

# **Tour d'Horizon of Literature 2024**

td-net Network for Transdisciplinary Research

To provide a comprehensive overview of important literature in the field of inter- and transdisciplinarity, td-net annually invites experts from the td-net community to compile a list of recent key publications. Please refer to page 16 for the list of contributors to this year's Tour d'Horizon. Within this document, we present literature published in 2024, accompanied by concise annotations provided by the experts who recommended these publications.

We would like to thank the contributors for their inputs and are looking forward to another productive year for inter- and transdisciplinary research.

All previous "Tour d'Horizon of Literature" issues can be found on our website.

This document is interactive: the references are hyperlinked with the matching website.

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#### Theories and epistemologies

Benjamin, R. (2024). Imagination: A manifesto. W. W. Norton & Company.

Benjamin positions imagination beyond disciplinary boundaries as a transformative force capable of reshaping our understanding of what is possible. Her work underscores the need to cultivate spaces for radical dreaming, particularly in contexts of systemic oppression, where envisioning alternative futures becomes an act of defiance. This manifesto is a profound reminder that imagination is not a luxury but a necessity for building equitable and inclusive societies. Ana Gretel Echazú Böschemeier

Chiodi, V. (2024). What makes Latin American STS? A speculative reading of a compilation book by young STS researchers: Ciencia, tecnología y sociedad. Abordajes desde Argentina, Brasil y México, compiladores Marcela Amaro Rosales, Eduardo Robles Belmont, César Guzmán Tovar, Instituto de Investigaciones Sociales, Mexico City. *Tapuya: Latin American Science, Technology and Society, 7*(1), 2419364.

- A collection of articles in the field of Science and Technology Studies (STS), written by emerging researchers from various Latin American countries. The chapters are organized around three key questions: How is scientific and technological knowledge created and applied? What citizen-driven challenges, movements, and transformations are connected to science and technology? What policies and agendas currently define the field of Science and Technology Studies (STS)? Ana Gretel Echazú Böschemeier

Dedeurwaerdere, T. (2024). *Transdisciplinary Research, Sustainability, and Social Transformation: Governance and Knowledge Co-Production*. Routledge.

This book addresses the gap in the existing literature on transformational sustainability research by exploring the conditions of successful governance of boundary-crossing collaborations in transdisciplinary research. To this purpose, the book applies Elinor Ostroms' Institutional Analysis and Development (IAD) framework to a broad set of cases, based on personal face to face to interviews and meta-analysis. By drawing upon the thriving literature on the conditions for community and multistakeholder-driven collective action, I hope that this book can new light on the importance of the social learning on societal values among research partners as a core conditions for producing usable knowledge outputs for sustainability transformations. *Tom Dedeurwaerdere* 

Depaulis, A. (2024). Naissance de la transdisciplinarité. L'Harmattan.

- Une histoire complète de la transdisciplinarité. Hubert Landier

Förster, R., Sägesser, A., Singer-Nrodowski, M., & Walkes, S. J. J. (2024). How to Provide Safe (Enough) Spaces for Transformative Learning to Support Courageous and Decolonial Practices towards Climate Justice. *Getting Transformation into Good Trouble: Making New Spaces of Possibility with Community and in Practice*, 664–671.

This paper connects transformative learning (TL) with decolonization in the context of climate (in)justice. By integrating decolonial epistemological, ethical, and political practices, it provides a potential framework for fostering collaborative and courageous learning that moves beyond Western paradigms. The paper also raises critical open questions about normativity in TL, interspecies justice, and structural power dynamics. *Anaïs Sägesser* 

Grund, J., Singer-Brodowski, M., & Büssing, A. G. (2024). Emotions and transformative learning for sustainability: A systematic review. *Sustainability Science*, *19*(1), 307–324.

This paper is exciting because it highlights the often-overlooked role of emotions in sustainability-related transformative learning, revealing how both negative and positive emotions shape the learning process. By systematically reviewing 355 publications, it identifies a major gap in theoretical grounding and calls for more emotionally aware educational practices. Its findings emphasize the need for safe

(enough) spaces where emotions can be expressed and understood, ultimately paving the way for more effective and engaging sustainability education. *Anaïs Sägesser* 

Lawrence, R. (2024). Transdisciplinary architectures: Reconnecting theories, research and practices. *Archnet-IJAR: International Journal of Architectural Research*.

