An Exploration of Competences for

Socio Ecological Transition

Edition 1:
a 1st iteration to generate discussion, engagement and feedback
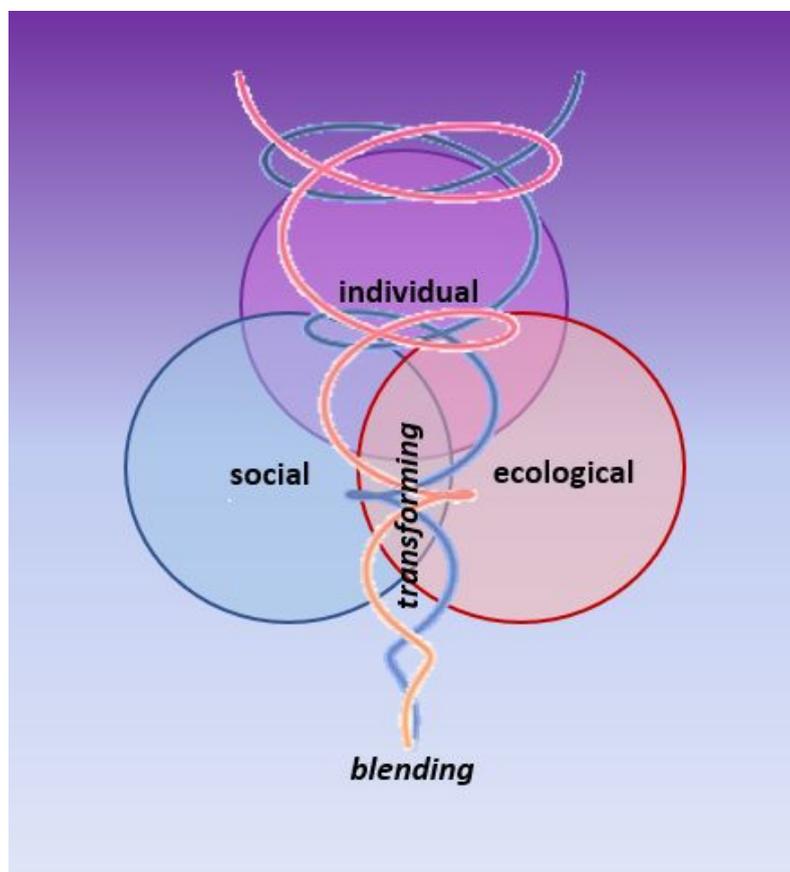
Contents

Foreword: Towards A Transition Competency Framework

This document presents **An Exploration of Transition Competence** for trainers, individuals, teams and Communities. In other words, it explores what trainers have to enable people to know about and to be able to do, so that any community can put in place the competencies that enable the process of socio-ecological transition to progress in a significant and meaningful way. The exploration covers the level of the household to the community, from neighbourhoods to organisations, and from the municipality to the bioregion.

This exploration is designed to be used with the **BLAST Competences Framework.** The framework provides a structure for understanding the sets of transition competencies that are needed for a) individual trainers and catalysts, and teams they are part of, and b) participants in learning and action, from the individual to the community, including their own teams (e.g. employees) and groups (e.g. community groups), and organises these in relation to the following areas and realms:

	Transformative learning competencies	Blended learning competencies	Socio-ecological competencies
Intrapersonal (Being) Realm			
Interpersonal (Relating) Realm			
Cognitive (Knowing) Realm			
Action (Doing) Realm			

A **Transition Goals & Visions Appendix** to this exploration is intended to be helpful for generating a shared understanding across trainers and learners of what we are all working towards, and therefore *what the transition competencies are there to enable to emerge*.

Why Competencies?

Thinking in terms of competencies started in the 1970's as a way to move beyond narrower concepts of skills and knowledge. The idea emerged from recognising that every job requires a specific set of competencies to do it well, so those people that perform the job need to have or develop those competencies.

Importantly, this approach focuses on what a person can learn, rather than what they can do - so has become useful and popular in the training sector. Competencies can incorporate specific behavioral indicators and also include motivation and self-knowledge, a desire and willingness to demonstrate effective performance in a role. Competency based learning therefore focuses on outcomes as well as the learners' real-world performance, whether that is in a work context for a specific job, or in a role as a trainer or facilitator of community based activity or learning. This approach is therefore seen as potentially being of significant value for considering what - and how - people need to learn to enhance their positive transition impacts, whether they are active as individuals, in a work team, or as trainers or community catalysts.

BLAST Target Groups / Audiences

In the context of the BLAST project, this exploration of transition competencies is particularly focused on understanding the needs and opportunities for Trainers and Community Catalysts that are aiming to help initiate, catalyse or strengthen Transition processes in communities. In particular, the focus is on both *transformative learning methodologies* and *blended learning methods* to enhance transition-focused learning and action.

Therefore, the transition competency framework has been developed specifically for the role or vocation of Transition Trainers and Catalysts. The target audiences for this role or vocation are:

- PRIMARY TARGET GROUP ('trainers'): adult educators, trainers, facilitators, coaches and similar professionals engaged in developing the capabilities for catalysing systemic change through transformative learning.

- SECONDARY TARGET GROUP ('catalysts'): change-makers, activists and civically engaged citizens interested in transformative adult learning / learning-for-action opportunities.

- Supplementary audience: Subject matter experts, with some training competence

BLAST Outputs and Approach

Viewing these issues through the lens of competencies, the diagram indicates the key relationships between transformative learning, blended learning and socio-ecological transition that the BLAST project aims to catalyse. It also illustrates the beneficial relationships between critical areas of activity that support the catalysing and scaling of transformative change, which have been developed by two complementary BLAST outputs, so that competencies can be understood within the context of *communities of practice*, which also identify, develop and use *a shared toolkit* for use in different situations.
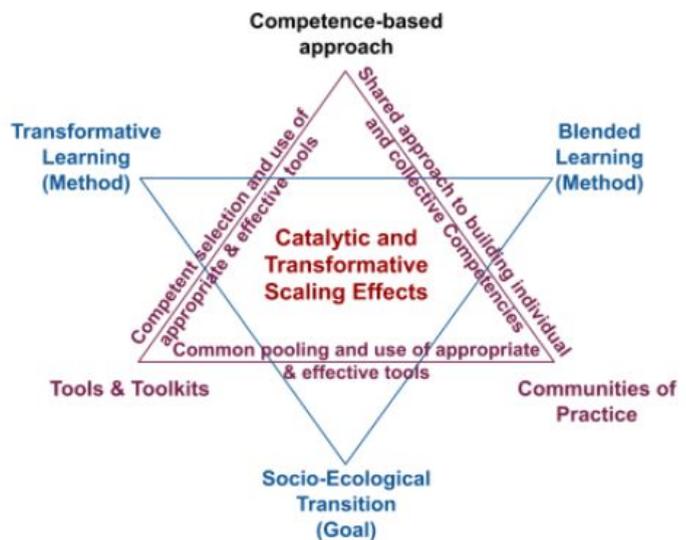
Introduction to Transition Competencies

The task of developing a *competency framework for blended transformative learning for the socio-ecological transition* is a complex one. It is complex both because of the three dimensional nature of this competency framework that incorporates:

1) transformative learning;
2) blended formats and methods;
3) socio-ecological transition,

and also because that complexity has to be made useful, understandable and applicable.

Therefore, to translate this complexity in a digestible format, an iterative process is being adopted that presents **'an exploration of transition competencies'**. This exploration journeys through a wide range of competencies that are seen as being needed to bring about socio-ecological transition, whether or not blended methods or transformative learning methodologies are used.

> **The Transition Competency Framework is relevant for any community-based approaches that are focused on delivering socio-ecological transition, sustainability, 'net zero', regeneration and resilience**, whether or not they adopt specific methodologies such as the Transition Town approach.

The purpose of combining **transition competencies** with **transformative learning competencies** and **blended learning competencies** is that when applied together they offer potential for significantly scaling the beneficial impacts of transition learning and action. Applied together, often with the competencies spread across a team, they can *accelerate*, *spread*, *deepen* and *lengthen* the benefits of that learning and action. Therefore, in relation to the goals of the BLAST project and its related **transformative learning CoP** (Community of Practice), the purpose for developing an understanding of transition competencies must be clearly understood as:

- **Socio-ecological transition** (Transition) is the goal for BLAST Competencies;
- This is enabled through **transformative-learning methods and processes**
- Using **blended methods, formats and processes** to bring about interrelated sets of outcomes that manifest a) inner and outer transformation and b) socio-ecological transition or meaningful steps towards that goal.

