

The Potential and Limits of Service-Learning to meeting the Goals of Education for Sustainable Development –

The case of the "Sustainability Challenge" Service-Learning with Companies

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AFFIDAVIT

I hereby affirm that this Master's Thesis represents my own written work and that I have used no sources and aids other than those indicated. All passages quoted from publications or paraphrased from these sources are properly cited and attributed.

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ABSTRACT

This thesis seeks to ascertain whether companies participating in Service-learning (SL) programs experience a learning effect that meets the goals of Education for Sustainable Development (ESD), as determined by UNESCO. As research in this field is still sparse, a series of expert interviews was conducted to determine whether SL within companies has the potential to meet the goals of ESD. In addition, the research sought to identify a method capable of detecting the effect – if any – SL has on companies. A case study was undertaken to evaluate the potential and limitations of SL within companies. The result clearly indicates that SL has an effect on companies, but it is one that is dependent on the company's size, its orientation towards sustainability, and the position of the SL-partner within the company in terms of power to bring about changes. The thesis concludes with recommendations on how SL could be better implemented within companies to meet the goals of ESD.

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"Instruction does much, but encouragement everything." Johann Wolfgang Goethe

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TABLE OF CONTENTS

AffidavitII					
Abstra	actIII				
Ackno	Acknowledgements IV				
List of Figures VIII					
List of	Abbreviations IX				
1	Introduction				
1.1	We need to talk1				
1.2	Statement of the research question				
1.3	Relevance of the research question5				
1.4	Structure of the thesis				
2	Literature review				
2.1	Introduction				
2.2	Presentation of the key concepts				
2.2.1	On sustainable development				
2.2.2	On sustainability science				
2.2.3	On education for sustainable development (ESD)10				
2.2.4	On service-learning (SL)11				
2.2.5	On transformative learning				
2.3	Education for sustainable development (ESD)13				
2.3.1	Introduction to ESD				
2.3.2 2.3.3	Definition of ESD				
2.3.3	History of ESD				
2.3.4	Potential and limits of ESD				
2.3.6	Goals of ESD				
2.4	Service Learning (SL)				
2.4.1	Introduction to SL				
2.4.2	Definition of SL24				
2.4.3	History of SL				
2.4.4	Characteristics of SL				
2.4.5	Strengths and weaknesses of SL				
3	Methodology				
3.1	Introduction				

3.2	Scope and limitations	. 35	
3.3	Research instruments	. 36	
3.3.1	Literature review	. 37	
3.3.2	Expert interviews		
3.3.3	Case study		
3.4	Data analysis	. 41	
4	Case Study "Sustainability Challenge"	. 44	
4.1	Introduction	. 44	
4.2	Regional Centers of Expertise on ESD (RCE)	. 44	
4.3	The "Sustainability Challenge"	. 45	
4.3.1	The role of companies in the "Sustainability Challenge"	. 47	
4.3.2	Interview partners of the "Sustainability Challenge"	. 48	
5	Analysis	51	
5.1	Validity of SL in cooperation with companies		
5.2	Evaluation of SL in cooperation with companies		
5.3	Potential and limitations of SL with companies to meet the goals of ESD		
5.3.1	Potential of SL with companies to meet the goals of ESD		
5.3.2	Limitations of SL with companies to meet the goals of ESD		
c	Decommendations	62	
6	Recommendations	. 02	
7	Conclusion	. 64	
7.1	Summary	. 64	
7.2	Contribution to knowledge	. 65	
7.3	Future research	. 66	
8	Bibliography	67	
0		. 07	
Appe	ndices	. 73	
Appe	ndix 1: 10 Principals of Good Practice for Combining Service and Learning	. 73	
Appe	Appendix 2: Interview guideline for expert interviews74		
Appendix 3: Transcript of expert interviews			
Appe	ndix 4: Interview guideline for SL-partners	. 87	
Appendix 5: Transcript of SL-Partner interviews92			



LIST OF TABLES

Table 2-1 Levels of Learning	12
Table 3-1 Service-Learning Interview Partners	40

LIST OF FIGURES

Figure 2-1: Four Dimensions of Sustainability by UNESCO (2010)	9
Figure 2-2 Learning cycle	28
Figure 2-3 Focus of SL	32
Figure 3-1: Applied methods	37
Figure 3-2 Effect of SL on companies	42
Figure 4-1: "Sustainability Challenge"	46



LIST OF ABBREVIATIONS

BMWFW	Bundesministerium für Wissenschaft, Forschung und Wirtschaft
CSR	Corporate Social Responsibility
DESD	Decade on Education for Sustainable Development
ESD	Education for Sustainable Development
GAP	Global Action Programme on ESD Report
RCE	Regional Centre of Expertise on Education for Sustainable Development
SL	Service-Learning
UN	United Nations
UNCED	United Nations Conference on Education and Development
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific, Cultural Organisation
UNU	United Nations University

1 INTRODUCTION

"Education is the most powerful weapon you can use to change the world." Nelson Mandela

1.1 We need to talk...

Imagine a world with responsible citizens, who think critically and reflect upon their actions. People who are not just aware, but also care about their environmental impacts, and who are empowered to live their lives based on mutual tolerance for each other as well as for nature. Imagine an economy that is not driven by continuous economic expansion and competition, but an increase in living quality (i.e. shorter working times, good health services, clean air, safety, etc.) motivated through values like community engagement, cooperation and holistic thinking, where businesses take a proactive role in terms of responsibility towards society and the environment. Imagine a healthy environment, with ecosystems featuring great biodiversity and clean water, where human life develops within environmental boundaries.

This proposal may seem imaginative and even utopian in the context of contemporary society but these times of on setting climate change and extreme inequality, where 1% of the population owns more than 50% of the world's wealth (Oxfoam 2014), we cannot afford much longer to look away from certain realities. We have already crossed four out of nine planetary boundaries, namely biogeochemical flows, land-systems change, climate change and genetic diversity (see Steffen et al. 2015) and tripled our ecological foot print between 1961 and 2005 (Curren 2009). Further, we probably lose up to 250 species every day (Orr 1994). Hence, there is a pressing need for this utopia to become reality in order to secure our survival and wellbeing. Therefore the question arises of what can be done to facilitate a transformation towards a more sustainable world? This was also one of the key questions posed at the United Nations (UN) Johannesburg conference held in 2002, where the foundations for the UN Decade on Education for Sustainable Development (DESD) were laid out. Clearly there are many answers to this question, many ways and possibilities to facilitate the shift towards a more sustainable future, one of which is through education (Leal Filho et al. 2014). Education, besides being a human right, is a prerequisite for sustainable development and an important tool for democracy, by allowing informed decision making as well as good governance. However, as highlighted by Orr (1994), the mere education of people does not necessarily lead to any improvements in terms of sustainability, but rather the opposite may be the case (see Orr 1994). Already in 1974, the economist E.F. Schumacher wrote

"'The volume of education has increased and continues to increase, yet so do pollution, exhaustion of resources, and the dangers of ecological catastrophe. If still more education is to save us, it would have to be education of a different kind: an education that takes us into the depth of things"

(Schumacher written 1974, published 1997, as quoted in Sterling 2010 Pg 17)

Quite contrary to Schumacher's wish for another more profound form of education is the description of the current situation by Prof. Birkhead, who reflects on 30 years of experience in higher education and laments the inability of learners to think independently and to take action.

"The most striking thing about some undergraduates is their dependence, their lack of initiative and their reluctance to think for themselves. This is reflected in their oftenshocking inability to engage in intellectual conversation and to organise their thoughts in writing. New undergraduates seem to expect to be told what to do at every stage. It is almost as though the spoon-feeding-and-teaching-to-the-test culture at school has drained them of independent thought."

(Birkhead 2009 No page)

Dale and Newman (2005) also note that learners in today's education system lack the ability to connect and apply their knowledge. Students often do not get animated to challenge the common paradigms, but instead the current system encourages individualistic and competitive behaviour (Cortese 2003). This form of education which fails to promote care for others, including future generations, and neglects the impacts we have on them has led us to destroying our living-environment at a tremendous pace, which makes time a pressing factor for transformation.

Hence, there is a need for education that does not stop at the thresholds of educational institutions and which informs people about the impact of their life-styles, that encourages humans to critically reflect upon their actions, and that empowers them to proactively participate in a transformation towards a more sustainable future. This form of education can be called Education for Sustainable Development (ESD) (UNECE 2009). ESD "is about shaping a better tomorrow for all" (UNESCO 2014, Pg. 8). In the document "The future we want" the UN acknowledges that:

"[Sustainable development] can only be achieved with a broad alliance of people, governments, civil society and private sector, all working together to secure the future we want for present and future generations"

(United Nations 2012, paragraph 13)

This shows clearly that there is a need to not only involve students, but also other actors like companies in this process of learning for a more sustainable future.

Since the year 2000, companies have overtaken countries as the world's biggest economies. Out of the 100 richest economies, based on corporate sales and countries' GDPs, 51 are corporations and only 49 are countries (Anderson and Cavanagh 2000). This shows where the power in our world accumulates and why it is so important to include companies in the learning process for sustainable development. Further, in Austria only 14% of the population between the ages of 25-64 hold an academic degree (OECD 2014) but 75% of Austrians are employed (Statistik Austria 2015). This suggests that by involving companies in learning processes towards ESD a wider spectrum of learners is reached. Hence, companies are important actors when aiming for a more sustainable development but how can they be integrated in the learning process towards sustainability?

One of the most promising methods promoting ESD in higher education is Service-Learning (SL), which represents an alternative teaching approach whereby learners are confronted with real-world problems and try to find solutions in conjunction with partners such as local communities, companies and NGOs (Stuteville and Ikerd 2009). This method connects the wish for a more sustainable development path, with the learning of students and the role of companies, as it not only encompasses formal learning, which refers to classical learning where learners receive a certificate, but also informal and non-formal learning. There is a great volume of literature highlighting the positive effect SL has on students (Gibson et al. 2011; Lester et al. 2005; Mitchell 2008; Stuteville and Ikerd 2009; Mc Reynolds 2014; Eyler and Giles 1999). So far, however it is unknown whether companies participating in SL also learn lessons that contribute to the goals of ESD.

Consequently, this master thesis seeks to determine whether SL teaching methods impact companies in ways which further the goals of ESD.

1.2 Statement of the research question

Living in a democracy, people can hardly be forced to become responsible citizens, but ESD aims to educated children, students and adults in a way that makes them aware of their impacts and empowers them to lead a life that does not limit the opportunities for other humans living on this planet as well as future generations. One of the methods to encourage compatible behaviours is SL, which has evolved significantly over the last decades (Beatty 2010, Backhaus-Maul and Roth 2013), but most of the literature focuses on the learning process experienced by students (Mc Reynolds 2014). Some authors also assess the effect on universities and staff-members (see Lester et al. 2005), but there is hardly any literature to be found about the learning effect of the project partners, especially companies involved in the SL process. Therefore, the research question of this master thesis is:

"What are the potential and limits of Service-Learning with companies to meeting the goals of Education for Sustainable Development?"

In order to scientifically address this question: (1) the validity of pursuing the goals of ESD by employing the SL method with companies must be evaluated; (2) this requires the definition of indicators through which the effects of SL on companies may be displayed; and (3) measurement across these indicators will determine whether the SL process meets the stated goals of ESD. Hence, the aim is to identify whether SL has an effect on profit oriented companies on a personal, corporate or societal level in terms of contribution to the goals of ESD. The sub questions addressed in this thesis are the following:

- Is SL a valid method to pursue the goals of ESD in the context of companies?
- To what extent does SL in cooperation with companies meet the goals of ESD regarding change within companies?
- Which factors influence the effect of SL on companies?
- What are the potential and limits of SL with companies to meet the goals of Education for Sustainable Development?
- How would the concept of SL need to be adapted to improve the fulfilment of ESD when cooperating with companies?

Answering these questions is of utmost importance because of the reasons which are elaborated in the following section.

