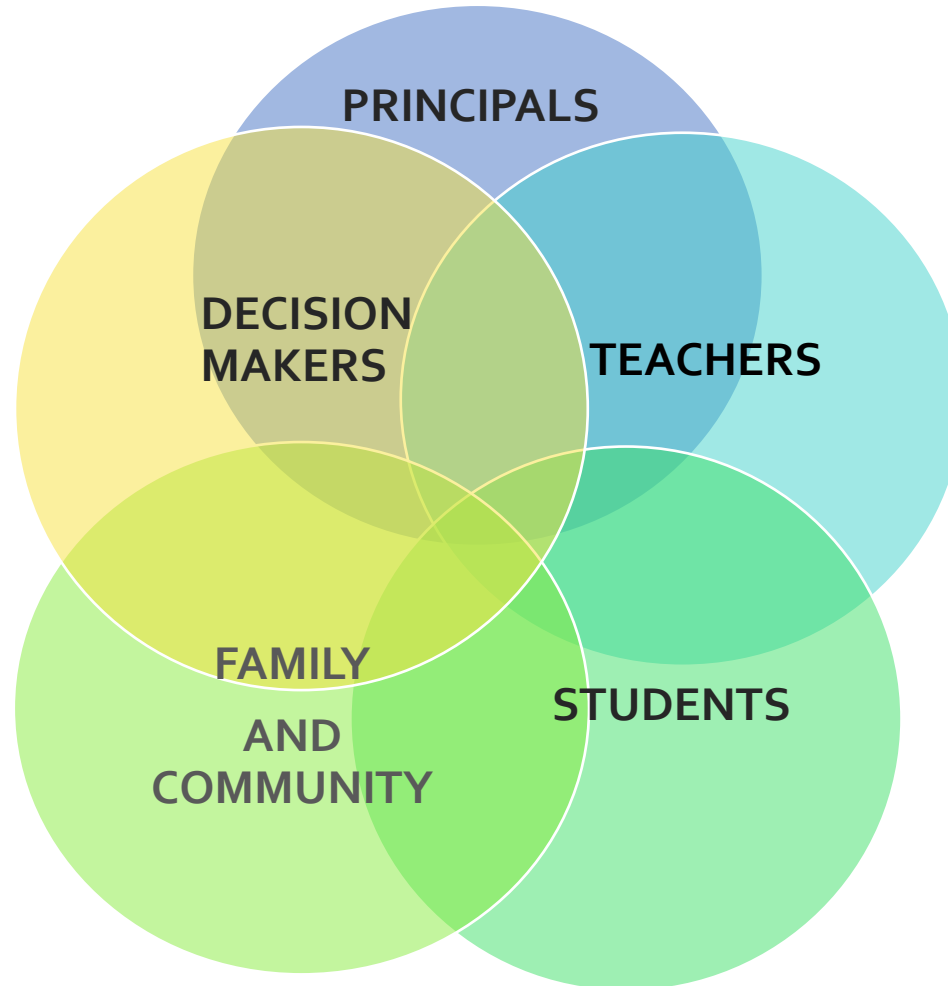


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## WORKING ON EDUCATION: ANTICIPATION AS A CROSSCUTTING CAPACITY



A project on education anchored in an institution, takes into account the whole system:

- the level of direction and inspection
- teachers
- students
- policy decision-makers
- family
- social organizations part of the community.

And how they are inserted and interacting in/with different spheres /phenomenon/aspects (technological, political, sociocultural, etc.)