A starting point is to recognise that **socio-ecological transition is fundamentally a process of transformative learning**, at an individual and collective level, that is focused on learning how to individually and collectively transform ourselves to generate a regeneratively sustainable culture from the household and local level to the level of society as a whole. Therefore:

> **all transformative learning competencies are relevant for individual and collective socio-ecological transition** (whether or not blended methods are used).
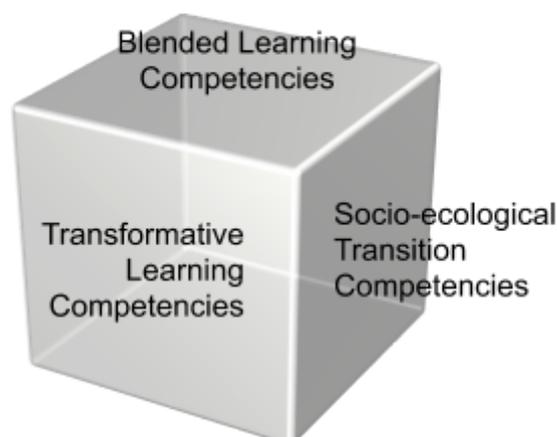
However, we also need to recognise that *transformative learning competencies alone are not enough*, and that a range of *additional **socio-ecological transition competencies*** are needed to achieve this goal.

>For example, if you are a trainer who is already strong in your transformative learning competencies, often the primary goal will be:
>
>a) to add socio-ecological transition knowledge to your existing transformative learning competencies;
>
>b) to make adjustments in your worldview i.e. to incorporate a socio-ecological worldview;
>
>c) to make adjustments in your self-view - for example, regarding your catalytic role in spreading and scaling local, regional or organisational socio-ecological transition activity.

To understand, detail and implement these **Transition Competencies**, we have to define Socio-ecological Transition in a useful way, in order to generate a common understanding of what our general direction and goals look like, the processes of change to move us toward them, and what these competencies are aiming to deliver, maintain and enrich. In this sense, two key questions, *What does Transition as a **process** look or feel like? What does Transition as an **outcome** look or feel like?*

One answer to the question of what the outcome looks like is: ***transition to Resilient (regeneratively sustainable) Communities, Ecologies and Systems***. However, this answer carries with it a great deal of detail for those with well developed transition competencies. For example, as a 'catch all' *resilient communities, ecologies and systems* will incorporate:

- Social justice and inclusion, including between generations - to ensure that transition processes and their outcomes are not unjust and unevenly distributed;
- A balance of individual and collective self-determination and life fulfillment.

This indicates ***Literacy in Sustainability, Regeneration & Resilience*** as one essential component of Transition Competences, that enables the elements and relationships of sustainability, regeneration and resilience to be broken down and communicated in an understandable way, such as the transition to 'net zero' for both carbon emissions and waste, from local to global levels. This also requires ***Future Thinking and Strategic Competencies***, for setting appropriate long term goals and strategies to achieve those goals.

This also indicates the value of ***Competencies for selecting and using a range of tools and methodologies*** that help to facilitate transition learning and action. For example, it is seen as being extremely valuable to have tools and resources available that provide and / or generate Localised Visions of Sustainable / Regenerative / Resilient Futures, and the steps to achieve those visions. This theme is further developed in the ***BLAST Visions Appendix***.

So, a different way of answering the question '*Transition to what?*' is to focus on competencies. Then ***transition involves putting in place and connecting up the broad set of transition competencies that are identified in this framework*** in our community or region, so that transition can flow directly from those competencies being in place. Hence, *the **BLAST***

Competency Framework is intended to be a valuable tool that offers a new and innovative way to help mobilise and empower transition processes.

> *This exploration and the related competency framework takes the position of considering the competences that are needed for both a) putting in place a significant and meaningful **process of transition** <u>and</u> b) achieving the **overall transition goals or outcomes** that process aims to achieve. For this reason, the overall Transition Competence Framework is extensive.*

To generate a deeper understanding of the full range of competencies that are needed to deliver community-based transition, three important questions need exploration:

1. What are the essential components and relationships of Resilient (regeneratively sustainable) Communities, Ecologies and Systems?

    a. In other words, what will the diverse competencies that are embedded within those communities and lifestyles look and feel like, and how will they interact?

2. What are the **individual and collective transition competencies** needed to put in place the components and relationships that bring about resilient communities, ecologies and systems?

    a. In other words, what individual and collective knowledge, skills and attitudes do we need for transition, to manifest our visions of our community and our lifestyles? (including to dismantle or evolve unhelpful embedded systems)

    These competencies are set out in Part B of this document, in the Section: ***Competencies for Participants***.

3. What are the **transition competencies needed by trainers and community catalysts** to manifest those individual and collective competencies in communities?

    a. In other words, what knowledge, skills and attitudes do our trainers and community catalysts need to help initiate, develop and maintain this transition process and manifest this transition vision?

    These Transition Competencies are set out in Part B of this document, in the Section: ***Transition Competencies for Trainers and Catalysts***.

In combination with competencies for both transformative and blended learning methods, these Transition Competencies are also set out in **The BLAST Competency Framework**.

A Competency-Based Approach for Socio-Ecological Transition

Transition at any level requires an ecology of inter-related competencies to be in place across a sufficient number of people in that community to enable transition.

These competencies need to be planned for, maintained and developed over time, at both the individual and collective level. ***Usually this will involve building on existing competencies.*** For example, often it will involve adding new knowledge (e.g. about green building methods and objectives; about social aspects of transition) to an existing set of competencies (e.g. construction or building design skills; training and facilitation, or communication and group-working skills).

> From this perspective, ***one goal for Trainers and Catalysts for Transition who use blended transformative learning methods is to help a community generate that ecology of inter-related competencies, over an extended period of time***.

Drawing on work within a higher education context, *Transformative Sustainability Learning* TSL (Sipos et al) suggests that the 'head, hands and heart' framework can be used as a framework for engaging with sustainability learning. This is likely to be helpful for communities that are addressing transition issues, without needing to become fluent in the language of competencies. The TSL framework is a way to integrate:

- Head - transdisciplinary knowledge;
- Hands - practical skill sharing and development;
- Heart - translation of passion and values into behaviour.

Translating this from a higher education context to community-based transition, it also suggests the following as essential ingredients that are need to complement this approach:

- development of a mental-emotional landscape for understanding transition competencies as a unifying framework;
- finding ways to engage and move between different disciplines, which also incorporate practical and/or place-based elements;
- creation of learning and transition objectives that are defined and organized in terms of Transformative Learning and the development over time of particular knowledge, skills, attitudes and dispositions.

In a context of community transition, it will be valuable to use this Head, Hands and Heart framework to help any community understand a) the general mixture of knowledge, skills and attitudes that are needed across a community to achieve transition, and b) the different mixes of these elements for specific fields of transition activity.

It is important to note that Diagram 2 below charts the broad inter-relatedness amongst these competencies to each other and to the framework of Head, Hands and Heart. The competencies are not in fixed positions, as their relative positions will vary according to particular practices used, and to the context of the audience.

HEAD: Learning through reading, videos, talks, discussion; includes critical thinking

HEAD engagement

HEAD & HANDS: designing and retrofitting low energy healthy homes; health-creating practices; learning-by-doing.

HEAD & HEART: visioning transition; cultural activities that communicate transition goals and values; developing equitable economic entities.

