

Towards Regional Circular Economies. 'Greening the University Canteen' by Sustainability Innovation Labs



Susanne Maria Weber and Marc-André Heidelmann

Abstract The paper presents the approach taken in order to interconnect university, campus and canteen development. How can integrated regional development and a regional circular economy be supported by interlinking students' professionalization with interconnecting regional stakeholders? The project funded by the German National Sustainability Council (RNE) pursues the goal of greening the university canteen by adopting a participatory and interactive approach of innovation labs, organized by organizational education students and realized with the relevant stakeholders and potential partners of the regional nutrition cycle.

Keywords Regional innovation systems · Design thinking · Innovation learning · Regional nutrition cycle · Organizational education and pedagogy · Discourse methodology · Network consultancy

1 Why Care? Engaging and Experimenting in Sustainability Innovation Learning¹

Sustainable campus development wishes to integrate research, teaching and organizational learning. Campus strategies are under-researched, but nevertheless carry a lot of potential (Pike et al. 2003). Universities can still much more incorporate sustainability principles into their activities as organizations (Leal Filho et al. 2015) and establish sustainable campus improvement programs (Faghihi et al. 2014). As Schneidewind and Singer-Brodowski (2013) show in their book 'Transformative

¹ We appreciate the comments of our colleagues Annika Braun, Leila Grosse and Sarah Wieners.

S. M. Weber (✉) · M.-A. Heidelmann
Department of Education, Philipps-University of Marburg, Bunsenstrasse 3, 3. OG, 35032
Marburg, Germany
e-mail: susanne.maria.weber@uni-marburg.de

M.-A. Heidelmann
e-mail: marc-andre.heidelmann@uni-marburg.de

© Springer Nature Switzerland AG 2019

W. Leal Filho and U. Bardi (eds.), *Sustainability on University Campuses: Learning, Skills Building and Best Practices*, World Sustainability Series, https://doi.org/10.1007/978-3-030-15864-4_25

Science', especially the academic system in Germany needs transformative spaces. So far, only 'heterodoxic' islands can be found in the seas of orthodox science and academic activities.

In the field of sustainable campus development, the university canteen is crucial, as it connects the life cycle of crops and regional agriculture with all relevant stakeholders into the potential of regional cycles of sustainable nutrition. This approach does not only refer to organizational development of the university, but to develop regional innovation systems. This interconnected perspective on campus development and its' regional embeddings has not been taken into account so far and should be strengthened. Especially the university canteen can offer huge potentials for impact in sustainability and "greening" the university by its' canteen supply, systemic regional sourcing and awareness rising for conscious food delivery, greening students' lifestyles and conscious "green eating".

As the university canteen processes large amounts of food on a daily basis, the potential impact of regional nutrition cycles is high. Following the idea of circular economy and regional innovation systems, several SDGs are addressed, which can enlarge and enrich sustainability studies, research, training and professionalization (Schneidewind and Singer-Brodowski 2013; Leal Filho et al. 2017a, b; Leal Filho 2018). Sustainable nutrition as a regional innovation system (Doloreux and Parto 2005) addresses SDG 2 "sustainable land use", in order to support regional ecological agriculture. Core to the regional sustainability cycle will be SDG 3 "healthy living", as health and nutrition are closely connected when it comes to regional, seasonal, biological, sustainable food production. SDG 4 "Education for sustainable development" is core in an approach, interconnecting university with regional stakeholders. Students in this approach will be cooperating with regional stakeholders in order to develop sustainable and solution-oriented learning and development designs. SDG 6 is supported through "regional agriculture towards sustainability". SDG 8 refers to "regional economical cycles" as such and SDG 12 wishes to support "sustainable consumption and sustainable production", which of course is involved when the regional nutrition cycle is developed. Our case of "greening the university canteen" will be especially suitable for regional economy cycles respectively nutrition cycles of university towns in rural regional spaces in order to establish a sustainable canteen and regionally connected economical cycles. SDG 17 is addressed, when the principle of "sustainable supply in supply and delivery chains" is applied. As we see, especially relating university and regional embeddings carries potential and can support networked participation, problem solving and social innovation for sustainability. It supports the implementation of SDGs.

Especially in the field of sustainable nutrition, universities can offer excellent potentials. In order to develop a regional innovation cycle, it is necessary to involve regional producers, providers, distributors, decision makers, students as learner-consumers and recyclers. Instead of static and one to one approaches, a network approach is suggested, which involves all relevant stakeholders in a direct way. By using the methodology of regional living labs between university, the university canteen and relevant stakeholders, necessary connections can be made, and sustainability strategies be developed, in order to green the university canteen.

New methods and formats like the approach of design thinking (Weber 2013a) can support and bring about a new culture of regional sustainability communication and cooperation. As Weber (2005) has shown, dialogical formats such as sustainability labs offer innovative approaches for stakeholder participation, collective idea development, network development as well as consciousness raising for sustainability. The value chain of sustainable nutrition then comes into view not only at the level of improving products and processes, but at the level of collective system building and consciousness (Weber 2014). As Leal Filho et al. (2017a, b, p. 135) show, progress “is to be measured by new criteria, such as community building, collective action and construction of new infrastructures of provision, in which well-being is not only tied to consumption, but to conscious consumption and even degrowth perspectives”.

Leal Filho et al. (2017a, b) see the need for more trained specialists and professionals in the field of sustainable development research and practice. In fact, the topic of sustainable food and nutrition mobilizes younger generations, too. Can students become change agents for campus transformation towards sustainability? The professionalization program presented in the following, reaches out towards students as civil society actors of the university. Can students become active protagonists within a sustainability innovation learning approach? Being trained as change agents of the future society (Nölting et al. 2018), they might contribute to bring about innovation and professionalization learning at the same time. While Razzouk and Shute (2012) question the contribution of novices, we argue, that especially the intergenerational dialogue between professionals and students can be helpful for integrating design research and intervention strategies for campus and canteen ‘greening’ by regional system innovation. In the following, we first draw back on our piloting experience with sustainability innovation labs realized in 2015. After this, we present the approach taken in the still ongoing design research project ‘greening the university canteen’, funded by the German Council for Sustainable Development 2018–2019.

1.1 The Innovation Lab ‘Sustainable University Canteen’ 2015: Learning from a First Prototypes’ Potentials and Limitations

Experimenting with participative methodologies (Weber 2014) in higher education Innovation Learning (IL), we first realized a ‘Sustainability Innovation Lab’ in 2015 in three interconnected and consecutive seminars in the Master program in education. At that point in time, we were interested in learning how we might interconnect and how ‘greening the university canteen’ might be brought about by interprofessional learning and problem solving for regional system innovation. ‘Greening the University Canteen’ in this sense was a bottom up innovation project, as it followed the students’ thematic wish for an innovation learning project. Training was realized in an organizational education perspective in the field of ‘Sustainable Nutrition’. The lab was expected to support multidisciplinary cooperation, to cross administra-

tive boundaries and organizational cultures, professional expectations and interests. Within the Master program in education, students prepared and organized the innovation lab, invited all relevant stakeholders and professionalized by facilitating their workgroups.

