

Working institutions from the inside out: action research for transformations towards sustainability

Citation for published version (APA):

Baker-Shelley, A. (2016). Working institutions from the inside out: action research for transformations towards sustainability. In R. Cörvers, J. de Kraker, R. Kemp, P. Martens, & H. van Lente (Eds.), Sustainable Development Research at ICIS: Taking stock and looking ahead ICIS Maastricht University.

Document status and date: Published: 01/01/2016

Document Version: Publisher's PDF, also known as Version of record

Please check the document version of this publication:

• A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.

• The final author version and the galley proof are versions of the publication after peer review.

 The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these riahts.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.

- You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Chapter **24**

Working institutions from the inside out: action research for transformations towards sustainability

Alex Baker-Shelley

Abstract

Considering the recent resurgence of debate surrounding the role of the university in the 21st century, and the complexity of interconnected sustainability challenges we face as a species, more reflexive and embedded research methods are required. In the context of analysing transformations towards sustainability at universities, I discuss the example of action research at Maastricht University to exemplify the utility of participation and the social impact of organisational research. There is a systemic relationship and interconnectedness that exists within the university and its surroundings. Appropriate research methods must follow suit by disentangling these associations in insider-academic research of the system in question, clarifying the dynamic role science must now play in society towards greater socio-ecological wellbeing. Challenges present in this kind of embedded research range from being privy to information (whether tacit or explicit), pre-understanding, role duality, and managing organisational politics associated with perceived implications of one's research to its stakeholders.

24.1 Why universities need to become more sustainable

A sustainable university is "A higher educational institution, as a whole or as a part, that addresses, involves, and promotes, on a regional or global level, the minimisation of negative environmental, economic, societal, and health effects generated in the use of their resources in order to fulfil its functions of teaching, research, outreach and partnership, and stewardship in ways to help society make the transition to sustainable life-styles" Velazquez et al. (2006)

Universities have been lagging behind other sectors in terms of embedding sustainability into their organisational structures (Lozano, 2011). Much research has been undertaken into the "what" of organisational transformation, corporate responsibility, sustainability reporting and accounting, (Aras and Crowther, 2008, Aras and Crowther, 2009, Clark and Master, 2012, Eccles et al., 2012, Lozano, 2006, Zadek, 2006), yet relatively little has been performed on the "how" (Shelley, 2013), and less still for a specific integration of sustainability into the core business of higher education institutions (HEIs). Progress towards embedding sustainability across departments, faculties, facilities, and operations at HEIs has been slower than expected and there is a definite lack or "clear orientation on exactly what a sustainable university should be" (Velazquez et al., 2005).

Considering their unique position and legacy in society, as well as their significant capacity for innovation and the honest brokerage of knowledge at the boundaries of science, policy, and politics (Pielke Jr., 2007), it is notable that their potential has remained largely untapped. It is still nonetheless encouraging to see headway being made post Rio+20, especially with the Higher Education Sustainability Initiative (HESI) commitments playing an enabling role in mobilising HEIs to ensure a sustainable future (Simon and Haertle, 2014). Another positive trend is the rate of uptake of sustainability standards, social impact measures, and corporate social responsibility (CSR) communications strategies by businesses and universities, as well as partnerships and collaborations with NGOs and civil society over the last decade. This has done much to change the landscape of superficial and reactionary policy for sustainable development towards a deeper recognition to make it part of organisational DNA (KPMG, 2013, Hespenheide and Koehler, 2012, Gray and Stites, 2013).