- This paper discusses challenges that should be addressed by those in the interdisciplinary field of built environments who endorse transdisciplinarity. Based on a half century of contributions about design theory and methods, the paper differentiates inquiry from research as fundamental to transdisciplinary projects. *Roderick Lawrence* 

McCarty, W., Lloyd, G. E. R., & Vilaça, A. (2024). *Science in the Forest, Science in the Past III. Further Interdisciplinary Explorations*. Routledge.

- This publication contains the edited proceedings of the third workshop in the series "Science in the Forest, Science in the Past", held in June 2022, at the Needham Research Institute, Cambridge. SFSP is an ongoing investigation into fundamental problems of the sciences in the broadest sense ('scientiae'). See the Editorial and Introduction. *Willard McCarty* 

McMurtry, A. (2024). Learning theory and interdisciplinarity: Reframing learning in terms of evolving coherences rather than "true" representations or correspondences. In R. Szostak (Ed.), *Handbook of Interdisciplinary Teaching and Administratio* (pp. 13–24). Edward Elgar Publishing.

This chapter extends Boix-Mansilla's work on interdisciplinary learning and epistemology. It uses philosophical argument and concrete illustrations to argue that coherence theories of learning and knowing offer a pragmatic and grounded way to frame interdisciplinary research and education. These new approaches – linked to constructivism, pragmatism, enactivism, complexity science, actor-network theory and other sociomaterial approaches – contrast with traditional correspondence views of learning and knowing, which are framed in terms of objective truths and subjective spectators. Agnus McMurthy

Meisch, S. (2024). Epistemic justice: An ethical basis for transdisciplinary and transformative sustainability research. *GAIA - Ecological Perspectives for Science and Society*, 33(4), 381–388.

This article provides a timely ethical reflection on the practice of transdisciplinary research. By introducing the concept of epistemic justice, the author bridges ethics and knowledge production, addressing key tensions in transdisciplinary and transformative research (TDTR) between justice-oriented motivations and epistemic prudence. The paper offers a compelling way forward for more inclusive, just and philosophically grounded sustainability research and is essential reading for scholars working across disciplines and sectors. *Martina Blum* 

Ober, S., Szaguhn, M., & Fricke, A. (2024). Transdisziplinarität. In C. Peer, S. A. Güntner, M. Haas, & A. Bernögger (Ed.), *Urbane Transformation durch soziale Innovation*, 219–226.

- Introduction to the main charcateritics of transdisciplinarity with emphasis on the inclusion of stakeholders in generating and evaluating knowledge. *Ortwin Renn* 

Parodi, O., Ober, S., Lang, D. J., & Albiez, M. (2024). Reallabor versus Realexperiment: Was macht den Unterschied? *GAIA - Ecological Perspectives for Science and Society*, *33*(2), 216–221.

I recommend this publication because it makes a crucial contribution to the conceptual and terminological clarity in the emerging field of real-world research. By clearly distinguishing between real-world labs and real-world experiments, the authors help prevent misunderstandings that can hinder theoretical and practical advancements. This differentiation is particularly relevant given the growing interplay between experimental research and real-world applications, making the article both timely and highly significant. *Ulrike Sehy* 

Paul, P. (2024). La transdisciplinarité dans l'évolution de la pensée. L'Harmattan.

- Un livre de référence. *Hubert Landier* 

Stokols, D., & Barankevich, R. (2024). Home environments in an age of precarity. *Journal of Environmental Psychology*, 99.

 This interesting paper presents social ecological analysis of the changing meanings and functions of contemporary home environments using the concept of precarity in the context of global change and extreme events worldwide. *Roderick Lawrence*

## Approaches, methods and tools

Da Silva Guimarães Martins Da Costa, L. (2024). Artificial Intelligence and the Transdisciplinary Human Mediation of HPTD-M. *Transdisciplinary Journal of Engineering & Science*, *15*, 107–133.