1.3 Relevance of the research question

"Education is an indispensable element for achieving sustainable development" United Nations 2004

The overall topic of this thesis is ESD, its goals in context of SL and companies, as well as how the effect of SL can be evaluated in terms of meeting the goals of ESD. As described in the previous section and as recognised by the United Nations Educational, Scientific- and Cultural Organisation, UNESO, education is an important tool for promoting a sustainable future. This thesis contributes to the field of ESD by emphasising an under-researched topic and investigating what can be done to better meet the goals of ESD.

In terms of SL, the study addresses an important gap in the SL literature and holds the practical potential of improving the SL, which has been previously identified by several authors. It further provides practical suggestions for improving the implementation of SL with companies to better realize its potential for achieving ESD goals.

Until now, most of the literature in the field of SL has emphasised the learning process of students (see Eyler and Giles 1999, Mc Reynolds 2014, Lester et al. 2005). Barth et al. (2014) argue that there is a lack of empirical literature addressing the incidental learning process among members not directly involved in the program. Further, they state that more research is needed to investigate the potential of SL in stimulating learning processes in the context of ESD. There is hardly any research on the community perspective, as it lacks financial and motivational backing (Arlach et al. 2009). Through SL, companies and communities get in contact with sustainability related issues, hence there is the possibility that SL not only impacts the social awareness of students but also of other participants, which would be an additional benefit beside the "service" provided by students. The research question explicitly targets the non-formal and informal learning of SL-partners and therefore adds a new perspective to the field of research.

In the same vein, Backhaus-Maul and Roth (2013) state in their empirical analysis of SL at German universities that there is a need for more research concerning the effects and results of service learning because there is only very little research so far and the method is gaining importance in the Germany. In case of the "Sustainability Challenge", when analysing the benefits and changes that arise with companies involved, inevitably the effects and results of service learning are going to be assessed and hence meet the demand of Backbaus-Maul and Roth.

Similarly, Lounsburry and Pollack (2001) argue that there is a need for more research on the relationship between the different actors involved in a SL project. The mapping out of concrete connections between students, partners and universities, and tracking of flows of knowledge, ideas and resources can shape partnerships in a positive and progressive way. In this master thesis, which analyses the impact of SL on companies, the influencing interaction which students have on the companies is a major concern.

There is also the potential that this thesis will reveal other benefits that have been overlooked so far. These results should be used to facilitate the future implementation of SL-projects by adapting the method to making this learning approach more appealing for stakeholders like project partners and universities.

Additionally, by exposing the limitations of this approach and making recommendations on how the goals of ESD can be achieved more effectively, this thesis contributes to the improvement of the application of SL in cooperation with companies.

1.4 Structure of the thesis

In the first chapter, the reader is introduced to the topic and to the issues the research question tries to tackle.

Chapter 2, the literature review, provides the reader with a theoretical understanding of ESD and SL. Key-concepts are introduced and briefly defined. The concept of ESD is explained in depth. The potential and limits of ESD are analysed, as well as its objectives. An overview of the method of SL is provided, including a short history and an analysis of the strengths and weaknesses. The literature review provides the analytical framework for the case study and the empirical research.

The third chapter presents the methodology, in which the scope and limitations are explained, applied research instruments are described and data analysis procedure are presented.

The fourth part of the thesis describes the empirical study, in which data was collected through expert interviews with three interview partners from the fields of ESD and SL. Further, the case study into the "Sustainability Challenge" by the Regional Center of Expertise on ESD Vienna (RCE Vienna) is presented, including qualitative interviews with former project partners which are fundamental in addressing the research question regarding meeting the goals of ESD.

Next, in the analysis, the results of the interviews and the case study are combined and evaluated. The potential and limits of SL with companies to meet the goals of ESD are presented based on the conducted interviews and literature review.

In chapter 6 the reader is provided with recommendations on how the concept of SL could be improved when cooperating with companies, based on the collected results.

The thesis ends with a conclusion summarizing the found results, highlighting the contributions to knowledge and elaborating on future research opportunities

2 LITERATURE REVIEW

"Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world."

- Paulo Freire, Pedagogy of the Oppressed

2.1 Introduction

The literature review seeks to provide the reader with an introduction to the concepts and terms used, in order to frame the realm of this thesis. It consists of three sections. In the first section the key concepts are briefly stated to introduce the reader to the topic. As many different definitions of the various concepts exist, it is also important to reveal how certain terms are understood and used in this thesis. The second and third sections provide more in-depth analyses of ESD and SL respectively.

2.2 Presentation of the key concepts

This section serves to introduce the key concepts used in this thesis so as to orient the reader and to establish how certain terms are applied in the thesis.

2.2.1 On sustainable development

The most commonly referred to definition of sustainable development is the one by the former Norwegian Prime Minister Gro Harlem Brundtland, who defined sustainable development as development that

"meets the needs of the present without compromising the ability of future generations to meet their own needs"

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(World Commission on Environment and Development, 1987 Pg 16)
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The definition given by Brundtland is very broad; for example, the definition of "needs" is open-ended. This failure to clearly define 'sustainable development' was intentional, in order to facilitate the inclusion of and cooperation between various stakeholders (Dale and Newmann 2005), and also because the stakeholders couldn't agree on a more stringent definition,

which would demand greater commitment. Thus, it is beneficial to additionally provide the reader with a definition of a sustainable society, since the topic of this thesis, education, is foremost a social one.

"A sustainable society is one that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or social systems of support."

(Meadows et al. 1992, Pg 209)

This definition by Meadows et al. (1992) is essential in the context of this thesis because it emphasises values like wisdom, foresight and flexibility which connect the field of sustainable development within the realm of ESD. It also highlights not only the physical but also the social limits of current systems.

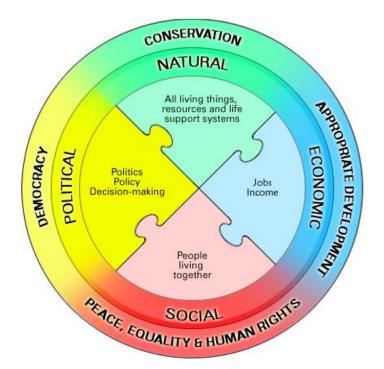


FIGURE 2-1: FOUR DIMENSIONS OF SUSTAINABILITY BY UNESCO (2010)

The four dimensional model presented by the United Nations Educational, Scientific, Cultural Organisation, UNESCO, is often referred to in discussing sustainable development. It encompasses the four dimensions of environment, society, politics and economy (UNESCO 2009), and displays the high interconnectivity between them. Sustainability science emerged as a new field which aims to encompass these disparate sustainability aspects and their connections with each other.

2.2.2 On sustainability science

Sustainability science can be seen as the science behind the Brundtland report trying to unify the various fields connected to sustainability. It integrates industrial, social and environmental processes in a global context (Mihelcic et al. 2003). Every year more than 3,000 academic articles are published on sustainability (Kajikawa et al. 2007). Sustainability science aims to integrate different sub-domains like agriculture, education, ecological economics, energy and health, and also to provide a forum for discussion addressing the polyphonic and polysemic nature of sustainability (Kajikawa et al. 2007).

This thesis is related to economic, educational and pedagogical sciences, as well as sociological and political realms, but most of all sustainability, sustainable development and ESD, and therefore can be located in the field of sustainability science.

2.2.3 On education for sustainable development (ESD)

ESD reflects the parent term of "Sustainable Development" and is based on the same principles and values, including economic, social, political and environmental dimensions (UNECE 2009). As ESD is still developing as a broad and comprehensive concept, there is no universally recognised definition. The definition used in this thesis is based on documents provided by the UN because they are widely used and recognised.

In the recently published Roadmap for Implementing the Global Action Programme on ESD, also referred to as GAP Report by UNESCO, ESD is defined in the following way:

"ESD empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and just society, for present and future generations, while respecting cultural diversity"

(UNESCO 2014, Pg 12)

Essentially, ESD tries to include sustainability issues in teaching and learning. It is a holistic and transformational form of education, which encompasses pedagogy, content, outcome, and learning environment. It aims to motivate learners to critically reflect upon their actions and empowers them to take action for sustainable development in a collaborative way. These features of ESD are also at the core of SL.

2.2.4 On service-learning (SL)

There is a great variety of definitions of SL (Flecky 2011). The following definition by Bringle and Hatcher (1966) encompasses various important characteristics of SL:

Service learning is a "(...) credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility."

(Bringle and Hatcher 1996 Pg 222)

What distinguishes SL from extracurricular volunteer service is that the focus is not on the output of the project but on the reflection process of the participants, which is stimulated through small group discussions, class presentations and writing assignments. Unlike internships, the learning experience is not necessarily skill-based (Bringle and Hatcher 1996). In brief, SL is a "(...) philosophy of education that focuses on service to the community" (Segrist 2013 Pg 1159). SL is a pedagogic tool to enhance students understanding of civic responsibility, encourage critical thinking and improve their problem-solving skills (Flecky 2011). By demanding that the learners reflect upon their actions, SL encourages a paradigm shift and therefore forms part of transformative learning.

2.2.5 On transformative learning

The term "Transformative Learning" originated from the work of Jack Mezirow, an adult educationalist, who defined transformative learning as follows:

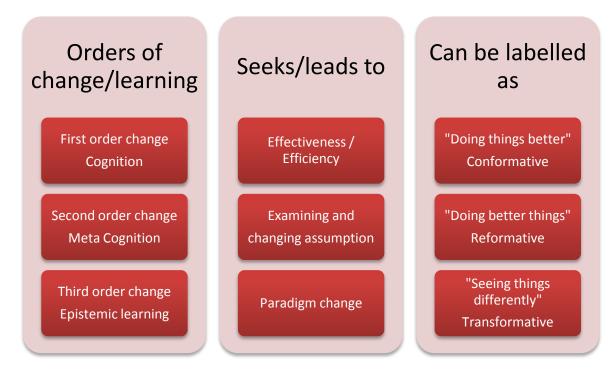
"Transformative learning is learning that transforms problematic frames of reference sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets)—to make them more inclusive, discriminating, open, reflective, and emotionally able to change."

(Mezirow 2003 Pg 58)

Transformative learning plays an important role in this thesis as it highlights the connection between the SL teaching approach and the goals of ESD. As highlighted by Orr (1994), educa-

tion itself is not a guarantee for more sustainable development. Sterling (2010) shows in Table 2-1 "Levels of Learning" that the first level of learning is simply about "doing things better", meaning in a more efficient way, and without necessarily questioning the purpose. The second level of learning addresses "doing better things", where a change in assumptions takes place as a result of examining the underlying reasons. The third level is called "Transformative Learning" and refers to a change in paradigm, which is needed to reach a more sustainable development (Sterling 2010).

TABLE 2-1 LEVELS OF LEARNING



Source: Table adapted from Sterling 2010 Pg 25

Transformative learning plays a crucial role in this thesis because, as highlighted earlier, the mere education of people through lower-order learning is not sufficient to facilitate a shift towards more sustainable development. The SL method forms part of transformative learning as it not only informs people, but also empowers them to take action and therefore encourages a shift in paradigm.

Through the application of transformative learning, SL transforms learners in agents of change and therefore meets the demand of ESD to add a new purpose to higher education, which goes beyond the pure passing on of knowledge as elaborated in the following section, the indepth analysis of ESD and SL.

2.3 Education for sustainable development (ESD)

"It is not education, but education of a certain kind, that will save us"

David Orr

2.3.1 Introduction to ESD

ESD is an umbrella term that encompasses many different concepts promoting sustainable development through education. One of these concepts is SL, which is why ESD forms an essential part in this thesis because it represents the connection between the very concrete educational method of SL and the rather broad and loose concept of sustainable development. Therefore the term ESD is explained further in this section. First several definitions are presented to show the variety within the concept, followed by a brief historical overview and the main characteristics of ESD. In addition the strengths and weaknesses are described. The last section focuses on the goals of ESD, which are important in the context of the research question.

