Unlearning for a Thrivable Future
A draft compendium for educators

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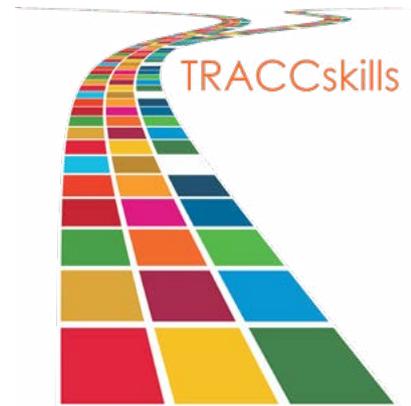Unlearning for a Thrivable Future A draft compendium for educators

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This book evolved out of the Strategic Partnership "Transformational, cross-cutting people skills for the SDGs - TRACCskills".

1. Introduction

1.1 Rationale

The world we are living in today is a source of widespread and deep anxiety. While it is reassuring to think that the global community was able to agree on the Sustainable Development Goals (SDGs), we are aware that global crises are catching up on us and that there is a need for more profound, systemic changes (Steffen et al., 2018).

Some argue that the work of sustainable development must be linked to regeneration (Wahl, 2016): we need to restore what has already been damaged. Others argue for the need for a complete change of perspective so that we become "relational", i.e. we begin to be, think, and act from a consciousness of our interconnectedness (Lange et al., 2021). Indeed, the "logic of separation masks the radically complex interconnections within which we exist, and as such, fragments the very relationships which resilient life depends on, and even more detrimental, puts them in an antagonistic relationship with one another" (p. 28).

How do we get there? It seems we need to unlearn the certainties we have about what the world is and how society works, and what this implies for our everyday lives — and indeed, for our habits and behaviours. A fix here and there won't do. What we need are new understandings and abilities: new mindsets, behaviours, priorities, ways of relating to one another and the world, and ways of coping with the uncertainties and complexities of the crises we are currently facing (Wahl, 2016). Importantly, these understandings and abilities need to be cross-disciplinary and cross-sectoral (Morin, 1994). And they need to rely on more than cognition: emotions, values and spirituality are just as important as science or facts (Ball, 1999).

Education — formal, informal and non-formal — has been acknowledged to play a central role in enabling us to deal in equitable and mindful ways with the enormous challenges, uncertainty, and trade-offs humanity faces (Wals and Benavot, 2017). The ESD for 2030 Framework (UNESCO, 2020) lists "transformational skills" and "transformative action" as essential to help move the whole of society towards our common goals — the SDGs. In the Framework, "transformative action" is even listed as the first of three key notions that constitute the basis of ESD (Education for Sustainable Development) (UNESCO, 2020, p. 18). And Agenda 2030 (UNGA, 2015) speaks of "transformative steps".

Non-formal adult education has developed a vast array of educational practices for facilitating transformation in various, very specific contexts. Formal educa-

tion is lagging behind, especially in the higher education sector, which is considered key to educating future agents of change but focuses mainly on building and transmitting knowledge (Sterling, 2021).

What is needed now are capable trainers and educators on a large scale and in multiple sectors, equipped with the skills, practices and pedagogies to support learning processes that help learners unlearn and become change agents; and for this, we need an action-oriented pedagogy.

We have identified a lack of adult education covering in a cross-disciplinary and cross-sectoral way the normative and behavioural aspects of sustainable development. This lack manifests itself in practice in initiatives that fail to meet their objectives, for example in such areas as public engagement, consumer behaviour change, leadership, community development processes — all of which are to some extent dependent on the inner strength of the individuals concerned.

The Inner Development Goals (IDGs) were recently proposed as a corrective and complementary focus: goals that will help us achieve the SDGs through the inner development of those engaged, because we "lack the inner capacity to deal with our increasingly complex environment and challenges. Fortunately, modern research shows that the inner abilities we now all need can be developed" (Inner Development Goals).

1.2 Purpose

Any possible transition from current global crises to a thriving society on a healthy planet requires a shift in worldview (Ball, 1999). This also demands of us that we learn ways of being, relating and acting based on this shift and on conscious perception of the values that guide us.

Many such shifts have been described, and prescribed, for decades or even centuries. For example, the shift from Darwin to Margulis, or Capra (1997): from a perspective that sees life as essentially a fight to the death for scarce resources, to one that sees it as an intricate web of cooperation and co-creation in a world of abundance.

"Discerning how co-creation differs foundationally from the worldview of competition is key to understanding... its phenomenal potential to bring about an utterly tectonic shift within society.

"When we speak of a move from competition to co-creation this is not the same as the more gentle, and somewhat conflicted manoeuvres humanity makes when it shifts to collaborative or cooperative modes of operating within a competitive context but, rather, refers to a distinct, bold and profound exit out of competition altogether."

Andrea Harding, 2021

To paraphrase Gandhi, it might be said that the Earth has enough for everyone's needs, but not for anyone's greed.

The focus of the TRACCskills project has been the area between the IDGs — *which we consider as learning objectives in the context of the present project* — and the practical applications of the principles involved: an area that we have come to think of as 'teachable skills'. These teachable skills are sometimes instrumentalised

for specific and straightforward purposes that are not only unhelpful but even contrary to the SDGs. Our purpose is to introduce skill sets that make space for transformative learning and enable a cross-disciplinary approach, as this opens the way for handling complexity from a perspective of sustainability, regeneration (Wahl, 2016) and relationality (Lange et al., 2019), to create a society that is healthy, adaptive and resilient to complex and unpredictable future challenges.

Such a society also ideally knows how to put power to work for the benefit of, and with respect for, all, indiscriminately, rather than for individual, corporative or discriminatory collective benefit that is based implicitly or explicitly on ignorance and exploitation of others — including the Earth's ecosystems (Raworth, 2017).

1.3 The project and the materials

1.3.1 Our question, and a disclaimer

In this project we asked ourselves: what 'people skills' help lead us away from hopelessness or greed and their bed-fellows apathy, hedonism, fear, aggression and hatred, towards a peaceful society based on the IDGs, and on unconditional respect for all beings, love, compassion and inclusion? And how can we foster such skills in various formal and non-formal adult educational contexts?

Anyone in any educational or transitional context can ask themselves these questions, and the present Compendium is for all of us.

We make no claim to have reached definitive answers. This Compendium is the outcome of a 14-month exploration — by three partner organisations (see Annexe 3) — of the experience and wisdom of our networks in the formal and non-formal adult educational contexts. The exploration included two pilot workshops, one conducted in a higher education context and the other in a non-formal adult education context. The Compendium is offered as a beginning rather than an end, in the hope that continued exploration by more and more educators and practitioners will yield better and better responses.

1.3.2 Using this Compendium

We imagine that you, the reader, are engaged in education for transformation and sustainable development, whether formally or non-formally, as an educator, facilitator, or curriculum designer. You are looking for the transformative edge you would like to give your teaching to make a real difference. You would like to learn from practitioners who have experimented with a number of different methods to achieve this. You would also like to experience new transformative methods on yourself and acquire the skills you think and sense are important for those learners you will be teaching.

If you work in the vocational or higher education sector, you may regularly be confronted with students who have an instrumental attitude towards education: they believe it should result in a diploma and in 'employable' skills that are competitive in the labour market; or in highly advanced scientific knowledge and methods

that will make them experts in their field. Or, your students may have given up hope of a future for humankind. In either case it may be challenging to engage them on a path of transformative learning.

In the non-formal sector, sometimes referred to as "adult education", you may have students or participants who come to you specifically for a transformative experience, which is the best possible starting point. A minority might instead be dedicated to changing the world from a deeply-held belief in a single solution, so that they risk becoming missionaries rather than change agents.

Our concept of teaching in the context of sustainable development is that teachers who want to support transformative learning do not primarily aim to transfer knowledge but to support the development of people skills for the SDGs. What a teacher with such an aim does is to empower learners to learn rather than only teach them contents to memorise. Often, these teachings feed into larger individual and collective learning processes — where teachers become learners as well — with outcomes not all of which are foreseeable and plannable (Benaim and Mehlmann, 2017; Inayatullah, 1998; Mehlmann and Pometun, 2013).

1.3.3 An online Toolbox

Numerous specific 'teachables' are referred to in this Compendium. They are not described in detail here but in the Hosting Transformation Facilitation Toolbox, an online resource under development, hosted by Visionautik Akademie, one of the project partners. It contains detailed advice for an educator or facilitator wishing to use one of the methods, as well as some background articles. At the time of writing, access is free of charge. (https://hosting-transformation.eu/toolbox)

2. Clusters of answers

A first, informal expert workshop by the contributing partners within their immediate networks told us that our initial questions – "What 'people skills' help us meet the sustainable development agenda and how can we foster such skills in various formal and non-formal adult educational contexts?" – are highly topical and not limited to the current century. A dozen or more groups and institutions have published different but overlapping answers, with suggested skills, competences or other outcomes of learning.