This article studies the scope of Artificial Intelligence (AI) through the HPTD-M theory, i.e., the Holopraxis Transdisicplinary Management: It aims at collaborating to the debate on the limits of AI, including ChatGPT simulations, comparing the four types of intelligence in the HPTD-M Theory, namely empirical, emotional, rational, and intuitive, with the nine types of Gardner's multiple intelligences theory (MI Theory). The types of intelligence are also compared with psychosomatics, the emotional shadow of the Western culture, the levels of the collective unconscious, and soft skills. The concept of mediating manager has an essential role in showing the limits of AI. *Leonardo da Silva Guimarães Martins da Costa* 

Darbellay, F. (2024). Encyclopedia of Interdisciplinarity and Transdisciplinarity. Edward Elgar Publishing.

- The book has 135 entries from authors on every continent. The topical coverage is quite extensive and the quality of entries is very high. This is a wonderful resource for anyone interested in interdisciplinarity or transdisciplinarity. *Rick Szostak* 

Laursen, B., Vienni-Baptista, B., Bammer, G., Di Giulio, A., Paulsen, T., Robson-Williams, M., & Studer, S. (2024). Toolkitting: An unrecognized form of expertise for overcoming fragmentation in inter- and transdisciplinarity. *Humanities and Social Sciences Communications*, *11*(1), 1–10.

This article offers a timely and insightful overview of the fragmented landscape of inter- and transdisciplinary (ITD) toolkits, highlighting the need for greater coordination and expertise in the creation, maintenance, and dissemination of these resources. By introducing the concept of "toolkitting" as essential metawork, the authors provide valuable recommendations for building a comprehensive inventory and federated knowledge bank, making this article highly relevant for researchers, toolkit developers, and funders seeking to advance the quality and accessibility of ITD research methods and frameworks. *Theres Paulsen* 

Lundsgaard-Hansen, L., Tun, N. N., Htun, A. M., Myint, W., & Schneider, F. L. (2024). *Participatory Visioning and Future Planning. Backcasting with Myanmar Farmers for a more Sustainable Future. Methodological Report.*Centre for Development and Environment (CDE).

- This report describes the methodology of participatory visioning and future planning, including a technique called backcasting. Based on literature and experience, this methodology was developed and applied to support smallholder farmers in southern Myanmar. *Theresa Tribaldos* 

Mertens, K., Moreno Cely, A., & Nyakato, V. N. (2024). Against Self-Reflexive Confessions: Collective Dialogues to Progressively Transform Academic North–South Collaborations. *The European Journal of Development Research*, *37*(1), 219–240.

- This paper offers a critical analysis of self-reflexivity and proposes a novel approach to engaging in a collective reflexivity process to unpack our complicity in reproducing problematic power dynamics in academic collaborations. *Adriana Moreno Cely* 

Poelsma, F., Moser, S., von Dach, S. W., & Breu, T. (2024). The added value of including citizen perspectives in a transition management process towards climate neutrality. Insights from an experience in the Swiss Alps. *GAIA - Ecological Perspectives for Science and Society*, *33*(3), 295–305.

- In this study, the authors explore how citizens can be involved in transition management initiatives, based on a transition process towards climate neutrality in the Swiss Alps. Local citizens evaluated a

developed vision as well as the legitimacy of the process. Results were discussed in workshops with the stakeholders. *Theresa Tribaldos* 

Stein, S., Ahenakew, C., Valley, W., Sherpa, P. Y., Crowson, E., Robin, T., Mendes, W., & Evans, S. (2024). Toward more ethical engagements between Western and Indigenous sciences. *FACETS*, *9*, 1–14.

- This paper seeks to support Western scholars working with Indigenous people/Indigenous Knowledge to recognize and interrupt extractive modes of relationship to build more ethical, respectful and reciprocal engagements with Indigenous sciences. *Adriana Moreno Cely* 

Wiefek, J., Nagy, E., & Schäfer, M. (2024). Formative evaluation of transdisciplinary research for systematic impact orientation in real-world laboratories. *GAIA - Ecological Perspectives for Science and Society*, *33*(1), 94–101.