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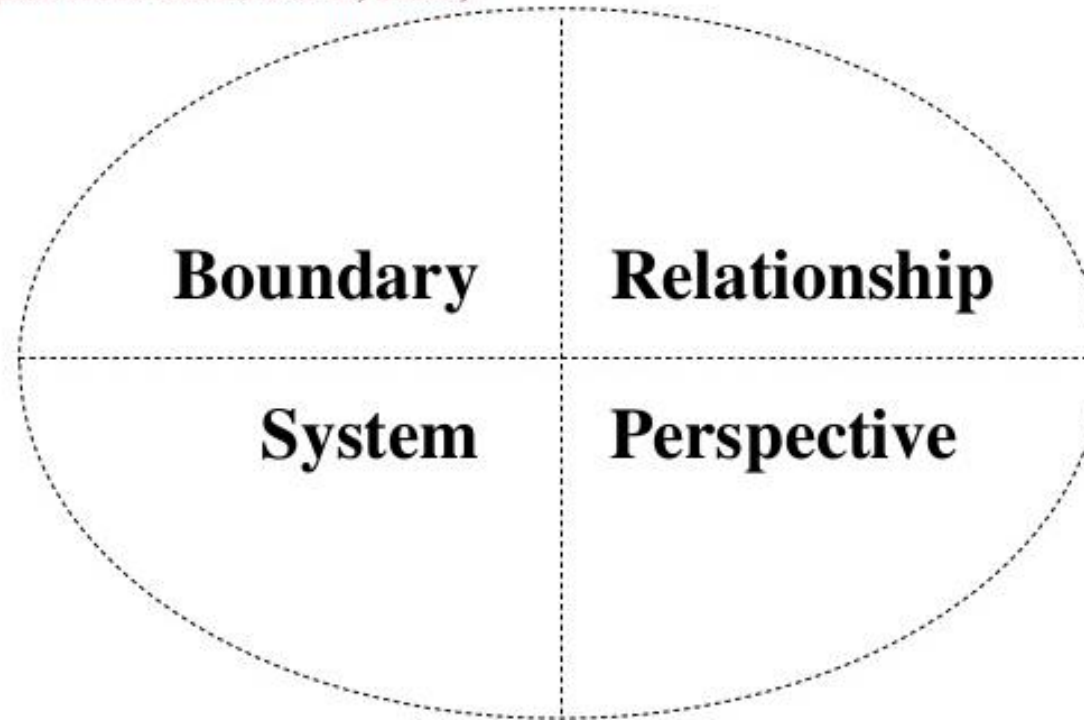
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## Four Systems Thinking Skills

(adapted from Cabrera et al, 2008)



From G. Midgley

<https://www.slideshare.net/issip/an-introduction-to-systems-thinking-for-tackling-wicked-problems-57502299>









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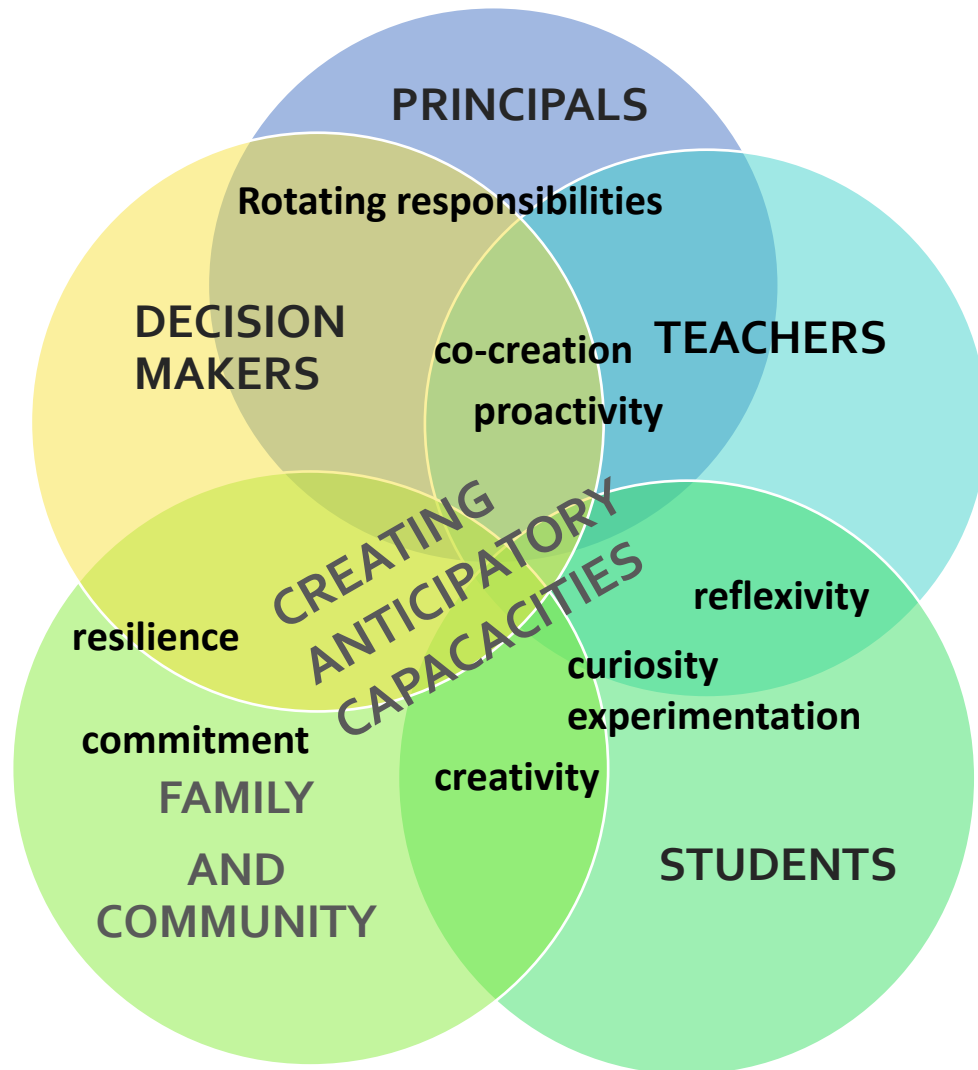