In 2015, together with 50 regional stakeholders we had a one day (6 h) regional ‘Sustainability Innovation Lab’, which took place at the regional council of Marburg-Biedenkopf County (nearby Frankfurt/Main) in Germany. Already at this point in time, the pilot showed how much students and regional stakeholders appreciated the learning potential of lab-formats. Through lab strategies, students, citizens as well as other relevant stakeholders were integrated into a process of systematical idea development in economical, political, ecological and social sustainability perspectives. We learnt, that by interconnecting Higher Education and all relevant stakeholders, a regional ecological cycle in sustainable nutrition indeed can be designed and shaped. Especially the Student Service Organization, that is in charge of the university canteen, proved to be a relevant core actor in the field in order to trigger sustainable regional cycles.

Although having been successful, the pilot project 2015 showed that (A) A longer preparation and networking time is needed. (B) A systematically developed project management approach would be helpful (C) A consistent concept, relating to all learning levels would be important, (D) An approach, that would reach out to all students’ responsibility awareness would strengthen the potential for a problem based, potential based, self-reliant and networked learning approach. (E) Systematical networking of regional partners and the university canteen was regarded as offering a huge amount of innovation potential for a regional idea management in the field of sustainable nutrition. (F) Diffusion is important to be stronger supported through a manual and medial support in order to learn how to realize and repeat labs and to contribute to diffusion (G) The lab concept should be developed in a more systematical and interdisciplinary embedding and depth. (H) The concept for realization should be systematized, theorized more, it should be interdisciplinary embedded, and (I) it should become an interdisciplinary learning space for students. (J) Institutional structures and enabling conditions for innovative learning should be developed and (K) Institutional cooperation with the Students’ Service Organization and University Canteen at local and national level would have to be strengthened in order to (L) after a local piloting have a transfer potential for the ‘sustainable university canteen’ at a national level (58 cities and locations).

1.2 The Innovation Lab Series ‘Sustainable University Canteen’ 2018–2019: Theorizing, Professionalizing, Still Experimenting

Based on motivation, good arguments for exploring innovation learning and experiences with lab experiments, we sought to professionalize in the field of sustainability Innovation Learning in an organizational education perspective (Göhlich et al. 2014).

In 2018, the research team applied for funding at the German Council for Sustainable Development, a state funded agency to bring about the political programmatics of the great transformation (WBGU 2011). In order to transform lifestyles at the level of “daily culture”, the transformational program supports a whole series of transformational topics in sustainability. The program ‘Sustainable Nutrition’ supports our project ‘Greening the University Canteen’ for the year 2018–2019. Its core goals are to (A) design a refined prototype of ‘Innovation Learning’ based on the 2015 prototype. (B) to support the shaping up of the regional nutrition cycle for ‘greening the University Canteen’ and (C) to contribute like this to a SDG oriented organization education learning for sustainable development.

Students professionalizing in the field of ‘Network Innovation and Organizational Education’ for Sustainable Development are trained in a one-year Master’s program at Philipps-University of Marburg, Germany. Within this organizational education program, Education for Sustainable Development (ESD) is deepened into an organizational approach (OESD). The module ‘Future Education and Network Innovation’ combined two seminars and one lecture. They interconnect (a) students’ experience-based innovation learning, (b) the ‘greening of the university canteen’ using a process approach (based on participatory innovation labs) and (c) support the regional nutrition cycle to shape up into a regional system innovation in sustainability.

The project intends to support integral idea-creation, to connect different sustainability perspectives at the political and regional level, too. As already shown, it carries the potential to bring about future oriented structures, system, culture and consciousness development. It can support regional circular economy involving university, student service organizations, producers, suppliers, regional politics and administration, as well as students as users of the sustainable university canteen and the recycling economy. In this ongoing project, we use design-based approaches and integrate peer-to-peer interviewing, group discussions, participatory lab and workshop formats in order to analyze and research the potentials as well as the challenges on the way towards ‘greening the campus’.

The multilevel approach addressed in the project will be presented in the following. At first, we connect to theoretical debates, which portray the topic of the circular economy as a new paradigm for sustainability and regional innovation systems (RIS). In present debates, RIS can be seen as a potential not only for industrial high-tech clusters, but for regional, rural, low tech contexts, too. (2) In a third chapter, we show our theoretical foundation taken, referring to a Foucauldian discourse perspective for research, training and development of a consultancy approach (3). The fourth chapter connects to the lab approach taken and shows the rationalities and perspectives of involved stakeholders, as explored in the starting phase of the project (4). The fifth chapter presents outcomes of the first lab realized in June 2018 and the prototypes found in this sustainability innovation lab (5). Finally, the sixth chapter gives an outlook into strategizing as well as scaling potentials into the national and international level for the years 2018 and 2019 (6).

2 The Circular Economy as a New Paradigm for Sustainability

In the debate about societal renewal towards sustainability, academic debates agree that especially the circular economy carries the potential to address the pressing need of transitioning into more sustainable socio-technical systems (Geissdoerfer et al. 2017, p. 757). Following Geissdoerfer et al. (2017, p. 764), the concepts of ‘sustainability’ and ‘circular economy’ carry many similarities. The authors refer to the intra- and intergenerational commitments, the agency to the multiple pathways of development, the need to integrate non-economic aspects into development, the system change/design and innovation orientation and the value creation opportunities. The given value co-creation opportunities of an integrated production cycle reveal the necessary cooperation of different stakeholders. Besides the potential seen in regulation and incentives, the resources and capabilities of private business are regarded as a core potential. For achieving the circular economy, business model innovation is regarded as key for industry transformation. Technology solutions are regarded as important and at the same time tricky—as they pose implementation problems.

Traditional perspectives on circular economy primarily connect to the industrial sector to technology and technical innovation as well as to private business. The definition used by Geissdoerffer et al. (2017, p. 766) defines ‘circular economy’ as “a regenerative system in which resource input and waste, emission, and energy leakage are minimized by slowing, closing, and narrowing material and energy loops. This can be achieved by long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling”. Defining sustainability as “the balanced integration of economic performance, social inclusiveness, and environmental resilience, to the benefit of current and future generations”, they lack however to include the cultural dimension. They argue to contribute to ‘strong sustainability’ and ask for analyzing the impacts of circular economy initiatives (ibid., p. 767).

As Asheim and Coenen (2006) show, regional innovation systems (RIS) relate to a globalizing learning economy and should not be limited to the industrial or institutional complex. Especially Lundvall (1992) defined, that a learning economy understands innovation as an interactive learning process, which is socially and territorially embedded as well as culturally and institutionally contextualized. In this concept, the view on innovation broadens into non-research and development branches, firm sizes and even traditional regions, low tech ‘industries’ or economical activities. In fact, Lundvall (2004) already in 2004 argued to see the potential that can be mobilized in traditional sectors, where institutional reforms and organizational change might promote learning processes. The project to be described and analyzed here follows the concept of designing a regional, sustainable nutrition cycle: It can be regarded as a complex regional system innovation as it brings about a specific new, dimension into account (Doloreux and Parto 2005). Questioning existing routines and organizations, regional system innovation carries a radical, disruptive potential.

