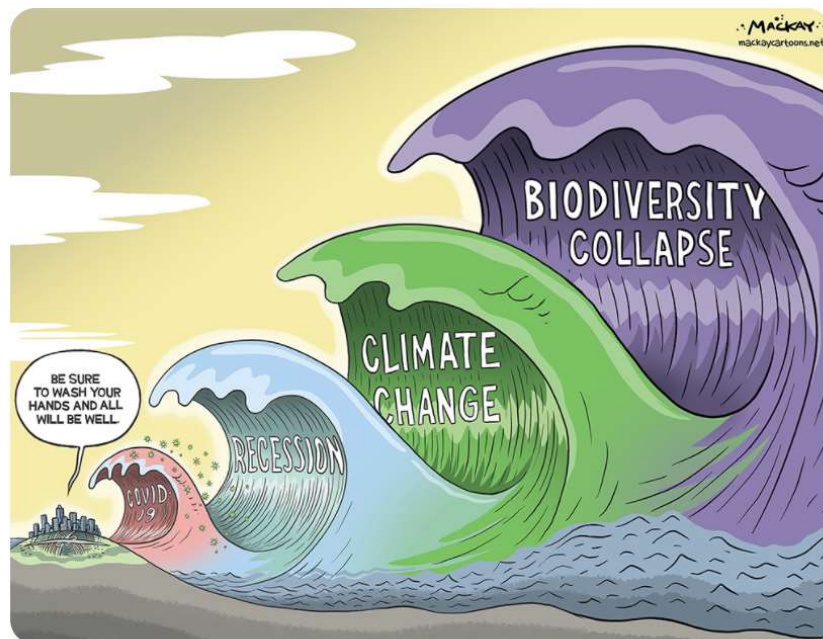


Future-oriented skills, competences and attitudes in Transdisciplinary Education

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 www.institute-for-the-future.be
 VARIO Colloquium 17 Nov 2022

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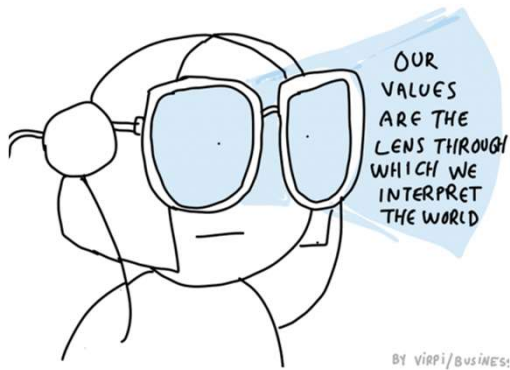
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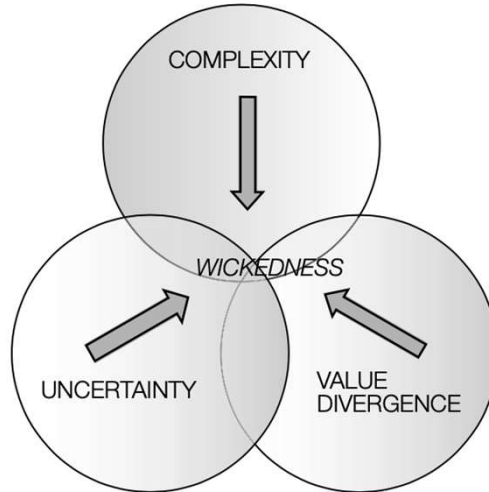
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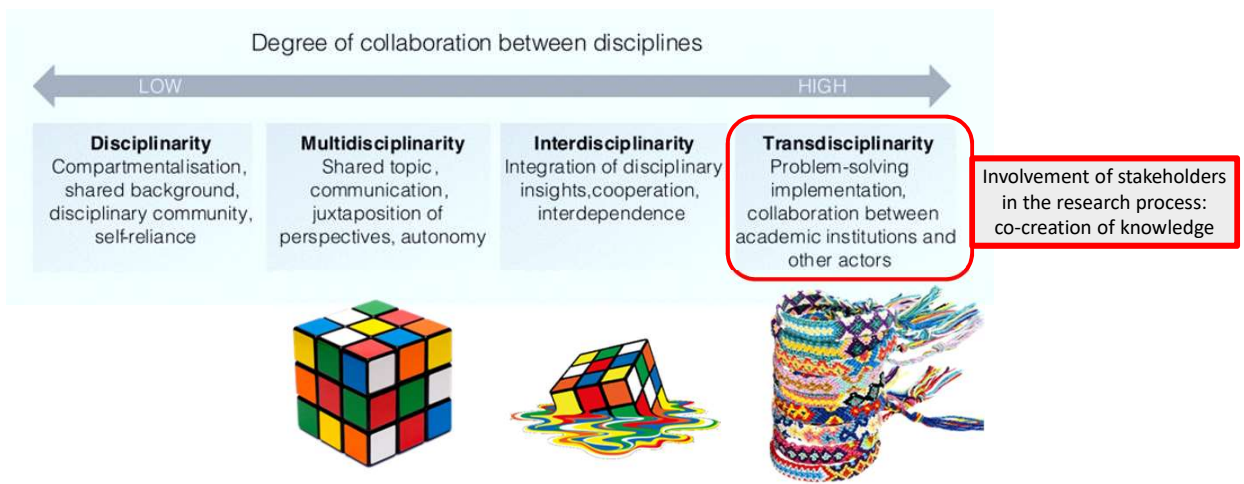
The importance of values