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## WORKING ON EDUCATION: ANTICIPATION AS A CROSSCUTTING CAPACITY



During a FLL process, participants reframe beliefs and problems, and expand the ways of understanding and transforming them, introducing the future in reflection and analysis, opening up alternatives in decision-making.





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## WORKING ON EDUCATION: ANTICIPATION AS A CROSSCUTTING CAPACITY



The approach while creates and strengths anticipatory capacities, strengths other deep learning competences and skills as: reflexivity, critical thinking, curiosity, creativity, teamwork collaboration, empathy, resilience.



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## FIRST MODULE

Theoretical ,  
methodological basis  
in the Discipline of  
Anticipation and  
Futures Literacy  
Framework with action  
research and learning-  
by-doing approach

## SECOND MODULE

Co-designing school  
curriculum activities  
using the future as a  
crosscutting approach

## THIRD MODULE

Applied. Working with  
the students to  
incorporate in their  
reflections and actions  
the use of the future as  
a capacity and  
competence.  
Project base approach.

















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## WORKING ON INNOVATION: INNOVA MUJER PROJECT

Five months project with the Ministry of Industry, Energy and Mining (MIEM, Spanish acronym) within the framework of its Commission for Sustainable Social Development and Gender Equity.

It was a 'tailor-made' FL project to strengthen anticipatory, creative and resilient capacities for 35 businesswomen in their concrete areas of interest and needs.



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## GETTING OUTSIDE THE COMFORT ZONE OF THE KNOWN TO BE COMFORT WITH THE NOT YET KNOWN



It is a valuable experience, inside a laboratory environment to experiment and learn, training the capacity to be surprised, explore, discover, invent, create, feel, enjoying to learn how to be with what is not yet known...