HANDS enactment

HEART enablement

HANDS: Growing local organic foods; installing and maintaining renewable energy systems

HEART: experiencing connection; reflecting upon values & practices

Diagram 1: The Head, Hands and Heart Model of Sustainability Competencies

HANDS & HEART: creating public art that inspires transition

HEAD, HANDS & HEART: designing and creating a community food project, or developing a coherent transition training programme

Both Diagram 1 and 2 adapted from Sipos et al, *Achieving Transformative Sustainability Learning*

Diagram 2: The Landscape of Transition Competencies

HEAD
Quantitative & Analytical Comps

Future Thinking & Strategic Comps

Systems Thinking Comps

Disciplinary & Inter-disciplinary Comps

Sustainability Literacy

Comp in Tool Selection & Use

Competency Literacy

Reflection, Testing & Evaluation Comps

Social Innovation Comps

Normative & Cultural Comps

Technical Comps

Interpersonal competencies

Intrapersonal competencies

HANDS

**HEART**

Ecologies of Competence

Transition is both an extensive process (across most areas of life) and an extended process (over a significant period of time). Therefore, within the diversity of inter-related transition competencies already identified above, at the collective level of transition competencies there will be **Ecologies of Competence** in particular areas of transition activity.

- For example, community renewable energy initiatives or visions for whole-health in a community will typically start with competencies that engage individuals around these themes, initially in smaller initiating groups. This will flow into facilitating larger groups around equitable and inclusive ways to develop a) a community energy coop or b) whole health initiatives and enterprises, with a broad awareness of the chain of stages and range of competencies needed to deliver such projects.

   *For the community renewable energy sector, such issues are addressed very clearly by Howard Johns in **Energy Revolution** (Permanent Publications, 2015) in the People chapter (pp157-161) based on his significant personal experience in these areas.*

- As simplified linear processes, these transition processes can be seen as ending with the skills for installing, maintaining and managing a) community renewable energy systems or b) whole health at individual and community level. At various stages, this will draw on **webs of competence**, which provide practical abilities and generic knowledge that is needed in areas such as finance, inclusivity and social justice (e.g. to access affordable energy and affordable health), system design and specification, community enterprise governance and stakeholder engagement.

- Each of these themes will have been planned for at a general level at the design stage, with collective decisions shaping the nature of the initiative from the early stages, such as decisions about a) the energy technologies to be used (technical competencies) and b) how inclusivity and social justice are built in and maintained (socio competencies). Each of these areas will then require deeper levels of competence to be applied at various stages in the process.

So, transition competencies can be viewed as fractal in structure, because across the full range of areas to be addressed, there is a great deal of complexity that emerges as we move from the general patterns of activity and impacts to the particular details that are specific to any one area of activity. What is needed is something of a 'hive mind' when it comes to understanding and manifesting collective transition competencies across a community.
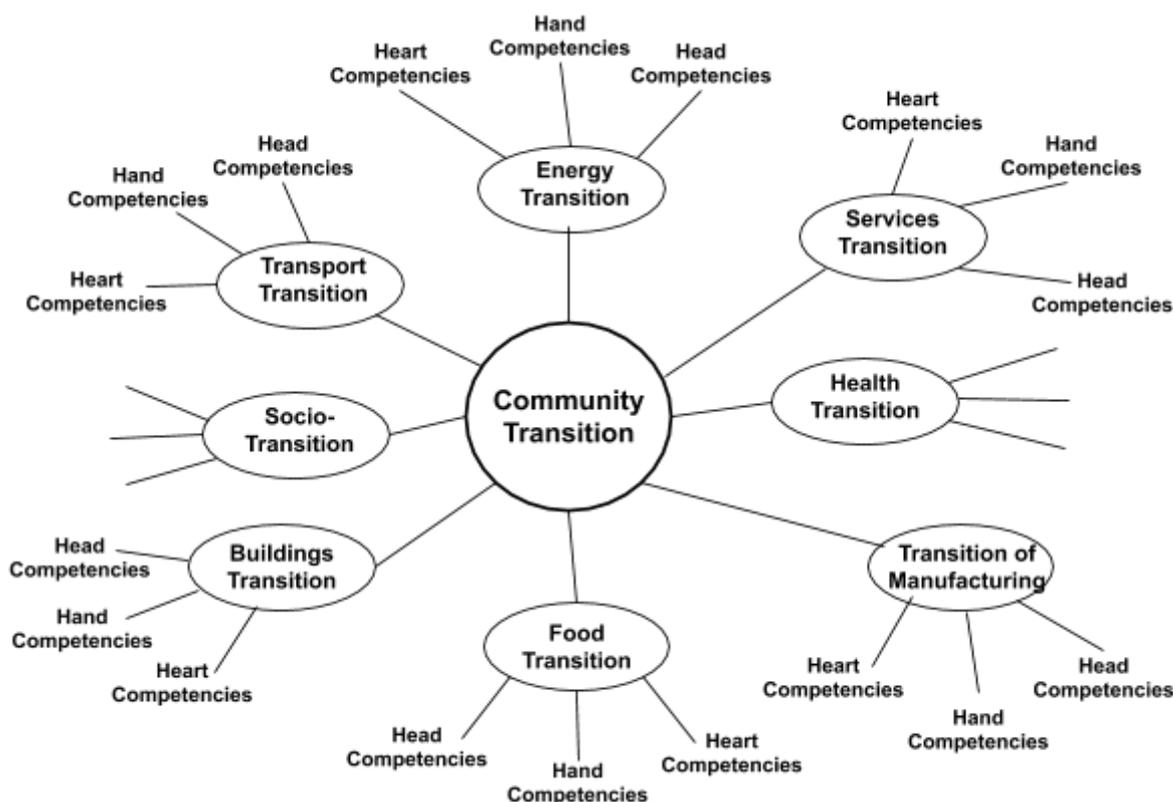
Trainers and Catalysts for Transition will need to be able to skillfully address the complexity and lack of definition of any individual's or community's understanding of transition competencies, in ways that achieve some form of 'simplexity' i.e. digestible forms of complexity. For example, specific community goals that each require their own complex set of generic and specific competencies to achieve these broad transition goals include:

- Regenerative, resilient and equitable economic systems: Low carbon / net zero; Circular economy; Economic equity; Appropriate economic vehicles and financing mechanisms e.g. social, community and ethical enterprise, impact investment, crowdfunding, etc.

- Sustainable, regenerative and resilient social systems: Socially just, inclusive, social equity; Appropriate education, training, research and science systems i.e. that naturally, automatically generate sufficient sustainability competence, knowledge commons, etc; Sustainable health; Community (social) wealth building.

- Sector Specific Competencies: Community / Third sector; Public sector i.e. strategy, policy, projects and practices; Private sector i.e. regenerative enterprise

To help towards understanding these generic and specific individual and collective competencies, it can be helpful to work backwards from a shared understanding of the general goals for Transition, which can also help inform a community or organisation in generating a relevant **Vision for Transition** (see Appendix/Supplement).

Environments That Enhance Learning and Action for Transition

Stephen Sterling (2012) notes the quality of the learning environment is a significant factor for yielding a transformative learning experience as an interaction between a) the willing and prepared learner, b) the competent educator and c) the supportive learning environment.

The transformative learning programmes delivered by numerous *Ecovillages* across Europe (Steyerberg; Findhorn; Cloughjordan; etc) and the *LAND Centre* movement in permaculture provide examples of these benefits, while Schumacher College and the Centre for Alternative Technology in the UK indicate the significant benefits of integrated physical, mental and attitudinal learning environments within focused centres that foster and enhance learning for transition. The international audiences for these types of *learning and demonstration centre* indicate that the demand for their programmes is widespread.[1]

These learning environments demonstrate a) the physical characteristics of transition (such as buildings, landscapes and energy systems), *and* b) the equally relevant social and person-centred characteristics, such positive communication practices, attitudes and practices for collaborative working, and so on.

Thus, for transition trainers and catalysts, three key **competencies related to learning environments** are:

- The appropriate selection and use of learning environments to enhance transition learning i.e. demonstration projects, ecovillages, LAND centres, etc.

- Abilities to generate and develop local learning environments that enhance transition learning where they do not exist i.e. demonstration projects; exemplar projects; etc.

- Identifying online resources and arranging visits that provide a taste of sustainability demonstration and exemplar projects, where these are not available locally.

Citing Moore (2005), Sterling questions whether conventional education institutions are ready or even able to provide learning environments that truly foster transformative learning or enhanced learning for transition and sustainability. Whatever the quality of their content, conventional institutional learning environments usually unconsciously inhibit or distort learning for sustainability. Therefore, it is highly important for transition trainers and catalysts to develop ***competencies that enable them to use and create learning environments that enhance transition learning and action***. Often the creation of local hubs or centres that demonstrate these characteristics may be a good option to consider in the early days of catalysing transition processes and be a good way to develop a range of important competencies.