Big resistance to change



Wicked problems need a transdisciplinary approach



Transdisciplinary strategies for wicked problems

Collaborative

- *Advantage*: stakeholders are involved to reach durable solutions
- *Disadvantage*: very time-consuming
- Importance of diversity
- Different tools, skills, competences, attitudes are needed to streamline the process, as compared to competitive and disciplinary approaches: how to avoid a total mess or collapse

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“YOU NEVER CHANGE THINGS BY FIGHTING THE EXISTING REALITY. TO CHANGE SOMETHING, BUILD A NEW MODEL THAT MAKES THE EXISTING MODEL OBSOLETE.”

- BUCKMINSTER FULLER

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HOW ABOUT CO-CREATING A BETTER FUTURE TOGETHER?

I would like to get involved, can you tell me how?

How to talk to my colleagues in other disciplines?

I am a bit afraid of working with society, can you help me?

Can I join a team? I don't manage on my own.

We need new skills, competences, attitudes

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INNER DEVELOPMENT GOALS

Transformational Skills for Sustainable Development

- 1 **Being** — Relationship to Self
- 2 **Thinking** — Cognitive Skills
- 3 **Relating** — Caring for Others and the World
- 4 **Collaborating** — Social Skills
- 5 **Acting** — Driving Change

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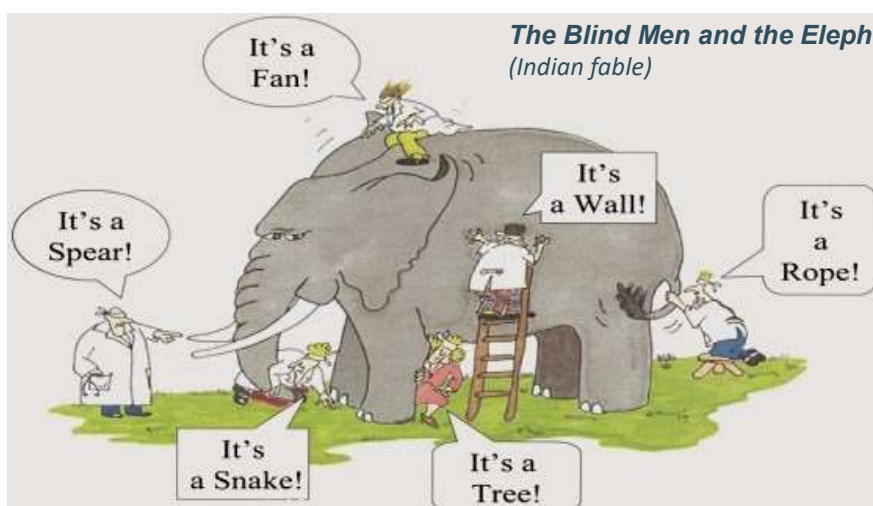
<https://www.innerdevelopmentgoals.org>

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Diversity as a driver of innovation



The Blind Men and the Elephant
(Indian fable)

Different disciplines or different stakeholders have different mental models and world views

- What is obvious for one is not necessarily so for the other.
- Bring a team of diverse people to gether for transformative innovation