2.3.2 Definition of ESD

As there is no single accepted definition of ESD, several definitions are introduced here to provide an overview of the concept. Also there are many terms similar to ESD, such as 'education for citizenship', 'sustainable development education', 'education for all' and 'sustainability education', which have not been distinguished in a satisfactory way so far (Jickling 2005).

The UNESCO defined ESD at the World Conference for Education in 2009 as "(...) an approach to teaching and learning based on the *ideals and principles that underlie sustainability*" including key issues such as "(...) human rights, poverty reduction, sustainable livelihoods, peace, environmental protection, democracy, health, biological and landscape diversity, climate change, gender equality and protection of indigenous cultures"

(UNESCO 2009 No Page)

This definition shows quite well the multi-faceted nature of ESD, and its transdisciplinary approach. Another very useful and comprehensive definition, already stated in section 2.2.3. was published by UNESCO in the GAP Report at the end of the Decade of Education for Sustainable Development, DESD, in 2014. This is the definition implied whenever ESD is referred to in this thesis:

"ESD empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity."

(UNESCO 2014)

This definition highlights the link between education and sustainability, as people gain information and skills which then should lead to concrete actions taking into consideration all realms of sustainability. At the same time, this definition gives the impression that people need to start thinking for themselves because politics fails to implement the actions described above. Beside the official UN document, many more definitions of ESD exist: for example, Curren (2009 Pg 25) describes ESD as:

"a widely advocated educational vision of how to address problems of sustainability and poverty, in a world in which problems of sustainability contribute to poverty. "

In this definition the emphasis is put on poverty, which is one out of the wide array of topics that can fit under the umbrella term of ESD. Also the term "educational vision" seems an appropriate description for the concept as it alludes to as-yet unrealised goals which have already been pursued for several decades - as 2.3.3. History of ESD notes.

2.3.3 History of ESD

This section provides a brief overview of the most important events and milestones in the history of ESD in order to show that sustainability and ESD are not just temporary fashions, but have been topics of discussion for many years.

ESD has its roots in the environmental movement, and much of what is discussed nowadays can be traced back for several decades (Leal Filho et al. 2014). An important milestone in the history of ESD is the Brundtland Report published in 1987, which gave rise to the concept of sustainable development, as well as setting off the search for a more holistic strategy to reach a sustainable development. The Stockholm Declaration (UNEP 1972), the Brundtland Report (World Commission on Environment and Development 1987) and the United Nations Conference on Environment and Development, UNCED (1992), all recognise the importance of education as a tool for sustainability.

The UNCED, also called Earth Summit or Rio Summit, is often referred to as the starting point of ESD. At this international conference held in Rio de Janeiro, governments decided upon an action plan for global challenges such as poverty, deforestation and climate change. This nonbinding, voluntarily implemented action plan, named Agenda 21, is divided into four sections:

- social and economic dimensions,
- conservation and management of resources for development,
- strengthening the role of major groups, and
- means of implementation.

Chapter 36 of Agenda 21 is about promoting education, public awareness and training. By recognising that "education is critical for promoting sustainable development and improving the capacity of the people to address environmental and development issues" and demanding a reorientation of education towards sustainable development, Agenda 21 provided the basis for the development of ESD (UNCED 1992 Pg 320). The document recognises that formal as well as non-formal education are vital to make people conscious of their capabilities to address their sustainable development concerns. From this time on, the concept of sustainable development began to find its way into the curricula of universities. Further, Agenda21 proposed that experts should cooperate with policy makers to tackle the problems emphasised in the action plan, and policy makers should then take concrete steps using the knowledge received (UNCED 1992).

Another important conference that contributed to the enhancement of ESD was the UNESCO-UNEP conference on Environmental Education held in Tbilisi in 1997, where principles of environmental education were developed.

In 2002, the World Summit in Johannesburg was convened to examine the progress made in sustainable development since the Rio Summit ten years earlier. The results achieved in this 10 years period were rather limited (Leal Filho et al 2014). As politics seemed to have failed to steer our path towards a more sustainable future, a new focus was placed on companies – in the form of Corporate Social Responsibility (CSR) – and partnerships, while education was emphasised more strongly. Another important step taken at the Johannesburg Summit was the adoption of Resolution 57/254, which declared the UN DESD from 2005-2014. What is interesting about this resolution is that, aside from the preamble, there is no reference to 'environment', 'environmental', 'ecology', or 'ecological' (Jickling 2005). This omission is also noteworthy in the goals of the DESD, which are the following:

"catalyze new partnerships with the private sector, with youth, and with media groups;

- encourage monitoring and evaluation;
- encourage development of a research agenda and serve as a forum for relevant research on ESD;
- serve as a forum for bringing together important stakeholders in the Decade such as representatives of Member States and key multinationals, faith-based institutions, youth associations, indigenous people, etc.;
- share good ESD practices;
- link Member States that have put in place ESD curricula, policies, research, etc. with those Member States that are requesting help;
- convene flexible working groups on particular topics;
- fulfil its strategic role with regard to ESD."

(UNESCO a 2015 No Page)

These goals already show a tentative economic orientation in the whole discourse, which is further discussed in section 2.3.5. Potential and Limitations of ESD.

In 2012, at the World Conference on Sustainable Development held in Rio de Janeiro, heads of state governments, high level representatives and participants from the civil society gathered to renew their commitment to sustainable development and to confer about its promotion. The document "The future we want" was finalised and agreed upon as one of the outputs of this conference. This document aims to facilitate actions on sustainable development and calls for a wide range of actions, including, among others:

- Initiation of a process to develop concrete sustainable development goals based on Agenda 21 and in adherence to all Rio Guidelines.
- Promoting the involvement of companies through CSR and by including sustainability in their reporting circle.
- Finding a measure that goes beyond the gross domestic product to assess the wellbeing of a country.
- Empowerment of civil society and involvement in decision making processes and policy
- Improve education of workers and trade unions in sustainability because there is a need for education at all levels.

(United Nations 2012)

For more detailed information on the history of ESD, see Leal Filho et al (2015).

2.3.4 Characteristics of ESD

"Education without values, as useful as it is, seems rather to make man a more clever devil."

C.S. Lewis

As there is lack of conceptual unity within ESD (Kopnina and Meijers 2014), the description of ESD provided in this section is primarily based on the definition by UNESCO because it is an internationally and widely accepted actor and the designated lead agency in the DECD. Similarly, the case study presented in this thesis is also oriented on the guidelines of UNESCO.

In general, ESD is not a special program or method, but rather an umbrella that unites different forms of educational methods and contents that contribute to a more sustainable development path. ESD encourages a reconsideration of current educational practices that promote unsustainable behaviour. On one side ESD is about the topics taught, as it aims to inform people about issues such as climate change and the impacts that human activities have on the environment. On the other side, ESD requires new forms of teaching that promote lifelong transdisciplinary learning, self-reflection and the empowerment of individuals to take action for a sustainable future. Therefore, it affects all realms of education, including assessment, curriculum, finance, and learning methods (UNESCO b 2015).

Through use of various pedagogic techniques, ESD promotes participatory learning and the development of higher-order thinking skills – i.e. everything that goes beyond simple memorization, for example critical thinking and reflection (see Wang and Wang 2014) – and is directed towards a lifelong learning experience. ESD is an interdisciplinary approach, meaning that all disciplines can contribute to ESD. It aims to take into account local and cultural differences, acknowledging that this might have international consequences. Therefore, ESD tries to address content, including global issues as well as local priorities (UNESCO 2014).

The UNESCO (UNESCO b 2015) states the following characteristics of ESD on its homepage.

"Education for sustainable development:

• is based on the principles and values that underlie sustainable development;

- deals with the wellbeing of all four dimensions of sustainability environment, society, culture and economy;
- uses a variety of pedagogical techniques that promote participatory learning and higher-order thinking skills;
- promotes lifelong learning;
- is locally relevant and culturally appropriate;
- is based on local needs, perceptions and conditions, but acknowledges that fulfilling local needs often has international effects and consequences;
- engages formal, non-formal and informal education;
- accommodates the evolving nature of the concept of sustainability;
- addresses content, taking into account context, global issues and local priorities;
- builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, an adaptable workforce, and a good quality of life;
- is interdisciplinary. No single discipline can claim ESD for itself; all disciplines can contribute to ESD."

(UNESCO b 2015 No Page)

Those characteristics can be implemented in many different ways, which is important for the adaptation of the ESD approach to local conditions, but also weakens the validity of ESD, as is further discussed in the following section.

One important characteristic of ESD is the recognition of non-formal and informal learning. Considering the remit of this thesis, this characteristic plays a key role because the research question investigates the non-formal and informal learning process of SL in companies, and therefore requires further explanation. While several definitions of non-formal and informal learning exist, the ones applied in this thesis are those of the United Nations Economic Commission for Europe, UNECE, in its strategy for ESD:

"Non-formal learning takes place outside and sometimes parallel to mainstream systems of education and training, and does not typically lead to formal certificates. Nonformal learning may be provided at the workplace and through the activities of civil society, organizations and groups (e.g. youth organizations, trade unions and political parties). It can also be provided through organizations or services that have been set up to complement formal systems (e.g. arts, music and sport classes).

- Informal learning is a natural accompaniment to everyday life. Unlike formal and nonformal learning, informal learning is not necessarily intentional learning, and as such may not even be recognized by the individuals themselves as contributing to their knowledge and skills.
- *Formal learning* takes place in education and training institutions, leading to recognized diplomas and qualifications."

(UNECE 2009, Pg 148)

All three forms of learning play important roles in this thesis. The case study presented is a formal learning experience for students, yet the formal learning outcomes are only a side aspect of the empirical study. The aim is to evaluate the non-formal, as well as the informal learning processes taking place within companies when participating in SL. As informal learning often occurs unintentionally, it is difficult to trace and to evaluate, which leads to the potential and limitations of ESD in the next section.

2.3.5 Potential and limits of ESD

There are both strengths and weaknesses to the ESD approach, some of which are here discussed in detail based on their relevance for the thesis.

A recognisable potential of ESD in the widest sense is that it promotes education, which is a human right. The UNESCO states that "education is crucial for the well-being of individuals, nations and the world" (UNESCO 2005 Pg 2). The importance of education is also acknowledged in the World Declaration on Education for All, the Dakar Framework for Action, and the Millennium Development Goals. But besides the need for more education, there is strong need to include new values, as well as changes in pedagogy, organisation and ethos (Sterling 2010, Orr 1994). ESD meets these demands for change in terms of inclusion of values and new methods on several levels as it promotes among other things "community-based decision-making, social tolerance, environmental stewardship, an adaptable workforce, and a good quality of life" (UNESCO b 2015 No Page). Additionally, by enabling informal as well as non-formal education, and by using a variety of different pedagogies, ESD tackles one of the biggest issues in common education systems, which is that we only recall 10 to 20 percent of what we read or hear. In contrast, we retain around 80 percent of what we do (Cortese 2003). Hence, by using alternative teaching methods that include direct action, like SL, there is enormous potential for ESD.

Another important potential of ESD, which already has been mentioned before, is that it not only addresses students, but learners of all kinds. "Lifelong learning" is an integral part of ESD (UNESCO 2014 Pg 12). This is important because a wide participation is a crucial factor for reaching a sustainable development.

Further, it tries to involve a broad alliance of stakeholders, ranging from kindergarten teachers to CEOs. This can be seen as a potential because, as mentioned before many companies are very powerful and can provide access to people, who are outside of the common academic system.

Nevertheless, the inclusion of many stakeholders in the discourse can also be regarded as a limitation of the concept because bears a risk of diluting the original purpose. This becomes apparent in the goals of DESD, which are more focused on business related aspects like creating partnerships, monitoring and encouraging development than the ideological goals of a clean environment, social justice or cultural aspects.

Another limitation of ESD is its demand for paradigmatic change which requires people to change their opinions, their lives and their values towards a more sustainable lifestyle. Humans are, in general, rather reluctant to change, and even people who are used to dealing with highly complex issues often refuse to accept the simplest truth if that would force them to admit the falsity of conclusions they had reached throughout their lives in front of their colleagues, family or students (see Bridges 2001, quoted in Cortese 2003).