Streams of literature in this field focus on (A) interactions between different actors in the innovation process, particularly interactions between users and producers, but

also between business and the wider research community; (B) on the role of institutions and the extent to which innovation processes are institutionally embedded in establishing systems of production; (C) on reliance by policy makers on analysis, that attempt to operationalize the concept of regional innovation systems (Doloreux and Parto 2005, p. 134). The authors make clear that the region becomes a locus of innovation, that innovation has to be regarded as contextual, that social relationships become relevant here and that lastly regional and geographical proximity in innovation is crucial. A first stream of research in this field focuses on the functioning of regional innovation systems in order to specify desirable factors and mechanisms. A second one offers detailed snapshots of single regional innovation systems to assess the extent to which they correspond to a ‘truly’ regional innovation system. They illustrate the interaction, institutional and political dimensions and show the unique characteristics of specific and individual models (Doloreux and Parto 2005, p. 138). Again, regional innovation systems are defined as “one that comprises a ‘production structure’ embedded in an ‘institutional structure’ in which firms and other organizations are systematically engaged in interactive learning” (Doloreux and Parto 2005, p. 143). Within this definition, the dimensions of specific production structures, institutional structures, regional and actor structures as well as interactions and interrelations are to be captured for empirical and analytical perspectives. Understanding the region as a cultural entity, the concept of ‘embeddedness’ is suggested, underlining the systemic interconnectedness and interdependency of the region (Cooke 2001). While theoretical frameworks in regional innovation systems as well as in circular economy relate to a certain extent to the ‘culturality’ and ‘embeddedness’ of processes, the notion of boundary-crossing and transgressing rationalities is less highlighted in those perspectives. In the following, we therefore briefly explain our theoretical perspective, in which we connect innovation labs, circular economy and students’ professionalization for becoming change agents in organizational education for sustainable development.

3 Connecting Innovation Labs, Circular Economy and Students’ Professionalization: A Discourse Methodological Framework

Relating to the theoretical reference points of circular economy, regional innovation systems and sustainability, we can see that the role of universities has to be taken more into account than in the past. This should not only happen at an institutional level. What is needed here is a systematical theorization of stakeholder integration and knowledge transitions, too (Weber 2005). In a Foucauldian perspective, sustainability innovation labs are to be understood as ‘epistemic terrains’, as power-knowledge in action and as discursive processes. Here, material analysis of knowledge orders and grammars of emergence play out, thus the ‘modus operandi’ of power-knowledge

has to be analyzed. Students learn to analyze the *modi operandi* of ‘inclusions’ and of conditions for organizational and network change (Marshak and Grant 2008, p. 11).

Our organizational education discourse analytical perspective is grounded in the Foucauldian archeology of knowledge (Foucault 1972) and is interested in the discovery of transformative potentials and opening rationalities (Weber 2014; Weber and Wieners 2018; Marshak and Grant 2008). Strategies for a circular economy and Regional Innovation Systems then have to be analyzed regarding the rationalities playing out (Weber and Wieners 2018). Especially the issues of equality and sustainability carry normative and value-based conflicts. In our approach taken here, they are to be understood in their epistemological dimension and act out not only in institutions but as well in medially contested terrains, in performative medial incarnations. According to this perspective, sustainability strategies then are to be analyzed as discursive strategies. Following Foucault’s archeology of knowledge and related to discourse oriented organizational analysis (Weber 1998) for analysis, we address the three levels of ‘real relations’, ‘reflexive relations’ and ‘discursive relations’.

As discourses constrain, shape or reify forms of educational practice, higher education teaching and learning should be connected to a broader political, economic, cultural and philosophical agenda. Universities, too, are to be understood as sites of knowledge creation (Boden and Nedeva 2010; Weber 2013a, b). In this sense, programs like the one discussed here do not only wish to analyze the discourses existing in the context of neoliberal Higher Education (HE) strategies (Deem 2001) and to evaluate rhetorical strategies in the production of policies. Organizational Education Research and learning for sustainable development is interested in co-creating a critical as well as future oriented discourse. In order to push the existing boundaries, a grammar of ‘Organizational Education for Sustainable Development’ (OESD) has to be developed.

An organization and network theoretical perspective grounded in a Foucauldian methodological framework is interested in the discourse organizing knowledge, in the so called *dispositive* (Weber 2013a, b, 2014). It intends to analyze what can be said and what has to remain unsaid, what regulates our actions (Defert and Ewald 1994, p. 299) and our minds and subjectivities. Based on a genealogical perspective (Foucault 1972), regional transformation by labs from an organizational education perspective can be seen as methodized forms of Dewey’s laboratory school (Weber 2018a, b). The lab then has to be regarded as “a form of community life” and as “pedagogical laboratory” (Oelkers 2009, p. 273). “Democracy as theoretical norm of pedagogy” is enacted as well as “experience and action”, “thinking and problem solving”, “researching learning and project based work” (ibid.).

In this sense, the ‘laboratory school’ generalizes as *dispositive* in the innovation lab as a methodized “pedagogical laboratory” (Oelkers 2009, p. 273) and methodized democracy. In its shifted mode into methodization, temporalization and focus on problem solving, we see the innovation lab is a space of expedition and discovery. Experimentation and norm constitution in process are given core rationalities. Innovation Labs transcend the given and bring about the subject-position of the creative individual, the ‘artist’, who is a whole-body learner. Newness refers not only to the absolute new but to new relational patterns. The Foucauldian question ‘Who speaks?’

connects here to the practice of multi-experiencing and multi-voicing. Drivers and actors involved in regional transformational processes will be analyzed regarding the question which rationalities and knowledge sets become relevant in the potential regional nutrition cycle.

The professionalization of students being trained in a poststructuralist consultancy approach refers to integrating the power-knowledge perspective on sustainability into the regional nutrition cycle analysis and in this regard necessary interventions. Here, it becomes relevant to challenge and to change the prevailing 'story lines' (Marshak and Grant 2008, p. 12; Weber and Wieners 2018) and to de-essentialize and relate to 'performativity', to de-individualize and relate to collective practice in process (Weber 2005, 2017) and as well to enrich sensitivity for situated knowledge. In a poststructuralist learning approach, students' professionalization for learning consultancy does not only refer to the dimension of inclusion of rationalities but to the inclusion of practice, too. In this sense, students learn to support collective transformatory processes and to interconnect and enable regional system innovations. They learn to be aware of the need of inclusion and voicing. They learn to support the articulation of (systematical) unspeakabilities (Weik and Lang 2007). Moreover, they learn to include the New and to transcend existing knowledge and concepts. The programs goals are to develop abilities to deal with "incommensurabilities" (Lyotard 1994, p. 16) and to support the transgression of speaking positions. By analyzing performative orders in organizing (Spicer et al. 2009, p. 538), they learn to support rationality transitions.