Ideally, transition initiatives need access to the following as specific learning environments relevant to transition: eco-housing and low energy retrofit projects; local and organic food projects; community renewable energy projects.

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[1] The guide **Eurotopia** has for many years catered for the high demand for informal experiential learning that often arises from visiting and spending time at Ecovillages and intentional ecologically-minded communities.

Competencies to Activate Transition

In considering transition competencies, we can adapt *A Competency Framework to Assess and Activate Education for Sustainable Development* (Giangrande et al; Gaia Education, Ecolise etc), and draw from it those competencies that are most fundamental for our target audiences in catalysing transition. There are both significant parallels and significant differences between 'assessing and activating education for sustainable development' and assessing and activating socio-ecological transition[2].

For assessing and activating transition we can identify the following **Key Competency Areas** from the Giangrande et al framework**:**

- **Intrapersonal and Interpersonal Competencies**: these are covered in most depth within the domain of transformative learning competencies e.g. cross-cutting competencies such as effective individual and collective reflection;

- **Systems Thinking Competencies**: Systems thinking, elements and relationships, working with complex problems, understanding and promoting resilience, understanding tipping points and feedback loops;

- **Values-based (Normative) and Cultural Competencies**: Ethical responsibility, development of world views and perspectives, awareness of values, understanding of justice, cosmopolitan perception, transcultural understanding, awareness of local context and global trends;

- **Future Thinking and Strategic Competencies**: Visioning, developing scenarios, backcasting, recognising heritage, intergenerational equity; Design, planning, decision making, implementing, addressing challenges, organisational development, use of action-reflection cycles;

- **Disciplinary and Interdisciplinary Competencies**: Understanding the links between knowledge, skills, attitudes, experience, critical thinking, framing for specific disciplines, interdisciplinarity, expressing multiple ways of learning and knowing.

Additional areas which relate to all of the above, and which significantly benefits the assessing and activating of transition are:

- **Competencies for Communities of Practice** - knowledge, attitudes and skills for working collaboratively across both dispersed and unstructured networks, and organised collectives with *common interests in a general field*, *both to develop the general qualities of practice in that community, to learn collectively and to achieve the common objectives of that community*.

    The BLAST Community of Practice Guide has been specifically developed to work in combination with the BLAST Competency Framework to help strengthen and expand the

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[2] This requires a basic understanding of the difference between *'sustainability'* and the concept of *'sustainable development'*, which is the one institutionally accepted approach to achieving the goal of sustainability. This requires an understanding that *sustainable development* is not the only approach to achieving *sustainability*, perhaps questioning whether *sustainable development* is even capable of taking us to a state of *sustainability*.

work of various interacting communities of practice involved in its cross-cutting themes of transformative learning, blended learning and socio-ecological transition.

- **Competence in the selection and use of tools & methodologies** - individual tools and tools in combination, for a variety of contexts, processes and audiences i.e. well-informed selection and use of tools & methodologies for mobilising and enhancing all the other competencies, including different types of tools according to the needs of the participants and the specific context e.g. participative methodologies; online tools; etc.

  The BLAST Toolkit has been specifically developed to work in combination with the BLAST Competency Framework and BLAST CoP Guide to help strengthen and expand the work of various interconnected individuals, collectives, organisations and communities of practice involved in its cross-cutting themes of transformative learning, blended learning and socio-ecological transition.

It is important to recognise that in combination with the competencies listed above, specific ***competencies for catalysing change are needed*** (not just competencies for facilitating learning). Particularly, these are needed for engaging, motivating and equipping individuals and collectives to participate in and activate transition, for as long as it takes.

The range of competencies required for this catalysing effect are explored in the following sections. Initially, it is relevant to consider appropriate leadership and pioneer competencies for the BLAST context. A simple but relevant set of sustainability leadership competencies have been identified by Coro Strandberg, working in a business context. These can be translated to a community context, so that five sustainability competencies (three skills and two knowledge areas) are identified which individuals, collectives and communities should develop (in addition to existing community development competencies) to position the community for effective transition. Two of these competencies have already been identified above: Systems thinking and Partnership / External collaboration (i.e. Interpersonal competence). In addition, a value-based approach (Stranberg's 'Active values') can be seen as broadly equating to the Normative competencies already detailed above.

This gives us two additional competencies identified by Strandberg that are relevant for the socio-ecological transition context that we are addressing, and which are described later in this document:

1. **Social innovation competence**

2. **Sustainability (or regenerative) literacy**

Competences for Purposeful Collective Action

Welch and Yates (2018) identify that theories of practice have struggled to accommodate the roles of collective actors and purposeful collective projects in social change. Indirectly, they therefore identify that **competencies for purposeful collective action** are vital for transition.

Competencies for Purposeful Collective Action

- Facilitation of ongoing dispersed collective activity e.g. networking, movement building and development, asynchronous collaborative working methods, structured and unstructured communication and information sharing, etc.

- Facilitation of processes that generate organised groups or organisations out of the dispersed activity to address specific themes e.g. marketing and distribution cooperatives formed of local food producers; renewable energy systems designers and installers; repair cafes and hackerspaces; training collectives; etc.

- Recognition of issues, identification and addressing common opportunities (or threats), collective representation.

For mobilising purposeful collective action *there are important beneficial relationships with the Blended Learning competencies that relate to good practice in:*

A. *digital communication and collaborative working tools and systems (see BLAST Competency Framework and Toolkit);*
B. *socio-competencies for transition (see following section).*

Welch and Yates conclude that a crucial understanding for achieving sustainability transitions is the need to address the often overlooked self-reinforcing, self-repeating relationships between collective impacts and everyday routines, including those which perpetuate and reproduce patterns of consumption which prevent transition, rather than activating or enabling transition. Examples of this type of routine are:

- Where / from whom we buy our food, shifting from automatic social norms such as supermarket shopping to actively supporting local and organic producers, community wholefood coops, participating in community supported agriculture (CSA) schemes, etc.

- Responsible sourcing and investment, moving from unconscious activity to sourcing and ethical investment that actively supports purposeful ethical and transformative enterprise, e.g. community owned renewable energy supply cooperative; ethical clothing; ethical energy, phone & internet suppliers; etc.

- How we perceive and manage 'waste', fundamentally reshaping our consumption and purchasing habits to avoid or prevent waste in the first place (not just putting more in the recycling bin!).

This reinforces the importance of **competencies for networking, movement building and collaborative working**, in particular for the development and expansion of good practice in **transformative learning communities of practice**. These competencies have fractal aspects, as they are often identified and strengthened by national and international networks, drawing on network members' local experience, which then identifies and mobilises ways to enrich them back at the local-to-regional level through the growing community of practice.

Socio-Competencies

The socio-ecological transition movement has arguably arisen from an evolution of the environmental movement, with a growing recognition of the need for a deeper understanding of the social dynamics of fundamental cultural shifts.

Often this has arisen from critiques of the gaps in awareness within the environmental movement, that has come from other movements with deeper experience and understanding of these social dimensions.

With an awareness of a common default position of seeing 'transition' as just a technical issue, that is particularly about energy and resource use, there is value in identifying specific 'socio-competencies' that are integral components of the broader set of socio-ecological transition competencies, as set out below.