- The article addresses the formative evaluation of transdisciplinary research in real-world laboratories, which is essential for tackling complex sustainability challenges. The article provides a framework for the systematic impact orientation of such laboratories. The proposed framework views evaluation as a continuous process for adapting and improving research. The Theory of Change (ToC) approach is used to formulate and verify impact assumptions. Almut Jödicke

#### Research policy: funding, quality criteria, evaluation

Borlaug, S. B., & Svartefoss, S. M. (2025). Evaluating Transdisciplinary Research Quality. In G. Sivertsen & L. Langfeldt (Eds.), *Challenges in Research Policy* (pp. 13–20). Springer Nature Switzerland.

Borlaug and Svartefoss (2024) provide a concise, practice-oriented overview of current approaches to
evaluating transdisciplinary research, highlighting key challenges and emerging solutions. The policy
brief is recommended for anyone seeking robust criteria to assess the societal and scientific value of
such projects. Theres Paulsen

Buckton, S., Fazey, I., Ball, P., Ofir, Z., Colvin, J., Darby, M., Hejnowicz, A., Leicester, G., Newman, R., Page, G., Parsons, K., & van Mierlo, B. (2024). *Twelve principles for transformation-focused evaluation*. Social Science Research Network.

- An enormously helpful literature review synthesizing a wide range of transformation-focused evaluation approaches, and synthesizes it into 12 useful principles. I find it so helpful for my work. *Susi Moser* 

Deutsch, L., Björnsen, A., Fischer, A. M., Hama, A. M., Zimmermann, N. E., Zurbrügg, C., & Hoffmann, S. (2024). Herding cats: Integrative leadership strategies in inter- and transdisciplinary research programs. *Sustainability Science*, *20*, 95–115.

This publication focuses on the critical role of integrative leadership in inter- and transdisciplinary research programmes. It presents six key leadership challenges and corresponding strategies to address them, and is aimed at funders and research institutions behind such programmes in their efforts to realise the integrative potential of the programme. *Stefan Müller* 

Darbellay, F. (2024). Elgar Encyclopedia of Interdisciplinarity and Transdisciplinarity. Edward Elgar Publishing.

- A rich collection of thoughtful reflections, guidelines and insights around interdisciplinarity and transdisciplinarity. While the information says that this is mainly across the sciences, I found many chapters in it to be equally helpful in collaborative research that includes the social sciences and humanities. Sawsan Khuri

Good Shifts. (2024, June 28). Now we are all measuring impact—But is anything changing? The Good Shift.

- In the context of complex system change - exactly the realm in which TD is most often used, rethinking evaluation is important. This brief "provocation" lays out what is and isn't being measured and points to further resources to rethink evaluation. *Susi Moser* 

Pärli, R., Byamungu, M., Fischer, M., Kantengwa, S., Kintche, K., Konlambigue, M., Lieberherr, E., Six, J., Wilde, B., & Späth, L. (2024). "The reality in the DRC is just not the reality in Rwanda" – How context factors affect transdisciplinary research projects. *Research Policy*, *53*(7).

This publication conceptualises various contextual factors in order to grasp their significance for the
impact of transdisciplinary projects. It shows that context plays a central role in the evaluation of
transdisciplinary research, but that projects can influence and shape initial context factors throughout
their duration. Stefan Müller

Pulkkinen, K., Aarrevaara, T., Rask, M., & Mattila, M. (2024). Societal interaction plans—A tool for enhancing societal engagement of strategic research in Finland. *Research Evaluation*, *33*(1).

The funding mechanism of the Finish Foundation for Strategic Research is – to the best of my knowledge – one of the rare mechanisms that funds both a research consortium and a specific transidisciplinary knowledge broker, called the interaction manger. Although a relatively recent innovation – for the funding lines since 2015, this paper provides an interesting overview of the mechanism and a first evaluation. *Tom Dedeurwaerdere* 

Schölvinck, A.-F., Uygun-Tunç, D., Lakens, D., Vaesen, K., & Hessels, L. K. (2024). How qualitative criteria can improve the assessment process of interdisciplinary research proposals. *Research Evaluation*, *33*(rvae049).