Labs as discursive practices of inclusion open up the 'natural laboratorium' (Weber 2000, 2002, 2005) towards possible alternative futures. As a 'methodical democracy', they support the norm constitution in process (Weber 2006, 2009). In this sense, they are spaces which intentionally address (institutional and contextual) transitions in time and space. They organize (un)order, establish communication flows, (potentially) break up symbolic orders of speaking and listening, question dominant classifications and interpretations. In the multiperspectivity setting, a systematical constellation of difference occurs. Labs organize difference systematically. In the methodical democracy everybody speaks. Labs constellate "being stranger" to each other and they constellate "bridging". They constellate "translation" into the rationality of organized transitions. Labs carry the core function of the inversion of organization and society. This dimension strongly refers to inclusion, too. In the sense, they open up into alternative futures and labs can thus be regarded as heterotopical formats and heterotopical knowledge (Adler and Weber 2018).

Innovation labs therefore are to be analyzed as 'temporary organizations' (Weber 2004) on the way towards regional innovation systems. Interconnecting the potential regional cycle through methodical 'rituals of transformation' (Weber 2005) such as sustainability innovation labs, also brings about the potential of system building. Using Sustainability Innovation Labs in a sequence of events, the potential of a Regional Innovation System (RIS) rises. Lab effects and impact potentials can be analyzed at three levels: (a) the level of rationality of products and processes, (b) the rationality and impact at the level of regional system development and (c) the

level of consciousness rising for regional stakeholders, institutions and cooperation partners.

4 Towards Regional Co-creation and Strategy Development—Engaging the Regional Cycle of Sustainable Nutrition

Interconnecting with the city council, regional administration and other stakeholders, the region can emerge into a regional space of citizens' sustainable culture and regional circuits in a circular economy perspective. It then does not only relate to economy, politics and technology, but to civil society, rural regional settings, non-profit organizations like the university canteen, to university and to students as future professionals. Likewise, the university canteen can be a starting point in order to establish sustainability strategies, regional and sustainability-oriented agriculture, as well as regional market potentials.

The goal of the one-year funded program is to support the greening of the sustainable university canteen and to prototype students' professionalization in the field of sustainability consultancy. Based in the Department of Education at the Philipps-University Marburg, the project is realized in the context of 'organizational education' training of master students. Here, we focus on topics of sustainable development, education for sustainable development, address futurability and innovation, innovation and future learning as also done in programs like 'network coaching future designers' (Weber 2018a, b). Our partner institution in the project is the Students' Service Organization and its canteen, which are autonomous institutions in the legal sense.

The master lecture and seminar were interrelated and organized according to the process of six steps in design thinking. Following the design thinking process we addressed (1) agenda setting, (2) 'empathy': understand the visions and positions of stakeholders; showing leaks in awareness (3) define: desirability, realizability and applicability are relevant here. (4) 'ideate': idea development for the concrete realization and design of visions for the future. (5) 'prototype', the modelling of system transformation. In the last step, the prototypes should be (6) 'implemented' and be presented in a public event and in a regional setting in order to support implementation. The interconnected cooperation between regional partners of the city council and the regional council as well as the existing cooperation with the Students' Service Organization, the contact to the roof organization of the student service organizations allow networking, transfer and diffusion of this approach at the level of higher education at regional and national level.

For developing this meta-prototype, the regional sustainability context of the German city of Marburg was helpful, as we found a consistent regional strategy towards sustainability and well-being. Replicability and institutional diffusion through the Student's Service Organizations at the national roof organization level was regarded

as a potential for transfer and diffusion. Students, professors and the Student's Service Organizations were regarded as additional supporters for the diffusion of our prototype. Project documentation and evaluation as well as a manual and a trailer were regarded as helpful resources for project implementation. Presentation as well as diffusion and media supported the impact of the 'Sustainable University Canteen' model as a regional system innovation.

5 Analyzing the Cycle of Multi-stakeholder-Rationalities

In order to set up the regional nutrition cycle, we first aimed at a better understanding of the rationalities and perspectives of regional stakeholders. The preliminary results achieved in the preparation of the first 'Sustainability Innovation Lab' realized in June 2018 will be presented in the following. The analysis draws on one visit of the 'university canteen' and 10 telephone stakeholder-interviews conducted by Master-students at an early stage of the process. Especially in the first steps of a design process, it is core to understand the rationalities of the stakeholders that will become involved. As for time reasons it is difficult to bring together core actors at once, stakeholder-interviews are helpful means to get a broader understanding about mindsets, perspectives, problems and solutions from the point of view of regional stakeholders. This provides a deeper understanding in order to search for sustainability solutions. The lab concept was designed according to the results of the interviews and realized with the stakeholders involved.

The regional nutrition cycle starts with the producers. How do they see their situation? What are their needs and wishes? What do they wish to achieve? The perspectives of producers already show their perceived problem of the mismatch between limited delivery possibilities and large demands of the university canteen. Criteria for users' and producers' interest in general is, to get good prices. Not necessarily farmers tend to enter production cooperatives: They may prefer to sell their products individually instead of selling them together with other producers. Farmers think that they might themselves individually negotiate better for best conditions. They may not be able to deliver stable prices all over the year and in any season. They may find difficulties in easy delivery needs of the university canteen which only wishes one cooperation partner for complex deliveries of as many products as possible. The interest of farmers is to achieve good prices regardless of weather conditions all over the year. Farmers in general are interested in reaching out to a high amounts customer if the price is right. They might have to solve together with other farmers the problems of packing quantities and container sizes. As well they might have to solve problems and questions of pre-processing stages (such as 250 kg potatoes daily, which have to be peeled and washed before entering the university canteen for further processing). Would farmers be willing to reach out for more organic, seasonal, regional, sustainable production? The analysis clearly shows, that farmers react on policy incentives and support. As the EU farming policy supports energy-oriented crop production (e.g. corn), most farmers will not follow ethical but economical cri-

teria. So, could a regional cooperative cover the demand of customers such as the university canteen and would they be able to deliver regional, seasonal and organic products? What other solutions could support solving the problems addressed here?

The second 'interface' in the cycle refers to the providers like the university canteen. As we can expect, their perspective and view on producers is different to the one of producers. Here, we find the problem of gaps between large purchase demand and previously limited production and offers. Criteria for providers like the university canteen are to receive conveniently located and wholesale shopping from one single source. Interests of the university canteen are to achieve stable prices over the year. The university canteen needs large packed quantities and container sizes and pre-processing stages for their food (such as potatoes peeled and washed). Could a regional supply cooperative better cover the demand of regional, seasonal organic products for large customers such as canteens? What other solutions could solve the problem?

