

# Living Labs as Innovative Learning Environment

## Reading Materials

### 1. What are Living Labs?

- Gamache, G. et al, (2020) Can Living Labs offer a pathway to support local agri-food sustainable transitions? in: *Environmental Innovation and Societal Transitions*, 37: 93-107.  
<https://doi.org/10.1016/j.eist.2020.08.002>
- McCrary, G. et al. (2020), "Sustainability-oriented labs in real-world contexts: An explanatory review", *Journal of Cleaner Production*, Vol. 277, pp.1-18.  
<https://doi.org/10.1016/j.jclepro.2020.123202>
- Loorbach, D. Frantzeskaki, N., Avelino, F. (2017), "Sustainability transitions research: transforming science and practice for societal change", *Annual review of Environment and Resources*, Vol. 42, pp. 599-626.  
<https://www.annualreviews.org/doi/abs/10.1146/annurev-environ-102014-021340>
- Loorbach, D. (2014), *To Transition! Governance Panarchy in the New Transformation, Inaugural Address*, available at: <https://drift.eur.nl/nl/publicaties/transition-governance-panarchy-new-transformation/> (accessed 21 July 2021).
- Köhler, J. et al. (2019), "An agenda for sustainability transition research: State of the art and future directions", *Environmental Innovation and Societal Transitions*, Vol. 31, pp.1-32.  
<https://doi.org/10.1016/j.eist.2019.01.004>
- Purcell, W.M., Henriksen, H., Spengler, J.D. (2019), "Universities as the engine of transformational sustainability toward delivering the sustainable development goals "Living Labs" for sustainability", *International Journal of Sustainability in Higher Education*, Vol. 20, No. 8, pp. 1343-1357. <http://dx.doi.org/10.1108/IJSHE-02-2019-0103>
- Ståhlbröst, A. and Holst, M. (2012), *The Living Lab Methodology Handbook*, Luleå University of Technology and CDT, Sweden.
- Westerlund M, and Leminen S, (2011), "Managing the challenges of becoming an open innovation company: experiences from Living Labs", *Technology Innovation Management Review*, pp. 19-25.  
[DOI:10.22215/timreview/489](https://doi.org/10.22215/timreview/489)

### 2. Design principles and quality criteria for Living Labs

- Mierlo, B. van and Beers P.J. (2020), "Understanding and governing learning in sustainability transitions: a review", *Environmental Innovation and Societal Transitions*, Vol. 34, pp. 255-269.  
<https://doi.org/10.1016/j.eist.2018.08.002>
- Nilsson, M. et al (2018) Mapping interactions between sustainable development goals: lessons learned and ways forward, in: *Sustainability Science*, 13: 1489-1503,  
<https://doi.org/10.1007/s11625-018-0604-z>
- Tulder, R. van and Keen, N. (2018), "Capturing Collaborative Challenges: Designing Complexity-Sensitive Theories of Change for Cross-Sector Partnerships", *Journal of Business Ethics*, Vol. 150, pp. 315-332. <https://doi.org/10.1007/s10551-018-3857-7>
- Peterson, H.C. (2013), "Fundamental Principles of Managing Multi-stakeholder Engagement", *International Food and Agribusiness Management Review*, Vol. 16, Special issue A, pp. 11-21. DOI: 10.22004/ag.econ.155141

- Sol, J. (2018), *Reflexively Stumbling towards Sustainability: Understanding social learning in regional governance networks*, PhD dissertation, Wageningen University. <https://doi.org/10.18174/448662>
- Tromp, C., Beukema, L., Almekinders, C. (2009), "Research in Action: the core business", Almekinders, C. Beukema, L., Tromp C. (Eds.), *Research in action: Theories and practices for innovation and social change*, Mansholt publication series 6, pp. 221- 242. <https://edepot.wur.nl/123348>
- Wals, A (2019), "Sustainability-oriented ecologies of learning: a response to systemic global dysfunction", Barnett, R and Jackson, N (Eds.), *Ecologies for Learning and Practice: Emerging Ideas, Sightings and Possibilities*, Routledge, London and New York. <https://doi.org/10.4324/9781351020268-5>
- Witteveen L, et al. (2016), "Design Principles for Living Labs aiming at sustainable development: The role of higher education in Living Labs", paper presented on the 'Competence 2016 Wageningen Conference' on competences, theory and practice, October 19-21, 2016, Wageningen. available at: <https://tinyurl.com/2th8fn4j> (accessed 21 July, 2021).