Shared vision and values
- Ability to work with others to create a shared vision and to identify the steps to manifest that vision
- Support people to explore their motivations and values and how to integrate those into the formation of groups/finding common ground with intention
- Understanding principles of community building which drive solidarity, learning, transformation and positive impact
- Recognising the importance of doing this work, whilst not rushing, avoiding prioritising action over reflection

Creating culture
- Building and developing groups that are grounded in trust and safety
- Appropriate ways to build group agreements or principles of engagement e.g. sociocratic principles
- Understanding theories around comfort/learning/panic zone in order to create environments which support exploring edge and growth
- Use of methods and tools for self-awareness which help to balance action and reflection e.g. practising active listening and non-violent communication
- Recognise the balance between conservation and innovation
- Understanding the wellbeing of the whole and how to foster that
- Understand the transformative potential of gratitude, appreciation and how to cultivate a culture of hope and creativity

Working with power
- Understanding how the social, cultural, historical, economic, political, environmental context affects group dynamics through prevailing systems being perpetuated
- Understanding how to raise awareness of these risks and how to dismantle systems that don't support the group to thrive, which instead inevitably tend to create ill-health in multiple social, economic and environmental systems.
- Building movements that engage with the climate and environmental crises in relation to other social struggles, against racism, sexism, neoliberalism and neocolonialism
- Identifying barriers or obstacles to becoming inclusive groups that intersect with other relevant groups and movements, and ways become inclusive groups

- Understanding the psycho-social phenomenon of 'othering' and how that affects group dynamics
- Understanding of social rank – how it is acquired and how it affects groups; how to break down or move beyond it
- Having a shared language and understanding around power that can support reflection around power dynamics – such as its uses, patterns, types of power, purposes and responses to power
- Addressing power imbalances that arise in groups and supporting the margins
- Identifying ways to generate and mobilise power in healthy and progressive ways

Innovating and learning
- Understanding systems thinking and its use as an analytical tool
- Supporting learners to critically assess ideas, contexts, relationships that are taken for granted in order to question the root causes of the topic at hand (Freire)
- Understanding ways to support giving and receiving of constructive feedback within groups that promote learning and connection
- Creating spaces for creative thinking and new ways of doing things
- Understanding the processes of innovation and learning, from creative thinking to take-up and dissemination of innovations, and implementation of learning and change

Delivering on tasks
- Understanding the dynamics of task vs process vs relationships and how to work with all three

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Perspectives on the sociological transformation that are needed for an ecological transition

Over time, what can be characterised as the socio-ecological transition movement has evolved a deeper understanding of the systems at play that inherently generate a combination of highly unsustainable, deeply unjust and hugely inequitable outcomes. For example, Raine Eisler has identified the 'dominator system' of social organisation that lies at the core of the ecologically destructive socio-economic systems of our time. A lack of a political critique and understanding of the role of socio-economic systems in ecological destruction led to a variety of criticisms from social ecologists, many of which have been welcomed and have contributed to a more mature understanding within a wider socio-ecological transition movement.

Social ecology augments deep ecology with it's analysis of the way in which patterns of social organisation such as patriarchy, capitalism and imperialism are central to the current ecological crisis. Social ecologists and ecofeminists have pointed out how the exploitation of nature has gone hand in hand with the exploitation of other humans in various hierarchical, militaristic, capitalist and industrialist forms. They point out that social transformation does not simply arise from a change of awareness of environmental issues, but also requires radical restructuring of the socio-economic system. The work of many social ecologists like Murrray Bookchin, Francis Moore Lappé, J. Baird Callicott, along with contributions from George Bradford, Ariel Kay Salleh, Janet Biehl, and Carolyn Merchant have offered a valuable critique and corrective to deep ecology's limitations in this respect.

Source: adapted from the Ulex Website content

Competencies To Overcome Embedded Systemic Sustainability Resistance

The starting point and approach taken on a path to Transition is very different if:

> ***a) we believe we have a level playing field and blank canvas ahead on the journey;***
>
> ***compared to:***
>
> ***b) we recognise that the journey needs to address embedded systemic sustainability incompetence alongside vested interests that are actively resistant to change.***

Often, the transition journey will involve a mix of both a) *and* b), not one or the other, so it is important to be able to distinguish which is which, and work with either situation in an appropriate, creative and effective manner. The point is to recognise that there will be some administrative and bureaucratic structures and processes that actively inhibit progress towards meaningful transition, as the majority of mainstream structures and processes (economic, administrative, governmental, social, etc) are of course strongly geared to managing, maintaining and supporting a thoroughly unsustainable status quo (often unconsciously).

> "*Education is at odds with sustainability when modern economies function to damage and destroy the ecological systems that support human and non-human communities. The explicit mission of contemporary school reform is to prepare students to perpetuate these problematic economies (Gruenewald, 2003). Many of today's social and ecological crises, such as climate change, a growing gap between the rich and poor, and two-thirds of the world population experiencing malnourishment, are perpetrated and perpetuated by people with post-secondary education (Orr, 1991; UNESCO, 2006)… If current education leads to unsustainability, then education can – and should – contribute to sustainability (Rees, 2003; Siebenhu¨ner, 2000)… Sustainability education must therefore be prepared to deconstruct and reconstruct all aspects of teaching and learning.*" Sipos et al

Arguably this highlights the very important conceptual *and practical* difference between *education or learning for sustainability* and *education for sustainable development*. The former being an approach that aims to give people the knowledge, skills and attitudes needed to bring about sustainability, while the latter subscribes to a view that a variation of the basic status quo model will deliver us a sustainable form of economic development.

The systemic inertia indicated above typically makes any form of change slow and requires commitment, persistence and hard work to overcome. In addition, many vested interests have a very significant investment in the existing unsustainable economic system, and very often are going to act to protect those interests. Therefore, as implied by Sipos et al (2007), it is valuable to recognise that **competencies are needed to dismantle, get around, evolve and / or leave behind those elements and systems that actively inhibit or resist change** (whether or not that is conscious or unconscious).

An awareness of this need is hugely important. Specific knowledge, skills and attitudes are needed to address and overcome these challenges in positive, creative, non-adversarial ways.

Being realistic about the situation is vital. In many situations, knowledge of and the ability to initiate positive options that offer significantly better outcomes are particularly valuable.

For example, if an unsustainable housing development is being proposed locally, it is very valuable to know of and share proven examples of community-led sustainable housing developments and ethically-based housing developers in order to build community and local government support for more positive alternatives. It is even more valuable to have the attitudes and abilities that enable the initiation and delivery of ecological housing developments locally.

Qualitative, Quantitative, Strategic and Planning Competencies

Particularly in combination with literacy in sustainability, regeneration and resilience*, the following are essential for achieving socio-ecological transition:*

- *knowledge, skills and attitudes for addressing both a) qualitative and b) quantitative priorities, targets, outcomes and measures.*

If social-ecological transition fundamentally requires a stabilisation of climate change as one of a core set of transition outcomes, this implies a need to strongly incorporate competencies to enable a massive transition over time of the most significant, high-impact sectors, to become low-impact sectors. This will require good quantitative competencies to be applied in analysis, target setting, modelling, monitoring and evaluation, which in a digital era inevitably involves significant skills for working with data.

For example, a good understanding of the scale and character of each nation's average household carbon footprint, how that varies across regions and socio-economic groups, and the balance of impacts from different areas of life is essential. These impacts vary greatly across Europe, as illustrated in the two diagrams below - the first of these indicates the variations between average household carbon impacts by region; the second shows the cumulative household impacts by region, which arise from each region's total population as well as its per person consumption.

(b) Average household carbon footprint (tCO2e/cap)

Legend:
- < 5.5
- 5.5 - 6.8
- 6.8 - 8.0
- 8.0 - 9.3
- 9.3 - 10.5
- 10.5 - 11.8
- 11.8 - 13.0
- 13.0 - 14.3
- 14.3 - 15.5
- 15.5 - 16.8
- > 16.8

(a) Total household carbon footprint (MtCO2e)