We grouped these into clusters (see next section, "Approach"). The clusters themselves (List 1) express a desired end state, or outcome, that can in our view be subsumed under three major headings:

Personal development: a conscious search for increasing self-awareness

Relationships: unconditional respect for all beings, openness, trust, and inclusion

Action: personal and collective responsibility for necessary or desired change

List 1: Clusters of answers, with suggested skills, competences or other outcomes of learning

PERSONAL DEVELOPMENT

Character

- Self-awareness, integrity, authenticity, inner compass, values and virtue
- Presence, serenity
- Humility, openness to learning, joy in mistakes
- Metalearning capacity

Sensing

- Awareness of sensory input
- Pattern recognition
- Multiple perspectives, riding complexity
- Physical wellbeing

Cognitive skills

- Critical thinking
- Analysis and synthesis
- Systems thinking

RELATIONSHIPS

Caring for other people and beings

- Gratitude, appreciation, humility
- Inclusion, interculturality
- Connectedness, empathy, compassion
- A thirst for fairness for all

Communicating

- Trust
- Exchange of ideas, knowledge, energy, resources
- Transparency, conflict handling
- Dialogue, non-judgemental listening
- Stakeholder perspective

ACTION

Creating

- Models of change; open innovation
- Co-creation rooted in common needs
- Metaphors and myths
- Experimentation

Anticipation

- Perceiving fears, hopes and expectations
- Understanding and transcending boundaries
- Envisioning desired futures
- Meaning and purpose

Action competence

- Courage, hope, perseverance
- Leadership and facilitation
- Flow

Seldom explicitly mentioned but tacitly recognized is the question of *purpose*, which is assumed to be the transition mentioned initially in this Compendium: the transition to a future that is thriveable for all beings.

3. Our approach

If the 'answer clusters' above represent a desired state for humanity, our next question is at a practical level: "How and to what extent can adult education (formal and non-formal) contribute to moving towards that desired state?"

"The higher education system is geared for stability, not for change.

* Students want to get an education that will predictably earn them a living.
* The administrators 'want' change but also want to keep to the budget.

So I'm interested in educational ideas that take a conventional form but have transformative potential."

Magnus Hoppe, Mälardalen University, 2022

"You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete."

Buckminster Fuller

3.1 New models

One way to "build a new model" (Fuller) without provoking backlash, or being ignored as irrelevant, is to identify familiar courses or workshops that could be complemented with a transformative twist: 'conventional' skill sets with transformative potential. Such an approach also enables us to avoid reinventing the wheel. In some cases it can be designed as a Trojan horse — or rather as Trojan mice, since our aim is not a military one like Ulysses' — introducing transformative potential into apparently orthodox transfer-of-knowledge education.
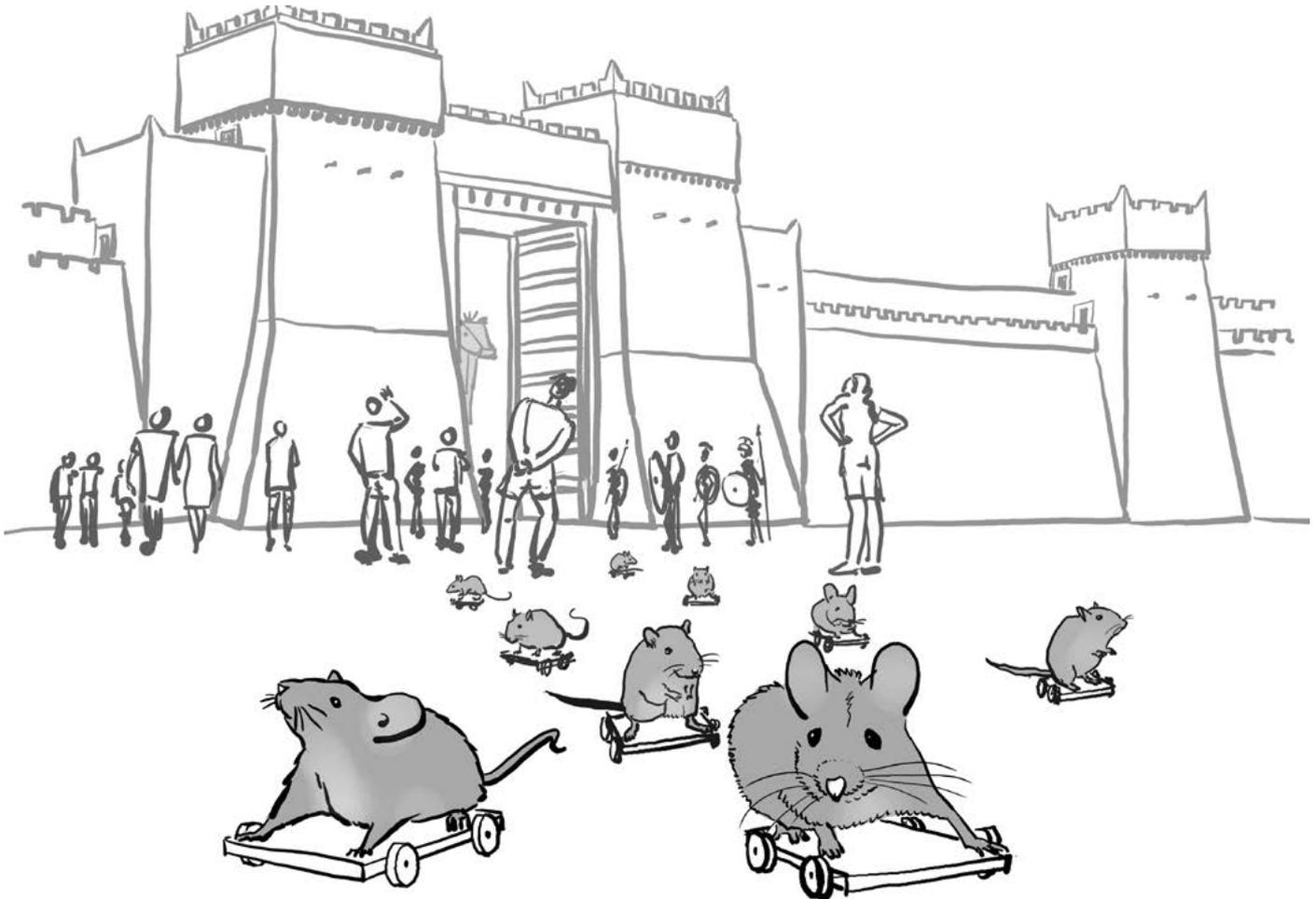
What could such a Trojan mouse look like? The 'external' shape could be a course design with recognizable elements and the aim of supporting change, while the transformative parts would be **the ways of teaching** (the pedagogy and didactics, including use of specific methods) and **the skills** acquired by (or offered to) participants.

Apart from relying on existing literature and open access course resources, we invited numerous colleagues (see Annexe 3) to contribute input on skills and ways of teaching based on their long-term experience and reflections. We intentionally invited contributors from many different disciplines and areas of practice to share their insights from their teaching because we believe it is urgent to **build a commons of transformative pedagogy.**

We also decided to run two pilot workshops based on our initial explorations and interviews, and asked participants to provide feedback on their experience as seasoned teachers and facilitators of learning processes in a higher education or adult education context. Their feedback also contributed to the emerging commons of transformative pedagogy.

After our first collection of material and clustering of answers, we decided to take the set of Inner Development Goals (IDGs) as our guiding framework. The IDGs are currently being promoted as a necessary adjunct to the SDGs, outlining better ways of:

- Being - Relation to self
- Thinking - Cognitive skills
- Relating - Caring for others and the world
- Collaborating - Social skills

3.2 Sources

- Acting - Driving change

We cross-referenced these goals against several other such sources with sets of desired learning outcomes that seemed relevant to us, notably:
- Hosting Transformation: "TL+"-project + books, 2021
- Essenes: guide to right living, ca 100 BCE
- UN Competences Framework for ESD, 2012
- Two models from the London

Interdisciplinary School, LiS
- Human Flourishing, Templeton Foundation, 2021
- Bright Future Now, ongoing online program

A source matrix is shown below in Table x, while references are included in section 8.