The third connection point of the regional nutrition cycle refers to the view from providers to users. Here we find the problem of expected higher costs for sustainable food. The university canteen decision makers fear that students might not support and accept sustainable food. They might not be willing to eat regional, seasonal, biological, vegetarian, vegan. As we can see, criteria for 'providers' are to offer cheap food and to meet customers (imagined) requirements. The university canteen of course does not want to lose customers in the competition of suppliers and restaurants which in a university city can be found in a broad range. Moreover, the university canteen does not wish to 'educate' customers but to satisfy customers' requirements and needs. It does wish to correspond to the public interest and to promote public welfare. Questions arising here refer to possible marketing potentials: Could sustainable food be awarded with 'sustainability stars' and could more attractive offers be created? How could a product line cover regional, seasonal organic, vegetarian, vegan dimensions and then offer a stable marketing base? Could students' chip cards carry a 'bonus' to be provided with a free 'Regio Plus' meal when filled? Can the canteen adopt a sustainability marketing strategy? Could the canteen be able to realize a sustainable development approach oriented towards collective well-being?

Especially in the field of the regional nutrition cycle there are a lot of regional potential structures and resources. On the one hand, the users' and customers' side (e.g. networking with engaged citizens like 'vegan groups', the movement of volunteers the 'Tafel', initiatives like the 'Community Supported Agriculture' (CSA); supply cooperatives; the "Transition Town" movement, as well associations and organizations in the field of sustainable agriculture, sustainable trade, etc.) can offer a huge potential. The fourth 'interface' in the regional nutrition cycle refers to the cycle perspective from users to providers. The perspective of users is important here, as we face the problem of not distinguishing the origin of the food. Users like students or professors who are getting their lunch in the university canteen might wish to have a broader and stable supply of regional, local and biological food. They miss regional food and see the problem of lacking food diversity in the range of sustainable regional food. Moreover, they problematize the leftover food which might not necessarily be recycled. They problematize the lack of information. As the university canteen indeed

already is trying to support sustainable quality, this fact is not known in the public. This is why a sustainability marketing might help to support prioritizing sustainable food strategies. Like this, the existing supply policy of fixed portion sizes might be changed. As well, fixed combinations of main course, side dishes, salad or dessert might be changed into more flexible arrangements, in order to avoid leftover food. Users like students reflect on the lack of health orientation in the provided food. Again, the university canteen claims to have a low level of processed food—and again, these existing qualities are not known to the public. Students wish a higher level of nutritional awareness. Their criteria as ‘users’ relate to get delicious food and not to spend a lot of money on it. They wish to be offered healthy and sustainable food and they wish to make value-based decisions in their everyday life. In this sense, they want to buy ‘good conscience’ in sustainability. When appropriate incentives are given, users will support a university canteen’s sustainability strategy. Students would wish a convenient approach in which any sustainability item might easily be booked on and off via the chip card. Questions raised here refer to the question, whether ‘Regio-Stars’ might be used as a marketing tool in order to stimulate sustainable diets and sustainable lunch buy? Can ‘Regio-bonus-points’ be established as an incentive system for sustainable nutrition in the University Canteen? Or can users’ acceptance be increased by increasing visibility by better placement of sustainability menus? Can different spatial arrangement change student’s willingness to become sustainable consumers?

Furthermore, regional politicians and administration have to address the topic of sustainability strategies. Regional politicians reflect on the problem of excessive expectations towards policy-makers and administration and the problem of lacking fiscal possibilities of control. They refer to wrong energy-policies at the EU level and to funding strategies which they cannot change at the local level. They talk about the problem of attracting many people to regional sustainability strategies and the problem of ‘right’ funding policy. According to political actors, sustainability strategies should be embedded into public welfare economics and should support the regional climate goals and support an integrated regional marketing. In general, the field of politics wishes to stay attractive for voters and wishes to maintain and expand power. Regional economy should be supported and improved towards a stable regional development. Can the acceptance of regional citizens be enhanced by a stronger regional marketing strategy? Can policy create its own sustainability strategy by canteens and schools? Can regional attention be increased by press and marketing strategies? Can the topic of sustainability and sustainable nutrition even stronger be anchored in the consciousness of students? Could regional integrated supply structures be supported by regional sustainability ‘brokers’? Would policy promote cooperatives for producers, providers and consumers?

Finally, the whole food cycle has to be taken into account in a network innovation approach. Here, the problem of competition, of partial interests and institutional selfishness emerges. In a network perspective, the problem of isolated institutional strategies has to be handled. The lack of occasional structures for public welfare economics is addressed. Criteria for ‘network innovation’ are to anchor the criteria of public welfare economics, to support the regional climate targets, to support

networking for integrated development and to promote regional ecology, economy, culture, and social affairs towards sustainability strategies. How can solutions be found and designed in joint participatory processes? How can the university and its region work closer together? How can a regional public welfare approach be scaled into a regional strategy development? Could regional ‘Nutrition Councils’ provide an appropriate access within a “decentralized democracy”? (Willke 2016) Can the marketing instrument of extra bonus points or ‘regional sustainability stars’ provide appropriate incentives for network innovation? How can awareness-raising be supported, how can it emerge in the region?

6 Greening the University Canteen: Prototypes and Preliminary Results

In June 2018, the sustainability innovation lab was prepared as a 6 h format and co-facilitated by students. About 60 regional stakeholders came to develop prototypes for regional sustainability solutions for the sustainable university canteen. In a highly structured six step design approach, the innovation lab ‘Sustainable Canteen in the Regional Food Cycle: Produce—Market—Consume—Recycle’ was realized. The common interest and commitment for a regional sustainable nutrition cycle brought together relevant stakeholders. In mixed groups, each station representing the regional nutrition cycle (producers, distributors, users of canteens, politics, and network innovators) was addressed and systematically developed over several steps of the design process. In the design-thinking workshop, students worked as co-facilitators and experienced the complexity of the field. Seven different stations developed seven different prototypes which will be presented here shortly: Based on the problem definitions of stakeholders, the participants developed ideas and from there focused on solutions, which were developed as prototypes and which were tested by the plenary followed by a ‘next steps’ planning phase:

To strengthen the regional nutrition cycle and to green the university canteen, regional sustainability strategies should be developed jointly. The expertise, interest and strength of all actors involved was to effectively strengthen regional production, marketing, consumption and recycling. It was meant to develop a partnership between the university and regional stakeholders.

As the method of design thinking supports the development and design of prototypes, concrete prototypes were developed: In the group of producers, suggestions were made how regional providers might cooperate and offer sustainable crops to the university canteen. Like this, options for new co-operations and contracting potentials with the university canteen emerged.

A second idea referred to a regional brokerage-platform for producers and providers. Like this, supply and demand might be matched. Moreover, the platform might address logistical, contractual and legal issues, and provide a regional, digital marketing platform.

The group ‘Network Sustainable University Canteen’ suggested the prototype of an online platform and project database which might provide an ideal opportunity for topic-related knowledge- and innovation-management all over the 58 university canteens. The demand was recognized, as the roof organization does not provide a specific knowledge management in the field of sustainability.

Another prototype suggested sensitizing and inspiring users and consumers of the university canteen by promoting the topic of sustainable nutrition. Through personalized regional recipes brought about in students’ ‘sustainable recipe competitions’, identification with regional producers and the canteen itself would be supported. The group saw sustainability marketing as core in order to support regional and sustainable product identification, marketing and consumption.