Legend:
- < 5
- 5 - 10
- 10 - 15
- 15 - 20
- 20 - 25
- 25 - 30
- 30 - 35
- 35 - 40
- 40 - 45
- 45 - 50
- > 50
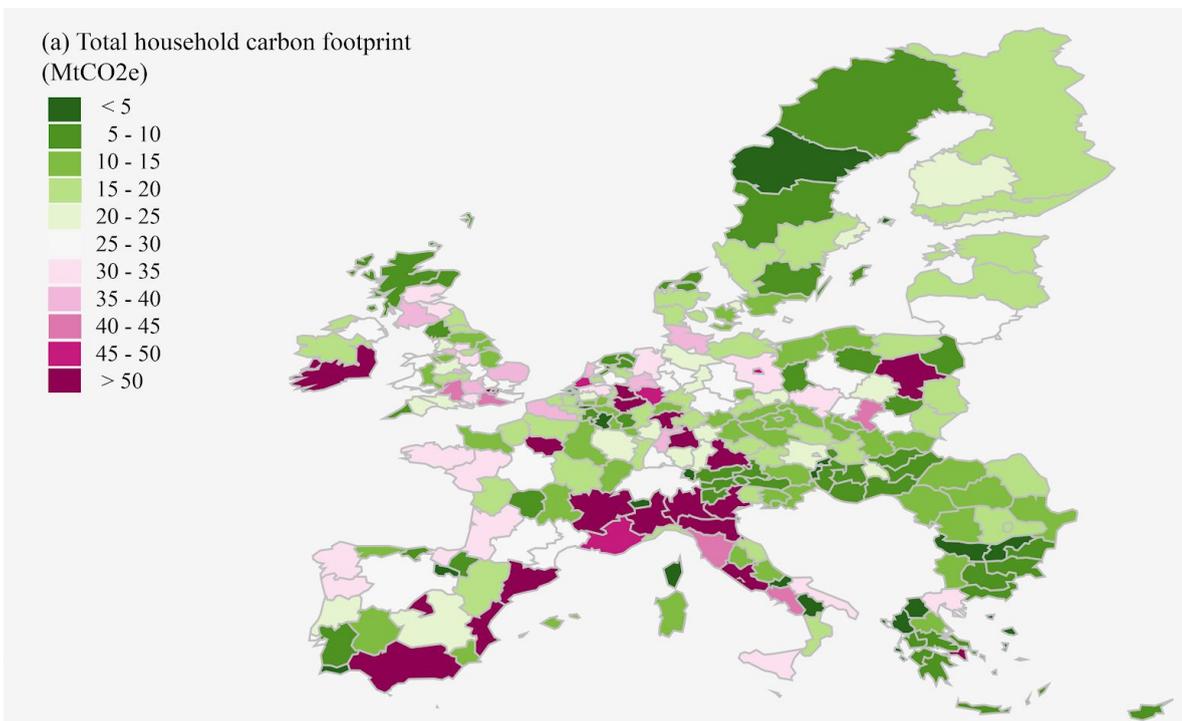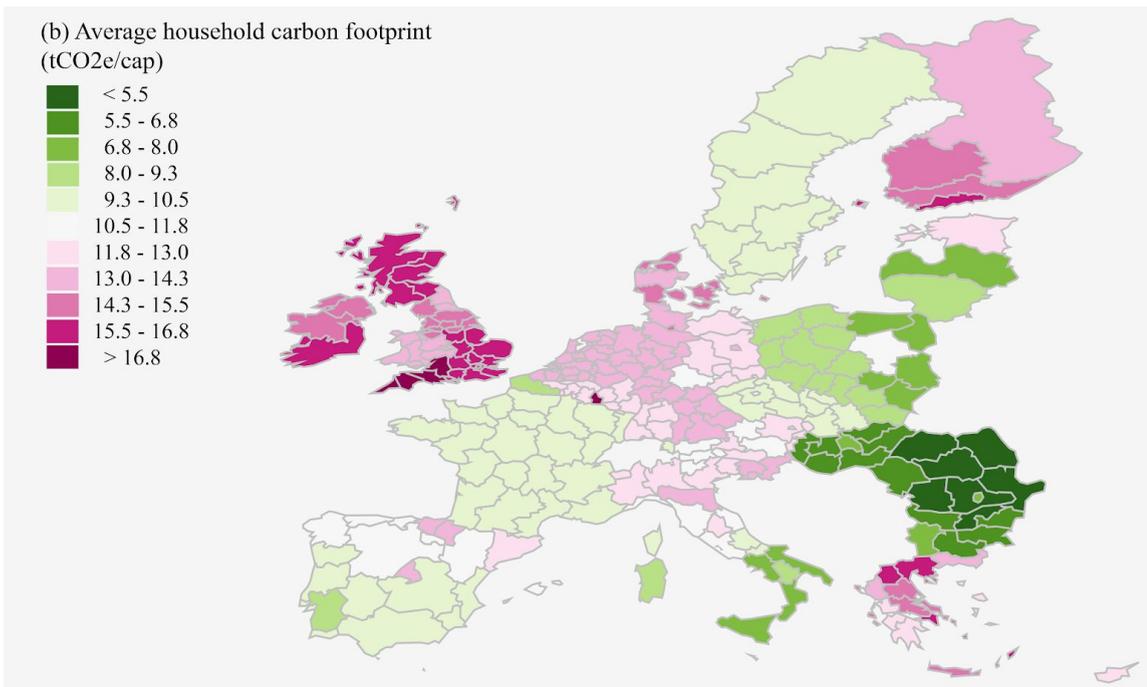
Source: Carbon Brief website - Jocelyn Timperley, *Mapped: How 'embodied' footprints compare across Europe*, 31.5.2017

Each country (region, community, culture, infrastructure etc.) has its variations in the nature of the data that is available, for example how carbon emissions or waste volumes are broken down by sector. However, the consistency and reliability of aggregated data on these issues is often questionable and / or challenging to interpret. Nevertheless, we know there are six very high impact sectors, which provide a context for considering community-based transition, In this way, data can be used to help select priority areas for focused transition activity, and then to set realistic targets and plan processes to achieve those targets. These sectors are:

- Energy generation and supply;
- Housing / buildings;

- Food production, distribution and consumption;
- Transport / mobility;
- Services - including from the digital sector, retail and tourism;

- Manufacturing

Average consumption based carbon emissions by sector across the EU 27 nations

Source:
https://www.carbonbrief.org/mapped-how-embodied-carbon-footprints-compare-across-europe
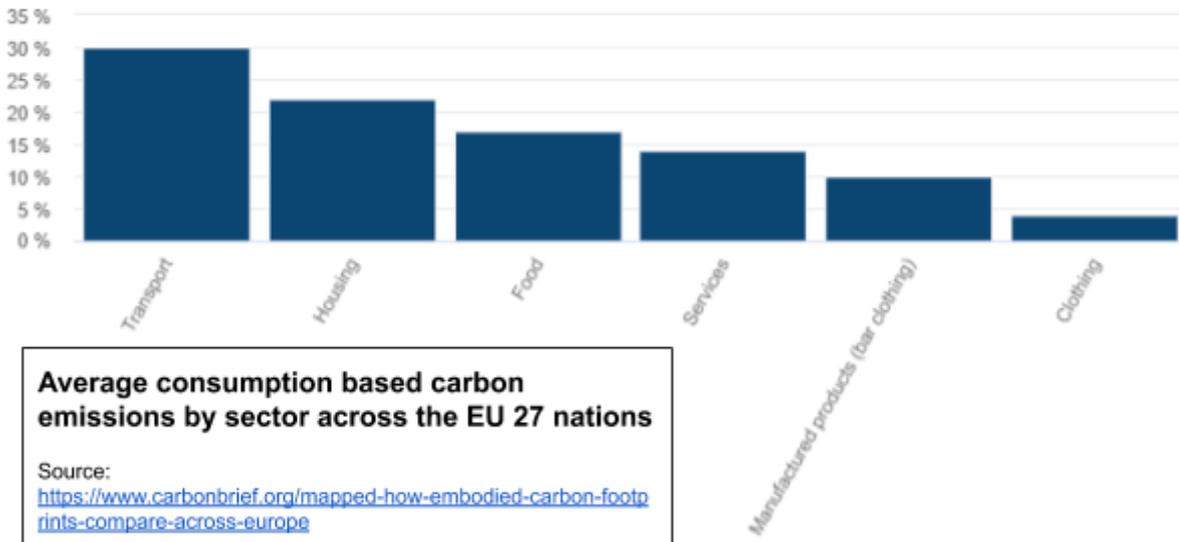
The impact of the digital and ICT sector is also very large, and growing.

Whilst each country has its own methodology for collating and breaking down data on carbon emissions impacts, we know that massive change is needed *in all these sectors*. As forms of positive collective action, social innovation and community enterprise models that generate locally-based shifts in these highest impact sectors hold great potential for activating community-led transition, for example in the energy, food, construction / retrofit and transport sectors.

Today, as part of the Services sector, the ICT sector accounts for:

- 5-9% of electricity use
- more than 2% of global greenhouse gas emissions (as much as all air traffic).

If unchecked, the ICT footprint could rise to 14% of global emissions by 2040.

Source: Supporting the Green Transition, European Commission, Feb 2020.

It could be argued therefore that developing specific competencies for community enterprise models in these four sectors are essential for any meaningful form of transition. For example, this could include developing collective competencies for achieving targets for establishing or strengthening local or ethical ownership in each of these sectors: i) energy generation and distribution; ii) transport and travel; iii) buildings; iv) food. All of which would be complemented by inner/person-centred transformative outcomes, and transformative outcomes in the social or interpersonal realm.

