Common Glossary

Climate Change refers to long-term alterations in global or regional climate patterns, primarily driven by human-induced greenhouse gas emissions. In the context of the humanities and the social sciences, it is examined not only as a scientific phenomenon but as a socio-political and cultural issue shaped by power, inequality and discourse. Scholars analyse how narratives of climate change are constructed, contested and experienced differently across global contexts. Climate change intersects with environmental justice, colonial legacies and questions of responsibility and agency. Its cultural dimensions are central to shaping public understanding and policy.

References: Hulme, M. (2022). *Climate Change*. London: Routledge; Nixon, R. (2011). *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.

Co-creation is an approach where multiple stakeholders – such as users, designers, researchers, and organizations – jointly contribute to the creation of value, ideas, or solutions. It emphasizes collaboration, shared ownership, and mutual influence throughout the innovation or development process. Co-creation is used across disciplines, including business, design, and public services, to enhance relevance and impact. Unlike traditional expert-driven models, co-creation values diverse perspectives and experiential knowledge. Contemporary studies underline its role in fostering engagement and sustainable innovation.

References: Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. Journal of Interactive Marketing, 18(3), 5–14. https://doi.org/10.1002/dir.20015; Voorberg, W. H., Bekkers, V. J., & Tummers, L. G. (2015). A systematic review of co-creation and co-production: Embarking on the social innovation journey. Public Management Review, 17(9), 1333–1357. https://doi.org/10.1080/14719037.2014.930505

Community mapping is a participatory method through which local communities collaboratively identify, document and visualize resources, challenges and opportunities within their environment. It empowers residents by integrating their lived experiences and local knowledge into planning and decision-making processes. Commonly used in urban studies, public health and environmental management, it supports social inclusion and place-based development. Community mapping strengthens civic engagement and

can reveal spatial inequalities often overlooked by formal systems. Recent literature emphasizes its role in democratizing data and enhancing community resilience.

References: Brown, G., & Kyttä, M. (2014). Key issues and research priorities for public participation GIS (PPGIS): A synthesis based on empirical research. Applied Geography, 46, 122–136. https://doi.org/10.1016/j.apgeog.2013.11.004; Cochrane, L., Corbett, J. (2018). Participatory Mapping. In: Servaes, J. (eds) Handbook of Communication for Development and Social Change. Springer, Singapore. https://doi.org/10.1007/978-981-10-7035-8_6-1

Cosmology is the scientific study of the origin, structure, evolution and eventual fate of the universe. It integrates principles from physics and astronomy to develop models explaining phenomena such as the Big Bang, cosmic inflation, dark matter and dark energy. Modern cosmology relies on observational data from telescopes and satellites to test theoretical predictions. It addresses both large-scale structures and fundamental questions about time, space, and existence. Contemporary research continues to refine our understanding of the universe's dynamics and composition.

References: Peebles, P. J. E. (2020). *Cosmology's Century: An Inside History of Our Modern Understanding of the Universe*. Princeton University Press.

Creativity is the capacity to generate ideas, solutions or expressions that are both novel and valuable within a given context. It is a multifaceted construct studied across disciplines such as psychology, education and design, encompassing cognitive processes, personality traits and socio-cultural influences. Creativity plays a central role in innovation, problem-solving and artistic expression. It can be fostered through supportive environments, interdisciplinary collaboration and iterative experimentation. Recent research highlights its dynamic, contextual nature and the interplay between individual and collective creativity.

References: Runco, M. A., & Jaeger, G. J. (2012). The Standard Definition of Creativity. *Creativity Research Journal*, 24(1), 92–96. https://doi.org/10.1080/10400419.2012.650092; Glăveanu, V. P. (2020). *Creativity: A Very Short Introduction*. Oxford University Press.