In the field of public attention and awareness rising, another prototype was suggested. Here, the idea of a regional ‘Food Policy Council’ was brought up. Involving civil society and citizens as a kind of advisory board, the ‘Food Policy Council’ is meant to be a supportive format for a regional sustainability strategy. The ‘Food Policy Council’ would support networking, communication and transparency. As a pressure group for sustainable nutrition, it might more directly support shaping up a sustainability strategy for the region. Food Policy Councils bring different partners together and support articulation of civil societies’ voices. As representatives from other cities’ ‘Food Policy Councils’ were present, they supported the formation of a regional working group. Concrete appointments were already made to put the ideas into action.

Another group developed the prototype of a ‘sustainability-ideas-lunch-table’. They proposed a monthly meeting, so that the direct exchange between the university canteen and its users may be strengthened and established over time.

As we can see, the innovation lab brought about many prototypes which will be followed up in the ongoing process in 2018 and 2019. The diverse support of all participants and contributors showed the great interest in the topic and the wish to follow up the process over time. The evaluation of the innovation lab showed the big success. The design thinking approach was regarded as most helpful in order to bring about change towards sustainability strategies. Furthermore, the process was regarded as very productive and the results of the process were considered as carrying a lot of potential for change. Participants highlighted the need for an implementation strategy and the institutional will of decision makers to bring all these prototypes into existence. People saw that it takes time to realize the prototypes. Others hoped that actors would not be left alone in realizing those processes and finally others mentioned that the good ideas need to be defined and refined in a more detailed way. Many stakeholders commented that they would wish the process to continue in order to advance towards an integral regional sustainability strategy and to green the university canteen—together with all the other canteens in the region.

7 Outlook: Analyzing Professionalization and Strategizing into the National Level

Interconnected with our higher education Innovation Learning (IL) approach, a design research process is realized. Based on a visual narrative methodology (Weber 2013b), the learning and professionalization process of students and the transformational learning process of professionals in a longitudinal approach (Brake 2018) are analyzed. We are interested in identifying potentials as well as limitations of the process and of students' professionalization into organizational education consultancy learning in the field of sustainable development. We are interested in learning more about the professional development of students and the relevance of collaborative actions between various agents. We use participatory research as a transformative research approach (Hopkins et al. 2014; Della Porta and Diani 2015; Weber 2009, 2014, 2018b). Like this, in order to avoid predetermined schemes of analysis, we use participatory deliberation and inquiry approaches. Like this, we wish to increase the commitment of the educational and learning communities involved, too. In the ongoing process, we will learn how to improve the professionalization of students and their transformation processes. We will identify the strategies to enhance professional development. Promoting the democratization of knowledge, we furthermore support the visibility of voices outside the academic context (de Sousa Santos 2006). The program in this sense experiments with disruptive actions between the university, educational and societal innovation. Using visual narrative methods for students as well as for regional stakeholders, we expect to raise student participation in the reconstruction of curricular innovation experiences and to support the polyphony of visions, perspectives and skills. In this sense, experimental projects like this bring about the polyphonic structure of discourse (Bakhtin 1981, 1987).

In our research perspective, we are interested in professionals' learning, in order to understand better the preconditions of regional innovation cycles, to be analyzed as organized interplays of tacit and codified forms of knowledge (Asheim and Coenen 2006). Asheim and Coenen (2006, p. 164) suggest analyzing the interactive, collective learning based on intra- or inter-organizational institutions (routines, norms and conventions). They assume, that these bring about regulations for collective actions. In our discourse-oriented transformation perspective and in our ongoing research perspectives, we are interested in potentials for change towards the regional nutrition cycle.

Moreover, social interaction (Adger et al. 2005) and experience based approaches give insights in the professionalization learning of students in their professional development. The learning process and outcome-oriented perspective does not only focus on formal, but also on informal and implicit learning modes. Through image-based approaches, students will reflect how they develop intuitive knowledge in incidental learning (Marsick and Watkins 1990) taking place in the program experience. Learning here does not only refer to 'explicit' learning, but to the level of implicit professionalization of students, too. Both successes and mistakes, aware-

ness (Smylie 1995) in unconscious and conscious activities can be reflected in the professionalization process of students as future professionals.

As we can already see, complex processes like collective innovation learning between students and regional stakeholders presented here, offer a lot of potential—and are challenging at the same time. The chapter focused on the learnings, approaches taken, the way we theorize labs and discursive change strategies. As the project still is ongoing, the chapter is limited regarding the ability to report final outcomes already.

Nevertheless, the project carries the potential for scalability, once interconnecting the federal level, the roof organization of students' service organizations and the field of higher education 'canteening' towards healthy and sustainable food. The Students' Service roof organization is already interested in approaches like replacing animal-based products, green production and trade, cooperations with farmers, supply, the sustainable value chain, the field of sustainable nutrition in general. As the roof organization has already developed suggestions and publications, this potential can be used for the project, too. The project 'Greening the University Canteen' sees the scaling potential for the 58 member-organizations of university canteens, too. These organizations are being autonomous members, in the future, formats have to be found to involve interested member organizations. As dialogical formats offer a special potential for diffusion, the national roof organization might be a natural partner to use 'Sustainability Innovation Labs' for implementation and diffusion of sustainable circuits in nutrition at national and even international level.

Like this, universities can contribute and support transitions towards sustainability. Mobilizing and engaging communities for sustainability in campus development is a potential, which should be used much more (Too and Bajracharya 2015). Universities can become much more integrative regarding their approaches to implement sustainable development (Leal Filho et al. 2015; Faghihi et al. 2014). They need to travel the road from 'little victories to systemic transformation' and become a learning organization (Sharp 2002) in order to systematically implement sustainable development at an institutional level (Leal Filho et al. 2017a, b). They can organize for transformative teaching, learning as well as a transformative sustainability science for systemic change (König 2015). These strategies will be shaped and pre-conditioned, too, by funding schemes, by human resources schemes and by time provided.

Given all the preconditions and complexities for higher education learning and teaching modes, fortunately, the project carries potentials for cooperation not only at the local and regional but at the federal level, too. Fortunately, as well network structures support to dynamize this process as a level of system building and collective learning. University networks such as the German 'HochN' support the acceleration of sustainability learning and transformation in higher education institutions (HEIs). This extensive inter- and transdisciplinary network supports to exchange findings, experience, methods in order to support sustainable development at an institutional level. Projects like the one explained here will allow to promote sustainability related development of HEIs. Teaching, research, operations, sustainability, reporting trans-

fer and governance are the relevant fields of action. The network wishes to support sustainability as a core theme for higher education institutions.

The recognition of this key objective has been increased over the last decades (Barth 2016; Michelsen and Fischer 2016), but sustainability implementation still is a critical issue. Still, sustainability governance is rarely dealt with (Spira et al. 2013; Baker-Shelley et al. 2017). As always local conditions will differ in sizes, locations etc. and always be specific, change strategies towards sustainability in general will need to be adapted. Leal Filho (2015) has suggested a typology of HEIs and their sustainability processes. At any level of institutional integration, participatory approaches and innovation labs will be crucial to bring about strategies for sustainability. Engagement and spirit will be core for institutionalizing processes (Disterheft et al. 2015; Shriberg 2002; Spira et al. 2013) on the way towards greening the university canteen and bringing about regional innovation systems in the circular economy.