The quantitative, data-related competencies are important to combine with the reflection and checking competencies that are detailed later, as so often the implementation of plans will need to be adjusted along the way. This flexibility to adapt and evolve plans and targets is vital,

as holding rigidly to them can lead to significant tensions within individuals and groups when other factors are indicating they need to be adjusted.

Such an approach offers the potential to bring together the competencies of trainers, catalysts and communities around the use of a BLAST Toolkit, to create meaningful shifts in these high impact sectors, and take actions for transition which are adapted to the particular local context.

In contrast, however well intentioned it may be, any approach that lacks awareness of these highest impact areas and that fails to understand the individual and collective socio _and_ technical competencies needed for transition in each of these, will almost certainly fail to achieve its objectives. For example, given that typically _existing_ buildings (homes, offices, etc) are responsible for around 30-45% of carbon emissions for most European countries (particularly in northern, central and western Europe) it is unrealistic to think that meaningful local transition (e.g. to socially healthy 'net zero' communities) can be achieved without the knowledge and skills being available at the local level for deep retrofitting of buildings.

Competences for Complex and Paradoxical Contexts

Working with Complexity

As mentioned in several sections, complexity is a recurring pattern in socio-ecological transition issues. Complexity exists among the technical issues and within the need to engage and train a diversity of people, with different needs, interests and competency levels. In this sense, it is often valuable to work with a smaller number of priorities or possibilities for individuals, groups or communities to focus on, so as not to overwhelm them with complexity and detail, which often becomes confusing, overwhelming and disempowering.

For example, focusing on 3, 6 or 12 priorities for action is usually likely to lead to greater change than trying to tackle 30 or 40 issues, even if they are all relevant. Therefore, an important individual and collective transition competence is **the ability to generate and communicate 'simplexity' (i.e. digestible forms of complexity)** - both in the work that is being undertaken and in the communication involved.

Often this may involve significant intrapersonal (being) skills, where a trainer may need to hold back from sharing a high level of detailed knowledge they may have in a particular area if that level of detail is likely to be inappropriate or overwhelming for the audience, which can be a common risk in technical areas.

Working with Paradoxical Contexts

In many situations, there also are likely to be paradoxical contexts to be addressed. For example, at the same time as recognising the very real forces of inhibition and resistance to change, it is valuable to recognise that there are also existing systems that can be readily used to enable and support change. Often these forces of resistance or enabling may be mixed together, for example in the contexts of working with local government systems or institutional education systems.

To take advantage of the systems that enable and support change, there is value in being able to translate the needs and goals of transition into, for example, the language of institutional education frameworks, local-to-regional policy systems, funding programmes and so on. So,

amongst the biggest challenges is to recognise that the forces of inhibition and resistance very often exist *alongside* forces that are open to change. Equally, there is value in recognising and working with both the damage and the genius within each of us individually and collectively, which will require a combination of well developed intrapersonal and interpersonal competencies.

For example, there are likely to be many educational opportunities to bring transition themes into the curriculum in education at all levels. However, the majority of educational processes and content will still be geared toward the status quo (Sipos et al; Sterling), so that often it will be the case that a module on transition or sustainability themes will be included within an overall course (or department / institution) that is largely geared to conventional unsustainable thinking and practices.

In many communities, an underlying challenge may arise from what may be *the central sustainability paradox*, which is the individual and collective struggle to comprehend the logical relationship between our very apparent 'success' as culture or species, alongside our very apparent destructiveness. In many ways this paradox sits at the heart of the challenge of delivering significant progress toward socio-ecological transition, as so much of what is familiar and comfortable to the majority appears to represent 'success' on the surface level, whilst delivering numerous negative social, economic and environmental impacts below the surface or at a distance.[3] This is exacerbated when our culture offers us few, if any, positive visions of the present or future, and instead largely offers us high unattractive dystopian or idealised high-tech visions of the future - hence the need for strong Visioning competencies, to create our own visions of an equitable and socially just, regeneratively sustainable future, with a particularly focus on generating local and bioregional visions of these futures, as the levels that people can relate to.

A further paradox, that supports the action-awareness gap, is that so many global scale problems can be addressed by significant shifts in individual and collective local and household action, which if taken would create significantly greater pressure for changes at the national and international level. But individuals and communities still struggle to believe their local action can make any significant difference to global problems, and so often remain inactive despite their knowledge of the need to act.

Skills for identifying and confronting these paradoxes in helpful ways are therefore important, such as keeping a focus on a smaller number of significant doable actions, and building individual and collective agency over time.

Reflection, Checking, Testing, Monitoring and Evaluation Competencies

When the competencies are identified to enact transition processes it is important to be able to monitor and check (qualitative and quantitative) progress when those plans or processes are underway. This area of individual and collective competence is closely aligned with the

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[3] In many ways these issues relate to those identified as far back as 1992 within J.K.Galbraith's *The Culture of Contentment*, the final chapter of which summarises the fundamental challenge that the inherent nature of the comfortable and content affluent political majority makes it extremely unlikely that it will seriously address any issues that threaten its comfort and contentment.

'processes of critical reflection' that are fundamental to transformative learning, and that are needed as much in technical fields as it is in the field of socio-competencies.

Through research in relevant technical fields[4], a very significant and common '**performance gap**' has been revealed. This is the gap between the designed or intended outcomes and the actual or 'in use' outcomes - for example, a building's actual energy use and air quality when it is occupied, which is very often far worse than planned at the design stage. Due to this significant Performance Gap, it is very common that newly constructed buildings use at least 50% more energy than the specified design targets or Building Regulations energy efficiency standards. In fact, it is not uncommon for buildings to use twice as much energy as intended.

> *The performance gap is specifically different to the action-awareness gap*.

The **action-awareness gap** *is the often considerable gap between what we know we 'should' do, and how we act*. This gap sits primarily in the social-psychological realm, and can be addressed by a range of competencies, particularly intrapersonal and interpersonal competencies. It is a gap that transformative learning competencies are well suited to addressing, when combined with sustainability literacy.

By contrast, the performance gap arises *when we <u>are</u> taking action*, but when we fail to achieve the intended outcomes. So it is a dangerous gap to be unaware of if we have overcome the action-awareness gap, and are assuming we will then achieve our intended transition outcomes. This performance gap typically arises from a) human factors, b) technological factors and c) process factors, which usually combine to expand the gap.

For example, in the built environment sector it arises because of:

- Multiple failures in understanding, knowledge, skills and attitudes across a range of roles e.g. from clients to architects to site managers to construction trades;
- Contribution from failings in different processes, technologies and systems;
- Inappropriate targets, inaccurate modelling or weak assumptions at the design / project specification stage, and a lack of checks and tests during the implementation phase to deal with emerging gaps before they become fixed in the system;
- Lack of economic, business or other incentives for getting things right - and lack of responsibility or liability for getting things wrong or doing things poorly.

In the context of community or regional transition, 'sustainable development' is written into virtually all significant policy and strategy documents across Europe at every level of government, and across many areas of business - and it has been since the 1990's. Yet, the trends in climate and environmental data show that there is little if any meaningful progress toward stabilising climate change and other measurable sustainability goals. This indicates both a significant action-awareness gap *and* a significant '**sustainability performance gap**' in most local-to-regional strategies that are intended to deliver sustainability.

The significant 'sustainability performance gap' implies an inbuilt level of delusion and unconscious institutionalisation of unrealistic levels of sustainability outcomes. We think we are planning to achieve significant action toward sustainability, and then fail to deliver any

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[4] i.e. <u>low energy building</u> in the UK, particularly research by: UCL; Leeds Metropolitan Uni (now Leeds Beckett); Oxford Brookes Uni; the Good Homes Alliance

meaningful change. This gap cuts across every sector and area of education (knowledge), training (skills), planning and implementation.