### 3. Living Labs for developing sustainability and transition competences

- Barnett, R and Jackson, N (Eds.) (2020), *Ecologies for Learning and Practice: Emerging Ideas, Sightings and Possibilities and Political Paradoxes*, Routledge, London and New York. <https://doi.org/10.1080/08941920.2020.1831673>
- Biggeri, M., Clark, D.A., Ferrannini, F. and Mauro, V. (2019), "Tracking the SDGs in an 'integrated' manner: A proposal for a new index to capture synergies and trade-offs between and within goals", *World Development*, Vol. 122, pp. 628-647. <https://doi.org/10.1016/j.worlddev.2019.05.022>
- Lozano, R. et al. (2017), "Connecting Competences and Pedagogical Approaches for Sustainable Development in Higher Education: A Literature Review and Framework Proposal", *Sustainability*, Vol. 9, No.1889, pp. 1-15. <https://www.mdpi.com/2071-1050/9/10/1889>
- Chankseliani, M. and McCowan, T. (2021), "Higher Education and the Sustainable Development Goals", *Higher Education*, Vol. 81, pp. 1-8. <https://doi.org/10.1007/s10734-020-00652-w>
- Rieckmann, M. (2012), "Future-oriented higher education: Which Key-competences should be fostered through university teaching and learning?", *Futures*, Vol. 44, pp. 127-135.
- Rieckman M. and Bormann I. (Eds.), (2020), *Higher Education Institutions and Sustainable Development. Implementing a Whole-Institution Approach*. Reprints of articles in *Sustainability*, MDPI, Basel, Switzerland. <https://doi.org/10.3390/books978-3-03936-989-8>
- Wiek, A., Withycombe, L., Redman, C.L. (2011), "Key competences in sustainability: A reference framework for academic program development", *Sustainability Science*, Vol. 6, pp. 203-218. <https://doi.org/10.1007/s11625-011-0132-6>
- Wittmayer, J. et al. (2021), "Transformative Research: Knowledge and action for just sustainability transitions", DIT Working Paper for positioning transformative research, Impact Transition Platform, Erasmus University Rotterdam. DOI: 10.13140/RG.2.2.28485.99047

### 4. Living Labs: making it operational!

- Avelino, F. and Wittmayer, J. (2018), "Transformative social innovation and its multi-actor nature", Howaldt, J., Kaletka, C., Schröder, A. and Zirngiebl, M. (Eds.), *Atlas of Social Innovation—New*

- Practices for a Better Future*, Sozialforschungsstelle, TU Dortmund University, Dortmund, pp.47-50.
- Brouwer, H. & J. Woodhill et al (2015) *The MSP Guide – how to design and facilitate Multi-Stakeholder Partnerships*, <https://mspguide.org/>
- HIVOS, 2015, *Theory of Change Thinking in practice: A stepwise approach*, [www.hivos.org](http://www.hivos.org)
- Silvestri, G, J. Wittmayer & T. de Geus, (2020) *Tomorrow Handbook – Workbook for urban transition makers*, DRIFT, <https://www.citiesoftomorrow.eu/resources/toolbox/guidelines/workbook-urban-transition-makers>
- Silvestra, G. G. Diercks & C. Matti (2021) *The X-curce: a sense-making tool to foster collective narratives for system change*, DRIFT
- Stephens, J.C. and Graham, A.C. (2010), “Toward an empirical research agenda for sustainability in higher education: exploring the transition management framework”, *Journal of Cleaner Production*, Vol.18, pp. 611–618. <https://doi.org/10.1016/j.jclepro.2009.07.009>
- Turnheim, B., Asquith, M., Geels F.W. (2020), “Making sustainability transitions research policy-relevant: Challenges at the science-policy interface”, *Environmental Innovation and Societal Transitions*, Vol. 34, pp. 116-120. <https://doi.org/10.1016/j.eist.2019.12.009>