Cultural ecosystem services are the non-material benefits people obtain from ecosystems through spiritual enrichment, cognitive development, recreation and aesthetic experiences. These services reflect the deep connections between nature and human culture, influencing identity, sense of place and well-being. Recognized within the broader ecosystem services framework, they are vital for sustainable environmental planning and policy-making. Assessing cultural services often requires participatory and interdisciplinary methods due to their subjective and context-specific nature. Recent research underscores their importance in fostering human–nature relationships and promoting sustainable ethics.

References: Chan, K. M. A., Satterfield, T., & Goldstein, J. (2012). Rethinking ecosystem services to better address and navigate cultural values. *Ecological Economics*, 74, 8–18. https://doi.org/10.1016/j.ecolecon.2011.11.011; Milcu, A. I., Hanspach, J., Abson, D., & Fischer, J. (2013). Cultural ecosystem services: A literature review and prospects for future research. *Ecology and Society*, 18(3), 44. https://doi.org/10.5751/ES-05790-180344

Cultural policy: according to Vargas (2025) and Valentine (2018), cultural policy encompasses the frameworks, strategies and interventions through which states and institutions govern cultural production, distribution and access. Vargas emphasizes the different functions of state intervention in various national contexts, presenting cultural policy as a means of shaping national identity and public cultural life. Meanwhile, Valentine critiques the hegemonic narratives embedded in cultural governance, emphasizing the political logics that underpin policy formation. Together, these perspectives define cultural policy as a mechanism of state power and a contested arena in which cultural values, ideologies and political interests intersect and are negotiated.

References: Valentine, J. (2018). Cultural governance and cultural policy: Hegemonic myth and political logics. In V. Durrer, T. Miller, & D. O'Brien (Eds.), *The Routledge Handbook of Global Cultural Policy* (pp. 148–164). London and New York: Routledge. https://doi.org/10.4324/9781315718408; Vargas, C. (2025). Space for governing culture: Cultural policy and state intervention in France, the United Kingdom, and the United States. *The Journal of Arts Management, Law, and Society*, 55(3), 140–157. https://doi.org/10.1080/10632921.2025.2467107.

Cultural Studies is an interdisciplinary field that examines the ways in which culture is produced, disseminated, and consumed within social and political contexts. Emerging from the Birmingham Centre for Contemporary Cultural Studies in the 1960s, it challenges traditional boundaries between high and popular culture. Cultural Studies critically investigates issues of ideology, power, identity, race, gender, and class in everyday life. It employs diverse theoretical frameworks, including Marxism, feminism, post-structuralism, and postcolonial theory. The field continues to evolve, engaging with globalisation, digital media, and cultural hybridity.

References: Hall, S., Evans, J., & Nixon, S. (2013). *Representation* (2nd ed.). London: Sage; During, S. (Ed.). (2023). *The Cultural Studies Reader* (5th ed.). London: Routledge.

Culture, within Cultural Studies, refers not only to artistic or intellectual production but to the symbolic, material, and everyday practices through which meaning is produced and contested. It encompasses the lived experiences, values, norms, and representations that shape social identities and power relations. Culture is seen as a site of ideological struggle, where hegemonic and resistant meanings are negotiated. This dynamic view challenges static or hierarchical definitions, foregrounding culture's role in the reproduction and transformation of society. It remains central to analyses of race, class, gender, and media.

References: Hall, S. (2019). *Essential Essays, Volume 2: Identity and Diaspora*. Durham: Duke University Press; Barker, C. & Jane, E. A. (2021). *Cultural Studies: Theory and Practice* (5th ed.). London: Sage.

Decolonial epistemologies refer to approaches that challenge Eurocentric frameworks of knowledge by valuing alternative ways of knowing rooted in the experiences, histories, and cosmologies of colonized and marginalized peoples. Emerging from Latin American and Global South scholarship, this perspective critiques the coloniality of power and knowledge production. It seeks to delink from dominant Western epistemologies and foster pluriversal understandings of reality. Central to decolonial thought is the recognition of epistemic injustice and the recovery of silenced knowledges. This framework is increasingly influential across disciplines, including education, philosophy, and cultural studies.