This suggests we need ***Performance Gap Competences*** built into the Transition Competency Framework. Once we have overcome the action-awareness gap, these competencies are essential for addressing the performance gap in action for sustainability / social-ecological transition. Challenging targets are typically only achieved as intended if and when we build in specific strategies, knowledge, skills and attitudes to ensure that is the case i.e. performance gap competencies. ***Without this being addressed we may deliver conceptually brilliant Transition Plans that significantly fail to deliver the intended or designed transition outcomes.***

To help reduce the gap we can specify the desired / required outcomes to be achieved by Transition processes at a realistic level of detail (What is to be achieved), and then work back from that point to determine the competencies needed to achieve those outcomes (How in practice it can be achieved). To significantly close both the action-awareness and performance gaps, this approach needs to include **Reflection, Checking, Testing, Monitoring and Evaluation Competencies**, as well as good project management and planning competencies.

From the field of buildings, we can draw on Passivhaus building methodologies, where actual energy use has consistently been shown to match the challenging planned energy targets which are set at design stage by incorporating:

1. Clear targets, accurate modelling and a set of relevant proven design principles;

2. Training and certification systems that deliver an appropriate level of detailed knowledge of what is to be achieved and how it can be achieved;

3. Appropriate attitudes i.e. specifically the intention to achieve very challenging targets and not to try to cut corners or cheat, or game the system;

4. A specific structured process that incorporates relevant tests and checks along the way to ensure any failings can be put right at the earliest possible stage, at least cost.

Reflection, Checking and Evaluation Competencies for Self and Others

As the range of Transition Competencies include a significant number of competencies, in many areas it will be valuable to work with simple evaluation tools that can be applied for assessing levels of competency in particular fields, and then for planning how to take competencies to deeper levels.

> For example, for both self-assessment and collective assessment, the Dreyfus & Dreyfus model for skill acquisition is cited in the BLAST Competency Framework as a system that can be used to assess and plan competence development in specific areas. It is not seen as an ideal model, but if its limitations are recognised it can be very useful, with levels of competency defined as:
>
> *Novice*
>
> *Advanced Beginner*
>
> *Competent*
>
> *Proficient*

Expert

In the context of socio-ecological transition, a key weakness is that this linear type of model fails to address scaling and multiplier competences which are so important to expand climate and transition action, particularly when the competent, proficient and expert levels are reached. However, this is addressed in the section below and in the BLAST Competency Framework, by including specific *scaling and multiplier competencies*.

Methodologies and tools that enable analysis / mapping of competencies and planning for competence development will need to be supported by other methods and tools that allow those competencies to be assessed and evaluated in appropriate ways during the journey of developing those competencies.

Scaling and Multiplier Competencies

It is increasingly obvious and increasingly widely understood that there needs to be a significant acceleration and expansion in action to address climate change, plastic pollution and the full range of socio-ecological transition objectives. Therefore, it is essential to identify and develop Scaling and Multiplier Competencies, as these enable a significant acceleration and expansion in learning and action.

> The **BLAST Training of Trainers programme** has been developed particularly to develop and support scaling and multiplier competencies.

Transformative Social Innovation Theory (Tim Strasser, ref) offers an evaluation model that considers the 3 dimensions of **broadening**, **deepening** and **lengthening** in relation to any form of social innovation. This is highly relevant for considering the scaling and multiplier effects of particular areas of transition competency - in other words, the skills, knowledge and attitudes that enable transition activity to be widened or deepened, and which enable its beneficial impacts to be extended over time.

Deepening competences relate to the degree to which the changes involve a transformative kind of change as compared to non-transformative change, and to what extent they challenge, alter and/or replace dominant institutions or reproduce them. This involves understanding and becoming aware or critical of, or reconsidering the structures, assumptions and values underlying dominant institutions, which sustain the problems that Social Innovation actors perceive as undesirable. In the renewable energy sector, deepening competencies would move from small scale roof installations of solar panels, to the set-up of large scale community renewable energy projects which both generate clean energy and localise ownership in the energy economy e.g. Brighton Energy Coop.

Equally, deepening requires identifying and enacting *solutions pathways* (or *theories of change*) for practically embedding changes in informal and formal aspects of institutions: in cultural attitudes mode of thinking and communicating, as well as policies, organisational structures or progress indicators. Deepening also requires being able to interact with dominant institutions and their formal representatives or decision makers in ways that gain acceptance, resources or non-interference required to realise their solutions.

Social Innovation actors also need to be self-aware about the alignment between their values and practices, and how they may unconsciously be captured by the dominant institutions that they seek to transform - to develop safeguards against domination by powerful actors. For instance, many ecovillages give ample attention to deeply personal reflection processes to avoid reproducing aspects of individualistic or consumer culture, and oppressive power relations that they seek to transform.

Based on Tim Strasser's model, we can also understand the need for **Broadening Competencies** which extend the reach of activity into new networks, audiences or geographic areas, as well as **Lengthening Competencies** that extend the reach and benefit of the activity over time.

Business and Economic Competencies for Trainers and Catalysts

Although business competencies are generic competencies for self-employed trainers, or trainers that work within training collectives, cooperatives or enterprises, the fact that they are involved in delivering transition training is important, as they are a particular type of scaling and multiplier competency. Therefore, competencies that enable trainers and catalyst to succeed in economic terms (according to the terms of 'success' they define for themselves) should not be ignored. For example, these include competence in marketing courses or training skills, in costing and pricing training and educational programmes, programme administration, in customer service and managing complaints, and so on. In other words, the more successful a good quality trainer is the more people become trained and the greater the benefits of their transition action - but if a great trainer is not successful in marketing and running courses, sadly they are likely to contribute much less to the expansion and enrichment of transition activity.

Arguably, this is often a weak area amongst those involved with sustainability related training (outside of the corporate sector). *The need for significant scaling of the transition impacts* suggests we need a number of trainers and catalysts to be highly competent and successful in these areas, to enable mass access to and take-up of good quality transition-related learning opportunities. If delivered by individuals, teams and organisations that embody the values and practices of transition, in itself this has the potential to provide new models of 'success' that are not based in the profit maximisation paradigm, which can then becomes new models of 'success' that can be taken up, replicated and adapted elsewhere in the transition movement.

The consideration of business models (whether they are for-profit or non-profit) for blended learning programmes is a critical element for enabling the online elements of blended learning to achieve affordable mass engagement and therefore reach a much wider audience, which would be slow and costly to achieve without the blended learning dimension.

> *The world of permaculture education provides an example of an emerging shift to incorporate online and blended courses and learning opportunities. In the years prior to 2020, Geoff Lawton became possibly the most successful example of a well established educator pursuing a more commercial approach to online learning, and successfully delivering very large online PDC's (Permaculture Design Certificate courses) - making the core course within permaculture education accessible to a much larger audience. This success has caused many in the movement to see the value of taking a more business-oriented approach to scaling the benefits of permaculture education by accelerating the development of quality online and blended learning programmes, whilst ensuring the values and principles of permaculture remain embedded in new models of business.*

> *This shift is characterised by the **online learning platform** launched in 2020 by the Permaculture Association (Britain), which is being designed to complement traditional in-person training, and thereby offered significantly enhanced options for blended learning. It will steadily expand its offerings in the coming years, and developing offerings and partnerships that cater for an international as well as UK audience.*

Appendix: Assessing and Mapping Transition Competencies

The BLAST Competency Framework covers ways to assess and map competency levels, and provides a full set of competency maps similar to that illustrated below in its Appendices.

Drawing on the BLAST Framework and prior work in the sustainable construction sector, the following offers a way to assess, plan and visualise competencies in a range of transition areas, with the diagram below being specifically focused on one technical sustainability competency area that is generally going to be essential for transition.

The diagram below indicates how one individual (red line) may have the highest level of competence in their community in relation to Low Energy Building and low impact and ethical Materials & Products, while others in the community (green line) have higher competencies in key technical areas such as Energy Systems and Biodiversity. This system can help highlight the areas that may need more attention, such as Embodied / Wholelife Impacts & Costs for the example below, and also that although there is some level of competency in Low Energy Building, this is relatively low and plans need to be made to raise the level of this competency area in the individual and the community i.e. training and skills development would need to be identified to reach a target of 80%+ expert competence (Proficient level on the Dreyfus scale).

Sustainability / Transition Competence - Mapping

This diagrams illustrates a way of mapping your Competence

Example Sustainable Building Competence i.e. Your community competence will be at 100% of what you need when you have repeatedly delivered successful design and construction of low energy healthy buildings which perform to their designed targets when they are in use.

— Individual
— Community

Notes, Reflections, Mindmaps or Doodles on a Competency Based Approach to Transition

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