As we have seen based on our ongoing project, HE professionalization of students, regional circular economy and a scalable model for learning ‘Organizational Education for Sustainable Development’ (OESD) as well as transfer and diffusion might become a ‘concrete utopia’ to be followed up. In a Foucauldian notion stakeholders and promoters of this project can see a ‘heterotopia’ rising—as there is no other space than the earth we share and the discourses we live in.

References

- Adgera WN, Arnella NW, Tompkins EL (2005) Successful adaptation to climate change across scales. *Glob Environ Change* 15(2):77–86
- Adler A, Weber SM (2018) Future and innovation labs as heterotopic spaces. In: Weber SM, Schröder C, Truschkat I, Peters L, Herz A (eds) *Organisation und Netzwerke*. Springer, Wiesbaden, pp 375–383
- Asheim B, Coenen L (2006) Contextualising regional innovation systems in a globalising learning economy: on knowledge bases and institutional frameworks. *J Technol Transf* 31:163–173
- Baker-Shelley A, van Zeijl-Rozema A, Martens P (eds) (2017) A conceptual synthesis of organisational transformation: how to diagnose, and navigate, pathways for sustainability at universities? *J Clean Prod* 145:262–276
- Bakhtin MM (1981) Discourse in the novel. In: Holquist M (ed) *The dialogic imagination: four essays*. University of Texas Press, Austin, pp 259–422
- Bakhtin MM (1987) *Rabelais und seine Welt. Volkskultur als Gegenkultur*. Suhrkamp, Frankfurt am Main
- Barth M (2016) Forschung in der Bildung für nachhaltige Entwicklung: Entstehung und Verortung eines Forschungszweiges. In: Barth M, Rieckmann M (eds) *Empirische Forschung zur Bildung für nachhaltige Entwicklung-Themen, Methoden und Trends (Schriftenreihe “Ökologie und Erziehungswissenschaft” der Kommission Bildung für eine nachhaltige Entwicklung der DGfE)*. Barbara Budrich, Opladen, pp 37–50
- Boden R, Nedeva M (2010) Employing discourse: universities and graduate ‘employability’. *J Educ Policy* 25:37–54
- Brake A (2018) Prozessorientierung und Längsschnittdesign als Forschungsstrategie der Organisationspädagogik. In: Göhlich M, Weber SM, Schröder A (eds) *Handbuch Organisationspädagogik*. Springer, Wiesbaden, pp 307–319

- Cooke P (2001) Regional innovation systems, clusters, and the knowledge economy. *Ind Corp Change* 10:945–974
- de Sousa Santos B (2006) Globalizations. *Theory Cult Soc* 23:393–399
- Deem R (2001) Globalization, new managerialism, academic capitalism and entrepreneurialism in universities: is the local dimension still important? *Comp Educ* 37:7–20
- Defert D, Ewald F (eds) (1994) Michel Foucault: Dits et Ecrits 1954–1988. Tome III: 1976–1979. Editions Galliard, Paris
- Della Porta D, Diani M (eds) (2015) *The Oxford handbook of social movements*. Oxford University Press, Oxford
- Disterheft A, Caeiro S, Azeiteiro UM, Leal Filho W (2015) Sustainable universities—a study of critical success factors for participatory approaches. *J Clean Prod* 106:11–21
- Doloreux D, Parto S (2005) Regional innovation systems: current discourse and unresolved issues. *Technol Soc* 27:133–153
- Faghihi V, Hessami AR, Ford DN (2014) Sustainable campus improvement program design using energy efficiency and conservation. *J Clean Prod* 107:400–409
- Foucault M (1972) *The archaeology of knowledge and the discourse on language*. Pantheon Pbk, New York
- Geissdoerfer M, Savaget P, Bocken NMP, Hultink EJ (2017) The circular economy—a new sustainability paradigm? *J Clean Prod* 143:757–768
- Göhlich M, Weber SM, Schröer A et al (2014) Forschungsmemorandum Organisationspädagogik. *Erziehungswissenschaft* 25:94–105
- Hopkins D, Stringfield S, Harris A, Stoll L, Mackay T (2014) School and system improvement: a narrative state-of-the-art review. *Sch Eff Sch Improv* 25:257–281
- König A (2015) Changing requisites to universities in the 21st century: organizing for transformative sustainability science for systemic change. *Curr Opin Environmental Sustain* 16:105–111
- Leal Filho W (ed) (2015) *Transformative approaches to sustainable development at universities working across disciplines*. Springer, Berlin
- Leal Filho W (ed) (2018) *Nachhaltigkeit in der Lehre. Eine Herausforderung für Hochschulen*. Springer, Berlin
- Leal Filho W, Shiel C, do Paco A (2015) Integrative approaches to environmental sustainability at universities: an overview of challenges and priorities. *J Integr Environmental Sci* 12:1–14
- Leal Filho W, Mifsud M, Shiel C, Pretorius R (eds) (2017a) *Handbook of theory and practice of sustainable development in higher education*, vol 3. Springer, Berlin
- Leal Filho W, Wu Y-CJ, Brandli LL, Veiga Avila L, Azeiteiro UM, Caeiro S, da Rosa Gama Madruga LR (2017b) Identify and overcoming obstacles to the implementation of sustainable development at universities. *J Integr Environmental Sci* 14:93–108
- Lundvall B-A (1992) *National systems of innovation. Towards a theory of innovation and interactive learning*. Pinter Publishers, London
- Lundvall B-A (2004) *Why the new economy is a learning economy*. DRUID Working Papers 04-01, DRUID. Copenhagen Business School, Department of Industrial Economics and Strategy/Aalborg University, Department of Business Studies
- Lyotard J-F (1994) *Das postmoderne Wissen. Ein Bericht*. Passagen, Bremen
- Marshak RJ, Grant D (2008) Organizational discourse and new organization development practices. *Br J Manag* 19:7–19
- Marsick VJ, Watkins K (1990) *Informal and incidental learning in the workplace*. Routledge, London
- Michelsen G, Fischer D (2016) Bildung für nachhaltige Entwicklung. In: Ott K, Dierks J, Voegt-Kleschin L (eds) *Handbuch Umweltethik*. J. B. Metzler, Stuttgart, pp 330–334
- Nölting B, Dembski N, Pape J, Schmuck P (2018) Wie bildet man Change Agents aus? Lehr-Lern-Konzepte und Erfahrungen am Beispiels des berufsbegleitenden Masterstudiengangs „Strategisches Nachhaltigkeitsmanagement“ an der Hochschule für nachhaltige Entwicklung Eberswalde. In: Leal Filho W (ed) *Nachhaltigkeit in der Lehre. Eine Herausforderung für Hochschulen*. Springer, Berlin, pp 89–107
- Oelkers J (2009) *Reformpädagogik*. Beltz Juventa, Seelze