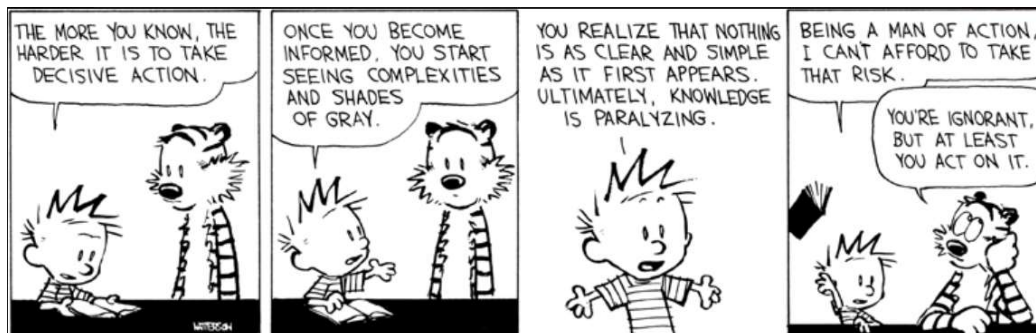
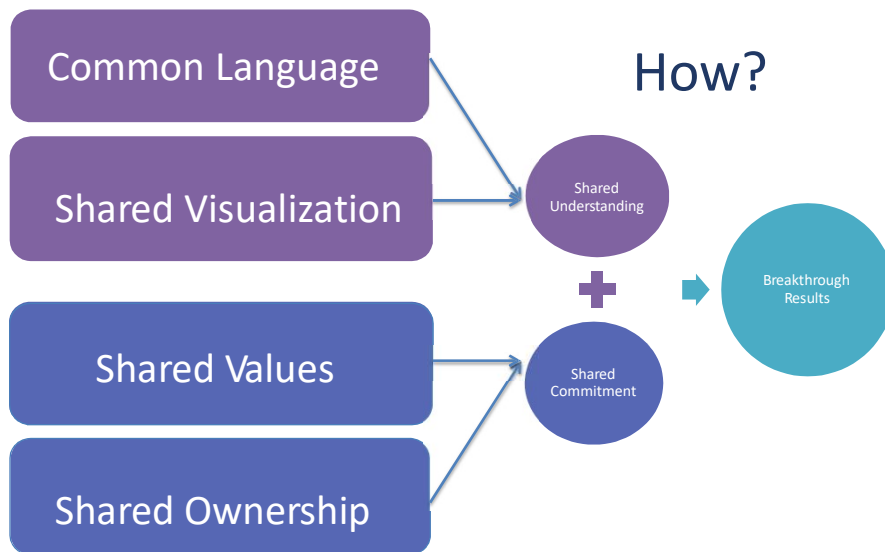
*Each in his own opinion
Exceeding stiff and strong,
Though each was partly in the
right,
And all were in the wrong!*
by John Godfrey Saxe

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How to avoid the wicked problem gridlock

*“Think big, start small, act now, before everything becomes too late.”
Barnabas Suebu, governor of the Indonesian province of Papua*

OECD publishing

ADDRESSING SOCIETAL CHALLENGES USING TRANSDISCIPLINARY RESEARCH

OECD SCIENCE, TECHNOLOGY
AND INDUSTRY
POLICY PAPERS
June 2022 No. 88



Box 3. What are Universities and public research institutions doing to promote TDR?

Universities and research institutes have taken various approaches to promote TDR. These range from the physical co-location of researchers from different disciplines to encourage exchange and collaboration and the co-teaching of relevant courses, to the development of **standard practices and policies for transdisciplinary projects** and the establishment of **dedicated inter- and TDR centres or networks**. The following examples illustrate some of these innovative efforts:

The Institute for the Future at the University of Leuven (Belgium) is a research incubator that supports, catalyzes and accelerates TDR at KU Leuven. It supports transdisciplinary education and capacity building, bringing students representing different disciplines together with experts and societal stakeholders around problems that require TDR approaches. Interesting ideas emerging from these teams are incubated to assess their feasibility and sustainability.

OECD SCIENCE, TECHNOLOGY AND INDUSTRY POLICY PAPER

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About the Institute for the Future

We believe that we are in a transition period for humankind, where academia can play an essential role in the co-creation of knowledge with stakeholders for speeding up actions towards a sustainable future/society.

We design and implement research methods based on complexity, transdisciplinarity, and futures to co-create knowledge, develop new insights, and unfold potential actions to move society towards a sustainable future.