Moreover, Wals and Jickling (2002, Pg 221) see it as problematic that the concept is called learning "for" something that is as "ill-defined" as sustainability. From this point of view, ESD seems to be a deterministic approach, where teacher are supposed to tell the students what is "best". This is clearly not the role of education (Jickling 2005). Some scientists argue that education can never be value free and that there is a need for the concept to be "ill-defined" in order to be able to reach a consensus among different disciplines (Dale and Newman 2005). Hence, there is a trade off in this tolerance that leaves the doors open for parties to then use the concept of ESD for green-washing purposes. By including, for example, the aim of encouraging self-reflection and criticism as one of the goals of the concept, this issue could probably be ameliorated.

Further, some authors criticise that sustainability is a good means, but a rather dubious aim due to the concept being so vague (Dale and Newman 2005; Wals and Jickling 2002). Jickling and Wals (2002) go on to argue that as we do not know the right way to achieve sustainability,

and evidently there are several paths to choose from, there is a risk of an "eco-totalitarian" regime. Considering the characteristics of ESD, which promote community based thinking, democracy, participation, awareness, wide education and a holistic world view, as well as a good quality of life, the likelihood of such a regime seizing power appears to be lower than that of most other movements (see UNSECO 2015).

Another factor limiting the mass appeal of ESD is its complexity. ESD is a complex and evolving concept, which is challenging to teach (Hopkins and McKeown 1999). Further, the intellectual exclusivity of the concept can be an obstacle for wide participation and diversity (Wals and Jickling 2002). The demand for a view, which highlights the interconnectivity of humans and ecosystems (Dale and Newman 2005) makes the concept abstract and complicated, which might be necessary but not helpful in terms of participation.

Leal Filho et al. (2014) criticise that there is a mismatch between what is invested in ESD and its returns. In the whole discourse, there is a lot of debating and theory, but very few concrete steps and actions. Leal Filho et al. (2014) demand more transparency in terms of where the money invested in ESD is going.

This leads to a further limitation, which is the measurability of ESD, especially in terms of nonformal and informal learning. As highlighted by UNECE, there is a lack of instruments that assess the outcomes of ESD (UNECE 2009). This strongly limits the applicability of ESD especially in an economic context where a lot of emphasis is put on the output. If the results of a process cannot be displayed, it is difficult to argue for its continuation. This issue will be discussed more in detail in the analysis. Further limitations to the concept of ESD are elaborated on by Hopkins (1999), Kopnina and Mejers (2014), Curren (2009), and Jickling (2005).

Summarizing, ESD has a strong potential to lead us to a more sustainable future, but only when we manage to overcome its limitations or, as Huckle (1996 Pg 15) puts it, "Education for Sustainability can play a key role in both short- and long-term developments provided it engages people in a realistic appraisal of alternative meanings, values and agendas". The content of "alternative meanings, values and agendas" of ESD is displayed in the goals of ESD, which are discussed in the following section.

2.3.6 Goals of ESD

"Education breeds confidence. Confidence breeds hope. Hope breeds peace." Confucius The goals of ESD are key to the evaluation and monitoring of the success of the different programs implemented. According to UNESCO, sustainable development, ESD, and DESD all try to achieve the same goal: namely "creating a better world for this generation and future generations of all living things on planet Earth." (UNESCO c 2015 No page).

More in detail, the Agenda 21 action plan states the following four main thrusts for ESD:

- 1. promoting and improving quality of education,
- 2. reorienting the existing education programmes,
- raising public awareness and understanding of the concept of sustainable development,
- 4. fostering environmental education and training.

(UNCED 1992)

There are several issues with these proclaimed goals. The ESD goals of Agenda 21 have been criticised for not being clear and very hard to measure, which are basic criteria for goals (Hopkins and McKeown 1999, Kopnina and Meijers 2014). These flaws lead to several shortcomings. The mere claim of "promoting and improving quality of education" without addressing values and paradigms might lead to even faster economic development and therefore depletion of natural resources (see Orr 1994). The second goal demanding a "reorientation of existing education programs" is per se not a good thing, because reorientation could also be to teach students how to exploit the environment the most efficient way. The goal of "raising awareness" is maybe a nice start, but as an ultimate goal of ESD, it is not really satisfying, as there are many studies that prove that there is a wide gap between what people are aware of and their actual daily practises (Kollmuss and Agyeman 2002). Only the last goal of "fostering environmental education" seems promising.

In contrast to the goals from 1992, the goals published in the GAP Report in 2014 state a clearer direction and commitment. The GAP Report by UNESCO states the following two main objectives of ESD:

- Objective 1: "to reorient education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development"
- Objective 2: "to strengthen education and learning in all agendas, programmes and activities that promote sustainable development"

(UNESCO 2014 Pg 14)

These objectives seem to be more clearly directed towards a sustainable development, which is why these goals are used in this thesis whenever referring to the goals of ESD.

Dale and Newman (2005) argue that as ESD is education towards a system that permanently changes, which is complex and locally diverse, the objectives of ESD should also be processes based. They insist that the goal of ESD should be to mediate a set of skills as well as the ability to implement those skills in complex and dynamic systems (Dale and Newman 2005). Those goals presented are held rather vague and do not state any concrete numbers, the UN wants to achieve.

The discussion shows that there are many difficulties and most likely political and social barriers to defining concrete goals that meet the vision put forward by the DESD of a "world where everyone has the opportunity to benefit from quality education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation" (DESD 2015 No Page). In summary, it is apparent that ESD, due to various reasons, is rather a vague concept, which makes it difficult to define in an encompassing way or to set concrete goals. Similar issues arise with the second key concept of this thesis SL.

2.4 Service Learning (SL)

"Education is not the learning of facts, but the training to think"

Albert Einstein

2.4.1 Introduction to SL

In this section SL is explained and defined more in detail. Firstly, different definitions are given and analysed. Then a historical overview is presented to show the roots of the concept, which is important in order to understand the current developments. Finally, the key characteristics of SL are highlighted, before the strengths and weaknesses of SL are discussed in the last section.

2.4.2 Definition of SL

SL varies greatly in its application across educators and institutions, ranging from volunteer services and internship programs to experiential education endeavours and university programs (Sandaran 2012; Mitchell 2008). As there is no consensus about the concept of SL among its various users, it is very hard to define in an all encompassing way (Mitchell 2008, Furco 1996). Common threads between different definitions include notions of critical thinking and reflection, relationships with the project-partners, as well as focus on service or learning.

A commonly stated definition of SL by Campus Compact National Center for Community Colleges refers to the encouragement of civic responsibility and reflective thinking:

"Service-learning is a teaching method which combines community service with academic instruction as it focuses on critical, reflective thinking and civic responsibility. Service-learning programs involve students in organized community service that addresses local needs, while developing their academic skills, sense of civic responsibility, and commitment to the community."

(Campus Compact National Center for Community Colleges 2015 No page)

This definition underlines two basic ideas of SL, namely "doing good" to the community in a philanthropic way and at the same time "learning to see things differently" (transformative learning) from a pedagogical point of view. Another definition by Ehrlich (1996) with reference to the philosopher and educational reformer John Dewey highlights the learning process of the students and an alternative approach towards learning:

"Service-learning is the various pedagogies that link community service and academic study so that each strengthens the other. The basic theory of service-learning is Dewey's: the interaction of knowledge and skills with experience is key to learning. Students learn best not by reading the Great Books in a closed room but by opening the doors and windows of experience. Learning starts with a problem and continues with the application of increasingly complex ideas and increasingly sophisticated skills to increasingly complicated problems"

(Ehrlich 1996, Pg xi-xii).

Another useful and rather descriptive definition of SL is provided by Gibson et al. (2011), who emphasise the relevance of service to the community:

"Service Learning is a form of experiential education where students and community members' work together to address relevant community issues, and where academically rigorous assignments are used to connect the community experience with specific classroom learning goals"

(Gibson et al. 2011, Pg 285)

These three definitions all try to grasp the idea of SL, using different terms like "method", "pedagogy" or "experiential education". In their basic idea these definitions are quiet similar, but they vary in their focal points.

For this master thesis the first definition by Campus Compact is the best suited because it emphasises critical reflective thinking, which is a key skill in terms of ESD, as well as the needs of local communities, which play a major role in the case study of the Sustainability Challenge. The limitation of all these definitions in terms of the case study is that they only refer to communities as partners for SL-projects, whereas in the case study the partners are companies. Of course companies can also be regarded as communities, but cooperation with civil society has usually been emphasised in the historical context of SL.

2.4.3 History of SL

"Educating the mind without educating the heart is no education at all."

Aristotle

The idea that education should not only include hard facts and scientific theories, but also has the purpose of creating responsible citizens who aim to benefit state and society dates back to the times of Aristotle and Plato, who regarded knowledge as a means in the pursuit of good ends (Rocheleau 2004). The linkage between education and service to the community continued in modern philosophies by representatives like John Stuart Mill, Immanuel Kant and Jean-Jacques Rousseau, who demanded education that promoted sympathetic and sensible interaction with civil society (Rocheleau 2004). Thus the inclusion of morals and values benefiting the common good is nothing new. However, the concept of SL, in which service to the community is regarded as a pedagogical method, is rather new. The systemic roots of the SL approach were set by the educational theorist John Dewey, born 1859 in Vermont. His famous quote "We do not learn from experience. We learn from reflecting on experience" already shows the strong connection to SL practiced today. He believed that things students learn should be connected with their lives and the challenges they face in their daily lives (Rocheleau 2004). Dewey considered knowing and learning as deeply social activities, because knowledge can only exist in a community with a shared recognition of its value (Rocheleau 2004, Beatty 2010). Rocheleau (2004) elaborates further on the roots of SL by Dewey.

SL first appeared in the mid- 1960s in the United States. After the Second World War, access to education was increased and a new generation of students entered the education system. Many of them criticised standard teaching methods as teacher centred, elitist, lacking relevance, and failing to meet the needs of society. Hence, they demanded change towards a more open and interactive form of education (Beatty 2010, Lounsbury and Pollack 2001).

One way of meeting these demands was through new explorative teaching methods like SL. The term 'service-learning' was documented for the first time in 1966 to refer to the work of students on summer-internships sponsored by Oak Ridge Associated Universities (Lounsbury and Pollack 2001). Since then, this term has been used in many different ways. Initially, SL was seen as a chance for universities to contribute to the common good by solving real-world problems as a kind of charity-program: for example, by cleaning the streets or planting trees (Lounsbury and Pollack 2001). This is in contrast to today's focus on the pedagogic aspects of SL, which is on one side due to the fact that teaching styles and theories on learning evolved considerably in the 70s and 80s, when pedagogical benefits became more emphasised (Lounsbury and Pollack 2001, Beatty 2010). On the other side, the shift from volunteer based antipoverty programs to a learning oriented teaching method was triggered by politics as well as educational reforms (Beatty 2010). Since the 80s, the price of college and university tuition rose significantly, hence education became a personal investment. This created a pressure for SL to be more than pure philanthropy, and highlight the direct and tangible learning benefits of SL, which led to SL being increasingly integrated into syllabi and courses (Beatty 2010). Due to these circumstances, SL developed ever more into an organisational field, connecting many different actors who wanted to transform education towards a more social approach (Honnett and Poulsen 1989).

An example of this process of organisation and institutionalisation is the foundation of Campus Compact in 1985, which today is "a national coalition of more than 1,100 college and university presidents who are committed to fulfilling the public purpose of higher education." (Campus Compact 2015 No Page). The mission of this association is to facilitate campusbased community engagement and to teach students social and civic responsibility. It was founded with the intention to help universities and colleges to create the support structures needed for cooperation with communities. Further, in 1989 the Principles of Good Practice for SL (see Appendix 1) were developed by a working group involving many different actors including schools, universities and NGOs. These wide-ranging principles focus on sustainability and program development. After 1993 SL was no longer solely a program, but became officially recognised as an integrated pedagogy (Lounsbury and Pollack 2001).