- This publication explores the possibility of supporting the evaluation of interdisciplinary research proposals with measures of interdisciplinary research quality. A set of qualitative criteria and bibliometric indicators have been developed and their feasibility tested through interviews, confirming their usefulness in making explicit what different people mean by interdisciplinary research and in improving the quality of discussions and decision-making. *Stefan Müller* 

Seibicke, H. (2024). Investigating stakeholder rationales for participating in collaborative interactions at the policy–science nexus. *Policy & Politics*, *52*(3), 477–500.

- Seibicke (2024) provides an insightful empirical analysis of stakeholder motivations for participating in collaborative research at the policy—science nexus, developing a novel typology of involvement rationales. This article is highly recommended for anyone seeking to understand how organizational interests and strategic considerations shape knowledge transfer and the use of evidence in policymaking processes. *Theres Paulsen* 

## Case Studies and reflections on research projects

Albornoz, G. P., & Mendoza, C. P. (2024). El sistema Tukuypaq. Aportes de la medicina tradicional para el abordaje integral de epidemias o pandemias: Sistema Tukuypaq para el abordaje integral de epidemias o pandemias. *Revista de Investigación e Información en Salud*, 19(47), 94–108.

Tukuypaq is a epidemiology proposal from the experience and perspective of healers in the Andean region of Bolivia. The contribution of this research focuses on the development of a consilience framework between indigenous and scientific knowledge. The paper conclude that the conception of health-disease is necessarily relational phenomena between cosmic and terrestrial, environmental and cultural, living and more than living organisms. Gabriel Peredo Albornoz

Assunção Ollveira, R., Boschemeier, A. G. E., da Silva Carvalho, B., Ferreira Marinheiro, J., Teras Nobre, M., Rios Silva Santos, M., Immonen, J., & Schapira Mosoró, R. (2024). *Gerações De Luta: Honrando As Faces Da Resistência (PT BR)/Generations Of Struggle (ENG)/Siia Ekobé Ita Maramunhã (TUPI)/Ylisukupolvinen Taistelu (FI)*. Edições Aporo - UERN.

This free-access digital book, originating from the "Boas Práticas" Project (2019–2022), funded by CNPq, is a multilingual work with texts published in Portuguese, Tupi-Nheengatu, Finnish, and English. From a perspective engaging citizen science and participatory action research, it amplifies the voices of Indigenous leaders, Calon Roma, mariculturists, fishers, people experiencing homelessness, and recyclable material collectors associated with traditional communities and social movements across Northeastern Brazil. Ana Gretel Echazú Böschemeier

Bader, C., Bieri, S., Trechsel, L., & Lannen, A. (2024). Fostering Sustainability Through Research and Education? The Transformative Role of Switzerland's Centre for Development and Environment (CDE). In W. Leal Filho, A. L. Salvia, & C. R. Portela de Vasconcelos (Eds.), *An Agenda for Sustainable Development Research* (pp. 357–371). Springer Nature Switzerland.

 This chapter examines the contributions of Switzerland's Centre for Development and Environment (CDE) towards realizing a sustainable world, highlighting selected research and educational projects from CDE's past and current initiatives. Emphasizing CDE's commitment to actionable knowledge, inclusiveness, and systems thinking—as expressed in its theory of change—the chapter shows how transformative science is put to work. Theresa Tribaldos

Collado-Ruano, J., Augusto Galeffi, D. A., & Pasquier, F. (2024). Filosofia transdisciplinar frente aos desafios geopolíticos complexos do antropoceno. /Transdisciplinary philosophy to face complex geopolitical challenges of the anthropocene. Prometeica - Revista de Filosofía y Ciencias.

This work aims to explore the professional training of teachers from a transdisciplinary perspective, to promote an understanding of the world among citizens who must confront the global change of the Anthropocene. This philosophical essay addresses the areas of economics, international trade, geopolitics, artificial intelligence, and teacher training based on the epistemological foundations of Nicolescu's transdisciplinary methodology and Morin's Complexity Theory. As a result, it discusses how ICTs, software, and applications (Twitter, Facebook, Instagram, TikTok, etc.) collect users' personal data through mathematical algorithms powered by artificial intelligence. *Antonio Malo* 

Collard, A.-L., Riaux, J., & Kuper, M. (2024). Récits de recherche sur l'eau dans un monde interdisciplinaire. Quæ.