Mission statement by the IF board team. Sept 2022

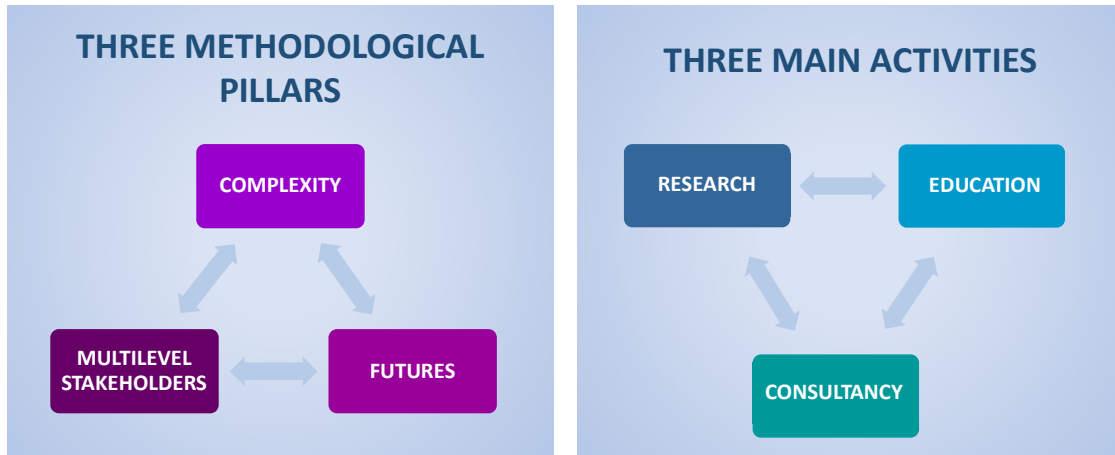
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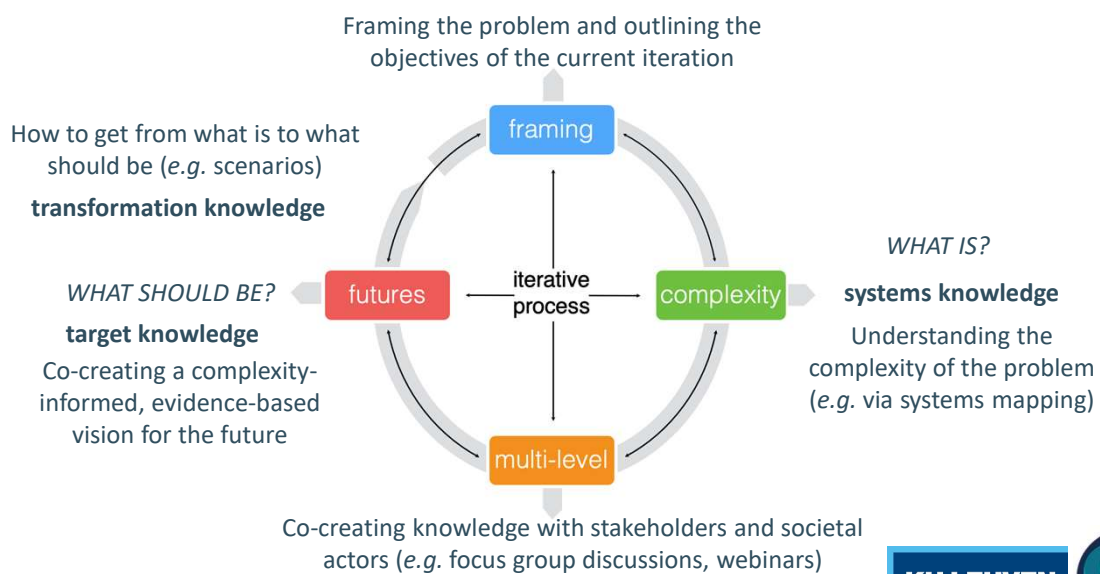


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Methodologies and activities



Designing Feasible Futures Framework (DF3)





How does TDI contribute to a better future?

- **WHY:** Climate change, pandemics, artificial intelligence, migration, polarisation... Our "developed" way of living is not sustainable. We are not good ancestors, societal change is needed to keep our planet livable for future generations.
- **HOW:** The complexity of a wicked problem is difficult to grasp from within one discipline, and those targeted for change need to "own" the change if it is to happen. We need a transdisciplinary approach, and introduce the associated skills, competences and attitudes early on in the academic curriculum to prepare future changemakers for their task ahead.
- **WHAT:** Our Honours Programme Transdisciplinary Insights (TDI) is a first step to acquire a transdisciplinary skillset while already tackling some of the problems.