References: Mignolo, W. D., & Walsh, C. E. (2018). *On Decoloniality: Concepts, Analytics, Praxis*. Durham: Duke University Press; Castro-Gómez, S., & Grosfoguel, R. (2021). *El giro decolonial: reflexiones para una diversidad epistémica más allá del eurocentrismo*. Bogotá: Siglo del Hombre Editores.

Decolonization refers not only to the formal end of colonial rule, but more broadly to the dismantling of colonial structures, epistemologies, and power relations that persist in contemporary institutions and knowledge systems. In Cultural Studies, it involves critically engaging with and undoing the cultural, linguistic, and intellectual legacies of colonialism. Decolonization foregrounds Indigenous and subaltern perspectives, advocating for epistemic plurality and reparative justice. It is both a historical process and an ongoing intellectual and political project. This concept intersects with debates on race, identity, heritage, and the global politics of knowledge.

References: Bhambra, G. K., Gebrial, D., & Nişancıoğlu, K. (Eds.). (2018). *Decolonising the University*. London: Pluto Press; Tuck, E., & Yang, K. W. (2012). "Decolonization is not a metaphor." *Decolonization: Indigeneity, Education & Society*, 1(1), 1–40.

Education: In keeping with Foucauldian theory, established forms of education are part of an educational system that functions as a tool of power to shape people and embed a prevailing historical and social power structure. In this situation, established norms and power structures determine what is true or significant (Foucault, 1975). Education was viewed in classical antiquity as a means of fostering intelligence and morality in order to achieve human wellbeing. According to Aristotle, learning is an active process that enables people to develop their moral principles and character in addition to their intelligence. Phronesis (practical knowledge), Sophia (theoretical knowledge), and techne (productive knowledge) are the several forms of knowledge that arise within this. Paulo Freire (1968) outlines the emancipatory potential of learning and knowledge. The distinctions can be made here between education and power dynamics, learning and its potential for virtue, and liberation through knowledge which is created through dialogical participatory approaches.

References: Freire P (1972) *Pedagogy of the oppressed*. London: Penguin. Foucault, M. (1975). *Discipline and punish: The birth of the prison* (A. Sheridan, Trans.). New York: Vintage Books. (Original work published 1975).

Environmental justice is a framework that examines the equitable distribution of environmental benefits and burdens across different social groups, particularly marginalized and racialized communities. It emerged from grassroots movements in the 1980s and critiques the disproportionate exposure of vulnerable populations to environmental harm. The concept integrates ecological sustainability with social equity, emphasizing participatory decision-making and community agency. Environmental justice intersects with issues such as climate change, pollution, land rights, and public health. It is increasingly recognized in policy, legal, and academic contexts as essential to achieving inclusive sustainability.

References: Pellow, D. N. (2018). *What Is Critical Environmental Justice?* Cambridge: Polity Press; Holifield, R., Porter, M., & Walker, G. (Eds.). (2022). *The Routledge Handbook of Environmental Justice*. London: Routledge.

Glocal is a conceptual blend of "global" and "local," referring to the simultaneous presence and interaction of global and local forces, practices or perspectives. It emphasizes how global processes are adapted to fit local contexts, and how local actions can influence global trends. Commonly used in sociology, business and cultural studies, the term reflects the complexity of globalization in a connected world. Glocal thinking promotes context-sensitive strategies that balance universal goals with local relevance and highlight its importance in sustainable development, education and cultural identity.

References: Robertson, R. (2012). *Globalisation: Social Theory and Global Culture*. SAGE Publications; Roudometof, V. (2016). *Glocalization: a critical introduction*. London: Routledge.

Heritage, as defined by UNESCO, encompasses the legacy of physical artifacts and intangible attributes inherited from past generations, maintained in the present, and bestowed to future generations. It includes tangible heritage (monuments, buildings, sites), intangible heritage (oral traditions, performing arts, rituals), and natural heritage (natural sites with cultural, aesthetic, or scientific value). Heritage plays a critical role in identity, continuity, and cultural diversity. Its preservation fosters intercultural dialogue and sustainable development. UNESCO emphasizes its universal value and the collective responsibility for its safeguarding.