The book suggests new ways of working on water, and proposes to make the relationships that societies have with it intelligible, around major issues: pollution, salinisation of groundwater, ecological restoration, technological optimism, in different regions of the world. Beyond the singularity of each story, these accounts highlight the cross-cutting issues of interdisciplinary practice in both individual

and collective experiences: the researcher's identity and commitment to society, the aims of research, and reciprocal learning that helps cross disciplinary boundaries. *Bernard Hubert* 

Cornu, P., & Theys, J. (2024). Dossier: « La recherche au défi de la crise des temporalités » : Introduction. *Natures Sciences Sociétés*, *31*(4), Article 4.

If the practitioners of the sciences and action fields most involved in the crisis of environmental temporality don't want to lose their legitimacy, their integrity and the mastering of their own skills, and if, above the crisis of general rationality, they are still convinced of the relevance of acting on the basis of the most rigorous, methodical and responsible knowledge, then they should unite their strengths to devise a new paradigm of time that fits the complexity of the global system. We are convinced that to reset the conditions of possibility of any future, apart from the one of the theories of collapsology, requires a brand-new and deep-thought global learning system. It is the ambitionwewant to share, inside and outside the epistemic community of Natures Sciences Sociétés, in a resolute opening to innovating and cross-cutting ways of questioning, encouraging everyone to try to merge fruitfully with us the methodologies and skills of reflexivity, observation, conception, and action. Bernard Hubert

French, M. A., Barker, S. F., Henry, R., Turagabeci, A., Ansariadi, A., Tela, A., Ramirez-Lovering, D., Awaluddin, F., Latief, I., Vakarewa, I., Taruc, R. R., Wong, T., Davis, B., Brown, R., Leder, K., & RISE consortium. (2024). Responsible north-south research and innovation: A framework for transdisciplinary research leadership and management. *Research Policy*, *53*(7).

The specific challenges of transdisciplinarity research between the so-called global north and the global south are still raises specific challenges that did not as yet receive systematic attention in scholarly work. Although based on a single case study – the 24 research sites of the global RISE consortium – this article breaks some new ground by providing more systematic guidance around topics such as empowerment of researchers and program staff in the global South, collaborative leadership and self-reflection on researchers' positionality. *Tom Dedeurwaerdere* 

Holle, F., Ponzoni, E., & Ghorashi, H. (2024). Conditions for transformative engaged scholarship in co-creation with queer refugees. In B. J. Regeer, P. Klaassen, & J. E. W. Broerse (Ed.), *Transdisciplinarity for Transformation* (pp. 319–346). Springer Nature.

- Conceptually rich and empirically insightful case study on arts-based transdisciplinary work with queer refugees in the Netherlands. *Pim Klaassen* 

Medina, N. C., Mendoza, C. P., & Albornoz, G. P. (2024). Criterios de operación para la Inteligencia Artificial en el uso de medicina tradicional para la autoatención en salud. *Journal Boliviano de Ciencias*, *20*(56), Article 56.

- Framed in the global digital health strategies (2020-2025), the WHO initiatives on Traditional and Complementary Medicine and the AI Indigenous Protocol, this research seeks to respond to the gaps in access and quality of self-care, especially in crisis contexts such as pandemics from Traditional Medicine Indigenous System perspective. The study use a transdisciplinary approach from a reverse engineering model to analyze the conceptual structure of Indigenous Traditional Medicine and generate operational criteria for its implementation in digital self-care systems. The paper concludes that the integration of AI with traditional medicine indigenous system could not only improve the coverage and quality of self-care in healthcare, but also contribute to seek for novel ways of AI developing according to indigenous knowledge logic and ethics. *Gabriel Peredo Albornoz*
- This paper explores the role of Artificial Intelligence (AI) in managing knowledge about medicinal plants
  used in Andean-Amazonian Traditional Medicine for self-care in health. It applies a transdsiciplinary
  approach using reverse engineering model to establish operational criteria ensuring the safe and
  effective use of traditional medicinal plants, incorporating indigenous knowledge and ecological balance

principles. The study highlights the potential of AI in integrating traditional and scientific approaches to healthcare while addressing ethical, regulatory, and sustainability challenges. *Natalia Caballero Medina* 

Nutas, A. (2024). Al solutionism as a barrier to sustainability transformations in research and innovation. *GAIA - Ecological Perspectives for Science and Society, 33*(4), 373–380.