Since then, SL has gained credibility and several articles have been written about the method (Beatty 2010). Nowadays the approach is becoming more and more institutionalised as a mainstream pedagogy.

Concluding the history of SL, it is important to highlight that this approach was created by pioneers who believed that values like civic engagement, justice and social responsibility are vital for students to learn and experience, but also that SL is a method which can be adapted to the needs and demands of society, which is apparent in the following section on the characteristics of SL.

2.4.4 Characteristics of SL

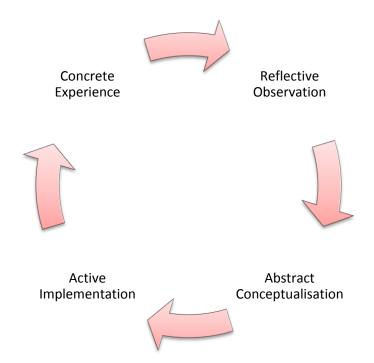
This section describes SL to make it more comprehensible for the reader. Firstly, SL is described in a general way and it is embedded in the theory of experiential learning. Secondly, five key characteristics of SL are elaborated in detail, as they are essential for the further analysis in the context of companies. Finally the concept of SL is distinguished from other concepts like internships and volunteer work.

In general terms SL is an experiential teaching approach that integrates service activities into academic curricula. SL is based on the concept of "learning by doing", hence students learn and develop through engaging in concrete projects which meet the needs of communities and making personal experiences, embedded in an academic learning environment where they can reflect upon their actions (Sandaran 2012).

Experiential learning is broadly "(...) the process whereby knowledge is created through the transformation of experiences" (Kolb 1984 Pg 38). The process of transforming experience into knowledge has been described by Kolb, an American educational theorist, in the following model (Figure 2-2), which is often referred to in the context of SL (see Eyler and Gyles 1999, Lester et al 2005). His model is one of the most well-know illustrations in management education and a key tool for explaining experiential learning (Vince 1998).

At the heart of the model is the idea that an individual can create his/her own learning through reflection on experience and is therefore in control of self-development. The model encompasses deductive (from theory to praxis) as well as inductive (from experience to reflection) approaches and therefore provides a bridge between subjectivity and objectivity, positivism and phenomenology (Vince 1998).

FIGURE 2-2 LEARNING CYCLE



Adapted from Kolb (1984)

The cycle consists of four stages. In the first stage a concrete experience is created, which involves the creation of thoughts and/or feelings. In the second stage of reflective observation, learners reflect on their thoughts or feelings. In the third stage a rational conclusion is drawn or an emotional insight discovered; hence an abstract conceptualisation is taking place. In the fourth stage the active implementation is takes place, whereby the initiation of the reflection is acted out and tested, which provides a new concrete experience. The learning cycle by Kolb is an accessible model which links theory with practise (Vince 1998). Through this model, learners are challenged to overcome old paradigms and to defy theoretical approaches when implemented in practise. It can be arduously for learners to go through this process of creative cognitive destruction as they sometimes need to tear down ideological constructs they developed and got used over the years without ever reflecting upon them. Having located SL as a method of experiential learning, some more specific characteristics of the method itself can now be discussed. A central claim of the field is that "Service, combined with learning, adds value to each and transforms both." (Honnett and Poulsen 1989, Pg 1). Hence, the question arises which components need to be considered in order to implement SL successfully. As mentioned before, there are different interpretations of the term SL, which makes it difficult to define general characteristics. In order to nevertheless represent some of the commonly stated characteristics of SL, the following sub sections are oriented on Sandaran (2012), who states the following five characteristics:

- 1. integrating SL within course content structure,
- 2. incorporating reflection into SL courses,
- 3. incorporating reciprocity for learning and service,
- 4. integrating 'real' community needs into student-learning and
- 5. working with community partners for SL.

These characteristics are discussed more in detail further below.

1. Integrating SL within course content structure

It is essential to strongly connect the SL project with the course material in order for students to have a theoretical foundation to make sense of their experience and not to just spend time outside (Gibson et al 2011). By linking the SL experience with the curricula, clear learning goals are set that are related to their program (Sandaran 2012). Studies show that by connecting service to the traditional course content, a stronger academic outcome is created (Billig and Furco 2002). Eyler and Giles (1999) explain that this is due to the learning material being set in the context of real world problems. Cognitive scientists claim that learning occurs within a context (Eyler and Giles 1999). Therefore the connection between course and SL-project is essential for the successful implementation of SL.

2. Incorporating reflection into SL courses

For SL to be successful in terms of improving traditional class room teaching, reflection has to be a central component in the student's experience (Gibson et al 2011, Eyler and Giles 1999, Bringle and Hatcher 1996, Lester et al 2005). Reflection is the bridge that connects the service with the learning. Reflection encompasses formal and informal activities that instructors use to facilitate the students process of converting service experience into contextualised learning. These activities comprise, for example, journal entries, group discussions in or out of class, research papers or personal coaching meetings (Gibson et al 2011). Eyler (2002) remarks that there is a lack in the literature of advice as to which of the different reflectional practises enhance learning, cognitive behaviour and future community engagement most effectively.

Eyler and Giles (1999) state that for reflection on SL to be effective, the Five C's - Connection, continuity, context, challenge, and coaching - need to be considered (see Eyler and Giles 1999 Pg 183). As remarked by Gibson et al (2011), reflection is always a personal and individual process, but for critical reflection guidance from the instructor is necessary for the student to fully benefit from the SL experience. Therefore, feedback from instructors is an essential tool to promote critical reflection by students and to encourage them to see things from a different point of view.

3. Integrating 'real' community needs into student-learning

One of the key components of SL is that students are confronted with "real-world" problems. In doing so, they are taken out of their comfort-zones and are motivated to think about the needs of local communities (Lester et al 2005, Gibson et al 2011). To tackle the problems of the communities, students often first have to agree about the project and go through a "consensus-building process "(Gibson et al 2011, Pg 293). Depending on the design of the SL-Program, students then have to present their idea to the instructor, which often leads to them personally engaging in the issue. Gibson et al (2011) state that this process has had mayor impacts on students in terms of commitment, finding their passion and leadership. Further, they learn how to deal with the complexity and challenges of change, and develop skills like self-management, self-learning and innovative thinking (Stateville and Ikerd 2009).

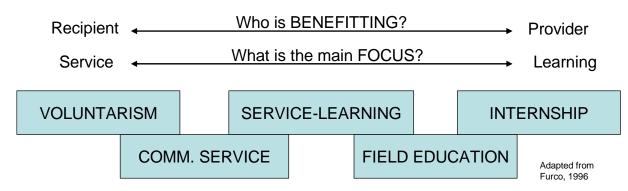
4. Incorporating reciprocity for learning and service

"Reciprocity means that in response to friendly actions, people are frequently much nicer and much more cooperative than predicted by the self-interest model;" (Fehr and Gächter 2000, Pg 159). Reciprocity is an important characteristic of SL (Lester et al 2005), because it facilitates the mutual respect of the partners involved and allows the participants to see the benefits which arise when cooperating. For example, students might have the experience that theoretical concepts do not necessarily work out in practise and therefore they need to overcome their paradigms in order to explore new ways of learning, hand in hand with community members. Hence, the idea of SL is that the students do not enter the project as experts, but that their academic knowledge in combination with the knowledge of the local community leads to the anticipated results (Aralch et al 2009). Through the inclusion of reciprocity in SL students are helped to internalise moral core values and mutual respect (Stateville and Ikerd 2009). Stuteville and Ikerd (2009) further argue that through SL the bonds of trust and reciprocity within society are strengthened, which is a necessary precondition for sustainable development.

5. Working with community partners for SL.

By facilitating the cooperation of students and communities, SL narrows the gap between universities and communities (Arlach et al 2009). When working together with local communities students develop tolerance and cultural awareness because they get confronted with different realities (Mitchell 2008). Another reason why it is important to integrate community partners in SL projects is that by doing so students get to see the direct impact that their project has on locals as well as on themselves. This is an empowering experience and can facilitate students becoming more engaged citizens. SL requires students to spend a considerable amount of time in local communities, which enables them build up relationship with locals and to have meaningful service experiences (Lounsburry and Pollack 2001). Further, communities also benefit through the participation in SL as they get the chance to accomplish some of their own goals (Lester et al 2005).

The stated characteristics are essential to describe SL, but in order to help characterising SL in more detail, it is helpful to briefly mention what distinguishes SL from other educational programs. Furco (1996) developed the following graph, where he highlights the balanced distribution of the benefits from SL between the various stakeholders involved, and the balanced focus between the objectives of service and learning. FIGURE 2-3 FOCUS OF SL



This balance is a key factor which differentiates SL from voluntarism and internships. To facilitate the stated balance it is important that the SL experience is embedded in an academic course, which it further distinguishes SL from other programs. Further, Furco (1996) proposes to that a program's focus and intended beneficiaries should always be determined in order to distinguish SL from other teaching methods.

Concluding the characteristics of SL, it has to be stated that the term SL is used in many different ways, and therefore no universally accepted set of characteristics exists. Further, Furco (1996) highlights that no experiential education approach is static and that therefore the characteristics of SL might change with time, just like the strengths and weaknesses which are discussed in the following section.

2.4.5 Strengths and weaknesses of SL

The strengths and weaknesses of SL of relevance to this thesis are discussed in this section. One of the main strengths of SL is the various benefits that arise for students, when participating in a SL-project. There is a vast literature highlighting the possible positive effects. Commonly stated advantages that arise for students are the enhancement of academic skills, personal growth, increased engagement, and awakening of social responsibility (Gibson et al 2011, Honnett and Poulsen 1989) as well as more tolerance, higher cultural awareness, better leadership and communications skills, and improved altruism (Mitchell 2008). Honnett and Poulsen (1989) found in their study that participants of SL projects develop a critical reflection on their experiences which empowers them to learn more through life. They observed that students are more curious and motivated to learn and that they feel more committed to social problems. Further, students developed a more complex way of thinking and imagination for alternative solutions. Through SL they developed a higher sensitivity regarding how decisions are made and implemented, and are empowered in the sense that they realise that their life can make a difference (Honnett and Poulsen 1989).

Another strength of the SL approach is that SL-partners and civil society also benefit from the service that is created in the sense that communities get to meet their organisational goals (Gibson et al 2011). Society benefits from SL through an increase of civic responsibility and students becoming better citizens that this teaching approach facilitates (Eyler 2002).

Universities may profit from SL by a renewed sense of engagement and purpose within instructors, as well as increasing the sense of social responsibility (Gibson et al 2011). Lester et al (2005) show in their study that the positive effects of SL also impact the project supervisors, in the sense that they take in students' motivation to learn, as well as benefitting from an increase of responsibility.

In addition SL involves different kinds of players as it engages students, faculty, civil society, NGOs and, in the case of the "Sustainability Challenge", also companies. By bringing together and connecting these different actors, SL holds the potential to contribute to the goals of ESD.

In summary, the strengths of SL include the diverse effects on students, as well as on other involved actors, and the encouragement of social behaviour which is beneficial for society as a whole and contributes to sustainability.

Nevertheless there are also some weaknesses to the concept of SL. One considerable weakness for most actors involved is the time factor (Gibson et al 2011). It is considered as a precondition that a university has relations with their local community. If this is not the case, faculty members need to arrange partnerships with communities and design a course along the guidelines of SL, which requires a considerable amount of time and resources. Also for students, the participation in a SL-project is more time-consuming than most other courses.