IDGs (learning outcomes?)	TL+ competence	Essenes	UN competences	LiS 1
BEING: relation to self			Learning to be	
Inner compass				
Integrity and authenticity				
Openness and learning mindset		3. Joy in mistakes		Metalearning capacity
Self-awareness	1. Self knowledge	1. Tranquillity		Self reflection
Presence		9. Serenity		
THINKING: cognitive skills			Learning to know	
Critical thinking				
Complexity awareness	4. Riding complexity		Systems Thinking	Systems thinking
Perspective skills				
Sense-making				
Long-term orientation and visioning	3. Envisioning			Anticipatory competence
RELATING: caring for others and the World		2. The supporter		
Appreciation		5. Positive regard		
Connectedness				Eco-social competence
Humility		7. The peacemaker		
Empathy and compassion		8. Unconditional love		
COLLABORATING: social skills	2. Working with others		Learning to live together	Collaboration
Communication skills	6. Pedagogy			
Co-creation skills				Strategic problem-solving
Inclusive mindest and intercultural competence		4. Fairness for all		
Trust		6. Stakeholder view		
Mobilization skills				
ACTING: driving change	5. Flow		Learning to do	Practical competence
Courage				
Creativity				
Optimism				
Perseverance				

LIS 2	Human flourishing*	Bright Future Now	Daoism (Layers: skills at chi level)	Theories
	Happiness, life satisfaction		Remember: you are an	Life Satisfaction
			expression of the Dao	
	Character & virtue			
Adapt				
	Meaning & purpose	Self-awareness/compassion		
	Mental & physical health			Wellbeing
Regenerate		Systems & habits		
		Objects, perspectives...		
		...categories, maps		
	Meaning & purpose			Foresight models
		Human development		
	Close relationships			
Connect			W	
	Character & virtue			
		(self-compassion)		
Exchange		Collaboration	Co-design	
		Vision to reality		
Diversify		How change works		
	Meaning & purpose			

Table x. Matrix of selected sources

3.3 Making the transition

Several participants in the project's pilot workshops reported difficulties convincing others of the value of working in a transformative way. Here's the thing:

- You attend a workshop and gain not only new insights and facts but also, most importantly, feelings: the so-called ´edge emotions´. You've experienced a close encounter with intuition.
- This is exciting. You want to convey a sense of those ´Aha!´ moments.
- But your colleagues, or students, weren't part of that experience and are still stuck where you perhaps also once were, in a world that pays homage to ´rationality´ and discounts intuition.

How can you carry your audience with you? Is it even possible?

Here's where the Trojan mice come in. All the teachables advocated here can be described both in terms of feelings, intuition, creativity, even spirituality; they can also, and equally accurately, be described in terms of rationality: they simply yield better results.

This was well understood a long time ago, and not only by the Greeks. In the Roman Empire, Janus was the god of gates, doors, keys - and transitions. And he had two faces.

Standing in this transitional doorway, you can choose the language of rationality *or* the language of intuitive insights. Which face will enable your audience to enter into your story?

There will always still be some who are unconvinced: it takes both energy and courage to make a transition. But your choice of language can make it easier for your audience to respond. Using both the language of rationality and that of intuitive insights at the same time may also be a solution.

3.4 Pedagogical and didactic reflections

Without a fundamental commitment to learning, we will not achieve the SDGs, let alone the transition to a thriveable society on a healthy planet. Learning is key to change (Agenda 2030) and achieving the SDGs requires *transformative* learning (UNESCO 2021). A phrase usually attributed to Albert Einstein says: "No problem can be solved from the same consciousness that created it. We have to learn to see the world anew". This consciousness of the need for a change in mental maps was systematically described by the "father" of transformative learning Jack Mezirow (1997). Mezirow inspired many adult educators, including Morrell and O'Connor, for whom transformative learning

"*...involves experiencing a deep structural shift in the basic premises of thought, feelings, and actions. It is a shift of consciousness that dramatically and permanently alters our way of being in the world. Such a shift involves our understanding of ourselves and our self-locations; our relationships with other humans and with the natural world; our understanding of power relations in interlocking structures of class, race, and gender; our body awareness, our visions of alternative approaches to living; and our sense of possibilities for social justice and peace and personal joy.*"

Morrel and O'Connor, 2002, p. xvii.

Transformative learning requires transformative teaching: this means that teachers need to take responsibility for their position as teachers, implying i.a. that they take responsibility for the choice of outcomes, course design and methods. But they should not exclude themselves from the learning process. Indeed, in the kind of teaching we envisage, at times the teacher also learns and participants may teach one another. And the teacher is likely to play the role of coach or facilitator far more often than the role of transmitter of knowledge.

In addition, in transformative learning, self-assessment forms an integral part of the learning process as it allows learners to become conscious of their advancement in their transformation journey and to make it explicit (to themselves and others). The role of evaluation and assessment therefore needs to be rethought, especially in the context of formal education, where achieving concrete and predetermined learning outcomes is a necessary condition for receiving credits.

Didactic approaches that support transformative learning are increasingly being used in formal education. They include experiential learning, real-world labs, problem-based learning, collaborative learning, inquiry-based learning, self-directed learning and others. A learner-centred approach contributes to transformative learning by creating an environment that encourages students to question their assumptions, reflect critically on their experiences and develop new ways of thinking and acting. This type of learning goes beyond rote memorisation and routine practice, and fosters a deep understanding of the subject matter and its implications for the world beyond the classroom.

Learner-centredness also implies that although teachers make emotions and values visible in the teaching-and-learning situations, their role is not that of ideological masters: instead, they enable learners to make their own decisions based on their own growing perception of how values influence their perception of the world (Beutelsbacher Consensus).

In the context of adult learning, the theory of heutagogy (Blaschke, 2012) is another approach that emphasises the learner's autonomy and self-directedness. This theory recognises that adult learners bring their own experiences and knowledge to the learning process, and strengthens their responsibility for their own learning.

The overall understanding of learning and transformative learning that underlies this 'Unlearning for a Thrivable Future' draft compendium is perfectly compatible with such educational approaches. We are, however, interested in broadening application of methods with a transformative edge to all educational situations, even those that have not been developed explicitly in the ways described above.

3.5 Terminology

There is a huge literature in Education for Sustainable Development and adult education that defines key concepts such as "competences", "teaching-and-learning", and "skills". These concepts are defined in different ways for different purposes (for a comprehensive glossary see for instance UNEVOC). We take the liberty of defining a set of terms for the specific purposes of the present Compendium.

Skill: "The ability to use one's knowledge effectively and readily in execution or performance" (The Merriam-Webster Dictionary). Some skills take many years to develop; others can be trained rapidly.

Skill set: A particular set of skills that helps individuals and groups develop competence for acting for the SDGs.

Teachable [skill]: A way of working (method, tool, skill…), simple to teach and learn, with high transformative potential in conditions of uncertainty and complexity. It may be used by an educator or practitioner to complement or replace a well-known but more linear way of working.

4. What's the transformative edge?

There is education for knowledge transfer; and there is education that includes knowledge transfer but also aspires to enable transformative learning. So another way of explaining the Trojan mice is that on the outside the course appears to be mostly focused on knowledge transfer, while the transformative aspects are hidden inside and enable learners to learn differently: more systemically and with a greater consciousness that learning is a process that they, as learners, can influence.

Education for knowledge transfer functions in a funnel-like manner: the facts are there, are undisputable, are known to the educator and need to be absorbed by the student.

Transformative learning is the acknowledged goal of, for instance, Mindfulness training or meditation courses. Even in its purest form, such education naturally also contains elements of knowledge transfer. However, in a world of increasing complexity and accelerating change, education for transformative learning – going far beyond knowledge transfer – is increasingly important: it is not funnel-shaped, more like a lozenge: it begins with questioning assumptions and broadening rather than narrowing the scope of the topic. Thus: after opening up to many/all possibilities (corresponding to the large central part of the lozenge), the learners extract the most significant learning for them (narrowing down the second half of the lozenge).

What transforms in transformative learning is the willingness and ability of the students to perceive the world anew and make the very lens through which they look at the world into an object of contemplation in its own right. This means for instance a capacity to think and act in novel ways, to increase reflectivity, to become more aware not only of what they know but more importantly how they know it. In a world where information is readily available, although of often problematical quality, this increased capacity is a fundament that formal and informal education can help to build.

In the TRACCskills project, we chose to look at what comes in between education for knowledge transfer and education for transformative learning, and consider it as a possible fruitful area of exploration for educators with transformative ambitions. We looked for ways to:

Assess existing and planned courses for their additional transformative potential,

Easily locate 'teachables' that could be used to enhance such courses.

4.1 Assessing additional potential

A regular knowledge-transfer course builds on numerous assumptions that can be challenged in order to realise their transformative potential. Some examples below.

a. Assumptions about what is and what has been

- If fact-finding is limited to already-established, verifiable data, there is scope to question how those limits have been set. Perhaps there is reason or opportunity to include additional data and sources, including qualitative, subjective or intuitive information?
- If facts are regarded as only those that can be represented in a spreadsheet, there is scope to introduce methods that access tacit knowledge and intuition.