References: UNESCO. (2003). *Convention for the Safeguarding of the Intangible Cultural Heritage*. https://ich.unesco.org/en/convention; UNESCO. (1972). *Convention Concerning the Protection of the World Cultural and Natural Heritage.* https://whc.unesco.org/archive/convention-en.pdf

Heritage commodification refers to the process by which cultural heritage - both tangible and intangible - is transformed into marketable goods or experiences for economic gain, often within tourism and global capitalist systems. This process can lead to the simplification, staging, or alteration of heritage to meet consumer expectations. While it may generate income and promote visibility, it also raises concerns about authenticity, cultural appropriation, and community agency. Scholars critically examine how commodification impacts identity, memory, and the power dynamics between producers and consumers of heritage. The concept is central to debates on sustainable and ethical heritage management.

References: Waterton, E., & Watson, S. (2015). *The Palgrave Handbook of Contemporary Heritage Research*. London: Palgrave Macmillan; Shepherd, R. (2022). *Commodification, Culture and Tourism*. Abingdon: Routledge.

Hybrid is the combination or integration of different elements – such as concepts, practices, technologies or identities – resulting in new, often cross-disciplinary or cross-cultural forms. In academic contexts, hybridity is used to explore intersections across fields like media studies, education and postcolonial theory, highlighting how blending can produce innovation or challenge traditional boundaries. Hybrid approaches are increasingly relevant in complex, globalized societies, where fixed categories are insufficient, since hybridity is a dynamic process shaped by negotiation, adaptation and context.

References: Bhabha, H. K. (1994). *The Location of Culture*. Routledge; Kraidy, M. M. (2005). *Hybridity, or the Cultural Logic of Globalization*. Temple University Press.

Intercultural is the dynamic and dialogic interactions between individuals or groups from different cultural backgrounds, emphasizing mutual understanding, negotiation, and transformation. In Cultural Studies, it challenges essentialist views of culture by foregrounding hybridity, relationality, and the power dynamics embedded in cross-cultural exchanges. Intercultural engagement involves not only communication but also critical reflection on identity, difference, and inequality. It is increasingly relevant in contexts of globalization, migration and transnationalism. The concept plays a vital role in discussions on education, media, and postcolonial encounters.

References: Dervin, F., & Gross, Z. (Eds.). (2016). *Intercultural competence in education: Alternative approaches for different times*. Palgrave Macmillan; Holliday, A., Hyde, M., & Kullman, J. (2021). *Intercultural Communication: An Advanced Resource Book for Students* (4th ed.). London: Routledge.

Interdisciplinary describes an approach that integrates concepts, methods and perspectives from two or more academic disciplines to address complex questions, problems or topics. It transcends traditional disciplinary boundaries, fostering collaboration and synthesis to generate new insights and holistic understanding. Interdisciplinary research and education are increasingly valued for their ability to tackle

multifaceted societal challenges, such as climate change, health and technology. Nowadays, interdisciplinary approaches play a relevant role in innovation, critical thinking and knowledge production across diverse fields.

References: Frodeman, R., Klein, J. T., & Mitcham, C. (Eds.). (2017). *The Oxford Handbook of Interdisciplinarity* (2nd ed.). Oxford University Press; Klein, J. T. (2017). *Interdisciplining Digital Humanities: Boundary Work in an Emerging Field*. University of Michigan Press.

Intergenerational refers to interactions, relationships and processes that occur between different generations, often emphasizing the transmission of knowledge, values, culture and resources across age groups. It is a key concept in fields such as sociology, education and sustainability studies, where it informs policies and practices promoting equity and long-term responsibility. Intergenerational approaches support social cohesion, lifelong learning and the preservation of cultural heritage, while also fostering mutual understanding and resilience in diverse communities.

