

Transdisciplinary problems are ***intricate and complex***, meaning they have the property of ***emergence***. This means these *problems continually change*. They are a *rich weave of societal structures and functions*. This weave (and the understanding of the problem) changes because new and coherent structures, patterns and properties emerge *as a result* of the interactions between people trying to address the problems while working within a web of changing relationships.

Original, individual contributions (yarns) to addressing the problem are left behind as a new weave/ fabric takes shape. *The energy created, the information generated and the partnerships formed also constantly change as the understandings about the problem change -*

everything is in flux and *in-formation*.

Problems dealt with in the world's complex reality via transdisciplinarity:

- ◆ the human condition
 - ◆ issues with global implications
 - ◆ human freedom and justice
 - ◆ self-determinism
 - ◆ harmonious access to and distribution of resources
 - ◆ human and bio sustainability
 - ◆ power relationships
 - ◆ import of ideologies and paradigms
 - ◆ human aggression
 - ◆ human development
 - ◆ world views (preferably human-
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The intent is to understand the world.

Learning the Lingo

Transdisciplinary Concepts

- **work in full, fertile middle space** between disciplines and civil society actors (rather than build bridges over dead, stagnant or empty space or take separate roads)
- **constant flux, formation and movement** (flow and fluidity) (rather than static, stalled or at rest)
- **crisscrossing, zig-zagging and moving laterally** (rather than in straight lines or in circles)
- **moving way beyond boundaries** (rather than staying within boundaries or blurring boundaries)
- **Levels of Reality - multiple realities**- governed by **different kinds of logic** (ethos, pathos and logos) (rather than one reality and only logos)
- **reality is multi-layered coherent whole** (rather than a single dimensional part)
- **Emergence** (rather than static or standing still)
- **Complexity** (versus complicated)
- **Integral**, concerned with respect for healthy tension holding things together as they evolve (versus integrated, balanced and in harmony)
- **Integration and holistic** (versus siloed, fragmented and disconnected)
- **Intellectual outerspace, a creative commons**, where integration happens (rather than private innerspace)
- **Create space for dialogue** where new ideas can crisscross and merge (rather than sharing different analyses or creating new applications)
- **Copyleft** (rather than copyright)
- **Convergence** (versus parallel)
- **the zone of acceptance (non-resistance)**, stepping out of safety zone through veil of resistance into the fertile space (rather than adhering to one world view and perspective)
- **open unity and complexity** (rather than dualities)
- **enduring transdisciplinary concepts** as building blocks and bridges (rather than temporary interdisciplinary teams)
- **in-formation** (rather than fixed and proprietary information)
- **isomorphies** (common, predictable *patterns* rather than separate *ideas*)
- **dance metaphor** (rather than billiard balls or networks)
- **uniting knowledge** created via cross-fertilization (rather than disparate, siloed knowledge)
- **web of dynamic, ever-changing relationships** (rather than disconnected individualism)
- **waves and particles** (rather than either/or)
- **transnational beings** (in addition to human beings attached to a particular nation)
- **shared truth emerges** from the work in the fertile space (rather than one truth held onto in the dead space)
- **new patterns of integrated knowledge** (rather than separate and parallel streams of information)



Learning the Trans-Dis Lingo

Implications of Transdisciplinary Inquiry on Scholarship

- ✓ it is the *context* of where the new knowledge will be applied that matters, not the agenda of the disciplinary home of the scholars
- ✓ the knowledge *created in context* belongs to **everyone** rather than being confined to (trapped in) a disciplinary map
- ✓ this means academics have to embrace other notions of **robustness of information** (aside from reliability and validity)- don't want to use un-robust information to solve deep, human problems. Now strive for *socially robust knowledge* and *socially approved knowledge* instead of empirically reliable knowledge (*robust criteria* might include justice, effectiveness, efficacy, autonomy)

- ✓ the disciplinary, academe imperative has to be set aside to create a voice for those working in other types of organizational homes, in other contexts
- ✓ academics will have to accept the idea that they are *transient* - they have a foot in their academic home while roaming the connections available in the network of relationships
- ✓ appreciate new trait of *institutional diversity*, referring to fact that research and scholarship take place way beyond the hallowed halls of the ivory tower
- ✓ have to be open to *de-differentiation* (rather than relying on the integrity of disciplinary differences)
- ✓ accept that social concerns cannot be held at arms length; rather, social concerns are the arms that shape the scholarship

- ✓ learn to rely on *safety of the evolving collective* of actors and the potential and hidden possibilities rather than rely on the certainty and relatively risk-free disciplinary expertise
- ✓ move from creating knowledge from a position of disinterested detachment to **negotiated knowledge** with those holding different interests but common concern for human problems
- ✓ can no longer wear the mantle of ‘founding father’ because knowledge created is a collective initiative - *an embodied knowledge* (can affect attempts to be tenured, promoted, get funding)
- ✓ gain a new appreciation for *intellectual fusion* (when separate ideas and people come together, they move faster when exposed to each other than when alone - they fuse together into a new whole)
- ✓ assume that the fertile space between disciplines and between the academy and society *is* where new ideas take root and grow, rather than accept

that new ideas outside disciplinary purview should fall between the cracks of disciplinary floors landing in an empty abyss

- ✓ rely on looking together for **patterns to use as templates** for finding similarities between seemingly dissimilar actors rather than falling back on familiar intra-disciplinary jargon and semantics (metaphors are especially useful)
- ✓ nothing is sacred anymore as scholars and actors search together for connections, *take quantum leaps* into the realm of transdisciplinarity where the academy meets society for the betterment of humanity