- If values (ethics) influencing outcomes are regarded as givens, there is scope for engaging learners and other stakeholders in explicit formulation of values.
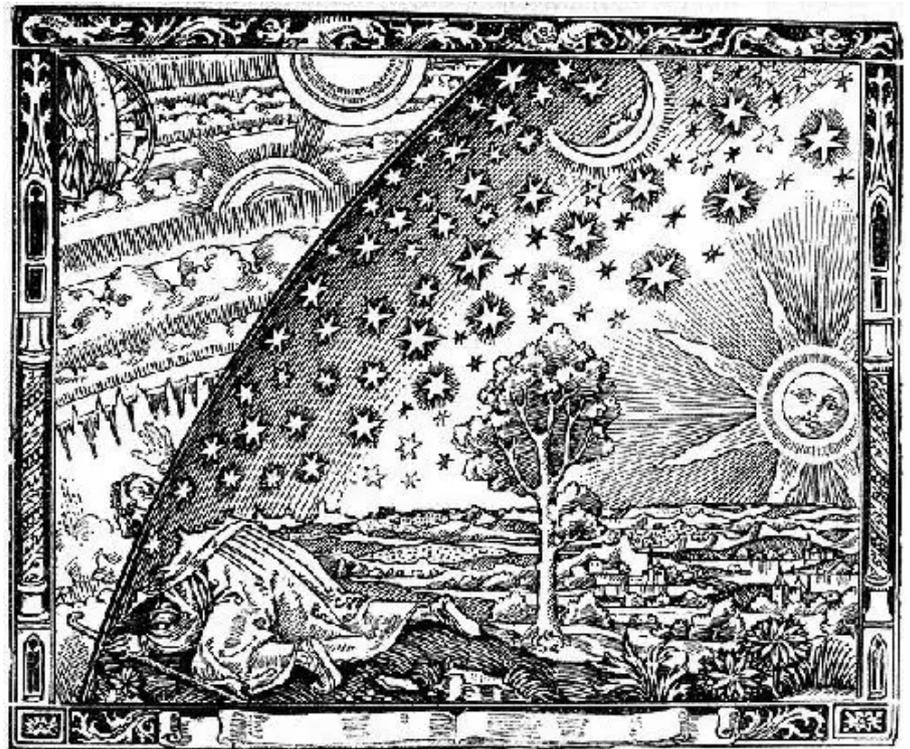
b. Assumptions about options

- If options are regarded as flowing directly from data, there is scope for unlearning and unknowing, as well as for methods engaging creativity, imagination, emotions/feelings, bodily sensations, hopes and fears.
- If options are generally regarded as responses to perceived problems, there is scope for shifting the focus to 'inexplicably' positive examples: the Positive Deviance approach (Baxter and Lawton, 2022).

c. Assumptions about perspective

- If all options are formulated by one or a small group of experts, there is scope for a stakeholder analysis and for welcoming new actors onto the stage.
- If there is an assumption that one discipline has a monopoly of Truth in the question, there is room to invite mutually respectful participation from other disciplines.
- If there is an assumption that science, democracy and economics are universal perspectives and you are positioned in the global North, there is scope for asking people from the global South whether their perspective is the same.

d. Assumptions about feasibility

- If it is assumed that a functioning technical, administrative or legal solution will succeed, irrespective of the opinions, values and feelings of the people whose behaviour needs to change, there is scope for introducing the whole concept of 'people skills' and inclusion.
- If communication with those affected by a given solution is presumed to be one-way, with room only for questions of clarification, there is scope for both extended knowledge transfer, e.g. about social diffusion of new behaviour, and about the mechanisms of behaviour change, and for such additional teachables as empowering communication, risk analysis, and numerous aspects of community-building.

4.2 A Transformative Edge checklist for my course

	To do	Done	N/A
a. What is and what has been			
• Review limits set to fact-finding.	○	○	○
• Use of methods to access tacit knowledge and intuition.	○	○	○
• Values explicitly formulated and agreed.	○	○	○
b. Options			
• Use of methods to support unlearning and unknowing	○	○	○
• Use of methods to enage imagination. emotions/feelings, bodily sensations, hoes an fears.	○	○	○
• Include search for ecamples aof Positive Deviance	○	○	○
c. Perspective			
• 'Expert' input compemented by other stakeholders.	○	○	○
• Other disiplines invided to contribute.	○	○	○
• Understanding of (e.g.) demoncracy, science, economics checked against those in other cultures.	○	○	○
d. Feasibility			
• Technical and administrative innovations are anchored with all affected by the change.	○	○	○
• Use of methods to support multi-stakeholder dialogue.	○	○	○
• Use fo methods to integrate stakeholder needs and views into innovations.	○	○	○

4.3 Some Trojan mice

Preliminary list of skill sets

A search for existing, well-established courses with a knowledge-transfer base as well as transformative potential yielded this list:

ANTICIPATE: What may b

CONFLICT HANDLING: Beyond hierarchy

DECIDE: Wise choice

FACILITATE: Safe and sound

GOVERN: Stewardship of public goods

INNOVATE: Fresh eyes to explore, create

LEAD: Mobilise others to make it happen

LEARN: Remain open, embrace openness

REFLECT: Step back, make sense

RELATE: Feel and be part of the world

SENSE: Open, take in, communicate

TEAM-BUILDING: Create conditions for co-creation

UNITE: Here, together, community

Each such course offers facts and skills somewhere on the scale from 'funnel' to 'lozenge'. We propose that in many cases, a course can be shifted further in the 'lozenge' direction to increase the scope for transformative learning.

Decision-making through this lens
DECIDE: Wise choice

"Soft skills for hard decisions"

We chose this skill set as the focus of our pilot workshops because decision-making is a component of several other skill sets; and because decision-making is often taught, albeit frequently in a 'funnel-like' way, as a more or less mechanical process. This may lead to confident decisions, but not necessarily to wise choices.

Transformative ambition:

Clarify and question personal and collective assumptions and values,

map impacts and risks, synthe-sise, negotiate. The skills needed are independent of whether the decision is purely personal or impacts millions of people.

This is a key sustainability skill set, because making decisions is critical, when no option stands out as ideal and when the future is uncertain. Its relevance to sustainable development is linked to the ability to place sustainability values and visions at the centre of the criteria for decision-making.

In the knowledge transfer, or 'funnel', mode it may be reduced to a question of algorithms: once 'all' the facts are known, the best outcome can be calculated. See the chapter on Pilot Courses for examples of how it may become more 'lozenge'-shaped.

…and the other skill sets through this lens
ANTICIPATE: What may be

Do you teach foresight, or work with futures?

The 'knowledge transfer' route is to equate foresight with forecasting: taking into account all available data, including analysis of current trends, to predict what will happen within a given time frame.

Transformative ambition:

Craft a vision of a transformed future, and chart paths in that direction. The scope can be unres-tricted ('The kind of world I want to live in') or focused, for instance 'How our community would be organised if all people with physical disabilities could lead fulfilling lives'. This is central to sustainable development, since the concept of a sustainable future is aspirational and demands an imaginative leap: a society of wellbeing for all beings has never yet been envisaged with this many humans on the planet, and with such awareness of the limits of physical resources (Steffen et al., 2018, Meadows et al., 1972).

Transformative options range from Introducing one or more teachables to open minds, e.g. 'long' critical thinking or working with values Teaching general principles for transformative futures work (Biester & Mehlmann, 2020)

Teaching one particular methodology for transformative futures work, e.g. Enspirited Envisioning, Dragon Dreaming, Three Horizons, Causal Layered Analysis.

CONFLICT HANDLING: Beyond hierarchy

Do you teach conflict handling?

The knowledge transfer route might be represented through a fixed approach to the background to the conflict, possibly cemented by a hierarchical component: the interpretation of the most senior or most powerful is assumed as fact.

🦋Transformative ambition:

Teach how to listen, ask deep questions, empathise; align purpose; practice compassion and self-compassion. Sustainable development demands not only compassionate handling of inevitable clashes of interest, without regard for conventional power structures, but also active measures to build both inner and outer peace.

Transformative options include introducing such teachables as

Appreciative Dialogue, Appreciative Inquiry or Systemic Constellations (ref xx), in the early stages

Sociodrama or similar methods to cast more light on feelings and possible options

Consensual Decision-Making or similar, to reach a viable conclusion

FACILITATE: Safe and sound

Facilitation is a skill that has been honed in contexts where learners are meant to be empowered rather than taught; such contexts are, for example, Montessori and Steiner schools, or transdisciplinary knowledge co-creation workshops. At most high schools and universities, educators - often called 'lecturers' - have not been regarded as needing facilitation skills. This is however changing; radically so, when transformative learning is aspired to.

🦋Transformative ambition:

Create interpersonal spaces that foster trust for co-creating, to spark creativity and engender innovation. To reach maximum transformative potential in an educational program, the educator needs to act as an empowering facilitator, from a deep knowledge of their own strengths and style. At the core of this skill set is the ability to create 'safe enough' spaces for participants: not so safe that they feel no need for change, but still safe enough that they feel emboldened to call their certainties into question, experiment, and make decisions (Mehlmann (ed) 2022). Safe enough space is needed for individual learners to dare transformation; it is also required for groups, and indeed for institutions (Singer-Brodowski et al., 2022).

It is possible to teach facilitation as a set of skills to be mastered?

Transformative options for teaching facilitation range from

Introducing some (more) exercises to explore how trust is built and maintained.

Including throughout the course support for participants to find their own, personal style of facilitation; and enabling them to support their own participants in search of self-knowledge.

Ensuring that discussions are a space where individual and group creativity is developed, rather than a space for competitive assertion of mindsets.