Another weakness of SL is expressed by Gibson et al (2011), who elaborate on the difficulties in terms of measuring SL and encouraging reflection. It could easily be that students write down in their reports and reflections what they believe the instructor wants to hear and what gets them the best grades, rather than what they really learnt from the SL experience. Though this is not only a problem of SL. Also there is a gap in the literature comparing and evaluating the different practices used to facilitate reflection (Eyler 2002). Beatty (2010) remarks regarding the history of SL, that initially the method was quite revolutionary, activistic and ideologically loaded: demanding a more social and just society. Some authors argue that SL has become a mainstream pedagogy that has lost its activist and moral edges (Lounsbury and Pollack 2001, Beatty 2010). Through its incorporation into the range of traditional teaching methods, SL probably has sacrificed some of its potential to promote nontraditional learning outcomes. Traditional teaching usually involves one-way communication, and is focused on what is considered objective knowledge. The contents taught often do not connect with the student's life and therefore students lack the possibility of applying their knowledge directly. Further, traditional learning tends to be short term and reflects a surface learning approach (Beatty 2010). By integrating SL into main stream traditional teaching approaches, it risks losing its meanings and contents and becoming a purely pedagogical technique. Clearly SL is different from other approaches, but it has lost much of its radicalism (Beatty 2010).

Another weakness of SL highlighted by Beatty (2010) is that most SL programs overlook relevant political issues and power dynamics. This issue is crucial when it comes to cooperating with companies in SL-projects. By involving companies in educational programs, there is a danger that they try to influence the content taught and unduly influence the outputs and reflection processes of students.

SL assumes that students have no debts, a lot of free time, are privileged and with high cultural capital. But as education is becoming more and more expensive, and considering the immense pressure put on students to be successful and efficient, students are eager to focus on the professional benefits rather than on civic engagement (Beatty 2010).

Summarizing the strengths and weaknesses of SL, it has to be stated that first and foremost SL is a teaching and learning method. Therefore its success depends strongly on its application and the learning context. SL is a theoretical concept that needs to be embedded in local circumstances and adapted to its stakeholders' needs; hence general discussions on SL can never be complete. Backhaus-Maul and Roth (2013) state in their analysis that doing research on SL is like comparing apples to oranges and then writing about why some apples are smaller and some are bigger. This is why it is challenging to find an appropriate method to evaluate the effects of SL; this challenge is elaborated in the following chapter.

3 METHODOLOGY

3.1 Introduction

The previous chapter introduced the reader to the general topics addressed in this thesis, mentioning the key concepts and an in-depth description of ESD and SL. In this chapter, the empirical study implemented for the purpose of this thesis is explained and the instruments which have been used to answer the research question are discussed.

The first section describes the issues arising when doing research in the stated context followed by a section about the chosen research instruments. To answer the research question adequately three different instruments were selected which are explained in detail in order to guide the reader through the following chapters. The last section explains how the data gathered, has been evaluated.

3.2 Scope and limitations

Before explaining the applied methodology and forms of data collection, some general limitations concerning the topic have to be mentioned.

First of all, with regard to ESD, the UNECE recognises that "instruments that assess the outcomes of ESD as a result of non-formal and informal learning are, however, largely lacking." (UNECE 2009, Pg 34). This fact strongly limits the realm of this thesis.

Secondly, concerning the evaluation of SL, there are several complications when evaluating the impact of SL. Bradley (1998) analysed the following reasons:

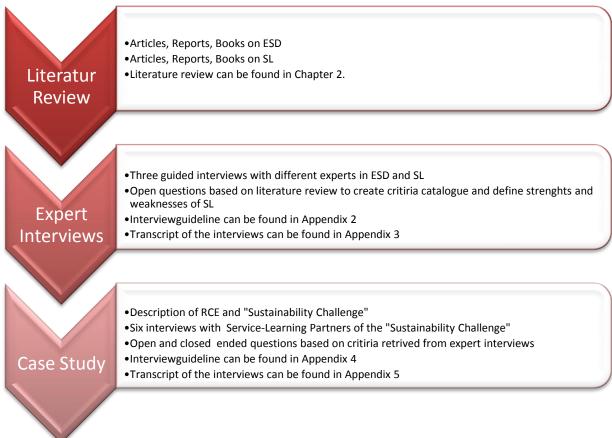
- Definition: As there is no clear definition of SL (see Section 2.3.1.), there is a continuing confusion about what should and could be the impacts of SL.
- Time: Many of the stated benefits of SL take time to enroll and lead to change. As most of the SL programs only last few months, it becomes very difficult to analyse the impacts of the participation in the program.
- Methods: In the discourse of evaluating SL there is an over reliance on quantitative methods and therefore excludes other kinds of information that might be relevant to documentation of the impact of SL programs.

Hence Bradly (1998) recommends a more inclusive approach when assessing the impact of SL. He highlights that the word "assessment" is rooted in the words "to sit beside" and therefore emphasizes a stronger nonlinear approach to science based on listening and assessing different levels of SL. Following the recommendations of Bradly, a qualitative approach to assess the effect of SL was chosen. The strengths and limitations of the chosen research instruments will be explained in more detail in the following sections.

3.3 Research instruments

The chosen strategy to answer the research question is a qualitative and evaluative strategy. In order to analyse the effect SL has on companies in terms of ESD, guided expert interviews were conducted as well as a case study. The unit of analysis of this master thesis is representatives of various companies who participated in SL-projects. The aim is to evaluate if and how the teaching method SL influences for-profit companies in their actions and perceptions, i.e. if they move towards a more sustainable behaviour. To answer this question the following steps were implemented:

FIGURE 3-1: APPLIED METHODS



The methods were selected based on the time frame, available resources, feasibility and scientific interest of this master thesis.

3.3.1 Literature review

Chapter two is mainly based on articles from journals such as "International Journal of Sustainability in Higher Education" and "Journal of Service-Learning in Higher Education" as well as official documents of the United Nations such as the GAP Report by UNESCO (2014). It provides the reader with an introduction to the field and describes the research that has been conducted to date. It also detects the gaps in the literature concerning the field of SL and companies and therefore provides the ground for the further empirical study, i.e. the expert interviews and the case study.

3.3.2 Expert interviews

The second method used to answer the research question is expert interviews with three different experts in ESD and SL. As highlighted earlier, there is very little literature on ESD in the context of SL and companies, as well as a lack of unity and research concerning the instruments to measure the effect SL has on the participants. Due to these circumstances expert interviews were conducted in order to gather information about how to evaluate the effect SL has on companies.

There are certain limitations to expert interviews, for example the asymmetric balance of knowledge between respondents and interviewer. Further, experts are not objective and might be biased in their answers (Beyers et al. 2014). Especially in the case of the "Sustainability Challenge" as two of the experts are directly involved in the case study, this might be a weakness. In terms of expertise and experience, this is a considerable advantage but it also implies that the interviewees might be biased in their responses. This bias is dealt with by interviewing a third expert who does not have any connection to the "Sustainability Challenge". The experts have been selected based on their experience in the field, the accuracy of the information they can provide as well as their availability for a personal interview.

The persons interviewed are Christian Rammel, Petra Biberhofer and Regina Steiner.

- Christian Rammel is teaching at the University of Economics in Vienna and the head of the Regional Centre of Expertise on Education for Sustainable Development Vienna, RCE. He has several years of experience in the field of ESD as well as in SL through the implementation of SL projects in form of the "Sustainability Challenge" and other programs.
- Another expert interviewed is Petra Biberhofer, who is the project manager of the "Sustainability Challenge" at the RCE Vienna. She has 4 years of experience with SL and is currently writing her PhD on ESD.
- The third interviewee is Regina Steiner. She is a fulltime professor at the Pädagogische Fachhochschule Oberösterreich. She has worked for 27 years at Forum Umwelt-bildung, a NGO whose core business is ESD.

The interviews are general guided interviews where the same general information is collected from different interviews. The interviewees were asked ten open questions concerning ESD and SL in the context of companies. The interview guideline can be found in the Appendix 2. The expert interviews are necessary to back up the assumption that SL is a valid method to meet the goals of ESD in the context of companies; to retrieve criteria that could possibly display a learning process within a company on an individual-, corporate- and societal level as well as to extend the discussion on the limitation and potential of SL to meet the goals of ESD on a corporate level.

The interview material was recorded and transcribed (see Appendix 3). The most relevant parts of the gathered information of the expert interviews are summarised and compared in the analysis.

3.3.3 Case study

In order to be able to answer the research question a case study was conducted. A case study is an appropriate method because the impact of SL on corporate partners is not evident and the research limited. The underlying theory is that the case study will show how corporate partners of SL-projects are influenced through their participation.

A case study is "an empirical inquiry that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident."

(Yin 2014 Pg 16)

As highlighted by Yin (2014) case studies research is challenging because of the absence of well-documented procedures to compare different studies and to create a general statement. This implies that there are several uncertainties involved, which is also true for this study on the "Sustainability Challenge".

A commonly raised concern when conducting a case study is the question of how it is possible to make general statements based on a single observed case. In this sense case studies are similar to experiments as they allow generalising to theoretical propositions but not to bigger entities or populations (Yin 2014). Therefore it has to be stated that the validity of this thesis is limited because of the chosen method, the small number of interviews and its specific focus. The case study plays a key role because it connects the field of ESD, SL and companies and puts the theory into context.

Out of several for-profit companies, which participated in the "Sustainability Challenge" in the last two years (2013/2014), six have been chosen to be interviewed for this master thesis based on their availability for interviews, their size (two small companies with less than 100 employees, two mid-sized companies more than 100 employees and two big companies with more than 10.000 employees) and their orientation towards sustainability (change maker or CSR). The companies are presented in decreasing order according to the number of employees. The individuals who were interviewed are mainly from the middle management and have been acting as reference persons in the SL-project with the students.

Name of	Number of	Role of Sustainability in	Year of	Name and Position of
company	Employees	the company	participa-	contact person
			tion	
Österreich-	16.250	Part of Business strat-	2013	Thomas Schuh, Sustain-
ische Bundes-		egy, no		ability coordinator of
bahn ÖBB		CSR/Sustainability de-		ÖBB Infra
Infra Holding		partment, but growing		
AG		awareness		
Wiener	16.000	Since 2010 part of busi-	2014	Kathrin Brunner, Coor-
Stadtwerke		ness strategy, executive		dinator of Science,
AG		department		Technology and Innova-
				tion Department
Merkur Wa-	9.500	Executive department,	2012/2013	Andreas Purin, Head of
renhandels		CSR part of strategic		the department "Ge-
AG		framework		nussküche"
A1 Telekom	8.500	Part of Corporate Com-	2013	Werner Sagmeister,
Austria AG		munication & Sustain-		Environmental manager
		ability, CSR		
Ökostrom AG	31	Part of core business,	2012/2013	Andreas Pribyl, Key ac-
		change maker		count manager
Swimsol	9 full-time,	Part of core business,	2014	Dominick Schmitz, Busi-
	16 part-time	change maker		ness developer

TABLE 3-1 SERVICE-LEARNING INTERVIEW PARTNERS	

The method of interviews with the company partners had obvious challenges. One such example is the reliance on the interviewee's memory, which influences the accuracy of the responses. Further the time lag between the interview and the discussed event, directly affects the reliability of the answers (Beyers et al. 2014). In the case of the "Sustainability Challenge", this might be a considerable limitation because some partners participated in 2013 only. Never the less this can also be regarded as an advantage because here the long term effects of the participation in the SL-project can be analysed.

Another limitation could be the expansiveness bias, where less powerful interviewees exaggerate to inflate their status and impact (Beyers et al. 2014). This is taken into account by asking for concrete examples which could display the effect of the "Sustainability Challenge". The interview guideline for the SL-partners can be found in the Appendix 4. The interviews were transcribed and can be found in Appendix 5. Further the interviews with the SL-partner as well as those with the experts provide the basis for the recommendations made in Chapter 6.

3.4 Data analysis

This section explains how the collected data has been analysed in order to be able to answer the research question in the most accurate way.

Concerning the expert interviews most of the input provided by the experts was directly translated into English and used in several sections of the analysis as well as for the recommendations.

In case of the SL-partner interviews the analysis was more complex because six interviews were conducted with very heterogeneous partners. In order to detect the limitations and potential of SL in cooperation with companies, a questionnaire was designed based on the literature review and input from the experts (see Appendix 4). The SL-partners were asked open as well as closed questions on three different levels (personal, corporate and societal level).