References: Sixsmith, J., Woolrych, R., Loret, H., Makita, M., & Fang, M. L. (2024). Intergenerationality in the Context of Age-Friendly Cities and Communities: Older People's Experiences and Perspectives on Place and Community Living in the UK. Journal of Intergenerational Relationships, 23(3), 312–328. https://doi.org/10.1080/15350770.2024.2396126

Intersections refer to the points at which different social categories, systems, or fields of knowledge overlap, interact, or influence one another, often producing complex and compounded effects. In academic discourse, particularly within intersectionality theory, the term highlights how identities such as race, gender, class, and ability intersect to shape unique experiences of privilege or oppression. Intersections are also used to explore cross-disciplinary connections and knowledge integration. This concept is essential for understanding systemic inequalities and fostering inclusive approaches in research and policy.

References: Crenshaw, K. (1991). *Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color*. *Stanford Law Review*, 43(6), 1241–1299. https://doi.org/10.2307/1229039 ; Cho, S., Crenshaw, K. W., & McCall, L. (2013). *Toward a Field of Intersectionality Studies: Theory, Applications, and Praxis*. *Signs: Journal of Women in Culture and Society*, 38(4), 785–810. https://doi.org/10.1086/669608

Interspecies refers to relationships, interactions, and co-existences between different species, emphasizing the ethical, ecological, and social dimensions of human–nonhuman

engagements. This concept is central in fields such as environmental humanities, animal studies, and posthumanism, where it challenges anthropocentric worldviews and promotes more inclusive understandings of agency and community. Interspecies approaches advocate for reciprocal and respectful ways of living with other life forms and are critical to sustainability, care and ecological justice.

References: Haraway, D. J. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. Duke University Press ; Despret, V. (2021). *Living as a Bird* (P. Manton, Trans.). Polity Press; Yong, E. (2022). *An Immense World: How Animal Senses Reveal the Hidden Realms Around Us.* Random House.

Interspecies assemblies is a concept developed in the New European Bauhaus Lighthouse project Bauhaus of the Seas Sails (BoS-Zoöp). An Interspecies Assembly consists of a multispecies gathering to discuss their respective and mutually affecting interactions. Building on successful examples of interspecies diplomacy in the Rights of Nature movement, they offer a technology for humans to represent non-human constituents and speak on their behalf.

References: Pedroso-Roussado, C., Kuitenbrouwer, K., Fearns, V., Pestana, M., Nisi, V., Light, A., & Nunes, N. J. (2025). Zoöp Futures: Towards an organisational framework for ecological cooperation between humans and more-than-humans. *Futures: The journal of policy, planning and futures studies*, 169.

Local communities are groups of people residing in a specific geographic area who share common interests, cultural practices, social ties and responsibilities. They play a vital role in the stewardship of natural resources, preservation of cultural heritage and implementation of sustainable development practices. In academic and policy contexts, local communities are increasingly recognized as key actors in participatory governance and knowledge co-production. UNESCO emphasizes their importance in safeguarding intangible cultural heritage and promoting inclusive, context-specific development.

References: UNESCO. (2003). *Convention for the Safeguarding of the Intangible Cultural Heritage*. https://ich.unesco.org/en/convention ; UNESCO. (2019). *Local and Indigenous Knowledge Systems*. https://en.unesco.org/links

More-than-humans and **Other-than-human** lifeforms refer to the built and natural environment, social dynamics, traditions, beliefs and cosmologies.

References: Akama, Yoko, Ann Light, and Takahito Kamihira. "Expanding participation to design with more-than-human concerns." Proceedings of the 16th Participatory Design Conference 2020-Participation (s) Otherwise-Volume 1. 2020.

Native refers to people, species, or elements that originate from and are naturally established within a particular region or environment. In human contexts, it is often associated with Indigenous populations whose cultural, linguistic and historical identities are rooted in specific territories. The term is also used in ecological and linguistic studies to denote organisms or languages native to a region. Its use requires contextual and ethical consideration, particularly to avoid conflation with colonial or exclusionary narratives. Recent scholarship emphasizes the importance of native identities in cultural resilience and environmental stewardship.