GOVERN: Stewardship of public goods

Do you teach law, economics, leadership? If your programs touch upon stewardship of the commons you may wish to embrace some of the more recent research and developments around 'commoning'. (Bauwens, 2019)

Transformative ambition:

Protect and strengthen the commons. Economics, law, relationships, leadership, communication, knowledge. If sustainable development is about transitioning to a paradigm of co-creation rather than competition (Harding, 2021), then the ways in which the commons are governed today need radical re-thinking: they tend to fall into the trap of at best cooperative modes of operating within a competitive context.

INNOVATE: Fresh eyes to explore, create

Business schools are no strangers to innovation or creativity, from the Lateral Thinking popularised in the 1960s (de Bono, 1967) to the introduction by the United Nations of a World Innovation and Creativity Day - 21 April - in 2002, and beyond. The crux is in the quality criteria: what constitutes a 'sustainable' innovation?

Transformative ambition:

Challenge solutions, reformulate questions, connect, synthesise, design, communicate. And beware of commodification of the New.

Many of the skills needed here, in order to take sustainable development out of the realm of

fantasy and into the real world, are known from business (where they are often used for distinctly unsustainable product development) and the arts. The sustainability challenge is to link them to the values and visions intrinsic to a sustainable future for all, including the Earth and its ecosystems.

LEAD: Make it happen

Leadership development is on many agendas and part of many curricula. Sometimes confused with management, i.e. the skill of making things happen according to given plans, leadership is more properly concerned with strategy and communication. Beyond that, all modern theories of leadership seem to have one thing in common: they include or indeed emphasise the criticality of the leader's own inner development.

Transformative ambition:

Learn and practise deeper self-knowledge, clarify values and assumptions, pinpoint obstacles to better practice, identify and communicate with stakeholders, hold a vision of a desired future and use it to mobilise and inspire others.

There are many models and indeed educational programs concerning leadership and sustai-nable development. One thing the models have in common is the need to educate leaders for evolving self-awareness and empathy; something which is often lacking in conventional leadership educational programs. Effective communication is also central: the one thing a leader cannot delegate is the responsibility to speak on behalf of their work and values.

LEARN: Remain open, embrace openness

It would be reasonable to expect that an educational organisation, whether formal or non-formal, could or even should be interested in teaching how to learn. When this topic is on the curriculum there is a risk that it focuses chiefly on how to receive (learn) transmitted knowledge - including, in the best case, knowledge of how to ask questions.

There is a big opportunity, in all kinds of education, to introduce more transformative elements and to foster learning to learn and indeed, to unlearn. Learning from this viewpoint is everyone's privilege, including the teacher's. The power to learn replaces the power to teach.

Transformative ambition:

Openness to un-learning and un-knowing, ability to appreciate, focus, work with values, synthesise. Moving away from the con-cept of 'learning' as a process of receiving given knowledge is an essential component of Education FOR Sustainable Development: learning to navigate the often-unfamiliar waters of un-knowing and co-creation of knowledge. Learning to see and appreciate other perspectives than one's own. Learning to humbly accept one's un-knowing as the beginning of an empowering transformation.

REFLECT: Step back, make sense

Reflection is integrated into many educational situations, in the form of invitations to consider and evaluate the learning experience. When it is framed as principally a validation that students have understood the transmitted knowledge, there is scope for introducing radically transformative elements. But this depends on perceiving critical reflection as the beginning of new discoveries, not as a means of exerting power over others' (assumedly weaker) thinking.

Transformative ambition:

Clarify and question assumptions, critically appraise, synthesise. The field of sustainable development is riddled with conflicting views on 'the facts'. The ability to face and indeed discuss them in a non-judgemental way is critical to the task of identifying effective ways forward that are also acceptable to those affected.

Critique with transformative potential is directed at the ways of perceiving and understanding the object of study, not as a means of asserting superiority over others or the object of study.

RELATE: Feel and be part of the world

The concept of the individual human as a discrete, disconnected entity is deeply rooted in our cultures. Despite overwhelming evidence to the contrary (Ball, 1999; Lange et al., 2019), we persist, by and large, in regarding human relationships in terms of interactions between separate individuals governed by power structures, in a spirit of competition. Our relationships with the non-human world are even more instrumental: other species, especially those the Western world calls inanimate, are seen as objects for use/exploitation. These attitudes are significant stumbling blocks to sustainable development, which education so far does little to overcome. The potential for improvement is huge.

Transformative ambition:

Approach situations and people without judgement, with an open mind, open heart and open will

OTTO SCHARMER

Practice empathy, care, compassion: encourage curiosity, challenge established beliefs, practise non-judgemental critique and dialogue, work with values. Exercises in empathy can include such questions as "What can a stone teach me".

Examine structural obstacles as well as enablers such as the recent adoption by several legislatures of ecocide as a criminal offence

ROUPÉ & RAGNARSDÓTTIR.

Feel the ground under your feet: are you connected with it, what energy flows from it and into you, what energy can you then let flow back into it and beyond?

SENSE: Open, take in, communicate

It's all too easy to reduce 'sensing' to a question of data collection and analysis. The world has far more to teach us than measurable facts.

🦋Transformative ambition:

Use all senses and all channels to understand, learn, communicate. The senses with which humans are endowed are admittedly incomplete: there are many phenomena that we are unequipped or ill-equipped to detect. Nonetheless the course of sustainable development can be improved if we make the best use of the senses we have; both to learn, and to communicate with others. Moreover, mobilising multiple senses during a sustainability-learning journey intensifies the learning experience and enhances the learning outcomes.

TEAM-BUILDING: Create conditions for co-creation

Team-building can be 'taught' or conveyed in either of two basic ways: as a matter of 'us-and-them', or as a matter of 'we'. The competitive, excluding model of 'us-and-them' is widely taught, not least in business. An inclusive, collaborative model can be more challenging to deliver but many times as effective (Tift).

🦋Transformative ambition:

Listen, enable non-judgemental communication, align purpose. In sustainable development 'human' resources are precious. Managing them with care in order to eliminate negative aspects of competition can enable a team to double or even triple its effectiveness (Tift) as well as modelling modes of organisation and communication applicable also in other contexts.

UNITE: Here, together, community

There are, in disciplines like urban planning and architecture, and perhaps especially in non-formal education, many programs teaching how to bring together people in a specific locality in order to bring about desired change. A potential hitch is when the change is desired by people who are not those most impacted by the outcomes: either people in positions of power, or activists made powerful by their zeal. The transformative opportunity lies in methods for deep engagement of stakeholders.

Transformative ambition:

Support alignment with common values and common purpose, rooted in place and time, with no-one left behind. Many propo-nents and practitioners of sustai-nable development propose that the major shifts are taking place in (local) communities (Norberg-Hodge; Sarkissian et al. 2010): while problems are global, many solutions are of necessity local, and build upon the ability to create alignment of purpose and ownership for initiatives among disparate stakeholders, bypassing or healing traditional rifts and disagreements.

5. Creating conditions for change

"Change is not something you plan, but something that happens when the conditions are right."

WARREN ZIEGLER

5.1 Preliminary conditions

Create a 'safe enough' space

As documented i.a. in the report Online Alchemy (Mehlmann (ed) 2020), a critical ingredient for successful transformative learning is trust. The more daring a transformation process is and the more it challenges the status quo, the more indispensable trust is: trust in the group, trust in the facilitator, trust in oneself and one's own place, as well as trust in the effectiveness of the process.

For learners/participants, transformation processes mean letting go of the old, outdated and engaging with the new, unknown. This liminal state comes with often uncomfortable 'edge emotions' and can - if not embedded in a basic feeling of security - quickly lead to resistance to the development process. In an atmosphere of trust, security, and mutual support, on the other hand, transformative learning and change processes can flow with curiosity, joy, and ease (Förster et al., 2019).

A good balance between safety and challenge is required. "Each one of us has our own sphere of safety; and as long as we remain snugly within it, no transformative learning will take place. On the other hand if we are thrown too far out, there is a risk that fear will dominate and prevent learning." (Biester & Mehlmann, 2020, Vol 1) We call this sphere 'a safe enough space'

There are methods that can be used, in particular at the start of a course, with the specific intention of creating trust and a 'safe enough' space. See Annexe 3 for examples used in the pilot work-shops - both the face-to-face event and the online course. See also the reports from the project Online Transformative Learning (Mehlmann (ed) 2020)

There are also cross-cutting methods with strong transformative potential that can be used throughout an educational event or a project. For instance,
- Deep Listening
- Fleck's Synergy
- I, We, It
- Open Space Technology
- Genuine Contact

Other guidance

One set of guidelines for creating conditions conducive to transformative learning is proposed by Taylor (2000):

- Foster group ownership and individual agency
- Provide intense shared experiential activities
- Develop an awareness of personal and social contextual influences
- Promote value-laden course content
- Recognize the interrelationship of critical reflection and affective learning
- The need for time

The experiential activities in both our workshops have revolved around case work in small groups. We have striven to meet several of the guidelines by avoiding the use of any theoretical 'cases', instead inviting each participant to 'bring' a case of their own. Each group selected a case to work on, while each participant whose case was not selected by their group was encouraged to apply the learnings from the group to their own experience.