- Pike L, Shannon T, Lawrimore K, McGee A, Taylor M, Lamoreaux G (2003) Science education and sustainability initiatives. A campus recycling case study shows the importance of opportunity. *Int J Sustain High Educ* 4:218–229
- Razzouk R, Shute VJ (2012) What is design thinking and why is it important? *Rev Educ Res* 82:330–348
- Schneidewind U, Singer-Brodowski M (2013) *Transformative Wissenschaft Klimawandel im deutschen Wissenschafts- und Hochschulsystem*. Metropolis, Marburg
- Sharp L (2002) Green campuses: the road from little victories to systemic transformation. *Int J Sustain High Educ* 3:128–145
- Shriberg M (2002) Institutional assessment tools for sustainability in higher education: strengths, weaknesses, and implications for practice and theory. *High Educ Policy* 15:153–167
- Smylie MA (1995) Teacher learning in the work place: implications for school reform. In: Guskey TR, Huberman M (eds) *Professional development in education: new paradigms and practices*. Teachers College Press, New York, pp 92–113
- Spicer A, Alvesson M, Kärreman D (2009) Critical performativity: the unfinished business of critical management studies. *Hum Relat* 62:537–560
- Spira F, Tappeser V, Meyer A (2013) Perspectives on sustainability governance from Universities in the USA, UK, and Germany: how do change agents employ different tools to alter organizational cultures and structures? In: Caeiro S, Leal Filho W, Jabbour C, Azeiteiro UM (eds) *Sustainability assessment tools in higher education institutions. Mapping trends and good practices around the world*. Springer, Berlin
- Too L, Bajracharya B (2015) Sustainable campus: engaging the community in sustainability 16:57–71
- Weber SM (1998) *Organisationsentwicklung und Frauenförderung: Eine empirische Untersuchung in drei Organisationstypen der privaten Wirtschaft*. Ulrike Helmer Verlag, Königstein
- Weber SM (2000) Power to the People!? Selbstorganisation, Systemlernen und Strategiebildung mit großen Gruppen. In: *Sozialwissenschaftliche Literaturreisenschau*, 2/2000, pp 63–89
- Weber SM (ed) (2002) *Vernetzungsprozesse gestalten. Erfahrungen aus der Beraterpraxis mit Großgruppen und Organisationen*. Dr. Th., Gabler Verlag, Wiesbaden
- Weber SM (2004) *Organisationsnetzwerke und pädagogische Temporärorganisation*. In Böttcher W, Terhart E (eds) *Organisationstheorie in pädagogischen Feldern - Analyse und Gestaltung*. VS, Wiesbaden, pp 253–269
- Weber SM (2005) *Rituale der Transformation. Großgruppenverfahren als Pädagogisches Wissen am Markt*. VS, Wiesbaden
- Weber SM (2006) Systemreflexive Evaluation von Netzwerken und Netzwerk-Programmen: Eine methodologische Perspektive. In: *REPORT Zeitschrift für Weiterbildungsforschung* 2006(4): Netzwerke. S. 17–25
- Weber SM (2009) *Großgruppenverfahren als Verfahren transformativer Organisationsforschung*. In: Kühl S et al (ed) *Handbuch Qualitative und Quantitative Methoden der Organisationsforschung*. VS, Hamburg, pp 145–179
- Weber SM (2013a) *Dispositive des Schöpferischen: Genealogie und Analyse gesellschaftlicher Innovationsdiskurse und institutioneller Strategien der Genese des Neuen*. In: Rürup M, Bormann I (eds) *Innovationen im Bildungswesen. Analytische Zugänge und empirische Befunde*. VS, Wiesbaden, pp 191–221
- Weber SM (2013b) *Partizipation und Imagination*. In: Weber SM, Göhlich M, Schröer A, Macha H, Fahrenwald C (eds) *Organisation und Partizipation. Beiträge der Kommission Organisationspädagogik*. VS, Wiesbaden, pp 71–82
- Weber SM (2014) *Change by Design? Dispositive des Schöpferischen und institutionelle Felder des Neuen*. In: Weber SM, Göhlich M, Schröer A, Maurer S (eds) *Organisation und das Neue*. Springer, Wiesbaden, pp 27–48
- Weber SM (2017) *Methodologien des Übergangs- Organisieren des Neuen. Dialogisch Gestalten und Forschen mit partizipativen Großgruppenverfahren*. In: Schemme D, Novak H (Hrsg.): *Gestaltungsorientierte Forschung-Basis für soziale Innovationen*. Bonn: BIBB, pp 461–487

- Weber SM (2018a) Strategieentwicklung als Gegenstand der Organisationspädagogik. In: Göhlich M, Weber SM, Schröer A (eds) *Handbuch Organisationspädagogik*. Springer, Wiesbaden, pp 595–607
- Weber SM (2018b) Innovationsmanagement als Gegenstand der Organisationspädagogik. In: Göhlich M, Weber SM, Schröer A (eds) *Handbuch Organisationspädagogik*. Springer, Wiesbaden, pp 517–529
- Weber SM, Wieners S (2018) Diskurstheoretische Grundlagen der Organisationspädagogik. In: Göhlich M, Weber SM, Schröer A (eds) *Handbuch Organisationspädagogik*. Springer, Wiesbaden, pp 635–647
- Weik E, Lang R (2007) *Moderne Organisationstheorien. 2. Strukturorientierte Ansätze*. Gabler Verlag, Wiesbaden
- Willke H (2016) *Dezentrierte Demokratie: Prolegomena zur Revision politischer Steuerung*. Suhrkamp, Frankfurt am Main
- Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen (WBGU) (eds) (2011) *Welt im Wandel: Gesellschaftsvertrag für eine Große Transformation*. Hauptgutachten 2011. AZ Druck und Datentechnik GmbH, Berlin

Professor Susanne Maria Weber is professor for social, political and cultural conditions of education in international perspectives at Philipps University of Marburg, Germany. Inspired by discourse analytical and inequality theoretical as well as practice theoretical perspectives, she especially is interested in transformational learning, large group interventions, organizational change and network development. In this sense she focuses on organizational dimensions of sustainability development in regional settings and currently works on developing a discourse analytical consultancy approach for organizational and networked learning for economical cycles and regional development.

Marc-André Heidelmann currently works as project manager of the design research project ‘The Sustainable Canteen’ funded by the Council for sustainable development (2018–2019) at Philipps University of Marburg, Germany, department of education, research group ‘Innovation—Organization—Networks’. After finishing his state exams in the disciplines of Political Sciences, Economics, German, Ethics and Philosophy in 2016, in his dissertation he empirically analyzes students’ process of professionalisation in the organizational education-training program connected to the project ‘greening the university canteen’. His research and teaching focuses on organizational education, professionalization, transformative Higher Education; Innovation Learning of students, professionals and regional stakeholders.

The 18 min documentary video “Innovation Lab Sustainable Nutrition” gives insights into the methodical approach taken in our “Sustainability Design-Lab” <https://www.youtube.com/watch?v=57PAqIaDrQg>.