- The first set of questions addresses the personal-level, to see if the SL-partners gained new skills and knowledge which empower them to act more sustainably. This section tries to evaluate the informal learning process SL-partners experienced when participating.
- A second set of questions addresses the corporate-level, which refers to changes within the company, whether the SL had an effect on the corporate practices and how far the board of directors was interested in the project.
- The third part assesses the societal level which refers to changes in the company's perception concerning their role in society, whether the participation at the "Sustain-ability Challenge" triggered an internal learning effect.

Based on the input from the experts, it seemed plausible to assume that the effect SL has on the previously stated levels in context of the goals of ESD depends on three factors:

• Firstly, the effect SL has within companies is influenced by the size of the company. The bigger the company, the less likely it is for SL to create an effect.

- Secondly, the orientation of the company towards sustainability and CSR is also a determining factor. If sustainability is part of the core business and the company regards itself as a change maker, the effect of SL is higher than if the company engages in CSR activities.
- Thirdly, whether SL with companies meets the goals of ESD also depends on the position of the contact person in the company. If the CEO is personally involved in the project, the likeliness of the SL-project having a significant effect towards ESD is higher.

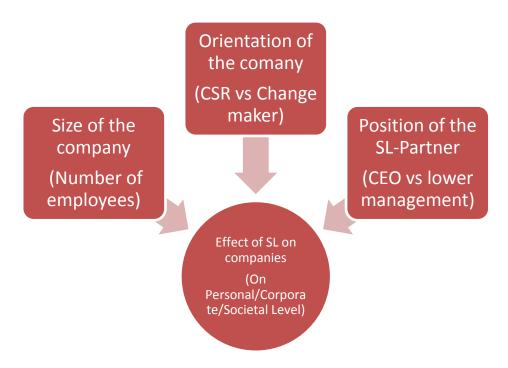


FIGURE 3-2 EFFECT OF SL ON COMPANIES

To analyse whether SL with companies meets the goals of ESD on a personal level, the partners were asked for their personal experience. To analyse if they learned something, the SL-partners were asked if their understanding of sustainability changed and if through their participation certain characteristics like critical thinking, collaborative decision making and social engagement changed. The characteristics were selected based on the expert interviews and official UN documents. The effect SL has on a personal level is described independently of the three factors the experts suggested because on this level the individual learning experience is observed regardless of the interviewees back ground.

On the corporate level and societal level, the experts had strong doubts whether the SLprojects have any influence at all, due to the very limited scope of the SL-projects. The partners were therefore simply asked, if they detected any learning process within their company or in their role towards society.

Concerning the analysis of the data gathered on the corporate level a focus was put on the factor company size because whether SL has an effect within a company is strongly influenced by the numbers of workers.

As for the data on the societal level emphasis was put on the orientation of the company because this level displays the link of the company with society, hence effects will be communicated through the orientation on the societal level.

The factor of position of the SL-partner was not explicitly included in the analysis of the case study data for two reasons. Firstly, it is very difficult to detect from outside how much power a person has within a company to implement changes if there is only one interview. Some companies such as Swimsol have very flat hierarchies. Others might have SL-partners in senior position, but lack the support of other departments. Secondly, all the interview partners of the case study form part of the middle management as displayed in Table 3.1. Hence, as there is a lack of variety in the selected sample, this factor is not emphasised in the analysis. Apparently this limitation is not overcome easily as most of the SL-partners form part of the middle management. It is assumed that the implications of not emphasising this factor in the case of the "Sustainability Challenge" are not significant as the main idea that underlies this factor, namely a close connection to the CEO, also correlates closely with the size of the company. Nevertheless it is important to be taken into account in future research.

Having laid out the methodology of the thesis, now the case study is presented.

4 CASE STUDY "SUSTAINABILITY CHALLENGE"

"A sustainability revolution requires each person to act as a learning leader at some level, from family to community to nation to the world" Dennis Meadows

4.1 Introduction

The "Sustainability Challenge" is an educational program implemented by the RCE Vienna. The case study has been chosen because it strongly connects the different realms of ESD, SL and companies. In the following section, the RCE Vienna will be introduced because the RCEs were initiated by the UN DESD and purse the goals of ESD which play an important role in this thesis. Moreover two of the interviewed experts work at the RCE Vienna.

In favour of making the case study more comprehensible for the reader, the "Sustainability Challenge" is described, first in general terms and then with a focus on the role of companies in the program.

In the last section of this chapter the companies which were interviewed, are introduced shortly together with a brief description of their SL-project.

4.2 Regional Centers of Expertise on ESD (RCE)

To meet the goals of the UN DESD from 2005-2014 in a better way United Nations University UNU proposed the creation of a global network of RCEs. On the homepage of UNU RCE is defined in the following way:

"An RCE is a network of existing formal, non-formal and informal education organisations, mobilised to deliver education for sustainable development (ESD) to local and regional communities."

(UNU 2015 No page)

The purpose of the RCEs is to translate the global goals of DESD in the context of local communities with which they operate. An RCE should contain the following four core elements:

"1. Governance - addressing issues of RCE management and leadership

2. *Collaboration* - addressing the engagement of actors from all levels of formal, non-formal and informal education

3. *Research and development* - addressing the role of research and its inclusion in RCE activities, as well as contributing to the design of strategies for collaborative activities, including those with other RCEs

4. *Transformative education* - contributing to the transformation of the current education and training systems to satisfy ambitions of the region regarding sustainable living and livelihood."

(UNU 2015 No Page)

Their goals are to re-orient education towards sustainability, to increase the access to education, to develop new methods and material for trainees as well as to raise awareness. These goals are in line with the goals of Agenda 21 (see Section 2.2.5).

Currently 127 RCE exist worldwide, one of these is the RCE Vienna, which forms part of the Institute of Ecological Economics at the University of Economics in Vienna, Austria. It was founded in January 2011 and since then implemented several programs on ESD and contributed to research in the field of ESD. The RCE Vienna has several partnerships with other universities, institutions and organizations and understands itself as " a platform for the exchange of ideas, knowledge and activities between these research institutions, public agencies, enterprises and organizations in the Vienna region." (RCE Vienna 2015 No Page).

The RCE Vienna is lead by Christian Rammel, who is the Head of the RCE Vienna. Furthermore the RCE Vienna consists of several researchers and project managers, one of whom is Petra Biberhofer, project manager of the "Sustainability Challenge" (RCE Vienna 2015).

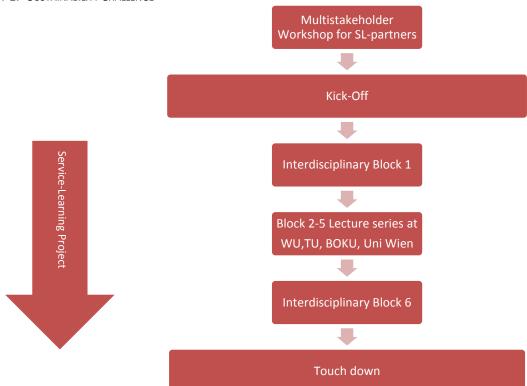
4.3 The "Sustainability Challenge"

The "Sustainability Challenge" is an inter- and transdisciplinary lecture implemented by the RCE Vienna. The slogan of the lecture is "60 students, 15 projects, 4 universities, 1 goal". The aim of the "Sustainability Challenge" is to contribute to the understanding of social, ecological and economic development. By engaging students and other stakeholders to develop concrete solutions together for sustainability related problems, the "Sustainability Challenge" is contributing to meet the goals of ESD.

The "Sustainability Challenge" is embedded in a network of cooperation with UNSECO, Ministry of Science, Research and Economy BMWFW as well as other institutions and organizations, pursuing the goal of transdisciplinartity.

The "Sustainability Challenge" is offered once per year beginning in March till June, every time with a new theme which is chosen by the RCE team in cooperation with the professors from the other universities. The theme of the "Sustainability Challenge" in 2013 was "Which implications has the 2-Degree target?" and in 2014 "Smart City-Intelligent solutions for urban challenges". Students from all universities in and around Vienna can apply to participate in this lecture series. They are selected based on their engagement, critical thinking skills, academic background and performance.

The series of lectures consists of six blocks, where the theme is presented from different perspectives.



The first and the last block are interdisciplinary blocks, where the theme is discussed in a more general way implementing alternative teaching methods like groups discussions. Experts from the field are invited to present their views in order to add practical elements. The lecture blocks are each hold at the four biggest universities of Austria, namely at the Technical University TU, the University for Agriculture BOKU, University of Vienna Uni Wien and University of Economics WU. Each university presents the selected theme from their disciplinary point of view to guarantee the transdisciplinarity of the lecture series. Afterwards there is once more

FIGURE 4-1: "SUSTAINABILITY CHALLENGE"

an interdisciplinary block, where students have the chance to reflect upon the semester and their project. The "Sustainability Challenge" ends with the Touchdown event where all the participants gather and present the output of their SL-project.

4.3.1 The role of companies in the "Sustainability Challenge"

Parallel to the lectures, students participate in a SL-project to relate the learned theory with some practical elements and to give the students the chance to implement directly their newly gained knowledge. In contrast to most SL-project, the "Sustainability Challenge" not only encompasses communities and NGO as partners but also governmental institutions and for-profit companies. This has several reasons. Firstly, the RCE Vienna tries to follow the goals of ESD and therefore tires to include as many different stakeholders as possible. Secondly, the "Sustainability Challenge" is financed by external funding which is retrieved from the companies as well as the governmental institutions which are paying to participate in the programme. Thirdly, it also functions as an incentive for students to apply for this lecture-series.

Before the official start of the lecture series all SL-partners are invited to a stakeholderworkshop. The purpose of this workshop is to clarify the expectations of the different stakeholder groups, to explain the concept and the goals of the "Sustainability Challenge" as well as the method of SL. In this workshop each partner, i.e. the contact person of companies, NGOs and governmental organisation, presents their challenge they would like to solve together with their team of students. It is important that the task partners want to assign to the student goes beyond their individual sphere and is connected with their daily work life as well as to the theme of the "Sustainability Challenge". This workshop also serves the partners to get to know each other and exchange their experience.

The partners are expected to participate in the Kick-off event of the "Sustainability Challenge" in order to present themselves and to meet their student group which usually consists of five persons from different academic back grounds. Each SL-group is supervised by one of the pro-fessors participating in the "Sustainability Challenge" and supported by the RCE Vienna team concerning communication, feedback and facilities.

After the Kick-off the SL-partner meets the students on a regular basis throughout the whole semester. It is important that knowledge and input contributed by students from each discipline is valued equally and that the project is done in a cooperative way, avoiding hierarchical structures.

At the end of the lecture series all stakeholder gather once more for the Touchdown event, where all the results and projects are presented. The students and SL-partners are encouraged to proceed with their projects beyond the scope of the "Sustainability Challenge".

4.3.2 Interview partners of the "Sustainability Challenge"

The following six companies participated in the "Sustainability Challenge" in 2013 or 2014 as SL-partner. Some of them participated also in 2012. Each of the former contact persons agreed to be interviewed for the purposes of this master thesis. In order to provide the reader with some background information about the companies and their SL-project, a brief description is provided in the following section.

• ÖBB-Infrastruktur AG (2013)

The Austrian train company Österreichische Bundesbahn ÖBB are a public holding company with a yearly revenue of more than 5 Mio € and around 40.000 employees. The ÖBB-Holding AG is subdivided into four departments, one of which is the Infrastrukture AG, which is in charge of property management (ÖBB Infra 2015). In 2013 Thomas Schuh, Sustainability Coordinator of the ÖBB Infrastruktur AG participated in the "Sustainability Challenge". The task for the students was to design a sustainable train station of the future, taking into account energy use, mobility, local surroundings and CO2 emission. The students designed a train station, which besides being a station also informs its users about local features, raises awareness and functions as a space of encounter. The architectural design was adapted to local needs and facilities (RCE Vienna ÖBB 2015).