Additionally, in the Non-Formal Education pilot the groups were offered a choice of two major cases to work on, each supplied by one of the participants and backed up by their team joining online.

Critical reflection and affective learning are closely linked, as emotions and feelings often provide impetus to the learner to reflect critically, their exploration fostering the self-awareness necessary to initiate changes in meaning structures. While unwillingness to respond to one's feelings related to experience might result in a barrier to learning, their processing might be enabling (and therapeutic) through greater appreciation for differences, tolerance for ambiguity and more courage, self-trust and inner strength (Neuman, 1996).

The need for time is central to transformative learning. The insight, or shift in perception, that characterises transformative learning comes in an instant; but the path leading to it may be days or months or even years long. One consequence is the need to consider long-term follow-up and evaluation, if practicable. An example of such long-term support is the use of online or face-to-face meetings of a Community of Practice (Wenger-Trayner and Wenger-Trayner, 2015).

5.2 Course design

Once the transformative pedagogy is in place, the question arises: how can we design a process in which change - even, transformative change - is possible and likely? In a routine world, even change-making can become routine: define the problem, survey solutions, pick the best one, implement. There are many books and courses that prescribe this pattern.

But dealing with complexity and uncertainty, while it may appear to follow a similar pattern, calls for quite different, and potentially transformative, skills.

Even the problem definition - if there is one - needs to be re-imagined. The transformative insight concerning problem definition is this: when we define a problem, we have at least one eye on one or more solutions. In fact, we tend only to define something as a problem once we believe there is, or could be, a solution. Anything else is simply fact - possibly an inconvenient fact, but not definable as a problem.

A generic process for transformative change might look something like this:

1. Clarity: Focus on what is
2. Vision: Expand to what might be
3. Ground the idea
4. Take next steps

The stages may be iterated until the fourth crystallises in a fifth, action.

1. Focus on what is

There are sets of questions, derived from different methods, that enable an individual or a group to escape preconceptions of 'the problem' and bring new clarity to the starting point of their enquiry, workshop, project... Some examples:

- What do you know for certain, what are your feelings about that, how do your feelings relate to your values?

- What do you most appreciate about the present? What would you most like to improve? (They can in fact be the same thing: it's easiest to improve what is already good.) From Learning for Change

- Who are those (most) affected by the current situation? Who is motivated to bring about change, who has the capacity to do so? Stakeholder Analysis

- What do you NOT know for certain about the present? What are you assuming, or taking for granted? What happens if, by chance, it's not true? Deep Questioning

- Has someone succeeded, against all the odds, in arriving approximately where you want to be? What was the difference that enabled their success? Positive Deviance

2. Expand to what might be

There are complete methodologies specifically designed to expand awareness and find new options - the heart of the transformative learning process. Some examples: Enspirited Envisioning, Dragon Dreaming, Three Horizons, Causal Layered Analysis.

There are also sets of questions, derived from different sources,

that enable an individual or a group to expand their perspective. Some examples:

- What are your hopes for the future? from Enspirited Envisioning

- What options are you not yet seeing? Lateral Thinking; Critical Big Thinking

- What are your ideals (values, success criteria)? Work with

Values, Dragon Dreaming

- Who will be affected by the change?

- Who are your potential allies? Stakeholder Analysis

- Who will NOT be happy if you succeed? Enspirited Envisioning

3. Ground the idea

The dance between what is desired and what is possible.

- Which criteria and options do you choose to prioritise? Fast Prioritisation
- What are the potential risks and benefits of the prioritised options? For whom? Devil's Advocate, Risk Analysis, RoI (Return on Investment), Stakeholder Analysis; Enspirited Envisioning
- How do you rate the best options against your ambitions and values? Nominal Group Technique

4. Take next steps

- Make a road map. Backcasting
- What is the smallest step you can take NOW in the desired direction?
- Do you have all the resources you need? Or, where might you find them?
- If you are successful, who will NOT be pleased? from Enspirited Envisioning
- What is happening that you didn't anticipate? Do you see new opportunities? Nominal Group Technique
- If you wake up one day and all is perfect: how will you know?

6. Some key skills and teachables

With so much of education justly focused on learning and knowing, on verifiable facts and replicable experiences, there is a special place in transformative learning for the opposite process: that of unlearning and 'unknowing' as a basis for new perspectives and new insights (section 6.1).

Beyond that, we have charted some well-known, potentially transformative ways of working with the preliminary list of skill sets, in order to identify at least a handful of skills that seem to have broad applicability to the task of creating space for transformative learning - whether as practitioner or educator (section 6.2).

6.1 Routes to unlearning and 'unknowing'

One major obstacle to transformative learning is the belief that we already know, and indeed should know. The route to transformative 'unknowing' begins with accepting that there is no way that we, or anyone, can possibly know everything about anything.

"Beware of false knowledge; it is more dangerous than ignorance."

George Bernard Shaw

"Facts do not find their way into the world in which our beliefs reside; they did not produce our beliefs, they do not destroy them; they may inflict on them the most constant refutations without weakening them, and an avalanche of afflictions or ailments succeeding one another without interruption in a family will not make it doubt the goodness of its God or the talent of its doctor."

Marcel Proust, Swann's Way

Not only do we not know everything, but our knowledge might indeed be "false", as the alarming circulation of fake news and the negligible impact of fact-checking shows, multiplied in the current context of social network bubbles where only facts compliant to our beliefs are prominent. A critical posture towards information and learning is therefore essential, as a preliminary to critical independent analytical capacity, which is crucial to resist manipulation and also a key ingredient to transformative and enabling learning.

"An expert is someone who knows more and more about less and less, until finally he knows almost everything about practically nothing."

Bo Hedberg, Konsten att inflyta

"When I invite experts, I don't ask them to tell us what they know. I ask them to tell us what they don't know. Questions they've become curious about in the course of their work."

Source unknown

Shoshin (初心) is a word from Zen Buddhism meaning "beginner's mind". It refers to having an

attitude of openness, eagerness, and lack of preconceptions when studying a subject, even when studying at an advanced level, just as a beginner would.

"In the beginner's mind there are many possibilities, in the expert's mind there are few."

Shunryu Suzuki

The other dimension of the necessary unlearning concerns Spivak's (1988) unlearning of privileges and intellectual prejudices, as they tend to cut off the privileged from certain kinds of "other" knowledge (e.g. from the marginalised "subalterns") and prevent us from truly learning to learn.

Some skills that can be taught by educators to promote 'unknowing':

Critical thinking, especially the kind referred to as 'big thinking'

Lateral thinking, and other creative exercises

Listening, especially Active and Deep Listening

Role-Reversal exercises to deepen empathy

Visions and values

When and how does the insight engendered by 'unknowing' crystalize into confidence in the 'new-knowing'? Seen through the lens of visions and values, some questions and some ways forward appear especially interesting.

Eugene Gendlin, the originator of the method called Focusing, describes two states of awareness in the process of crystallising new insights: The felt sense and the felt shift. The felt sense is a state of open awareness of sensing that something is on the tip of the tongue, you cannot yet name it or describe it. The felt shift happens in the moment when the new knowing kicks in. It does not only happen in the mind, but can be felt as a relaxation in the whole body, often combined with a deep sigh and a smile. Something fell into place and feels right, and it is combined with a deeper knowledge that this is right and true, there is no doubt about it.

Training the body awareness of the states of the felt sense and the felt shift helps grow the students more and more into a confidence of new-knowing. Additionally, it helps relax the un-ease many people feel when they are in the field of not knowing. Enduring the state of not knowing without giving way to the desire to get it all sorted and settled is one of the keys to allow new ways of thinking.

"The leader of the future will be one who can hold a paradox without becoming schizophrenic."

Robert Gilman

Learning and unlearning are always to be viewed as ongoing processes. The 'felt shift' thus also needs to be questioned for validity, with all the openness brought to other sources of information. This is a beginning, not an end!

Transformative learning can only be said to have happened when it manifests in action: when the new perspectives opened up during the educational process bear fruit in the form of decisions and behaviour that are different and broader than would have been the case earlier.