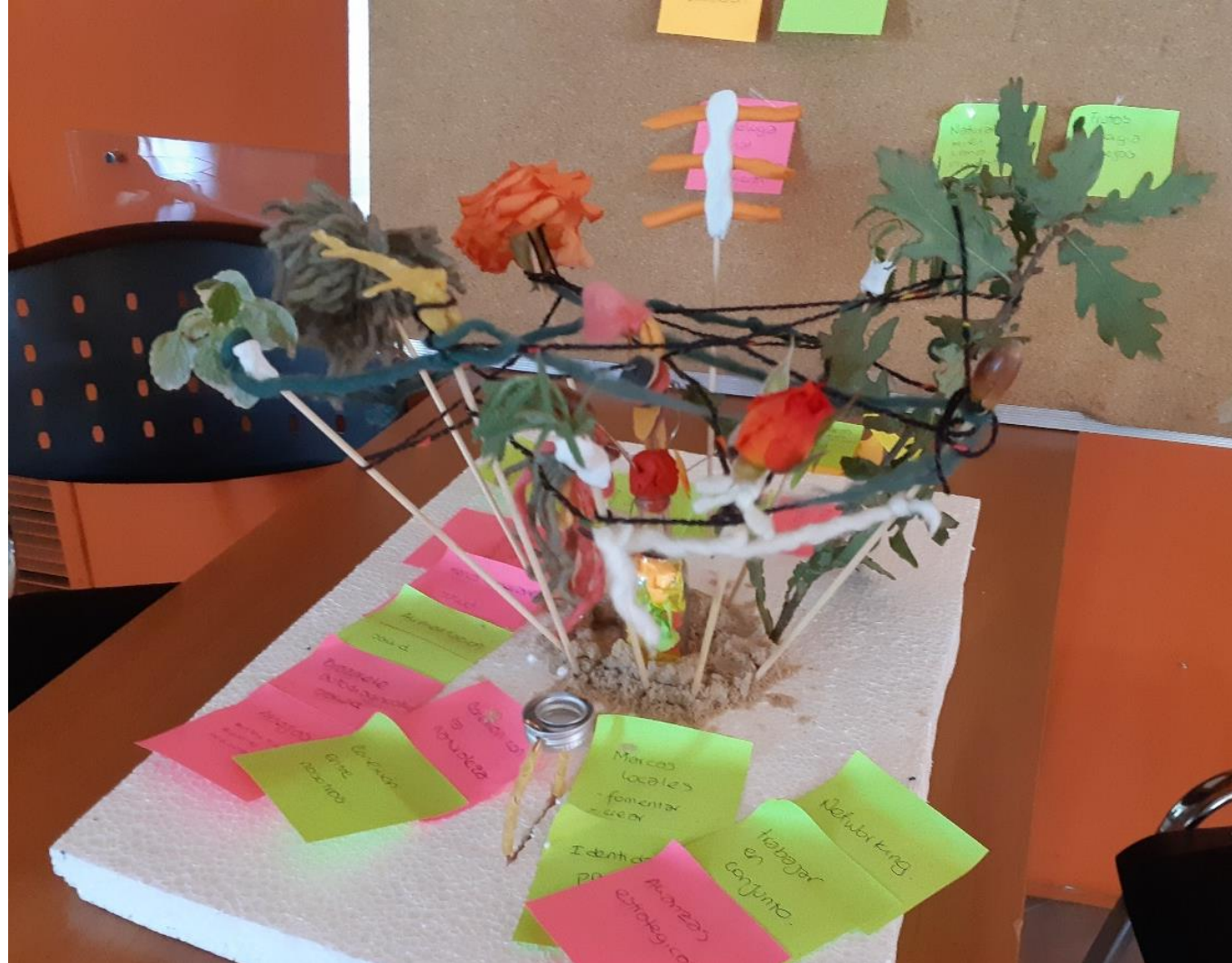


**GRUPO 1**

## **CREACIÓN ÚNICA**

**Hiperlocalidad  
conectada a lo  
Global.**

*Más allá de lo dual,  
entre lo particular y  
lo general...*



**GRUPO 1**

## **CREACIÓN ÚNICA**

**Hiperlocalidad  
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**GRUPO 2**

## **LIDERAZGO HOLOCRÁTICO**

Inteligencia colectiva.  
Hacia nuevos modos  
de organización  
interacción-creación.

*Más allá de lo dual  
entre lo individual y  
lo colectivo...*



**GRUPO 2**

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## GRUPO 3

# INNOVACIÓN SINCRÉTICA.

Asociaciones de lo  
diferente creativas.

*Más allá de paradigmas  
que ven las fronteras  
solo para separar...*



## GRUPO 3

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*Más allá de paradigmas  
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solo para separar...*





**GRUPO 4**

**ECONOMÍA  
CREATIVA.**

**ECONOMÍA  
COLABORATIVA**

Creatividad - cultura -  
tecnología

*Más allá de la oferta y  
demanda...*









## GRUPO 5

# CIRCULARIDAD

Reducir + Reutilizar +  
Reciclar + Recuperar +  
Regalar + Reposicionar

*Más allá de paradigmas  
lineales...*



## GRUPO 5

# CIRCULARIDAD

Reducir + Reutilizar +  
Reciclar + Recuperar +  
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## MAIN OUTCOMES OF THE PROCESS:

- Participants understood the 'texture' of temporality
- Achieve a 'shared language', that allows them to create share meaning, and enrich each other interchanging experiences, knowledge, and learnings.
- Extend the boundaries of what circumscribed their way of seeing reality, expanding the space of possibilities, allowing them to transform what they think at first were limitations into challenges.
- Discover themselves 'thinking outside the box', opening up the unknowns, putting new questions and new answers, discover a 'wider world', with alternatives and possibilities right here in the present
- Knowledge was broadened and hybridized. The exchange of experiences was tangible space of collective and collaborative work.
- Spaces and attitude of comfort were extended, but not as a numbing comfort zone, but rather the comfort that makes not to avoid, nor postpone. It's an antidote to procrastination, and a incentive to take action immediately.
- The level of stress was lowered as the fear of uncertainty was reduced. They experienced states of chaos and vulnerability, in a processes that allowed them to register how to do it, to learn, develop and evolve.
- Enhance creativity, inventive, resilience



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## FUTURES LITERACY TO RETHINK HERITAGE

Being future literate we can go beyond only using the future for prevention and/or planning (*anticipation for the future*).

We can understand that the past could be 'actualized' in the present through the way we imagine the future, not only as a continuation or preservation of the past, but also as novel pasts in relation to novel futures, opening them up to new meanings (*anticipation for emergence*).



# !!! MUCHAS GRACIAS !!!



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skype: lydiamgarrido

<http://www.saras-institute.org/index.php/en/about/2016-07-12-20-23-26>

<https://www.youtube.com/watch?v=h1QOxYMIFlc>



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