This thought-provoking article critically examines the dominance of Al-driven solutions in sustainability research, questioning whether these approaches adequately address the social, ethical, and political dimensions of sustainability challenges. By advocating for value pluralism and epistemic humility, the author challenges the technocratic tendencies in current innovation discourses and offers concrete reforms for academia and research. The paper invites scholars across disciplines to reconsider the ethical and societal implications of Al, making it essential reading for interdisciplinary work. Martina Blum

Poelsma, F., Moser, S., von Dach, S. W., & Breu, T. (2024). The added value of including citizen perspectives in a transition management process towards climate neutrality. Insights from an experience in the Swiss Alps. *GAIA - Ecological Perspectives for Science and Society*, *33*(3), 295–305.

I recommend this publication for its strong combination of analytical depth and practical policy advice. It is well-written and well-documented, offering a solid theoretical foundation supported by compelling empirical data. By integrating citizen perspectives into transition management for climate neutrality, the article provides valuable insights into participatory approaches, making it both innovative and highly relevant for current sustainability debates. *Ulrike Sehy* 

Regeer, B. J., Klaassen, P., & Broerse, J. E. W. (Eds.). (2024). *Transdisciplinarity for Transformation: Responding to Societal Challenges through Multi-actor, Reflexive Practices*. Springer Nature.

 This edited volume brings together a great diversity of scholars and practitioners, contributing their insights and experiences across a wide scope of themes, conceptual spaces, empirical domains, involved communities and geographies. Barbara Regeer

Tijsma, G. (2024). *Embedding Engaged Education: Creating knowledge together* [PhD-Thesis - Research and graduation internal, Vrije Universiteit Amsterdam].

- Insightful thesis for anyone interested in institutionalizing transdisciplinary approaches in Higher Educational Institutions. *Barbara Regeer* 

#### Education

Chandra, P., Hitchcook, S., & Seno-Alday, S. (2024). Assessment style in interdisciplinary education – challenges in creating equitable assessment opportunities. *Studies in Higher Education*, *50*(3), 525–536.

- Important article in which bias in assessment forms is discussed. Students from different specializations experience assessment forms differently. *Iris van der Tuin* 

Galeffi, D. A., Collado-Ruano, J., & Pasquier, F. (2024). Complexidade e transdisciplinaridade como filosofía educativa na formação profissional dos docentes: Elos da teoriação polilógica. *Foro de Educación*, *22*(2), Article 2.

The objective of this article is to reflect philosophically on the professional teaching training based on two epistemological foundations of the Political Theory proposed by Galeffi, which is based on the transdisciplinary methodology of Nicolescu and the complex thinking of Morin. Contextualized in the field of educational philosophy, the research uses a qualitative exploratory methodology to address the professional profile of 21st century teachers. As a result, the work discusses how the polilogical theory is better than the professional profile of teachers from their pedagogical vision of complexity and their practices of transdisciplinary education. *Antonio Malo* 

Idejiora-Kalu, N. (2024). Considering Transdisciplinarity for a New Engineering Systems Science. *For an International Transdisciplinary Chair. About the Dialogue Between Culture and Technoscience*, 201–215.

- Transdisciplinary Engineering Education. Ndubuisi Idejiora-Kalu

Khuri, S., Patel, S., Baker, K., Mutili, F., Griffiths, M., Puri, N., & Kilner, T. (2024). *14 Inclusive Practice Glossary 15 for Facilitators*.

A starting point for conversations around inclusive practice, this glossary offers terms used frequently
in equity, diversity and inclusion training, and more specific terms around race, gender, gender
reassignment and disability. Sawsan Khuri

Lambalgen, R. van, & Tuin, I. van der. (2024). Teaching integration. In R. Szostak (Ed.), *Handbook of Interdisciplinary Teaching and Administration* (pp. 114–135). Edward Elgar Publishing.