Some skills that can be taught by educators to promote confidence:

Bodywork, e.g. breathing exercises, as well as simple exercises derived from the martial arts, yoga, t'ai chi

Anchoring

Some skills that can be taught by educators to promote anchoring and action

Process design, including Enspirited Envisioning, Understanding possibility

Risk assessment, including Devil's Advocate, Risk analysis

Stakeholder engagement,

Foresight, especially using methods with visionary potential such as Enspirited Envisioning or Dragon Dreaming

Introspection & self awareness, including Work with Values and Critical Thinking

6.2 A small selection of teachables

Teachables appropriate for each of the Skill Sets

Tools/teachables	ANTIC	CONFL	DECIDE	FACILI	GOVERN	INNOV	LEAD	LEARN	REFLECT	RELATE	SENSE	TEAM	UNITE	#
Acceptance		•						•			•		•	4
Appreciative Dialogue			•			•	•	•				•	•	6
Appreciative Inquiry				•				•	•	•		•		5
Art of Hosting				•	•			•	•	•		•	•	7
Awaken the Dreamer	•					•					•			3
Backcasting	•		•				•		•				•	5
Deep Imaging	•	•				•								3
Deep Listening	•	•	•	•		•	•	•	•		•	•	•	11
Deep Questioning	•	•		•	•	•		•	•	•			•	9
Devil's Advocate	•		•	•	•	•	•	•	•	•		•		10
Empowering meetings	•	•	•	•	•	•	•	•		•		•	•	11
Forgiveness		•												1
Gratitude								•	•	•		•		4
Inner Critic		•						•						2
Lifeline								•				•		2
Mapping			•		•	•							•	4
Peer support: Feedback				•				•	•	•		•	•	6
Power Stance				•			•	•						3
Power of Yet							•	•					•	3
Reflection		•	•	•	•		•	•	•	•		•	•	10
Risk Assessment	•	•		•	•	•	•		•			•		8
Stakeholder Analysis	•	•	•	•	•	•	•			•			•	9
Storytelling	•	•		•	•	•	•	•	•			•	•	9
Work with Futures	•		•		•	•	•						•	6
Work with Values	•	•	•	•	•	•	•	•	•	•		•	•	12

The table on the left lists teachables, and the skill sets to which they are relevant, the most widely applicable being highlighted.

The attributions in the table are far from complete or definitive: they represent the current thinking and experience of the contributors. Many of the teachables,

as well as others, are also included in the Toolbox, where detailed instructions are readily available.

With thus all reservations for partiality, we identify some teachables that seem to be of relevance to many skill sets; currently

- Non-judgemental listening and questioning, eg Deep Listening

- Brainstorming and 'Devil's Advocate'
- Reflection as a praxis
- Empowering meetings, eg Fleck's Synergy
- Risk Assessment
- Stakeholder Analysis
- Storytelling
- Work with Values

Listening

Almost any program can benefit from teaching and practising open, non-judgemental listening. Listening is essential for understanding "the other", which is a prerequisite for a true dialogue, where the main aim is not (only) to defend one's own opinion, but to truly advance towards co-constructing a common vision.

There are several widely-used methods; one of the more effective is Deep Listening, because it enhances not only listening to

other people but also listening to oneself. It incorporates formulating 'compelling questions', also for oneself, and thus contributes significantly to not only group but also personal development.

The Toolbox gives a brief introduction to different listening methods (ref), as well as detailed instructions for several of them including Deep Listening (ref).

A linked but separate skill is that of Deep Questioning. This has

not yet manifested as a 'teachable', though some practitioners have their own collections of deep questions, i.e. questions with an unusually transformative potential - many such are to be found in these pages. This is a field ripe for further exploration.

Brainstorming, 'Devil's Advocate' and Sabotage

The expression 'brainstorming' is sometimes used loosely to refer to any process where several people put forward ideas. It is however a precise method which opens minds and supports inclusion. Formulating the question to be addressed is, as usual, the critical point: it needs to be broad enough to elicit new ideas but narrow enough to yield at least some practical suggestions.

The variation known as 'Devil's Advocate' builds on a negative question: give all the reasons why 'this' will never work. The exercise is highly liberating and gives 'permission' to openly voice fears and doubts.

(ref Toolbox)

Reflection as praxis

Personal reflection as a means to self-knowledge is a part of any path to personal development, and most effective when systematically put into practice. And indeed opportunities for reflection are good practice in any educational setting.

Group reflection is also a powerful instrument in the presence of collective transformative ambitions, and is most effective when incorporated into a routine such as Community of Practice or supervision groups.

(ref Toolbox)

Empowering Meetings

Effective meetings share certain characteristics, for instance:

They have a clearly stated purpose

Those invited have a stake in that purpose

Participants are invited to review and contribute to the agenda

They are facilitated rather than managed

They start and end on time

Fleck's Synergy Method has some additional characteristics with high transformative potential:

Each agenda item is 'owned' by one participant, with an agreed (negotiated) number of minutes assigned to it

The order in which agenda items are dealt with is not fixed but is determined by the flow of the interactions

For each agenda item, the entire group is at the service of the 'owner', to support them to reach an acceptable conclusion

When the time is over, it's over

For larger gatherings, Open Space Technology has similar characteristics. In other words, when bringing together people in meetings there is no need to adhere to conventional structures led by one person. No matter whether the meeting is of two people or several hundred, there are transformative alternatives.

Risk Assessment

Evaluating and even quantifying risks can be a path towards new and potentially transformative insights, especially when combined with thinking about return on investment (RoI) and consensual decision-making. (ref Toolbox)

As a preliminary, other methods can be used. For instance, Devil's Advocate, or Sabotage.

Stakeholder Analysis

In the course of any change process, new perspectives can be found by asking questions about people and groups with a stake in the process. Questions such as

- Who will be affected by the change?
- How can they be engaged or represented in the process? (ref)
- Which stakeholders are potential allies in bringing about the change?
- Which stakeholders are likely to resist change?

Enspirited Envisioning

Warren Ziegler's Enspirited Envisioning (summary in Biester & Mehlmann, 2022) is based on ancient Daoist principles and has proved effective across the globe. It builds on the skill of Deep Listening, first to oneself and then to others: bringing forth from the unconscious images of futures both desired and feared, to be shared with others and thereafter to form the basis for mapping potential actions and their predicted consequences. Some of the seminal questions are:

What images of the future do I carry inside me? How can I communicate them to others?

Whose future would I be happy to inhabit? How can we together communicate our desired future?

What are the consequences, if we manifest our future? Who will like them, and who will definitely not?

Storytelling

Storytelling is a form of information gathering that is not based on an interview or survey setting, but lets the narrator "tell a story" about real (or hypothetical) events and situations. Such methods can gather broad personal or community knowledge, which supports the reconstruction of a series of events or situations from particular points of view of different stakeholders, the relationships among them, their beliefs and sense of time, possible ways to manage problems or conflicts, and the roots and scope of a problem.

Storytelling can be useful in many situations, not least when working with groups with widely different educational backgrounds, and with people from societies with strong oral traditions.

Such an exercise can place high demands upon the facilitator since it might be emotionally challenging (not only for the narrator); and the gathered information may sometimes be difficult to organise since it is more susceptible to synthesis than to analysis.

Work with Values

Each person's and each group's set of values, or ethics, plays a part in their approach to both learning and unlearning. Yet often the values are left unarticulated, or only fuzzily defined, and their role ignored or largely unconscious.

Clarity concerning values greatly enhances many change processes, not least those connected with transformative learning, because it enables much more constructive dialogue between stakeholders.

(ref Toolbox)

A powerful question in this context concerns 'anti-values'. When asked to name our values, either in general or in the context of a project or group, there is a tendency to name things that are potentially lacking. For instance, in a group of hard-line Patriots, perhaps few would name 'patriotism' as a value because it would be a given.

So when a participant in a Work with Values exercise has named a value that is important to them, we ask for the opposite. "If this is what you want in our group: what is it that you don't want, or are wishing to avoid?". This example of an empowering question is just the start of the method. (see Toolbox)

7. Open questions for educators and sustainability professionals

The present Compendium is a draft. The ERASMUS+ project that made our work together possible allowed us to test transformative course designs and methods in different contexts, and made it possible for us to achieve a better, practice- and theory-based understanding of how to enhance people skills via enhancement of teaching skills. This has led us to new questions that we did not have an opportunity to explore further. Here they are…

Trauma

What role do traumatic experiences play in our lives?

How do they relate to the edge emotions, and thus to our capacity to move forward?

How can traumatic experiences best be handled so as to reduce the risk of actual trauma, and enhance mental health and well-being? Can this skill be acquired by 'anyone' or only by a qualified psychotherapist?

For an educator with transformative ambitions, what are the implications of coping with learners' traumatic experiences? Can such experiences be, or become, a positive force?

Eco-anxiety

On a similar line, some students who have not experienced trauma are anxious and very pessimistic about the future, beyond believing that sustainable development is still possible. How can we convey hope, as a necessary prerequisite (and constant ingredient) to engage on a transformation journey?

The fear of opening Pandora's box

Especially when the educator or facilitator is new to transformative learning, the unpredictability of the outcomes can be a source of apprehension. What to do if, for instance, a learner comes to the conclusion that humanity is doomed and should be extinguished for the better of the other living beings on the planet? Can we safeguard the transformation journey we are sending our learners on?

Dealing with feelings

While acknowledging that processing feelings increases the transformative power of critical reflection, educators might not feel comfortable and professionally prepared to handle emotions in the classroom. Is the focus on emotions unavoidable? What are the risks and how can they be handled? Where are the boundaries between collective learning and conducting collective therapy?

Power structures

Transformative teaching and learning benefit from horizontal structures. In strong hierarchies, is transformative learning a realistic option? How can we deal with the contradiction between the spirit and deontology of transformative learning, and (educational) institutions where professional progress is linked to climbing steps up a hierarchical ladder, following social rules determined by one's position, and depending on a system of monetary and social incentives?