References: Smith, L. T. (2021). *Decolonizing Methodologies: Research and Indigenous Peoples* (3rd ed.). Zed Books; Whyte, K. (2018). *Indigenous science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change crises. Environment and Planning E: Nature and Space*, 1(1-2), 224–242. https://doi.org/10.1177/2514848618777621

Policy effectiveness refers to the extent to which a policy achieves its stated objectives and brings about meaningful and measurable change, as outlined in the UN document "Assessing Policy Effectiveness: A Key Tool for Ensuring Impact". It encompasses the quality of policy design and implementation success, considering whether outcomes align with goals. Effectiveness also involves assessing equity, sustainability and coherence across sectors and scales. A policy is considered effective when it delivers results efficiently and inclusively, supporting long-term systemic transformation in line with sustainable development objectives.

References: United Nations Department of Economic and Social Affairs. (2023). *Assessing policy effectiveness: A key tool for ensuring impact.* Retrieved from United Nations Sustainable Development Goals website.

Polycrisis reflects the convergence of multiple, interconnected crises (climate change, pandemics, geopolitical conflicts, economic instability, etc) that interact in complex and compounding ways. Unlike isolated disruptions, a polycrisis is characterized by systemic interdependence, where the impact of one crisis amplifies others, creating cascading global challenges. The term highlights the need for integrated, cross-sectoral responses and anticipatory governance. Polycrisis is a defining condition of the 21st century, requiring adaptive and resilient policy frameworks.

References: Tooze, A. (2022). Welcome to the World of the Polycrisis. *Financial Times*, October 28, 2022; Lawrence M, Homer-Dixon T, Janzwood S, Rockstöm J, Renn O, Donges JF (2024). Global polycrisis: the causal mechanisms of crisis entanglement. *Global Sustainability* 7, e6, 1–16.

Power in Cultural Studies is understood not merely as coercive force, but as a diffuse and relational dynamic that shapes social structures, cultural practices, and individual

subjectivities. Influenced by Foucault, power operates through discourse, institutions, and everyday norms, producing knowledge and regulating behavior. It is both productive and restrictive, enabling certain identities and silencing others. Cultural Studies explores how power circulates through media, language, race, gender, and class. The analysis of power is central to understanding hegemony, resistance and cultural meaning-making.

References: Foucault, M. (2020). *Power: The Essential Works of Michel Foucault, 1954–1984* (Vol. 3, J. D. Faubion, Ed.). London: Penguin; Hall, S., Evans, J., & Nixon, S. (2013). *Representation* (2nd ed.). London: Sage.

Radical, in the context of cultural studies, refers to ideas, practices, or movements that seek to fundamentally challenge, disrupt, or transform dominant cultural norms, power structures, and systems of meaning. It often involves critical engagement with issues such as identity, inequality, colonialism, and representation, aiming not merely for reform but for deep structural change. Radical approaches in cultural studies draw from critical theory, feminist thought and decolonial perspectives to interrogate the roots of social and cultural oppression. Radical cultural work is essential to imagining alternative futures and resisting hegemonic narratives.

References: Hall, S. (2017). *Selected Writings on Marxism*. Duke University Press; Gilroy, P. (2021). *Against Race: Imagining Political Culture Beyond the Color Line*. Belknap Press.

Sea Forum is a locally grounded operative group that provides information and resources to plan and evaluate together the future activities and their impact in respect to the local water body. Practicing codesign approaches, the Sea Forum is activated through local events facilitated by a designer and a pilot team that include an academic institution, a cultural organisation and the local authority. The Sea Forum is organised to challenge the assumption that experts are the unique holders of problem-solving capabilities.

Stuart Hall (1932–2014) was a Jamaican-British cultural theorist and a founding figure of the Birmingham School of Cultural Studies. His work critically explored the intersections of culture, power, race, and identity within late modern societies. Hall's theories of representation, encoding/decoding, and cultural hegemony reshaped media and communication studies. He emphasized how meaning is constructed through discourse and contested within ideological frameworks. His legacy remains central to contemporary debates on multiculturalism, identity politics, and postcolonial theory.