This plays against the backdrop of a series of charters and declarations signed by global networks of HEIs to cement their commitment to the global transition towards a more sustainable society, such as the Talloires Declaration (1990), the Copernicus Charter (1994), the Handvest Duurzaamheid HBO1 (1999), Agenda 21 (1992), and the most recent UN Decade for Education for Sustainable Development (2005–2014) (Boer, 2013). If there was no problem of sustainability at universities then why would a whole decade have been dedicated explicitly to achieving it? HEIs need to become more sustainable yet they claim to find it difficult to meet their social and environmental

responsibilities. Many institutional barriers exist, such as decentralisation, a lack of environmental literacy, and lack of democratic principles. The boundaries between public and private have become increasingly blurred; managerialism logics have predominated over bureaucratic ones leading to a "marketisation" of HE (Howells et al., 2014, Natale and Doran, 2012). This shift in ideology experienced in the last couple of decades is unprecedented in the history of universities, and certain managerial standards have swiftly become the norm, further complicating matters. Universities must nevertheless justify how they contribute to solve ecological, social, and economic challenges of unsustainability with the knowledge that they produce and implement in research and education. Such challenges and external drivers are represented in the conceptual map of institutional governance for sustainability shown in Figure 24.1.

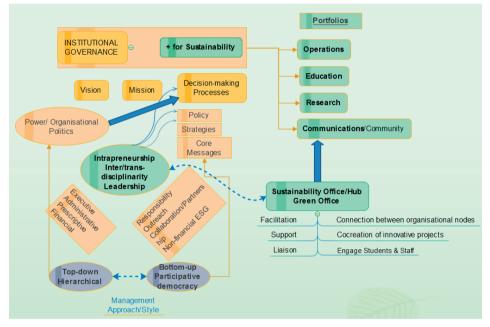


Figure 24.1 A concept map of internal institutional governance for sustainability

However, the dynamics of how this process of transformation takes place are not yet well understood (Hoover and Harder, 2014), which calls for greater focus on such processes that embed sustainability at HEIs (Stephens and Graham, 2010) and recommendations that they must be promoted in policy that targets a shift in the behaviour of the citizens of the institution (Velazquez et al., 2006). According to Yarime et al (2012), this means taking into account the deep structure and inter-personality of a university, all its sub-systems, facilities, and departments, including their interdependencies, in a systemic and dynamic understanding.

This represents an emerging paradigm in institutional governance that goes beyond the traditional "third mission" (Trencher et al., 2013) of an entrepreneurial, knowledge-

producing, and technology-innovating institution; however it is unclear exactly what form this will take since "the wheel is still in spin" and paradigmatic changes in and of science change as a result of external perturbation and crisis (Kuhn, 1996). Accordingly, co-production and design of solutions and societal transformations will grow as global trends, complemented by the launch of the Future Earth initiative, the expected renewal of the UNDP's Millennium Development Goals after 2015 into Sustainable Development Goals at upcoming international conferences in Paris, and the growth of sustainability science as a discipline and profession in its own right (Trencher et al., 2014).

24.2 Sustainability transformation of HEIs

Taking the background of macro-societal drivers that the University of the 21st century is tasked with in Figure 24.2, I argue that a sustainability transformation of the HEI is needed towards a more desirable and resilient end state. This systemic transformation required of and by universities is here conceptualised as a change in the very nature of a system (the university) from one state to another; a shift in the equilibrium of the means, methods, and processes by which the subject, whether individual, faculty, organisation, institution, or region, functions. This adds components of societal wellbeing, effective management of socio-ecological systems and resilience to such a system – or as some have proposed "a public university aimed at the common good" (Halffman and Radder, 2015) - and gives it equifinality: a choice in the manner of arriving at a destined state of higher sustainability that is not absolute but guiding; in other words there are multiple paths but no absolute sustainability. The end state of a "sustainable university" should be context-based and developed according to the organisational culture, values, strategy, and structure. This holds true if the system is open in that it has an inextricable environmental relationship with its surroundings, in addition to it having a developmental growth pattern.