Credits for Transformative Learning?

When introducing Transformative Learning in Higher Education Institutions, how do we deal with the obligation to give credits for students' learnings? Isn't the mere idea of attributing a mark to a transformative learning journey contradictory or even counterproductive for transformation?

How can we get around it and mobilise assessment and evaluation processes constructively, while still attributing the necessary credits?

Multicultural settings

Cultural differences, both nationally and internationally, for example about the place of the individual in society, the attitude towards controversy and conflict, the relation to time, etc., may be stumbling blocks. Can transformative teaching be easily used in mixed cultural settings? How can the methods be adapted for multicultural groups?

Deep questioning

Is there, or could we devise, a potential method to enable formulation of topical transformative questions?

A policy lever?

Governments have long viewed education as one of their major policy levers: if the population is sufficiently well-educated about the facts and values behind specific proposals for legislation and regulation, then there is a stronger likelihood both of support for the introduction of such measures, and of compliance without excessive policing. As one successful example, the compulsion to wear seat belts in cars is sometimes cited.

Some governments, national and local, go further and see the potential for transformative learning to enable more active forms of participation in government, supporting a move from representative to participatory governance in line with the EU's principle of 'subsidiarity'.

Both aspects of education are however seen to be under threat in an era of false and falsified facts as well as the growing potency of artificial intelligence. Can these perspectives be reconciled, so that education, and particularly adult education, becomes a significant contributor to a strengthening and renewal of democracy?

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 Other resources

Simandan, Dragos, Kinds of Environments (see materials folder)

Annexe 1.
Source models and maps

Source overview

Major sources used to compile the preliminary clusters were:

The Inner Development Goals, an international project intended to complement the UN's Sustainable Development Goals

The United Nations set of 'key competences' for Education for Sustainable Development

The Essenes's guidelines for right living, 2000 years old

Guiding principles of Daoism, even older

The Templeton Foundation's guide to human flourishing

Competences for Transformative Learning, from the project of that name

Two models offered by the London Interdisciplinary School

A framework of 'Key Competencies for Sustainable Development' published by the United Nations University

Frameworks offered by educational NGOs:

Visionautik's 'Blended Learning xxx'

Context Institute's 'Bright Future Now'

Compass Education's 'Sustainable Development Compass'

Gaia Education's Community Design offerings

Clusters of learning objectives derived from these sources are shown in Section 2, while the sources are cross-referenced in the matrix presented as figure x in Section 3

Annexe 2.
Notes from the pilot workshops

Designing workshop content

Pilot workshops were included in the project plan in order to gain experience and gather reviews of the design. Another consideration was to establish credentials for seeking funding for a possible, more ambitious follow-on project.

In view of the brief nature of the project and its pilot workshops, seen in relation to the breadth of potential content, we decided to focus on one skill set; and within that, to focus on what can reasonably be taught within a workshop of a few days. We selected the skill set DECIDE as the focus for the pilot course in an academic setting, and as an integral part of the non-formal online pilot course.

The draft Compendium served as a basis for designing the workshops. The workshops in turn gave additional input to the Compendium.

The Higher Education workshop

The HE pilot workshop, hosted by Leuphana University in Lüneburg, Germany, from 6-8 December 2022, was led by two facilitators and attended by 19 people, four of whom also served as small-group facilitators. It took place on two full days in face-to-face mode (i.e. two half days and one full day spread over three days), plus two online follow-up meetings within the following two months, aiming to see whether participants had been able to apply any of the transformative methods they had experienced in their everyday work at their higher education institutions or other adult education context, and what resistance or approval they were experiencing from colleagues and institution.

The face-to-face event comprised 23 work sessions, mostly in small groups, offering experien-

ce of many different teachable methods. Daily evaluations were made. The overall assessment was highly positive; the biggest criticism was that the workshop could have been longer, to be able to strengthen the ToT-elements - which were, indeed, not part of the original plan. The participants' feedback enabled numerous additions and improvements to this Compendium.

Course structure and teachables

As early as 1947 it was proposed (Simon) that "there is never one best course of action or decision, because one can't have complete information about [anything]". How to teach decision-making in a way that reflects this insight?

Build on actual cases, offered by participants

Successively introduce key skills:

Deep Listening, Work with Values, Synergy Meetings, Lateral Thinking, Stakeholder Analysis, Risk Analysis, Devil's Advocate, Nominal Group Technique

Engage participants in a sequence of small-group experiences

Examine and expand perceived options/alternative decisions

Engage tacit and intuitive knowledge

Evaluate options and make decision

Participants gave particularly high ratings to Deep Listening, Lateral Thinking, and Devil's Advocate.

Pedagogy

The pedagogy used differed in important ways from a conventional academic course. The difference was primarily in approach, "the pragmatic stance… constant /dynamic adaptation, different from the more static 'scientific' approach", and not least an element of playfulness.

It successfully incorporated seve-

ral facilitation methods that have proved valuable in non-formal education, for instance Throw the Ball as a basis for team building, online opinion polling (Slido), and repeated exercises in reflection.

The course design also incorporated some knowledge-transfer elements concerning Edge Emo-

tions and such contextual aspects as a model of economics for sustainable development (Doughnut Economics) and the concept of Planetary Boundaries, as well as an introduction to the Toolbox.

Online follow-up meetings

The first follow-up meeting gave rise to a discussion and ideas about how to introduce the teachables into a not-infrequently hostile academic environment.

By the time of the second meeting the participants had had an opportunity to try out some of the teachables and reported on their experience.

Survey

Subsequently a questionnaire was sent to participants, to gain more detail on the usefulness, or otherwise, of the course elements. Xxx

The Non-Formal Education workshop

The non-formal pilot online workshop, called "Basics in facilitating transformation", attracted 50 participants to enrol. It was led by two facilitators. The course comprised 4 modules, each of which contained a webinar, self study material and a small group session to try out a selection of methods in depth. Through the depth sessions, participants learned to facilitate these methods themselves, and help each other with the transformation challenges they were facing in their daily work. In addition, a forum offered the possibility of exchanging thoughts, new ideas and experiences.

The course contained 4 clusters of topics that are especially relevant to facilitating transformation:

1. A transformative attitude

2. Dealing with complexity

3. Tapping into creativity and collective wisdom, and

4. Motivation, activation, commitment and harvesting.

The group was very diverse, including participants from all over Europe as well as a few from Africa, Asia and America. The participants were eager to get to know each other and learn from one another.

Characteristics of this course

The focus was on experiencing-practical methods that can be put to immediate use in the participants' daily lives. Participants were able to experience some of these methods in the webinars and in small groups. In self-learning material, they were also given access to further methods with descriptions, and encouraged to try these.

Participants were encouraged to support each other in their respective work challenges. They did this in small groups. In addition, in the session on creativity and collective wisdom two participants were invited to present their own challenges, which had been given a huge boost through the group work.

The self-learning material contai-

ned three sections:
1. "Follow your curiosity", which contained links to readings and films to enable participants to deepen their understanding of the topic.
2. A section with method recommendations for each of the topics
3. Tasks to reflect on the topic or to try out a new approach.

A selection of methods and approaches introduced in the course

M1: Transformative attitude: Psychological safety, beginner's mind, creator's mindset, intention setting, appreciative speed-meeting dialogues, process models, transformation machines, socio-metric constellation, reflecting teams.

M2: Dealing with complexity: Ambiguity tolerance, visualisation and sensualisation of complexity, gravitation exercise, dealing with edge emotions, stakeholder

canvas, project tree.

M3: Creativity and collective wisdom: future forge, muse kiss model, dare to ask, perspective carousel online, upside down technique, design sensing, osborn checklist, blindspotting.

M4: Motivation, activation, commitment and harvesting: A promise is a promise, instant painting, the next elegant step, inner bodyguard, expiry date,

different ways of harvesting, art of celebration.

What we learned:

Many transformative approaches work very well online, eg reflecting teams, perspective carousel; or even work especially well online, eg transformation machines, dare to ask.

The biggest challenge was to create reliability and commitment within the small work groups.

Sometimes participants were missing (because of illness, other conflicting appointments or other reasons), which made it difficult for the small groups to keep going.

It was clearly a good decision to ask the participants to facilitate themselves and work on real cases, as this allowed them to actively learn in several ways: as facilitators, as case-givers and as

part of a group that could add value through experiencing others' progress and providing feedback.

Ways forward

For higher education, some possibilities are under discussion:

A second open program for HEIs

Potential support to specific HEIs

An open workshop focused on pedagogy/didactics

For non-formal education, a second online program is being announced in April 2023. Further plans will depend upon the response.

Annexe 3. The team

The project was conducted by three partner organisations:

Legacy17

(lead partner) represented by Annika Piirimets and Marilyn Mehlmann and assisted by Giada Acquilotti and Sophia Baldonado

COPERNICUS Alliance

represented by Anne Zimmermann, Elisabeth Hofmann and Mario Diethart, assisted by Eglė Staniškienė, Živilė Stankevičiūtė

Visionautik Akademie

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