References**:** Hall, S. (1997). *Representation: Cultural Representations and Signifying Practices*. London: Sage; Slack, J., & Grossberg, L. (Eds.). (2021). *Cultural Studies 1983: Stuart Hall*. Durham: Duke University Press.

Sustainability gained early prominence in political and intellectual discourse following the publication of the Report for the Club of Rome, Limits to Growth (Meadows et al., 1972), which outlined the restrictions on continued economic growth due to resource depletion. Since then, the term "sustainability" has come to be appropriated by numerous institutions, businesses, organisations and public bodies as a central value and organising principle of their actions. As such, it has come to be fraught with much ambiguity and misrepresentation. The vast array of definitions of sustainability which are employed reflect a similar diversity in the motivations for which it is applied. Sustainability can be a goal, an approach, an object, or a criterion. An understanding of sustainability concerns both living within our present environmental means whilst also considering the implications of current activities for future generations.

References: Meadows, D.H., Meadows, D.L., Randers, J. and Behrens, W.W., (1972). The Limits to Growth: a report for the Club of Rome's project on the predicament of mankind. New York: Universe Books. Caradonna, J.L., (2022). Sustainability: A history. Oxford University Press.

Transdisciplinarity is an integrative approach that transcends traditional disciplinary boundaries by incorporating academic, non-academic and Indigenous knowledge systems in order to address complex real-world problems. Unlike multi- or interdisciplinarity, transdisciplinarity emphasizes co-creation of knowledge through collaboration among researchers, practitioners and stakeholders. It is widely used in sustainability science, health and education to foster systemic thinking and socially robust solutions. Transdisciplinarity is becoming essential for navigating uncertainty, complexity and ethical challenges in global change contexts.

References: Bernstein, J. H. (2015). *Transdisciplinarity: A Review of Its Origins, Development, and Current Issues*. *Journal of Research Practice*, 11(1), Article R1; Fam, D., Neuhauser, L., & Gibbs, P. (Eds.). (2018). *Transdisciplinary Theory, Practice and Education: The Art of Collaborative Research and Collective Learning*. Springer. https://doi.org/10.1007/978-3-319-93743-4

Transdisciplinary learning is an educational approach that integrates knowledge and methods from multiple disciplines – along with non-academic and community-based perspectives – to address complex, real-world challenges. It emphasizes collaboration, critical thinking, and co-creation of knowledge across traditional academic and societal boundaries. This form of learning fosters holistic understanding, ethical reflection and practical problem-solving, often in the context of sustainability, global citizenship and social justice.

References: Leicht, A., Heiss, J., & Byun, W. J. (Eds.). (2018). *Issues and trends in education for sustainable development*. UNESCO Publishing. https://unesdoc.unesco.org/ark:/48223/pf0000261445; Mittelstrass, J. (2011). *On transdisciplinarity*. *Trames: A Journal of the Humanities and Social Sciences*, 15(4), 329–338. https://doi.org/10.3176/tr.2011.4.01

Transformative change refers to profound, systemic shifts that alter the fundamental structures, values, and practices sustaining current societal and environmental challenges. It moves beyond incremental adjustments to address root causes of unsustainability and inequality. As outlined in the European Research Council's mapping study, such change involves rethinking dominant paradigms, enabling innovation, and supporting inclusive participation. The United Nations highlights that transformative change is necessary to achieve the Sustainable Development Goals, requiring coordinated structural, institutional, and behavioural changes across sectors and scales to ensure equity, resilience, and environmental integrity.

References: European Research Council. (2023). *Mapping ERC frontier research: Transformative change for a sustainable future.* Publications Office of the European Union. United Nations. (2021). *From structural change to transformative change: Rationale and implications.* United Nations Department of Economic and Social Affairs.