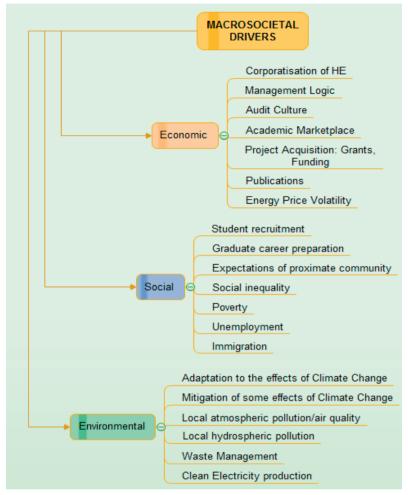


Figure 24.2 Macro-societal drivers of change at HEIs

24.3 Nitty-gritty: why this organisational research demands social impact

Considering the systemic relationship and interconnectedness that exists within the university and its surroundings, appropriate research methods must follow suit. Sarewitz and Pielke (2007) argue that it is rarely considered in science-policy discourse or decision processes that "alternative research portfolios might better achieve stipulated societal outcomes". The supply and demand of science clarifies the dynamic role of science in society by ideally matching the needs of end-users of scientific knowledge produced (Sarewitz and Pielke, 2007). My research project is geared towards

having a positive societal outcome in the form of policy recommendations for Maastricht University (UM) on its management of sustainability, based on a four-year scientific investigation. Advice will be based on the results of case studies of pioneering institutions as to how to transform UM structurally into a sustainable institution.

This research can essentially be boiled down to providing and brokering scientific knowledge so that university management and 'Green Offices' (student-driven, staff-supported sustainability departments: http://greenofficemaastricht.nl/) have a balanced account of how to gear up their institutes as trans-sectoral actors and facilitators of transformational change in the 21st century. This bolsters the usual indicators of successful performance of HEIs (student numbers, research project acquisitions, rankings etc.) as well as emphasising governance for sustainable development and corporate responsibility. It operates at the science–policy interface, defined by van den Hove (2007) as a social process that encompasses "relations between scientists [students, practitioners and decision makers] in the policy process.." allowing "for exchanges, co-evolution, and the joint construction of knowledge", enhancing social impact.

The ideal goal of all this is social and organisational learning: a change in understanding occurring in the individuals populating and influencing the university's transformation – stakeholders, co-researchers, policy makers and management – at the surface and at a deeper level "demonstrated by a change in attitudes, world-views or epistemological beliefs" (Reed et al., 2010) towards a sustainable development of and by their institute in its urban, regional, and international settings. Central to this aim at UM are just such a group of individuals, the Green Office, whose mandate is to manage the sustainability portfolio of UM in the areas of research, education, operations, and community engagement. This project also looks at how it is fulfilling its role towards the overall sustainability transformation of this university. This fundamentally requires a level of embeddedness by the researcher as an "insider" that goes beyond conventional case-study research.

24.4 'Insider' action research

"Action research is a period of inquiry, which describes, interprets and explains social situations while executing a change intervention aimed at improvement and involvement. It is problem-focused, context-specific and future-oriented." (Waterman et al., 2001)

In order to understand the nature of complex systems, we must dismantle them into units to examine the underlying complex relationships and mechanisms internal to the case under study (Wallerstein (1974) in Moses and Knutsen (2012)). We have to untangle the complex knot of interactions, with the focus on the internal causal mechanisms from which an organisational transformation takes hold and propagates.

To understand the hermeneutic tradition of organisational research is to see the researcher going in, or entering the site with a clean slate; that is, few or no theoretical preconceptions. This is a target which, although it can never be attained, allows the subject's (a university sustainability department for example) empirical evidence to guide the emergence of key themes and concepts (Brannick and Coghlan, 2007). Taking the decision to actively involve stakeholders in research is a necessity given the action research approach (see Figure 24.3), which builds on the philosophical tradition of Pragmatism; the notion that knowledge (whether obtaining it or sharing it) is based on observing the consequences of intentional action. It is inherently participatory, following a democratic approach to knowledge production, with the researcher being actively involved in intentional change to increase the chances of social and organisational learning taking place at UM.