 In this chapter, 10 integrative research methodologies are presented that can inform interdisciplinary education. Choosing an integrative research methodology before making pedagogical or didactic decisions reduces the initial development time for the educational team and enhances the quality of interdisciplinary education. Iris van der Turin

Lange, E. (2024). Composting modernity: Pedagogical practices for emplacing ourselves within the living world. *European Journal for Research on the Education and Learning of Adults*, *15*(3), Article 3.

This paper stands out not only for its content but also for its writing style, which embodies the relational approach it advocates. It challenges modernity's destructive legacy and calls for a fundamental repatterning of beliefs, ethics, and ways of being, drawing from Indigenous philosophies and posthumanist thought. Through rich pedagogical practices—such as composting problematic modernist narratives and fostering emplacement—it offers a deeply engaging, transformative vision for sustainability and climate education that is as intellectually rigorous as it is emotionally and imaginatively compelling. *Anaïs Sägesser* 

Philipp, T. (2024). Nachhaltigkeit durch Pluralität der Wissensressourcen: Prämissen und Praktiken Transdisziplinären Lernens. In W. L. Filho (Ed.), *Lernziele und Kompetenzen im Bereich Nachhaltigkeit* (pp. 103–120). Springer.

 The paper addresses the issue of how to include plural knowledge input inti learning and teaching. To teach transdisciplinarity, plural input is necessary but also plural and particularly inetrcative learning methods are essential. *Ortwin Renn*

Regeer, B. J., Klaassen, P., & Broerse, J. E. W. (Eds.). (2024). *Transdisciplinarity for Transformation: Responding to Societal Challenges through Multi-actor, Reflexive Practices*. Springer Nature.

 Very useful resource for starting transdisciplinarians, combining general (theoretical) overviews and introductions with more in-depth case studies spread out from over a diversity of thematic and geographical areas, laid out using an intuitively useful framework. *Pim Klaassen*

Schlieszus, A.-K., Weselek, J., & Siegmund, A. (2024). Navigating role conflicts and responsibilities in higher education for sustainable development. Insights from German university teachers. *GAIA - Ecological Perspectives for Science and Society*, 33(4), 363–371.

The topic of the contribution is of high relevance: growing urgency of sustainable education. Academic resistance and institutional barriers are relevant as universities worldwide reassess their priorities and teaching approaches. The shift toward whole institution approaches is an important issue - many universities are now moving in this direction, making this article's findings particularly relevant for institutional change efforts. Or they are definitely not moving! Almut Jödicke

Sonnenberg-Klein, J., & Coyle, E. J. (2024). How interdisciplinary is it? A new method for quantifying interdisciplinarity in student teams & examination of a large project-based program. *Studies in Higher Education*, 49, 1–16.

- Ways in which interdisciplinarity is quantified are very innovative. *Iris van der Turin* 

Szostak, R. (2024). Handbook of Interdisciplinary Teaching and Administration. Edward Elgar Publishing.

- The book has 27 chapters by authors from 10 countries on 4 continents. Chapters address issues of curriculum and course design, pedagogy, and administration across a wide variety of contexts, and provide extensive practical advice on how to develop or improve interdisciplinary courses or programs.
   The Handbook will be useful both for newcomers to interdisciplinary teaching and administration and those who are already experienced. Rick Szostak
- An international collection of contributions by authors who have experienced the administrative and intellectual challenges of nurturing and sustaining innovative interdisciplinary teaching in academic institutions worldwide. *Roderick Lawrence*

Tache, C. E. popa, Costa, L. D. S. G. M. D., Landier, H., & Thieriot LOisel, M. (2024). For an International Transdisciplinary Chair: About the Dialogue Between Culture and Technoscience. Volume I. ADJURIS.

- An international and academic view of educational posibilities of Transdisciplinarity. Hubert Landier

Vienni Baptista, B., van Goch, M., van Lambalgen, R., & Lindvig, K. E. (2024). *Interdisciplinary Practices in Higher Education: Teaching, Learning and Collaborating Across Borders*. Routledge.

- The editors invited contributions of challenges faced in interdisciplinary teaching, and then in each case invited three scholars in the field to discuss the advice they would provide .*Rick Szostak* 

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