Anne-Mieke Vandamme, J

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TRANSDISCIPLINARY INSIGHTS (TDI) HONOURS PROGRAMME @ INSTITUTE FOR THE FUTURE, KU Leuven

Three purposes

- A. Stretching the boundaries of education**
- B. Responding to the challenges**
- C. Training 21st century skills**



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A. Stretching the boundaries of education

TEAM'S COMPOSITION



COACHES



TAM NGUYEN
Master's Student in Business Administration
KU Leuven Antwerp Campus



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STAKEHOLDERS

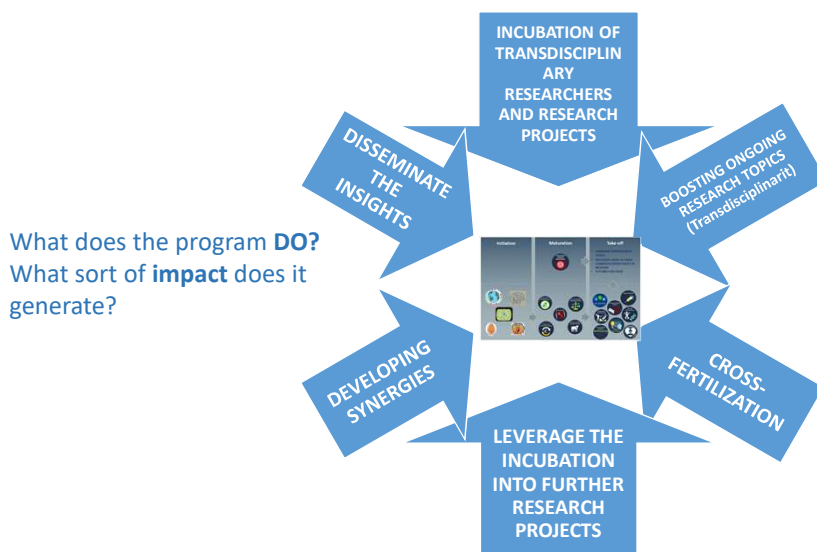



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B. RESPONDING TO THE CHALLENGE TRANSDISCIPLINARY RESEARCH INCUBATOR - LEVERAGE



C. 21st century skills - job market



C. 21st century skills - personal development in a changing world

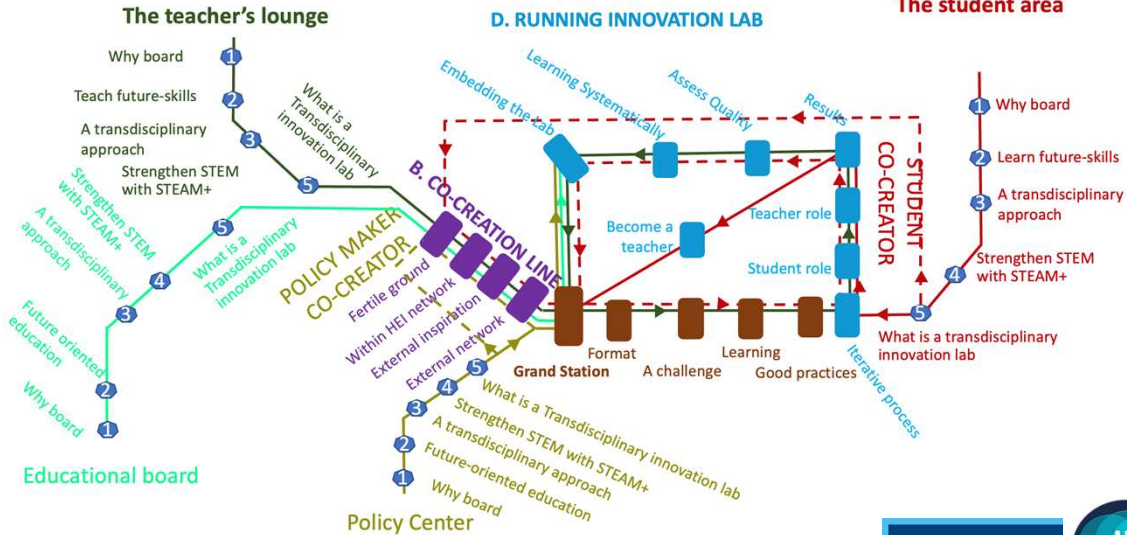




DRAFT

D. RUNNING INNOVATION LAB

The student area



Anne-Mieke Vandamme, 17 Nov 2022

<https://www.steamtalent.eu>



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Thank you – Questions?

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