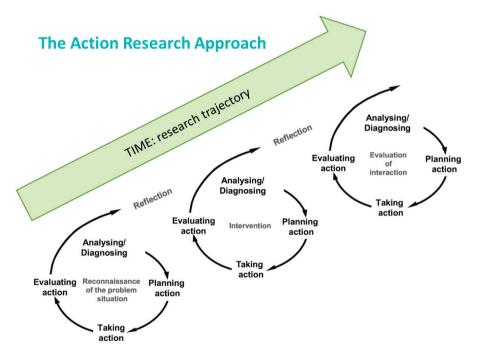


Figure 24.3 The action research process, adapted from Coghlan and Brannick (2014)

It aims to facilitate social learning and the development of novel, scientifically sound yet practicable knowledge by involving relevant stakeholders, including the researcher, in multiple cycles of planning, action, observation, and reflection (see Waterman et al. (2001)). The objective is to be aware of where the researcher places him/herself on the spectrum between the "objective" observer and the active team member; balancing the

role between acting as a "critical insider or friendly outsider" or vice-versa. Or more technically, as Brannick and Coghlan (2007) put it, action research is one of three major research paradigms where one can do "insider research", defined as "research by members of organisational systems in and on their own organizations". Progress is made after several cycles in terms of awareness and implementation of sustainability strategies and responsible internal leadership.

It is ultimately both an essential opportunity and a risk in any research that requires an inside-out perspective, where you as the researcher are deeply embedded in the organisation that is both paying you and that you are required to investigate. Challenges inevitably arise from access, pre-understanding, role duality, and managing organisational politics (Brannick and Coghlan, 2007). The last aspect is considered of particular relevance for any study approaching the often thorny issue of integrating sustainability into an organisation. It does not therefore take too much of a leap to imagine that there is a political context in which projects such as this operate (Brannick and Coghlan, 2007, Hoover and Harder, 2014). It is also thus logical to assume that the institutional context becomes an essential part of the appraisal process and can significantly affect the success of the organisational-level shift that aims to better contribute to sustainable development at multiple levels of society and the ecosystems it depends on.

In essence, universities educate and prepare future leaders, whether politicians, NGO leaders, social entrepreneurs, or those who will be concerned with regulating and monitoring the international business community, with respect to the complex challenges of the 21st century. In response to worsening crises of climate and capitalism alike, they also have a moral obligation to provide, through education and research, the societal transformation required of current modes of production and consumption based on economies that do not currently respect ecological limits. The way public institutions are managed has been changing at an unprecedented rate. Accordingly, researchers ought to adapt their methods to go above and beyond the convention in order to meet increasing societal demands to breach the walls of the ivory tower, enhancing the role of the university in cross-sectoral governance for sustainable development. This article has aimed to explain one way of doing this in the context of UM's sustainability portfolio.

References

- Aras, G. & Crowther, D. (2008). Governance and Sustainability: An investigation into the relationship between corporate governance and corporate sustainability. *Management Decision*, 46, pp. 433-448.
- Aas, G. & Crowther, D. (2009). Making sustainable development sustainable. Management Decision, 47, pp. 975-988.
- Boer, P. (2013). Assessing Sustainability and Social Responsibility in Higher Education Assessment Frameworks Explained. In: Caeiro, S., Filho, W.L., Jabbour, C.J.C. & Azeiteiro, U.M. (eds.) Sustainability Assessment Tools in Higher Education Institutions. Springer.
- Brannick, T. & Coghlan, D. (2007). In Defense of Being "Native": The Case for Insider Academic Research. Organizational Research Methods, 10, pp. 59-74.
- Clark, L. & Master, D. (2012). 2012 Corporate ESG/Sustainability/Responsibility Reporting: Does it matter? In: Boerner, H. & Coppola, L. D. (eds.). New York: Governance and Accountability Institute Inc.
- Coghlan, D. & Brannick, T. (2014). *Doing Action Research in your own Organization*, London, SAGE Publications.
- Eccles, R. G., Krzus, M., Rogers, J. & Serafeim, G. (2012). The Need for Sector-Specific Materiality and Sustainability Reporting Standards. *Journal of Applied Corporate Finance*, 24, pp. 65-71.
- Gray, B. & Stites, J. P. (2013). Sustainability Through Partnerships: Capitalizing on Collaboration. Network for Business Sustainability.
- Halffman, W. & Radder, H. (2015). *The Academic Manifesto: From an Occupied to a Public University*. Minerva, pp. 1-23.
- Hespenheide, E. & Koehler, D. A. (2012). *Disclosure of long-term business value: What matters?* Deloitte Development LLP.
- Hoover, E. & Harder, M. K. (2014). What lies beneath the surface? The hidden complexities of organizational change for sustainability in higher education. *Journal of Cleaner Production*, 106, (1), pp. 175-188.
- Howells, J. R. L., Karata-Ozkan, M., Yavuz, C. & Atiq, M. (2014). University management and organisational change: a dynamic institutional perspective. *Cambridge Journal of Regions, Economy and Society*, 7, pp. 251-270.
- KPMG (2013). The KPMG Survey of Corporate Responsibility Reporting 2013. KPMG International.
- Kuhn, T. S. (1996). The Structure of Scientific Revolutions. Chicago and London, The University of Chicago Press.
- Lozano, R. (2006). Incorporation and institutionalization of SD into universities: breaking through barriers to change. *Journal of Cleaner Production*, 14, pp. 787-796.
- Lozano, R. (2011). The state of sustainability reporting in universities. *International Journal of Sustainability in Higher Education*, 12, pp. 67-78.
- Moses, J. W. & Knutsen, T. L. (2012). Ways of Knowing: Competing Methodologies in Social and Political Research, Palgrave Macmillan.
- Natale, S. M. & Doran, C. (2012). Marketization of Education: An Ethical Dilemma. *Journal of Business Ethics*, 105, pp. 187-196.
- Pielke JR., R. A. (2007). The Honest Broker: Making Sense of Science in Policy and Politics. Cambridge: Cambridge University Press.
- Sarewitz, D. & Pielke, R. A. (2007). The neglected heart of science policy: reconciling supply of and demand for science. *Environmental Science & Policy*, 10, 5-16.
- Shelley, A. R. (2013). Gauging Corporate Governance for Sustainability: Public-Private Partnership in Accounting for Sustainable Development. Master in Sustainable Development, Uppsala University.
- Simon, K. & Haerthle, J. (2014). *Rio+20 Higher Education Sustainability Initiative (HESI) Commitments A Review of Progress*. UN Global Compact Principles for Responsible Management Education (PRME).
- Stephens, J. C. & Graham, A. C. (2010). Toward an empirical research agenda for sustainability in higher education: exploring the transition management framework. *Journal of Cleaner Production*, 18, pp. 611-618.

- Trencher, G., Bai, X., Evans, J., Mccormick, K. & Yarime, M. (2014). University partnerships for co-designing and co-producing urban sustainability. *Global Environmental Change*, 28, pp. 153-165.
- Trencher, G., Yarime, M., Mccormick, K. B., Doll, C. N. H. & Kraines, S. B. (2013). Beyond the third mission: Exploring the emerging university function of co-creation for sustainability. *Science and Public Policy*. 41 (2), pp. 151-179.

Van den Hove, S. (2007). A rationale for science-policy interfaces. Futures, 39, pp. 807-826.

- Velazquez, L., Munguia, N., Platt, A. & Taddel, J. (2006). Sustainable university: what can be the matter? Journal of Cleaner Production, 14, pp. 810-819.
- Velazquez, L., Munguia, N. & Sanchez, M. (2005). Deterring sustainability in higher education institutions: An appraisal of the factors which influence sustainability in higher education institutions. *International Journal of Sustainability in Higher Education*, 6, pp. 383-391.
- Wallerstein, I. (1974). The Modern World System. New York, Academic Press.
- Waterman, H., Tillen, D., Dickson, R. & Koning, K. D. (2001). Action research: a systematic review and guidance for assessment. Health Technology Assessment. Basingstoke, UK.
- Yarime, M., Trencher, G., Mino, T., Scholz, R. W., Olsson, L., Ness, B., Frantzeskaki, N. & Rotmans, J. (2012). Establishing sustainability science in higher education institutions: towards an integration of academic development, institutionalization, and stakeholder collaborations. *Sustainability Science*, 7, pp. 101-113.
- Zadek, S. (2006). The Logic of Collaborative Governance: Corporate Responsibility, Accountability, and the Social Contract. Corporate Social Responsibility Initiative; John F. Kennedy School of Government, Harvard University.