• Wiener Stadtwerke AG 2014

The Wiener Stadtwerke Holding AG is the infrastructure service provider of the city of Vienna. With more than 16.000 employees and a revenue of 3 Bill €, Wiener Stadtwerke is upon the 25 biggest companies in Austria. It is 100% owned by the city of Vienna. The corporate group encompasses the following enterprises: Wien Energie, Wiener Netze, Wiener Linien, Wiener Lokalbahnen, Wipark, as well as Bestattung and Friedhöfe Wien. The main service areas are mobility, energy and burial. Kathrin Brunner works in the FTI department of Science, Technology and Innovation (Wiener Stadtwerke2015). She was the contact person for one of three SL projects of the "Sustainability Challenge" in 2014.

Wiener Stadtwerke is developing a mobility application for mobile phones together with ÖBB and other transport providers in and around Vienna. As demography is changing, seniors are becoming an important stakeholder group. The task for the students was to find out what could be barriers for the generation 55+ in terms of using the new application and what could

be done to overcome those barriers. The students did a literature review on the generation 55+, created user profiles and suggested some features e.g. magnifier lens and barrier-free options (RCE Vienna Wiener Stadtwerke Holding AG 2015).

• Merkur Warenhandels AG (2013)

Merkur Warenhandels AG is a supermarket chain, which is part of REWE International AG. In Austria Merkur owns more than 120 supermarkets and employs around 9.500 persons. Andreas Purin is the head of the department Merkurs Genussküche. Their main business is to produce ready-made meals (Merkur 2015). In 2012 as well as in 2013 Purin participated in the "Sustainability Challenge" with the challenge for the students to improve the sustainability of their supply chain. Therefore the students developed an indicator for suppliers taking into account their energy use, environmental engagement and trainings for employees (RCE Vienna Merkur 2015).

• A1 Telekom Austria AG (2013)

A1 is Austria's leading communication provider with over 5.4 million customers. A1 forms part of the Telekom Austria Group. A1 has approximately 8.600 employees and a revenue of 2.5 billion \in (A1 2015). Petra Gallaun, CSR Manager at the Telekom Austria Group and Werner Sagmeister, Environmental Manager, took part in the "Sustainability Challenge" in 2013. The challenge for the students was to raise awareness for sustainability issues among the employees of A1 and to contribute to green mobility with the company. Hence, they implemented a survey among the employees asking about their commute to work, to develop a car sharing platform at the company's internal homepage. To facilitate the process, they analysed the car sharing options already implemented in subsidiary companies of Telekom in Bulgaria and Slovenia. As a last step they contacted a company offering carpooling services and presented an offer to A1 (RCE Vienna A1 2015).

• Ökostrom AG (2013)

Ökostrom AG was founded in 1999 with the aim to create a sustainable energy economy and to provide Austrians with green energy and to further drive the development of renewable energy. The three areas of business are power generation, delivery of electricity as well as energy services. Ökostrom AG has a revenue of 36 Mio € and 32 staff members (Ökostrom 2015).

Ökostrom AG participated in the "Sustainability Challenge" in 2012 and in 2013. Andreas Pribyl, quality manager at Ökostrom AG was the contact person as well as an actively participating student in the "Sustainability Challenge" in 2012. The task of the students was to analyse the energy awareness in terms of consumption and knowledge of young persons. Therefore they sent out an online survey to several high schools asking questions about their energy use habits and knowledge in this field. The results were presented to the managers of Ökostrom AG and the collected data was further on used by the public relations office.

Swimsol 2014

Swimsol is a young start up which aims to bring solar power to tropical regions. As there is often a lack of space, Swimsol developed floating solar platforms which have the advantage of being durable, innovative and adaptable to individual solutions. Swimsol has nine fulltime and 16 part time employees. Dominik Schmitz is Business Development Environmental Consultant at Swimsol and was the contact person in the "Sustainability Challenge" in 2014 (Swimsol 2015). The challenge of the SL-project was to find out if it is possible to install such floating solar power platforms next to mega cities. The students did a literature review analysing six mega cities and the feasibility of solar energy. They also designed an indicator in order to be able to compare the results of their research (RCE Vienna Swimsol 2015).

5 ANALYSIS

'It is better to do the right thing wrongly, than the wrong thing better and better.'

Russell Ackoff

The analysis tries to answer the research question stated in section 2.1. combining the information provided in the literature review and the data gathered in the interviews as well as during the case study. The sub-questions are answered in the stated order, starting with the validity of SL, and a discussion on how the effects of SL can be displayed, followed by analysing the effects based on the stated levels. The analysis closes with a summarising description of the potential and limitations of SL with companies to meet the goals of ESD.

5.1 Validity of SL in cooperation with companies

In the literature several parallels between SL and ESD became apparent, for example both promote transdisciplinarity, critical thinking and empower people to set specific actions (see section 2.2.3 and 2.3.3.). In the expert interviews all three experts stated that SL is a valid method to meet the goals of ESD in general, but they also mutually agreed that the concept of SL changes when practised with companies instead of communities. Hence, the question arises whether SL is also a valid method to promote the goals of ESD when practised with companies.

On a theoretical level, SL with companies meets the characteristics of ESD stated by UNESCO (UNESCO b 2015) (see section 2.2.3.). Regarding the characteristics of SL by Sandaran (2012) (see section 2.3.3.), which need to be considered for the method to work effectively, corporate partners of the "Sustainability Challenge" meet the criteria of working together with community partners, integrating community needs and incorporating reciprocity in the SL project, as this is communicated in the Multi-stakeholder workshop. Clearly, for the SL-partners their experience is not embedded in an academic course structure and whether SL-partners reflect upon their SL-experience has so far not been researched. Meeting only three to four criteria out of five characteristics, some uncertainty in terms of SL being a valid method for companies' remains.

In order to overcome this uncertainty, expert interviews were conducted to answer also the question on an empirical level.

Rammel believes that SL has a high potential to create a mind shift in companies towards a more sustainable development and therefore is a valid method to meet the goals of ESD even when practiced with companies.

Biberhofer states that SL in the context of companies is a form of non-formal learning, which is an important characteristic of ESD as well as of SL. Clearly, there is a non-formal and informal learning processes happening with the companies, but as the main focus is still on students, the impact might not be as strong as the one shown on students. Furthermore, the effect depends on the company, its size, orientation and former engagement in sustainability.

Steiner agrees with the two other experts that by interacting with critical students coming from different backgrounds, a mind shift could be triggered and that employees through their participation engage in a learning process.

Setting the output of the theoretical and empirical analysis in context with the two stated goals in the GAP Report (UNESCO 2014, see section 2.2.5.), which proposes that everybody should have the opportunity to learn and to expand education to all agendas, it becomes apparent that SL with companies is most likely a valid method to meet the goals of ESD as it reorients education by including a wide array of stakeholders and empowering them to contribute to sustainable development, as well as following the principles of ESD.

Having clarified the validity of the method, the following section tries to evaluate the effect which SL might have on companies in terms of an approach to the ESD goals in case of the "Sustainability Challenge".

5.2 Evaluation of SL in cooperation with companies

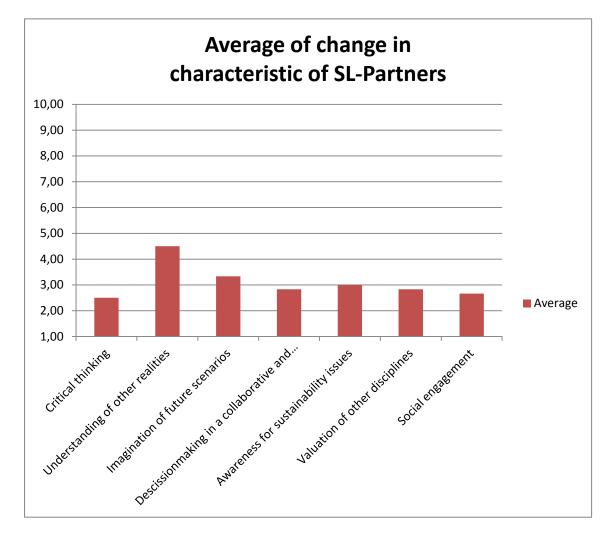
The following section is structured according to the interview guideline (see Appendix 4) which first analysed the effect of SL on a personal level, then corporate and finally on societal level.

Personal Level

The questionnaire covered this level with three questions. The first question is about the personal learning process during the "Sustainability Challenge", the second question is whether the understanding of sustainability has changed and the last one asks about the improvement of characteristics related to ESD, which usually become enforced among students when participating in SL (see 2.2.3 and 2.2.4). When asked about learning effects, all interviewees stated how they gained experience in working together with students, but none of them reported a significant personal change or learning experience with the exception of Pribyl from Ökostrom, who stated to have gained conflict solving skills and a better understanding of transdisciplinarity. This exception can probably be traced back to the fact that Pribyl also participated as a student in the "Sustain-ability Challenge".

Whether their understanding of sustainability has changed due to the participation in the "Sustainability Challenge" was answered with "No" by all the partners. Nevertheless, two of them stated their understanding of sustainability was enhanced. It is interesting to observe, how an enhancement of the definition of sustainability is not considered a change of understanding nor a learning experience by the SL-partners.

Concerning the third question, the interviewees rated how strong the following seven characteristics (critical thinking, understanding of other realities, imagination of future scenarios, decision-making in a collaborative and participative way, awareness for sustainability issues, valuation of other disciplines, social engagement) have improved on a scale from 1(no improvement at all) to 10 (strongly improved).





The graph shows that the improvement across the characteristics displaying an approximation towards the ESD goals range around 3 on average, which is rather low. SL has the strongest effect on "understanding other realities" and the lowest on "critical thinking".

In terms of effects on a personal level, at first sight it seems that SL doesn't have an effect at all. But when taking a closer look, it is interesting to observe that for example several interviewees stated that they had learned from students and how to work together with them but this is not reflected in the graph in "valuation of other disciplines" or "decision-making in a collaborative and participative way". Many SL-partner stated that critical discussions with the students took place, but they still rated the effect of SL on the characteristic "critical thinking" very low. This suggests that, the method used might not have been adequate to find out whether a learning process on a personal level actually took place. This displays the issues mentioned in section 2.3.5. Limitations of ESD and 3.2. Scope and limitations.

Corporate Level

According to Rammel, companies are new places of learning as the employees are influenced by a hidden curricula displayed in a company's philosophy. He believes that SL has a good potential to create a mind shift in the corporate culture, but the impact is relative to the size of the company.

The two largest companies stated clearly that SL did not have any effect on a corporate level, but they believe that this is due to complex structures and that SL can make a difference in smaller companies. In case of ÖBB there was interest at the management level, but not at the executive board level. When asking about a specific example how the "Sustainability Challenge" affected the company, the interview partner stated that one of the students was employed at ÖBB after finishing the project. This example is not directly connected to the goals of ESD, which is why it is assumed that there is no effect of SL on a corporate level with larger companies.

The two mid-sized companies, Merkur and A1, also said that there was no effect on the corporate level, which is mainly due to their large and complex structures, as well as the very limited time frame of the SL-project. In the case of Merkur, the project became very close to making a difference in the company's philosophy concerning the selection of their suppliers, but in the end, the support of other departments was lacking. Hence, this case study shows also no effect on a corporate level with mid-sized companies, but there is a potential that it might be different in other cases.

In contrast to the larger companies, the two small companies, Ökostrom and the start up Swimsol, reported that SL had a slight effect on the company. Ökostrom stated that there was no direct change but that the SL-project was of interest for the board of directors and it was very useful to raise awareness. The collected data had been partially used after the project had ended. In case of Swimsol, the CEO of the company himself interacted with the students. When asked about the effects of SL, Schmitz from Swimsol stated that they had gained experience in working together with students. The output of the student project could be used for a research fund application, which was successful and significantly affected the further development of the company. Therefore, SL with small companies does meet the goals of ESD on a corporate level.

Summarizing this confirms the assumption of the experts that the effect of SL is strongly influenced by the size of the company, as SL did not have an effect on large companies, and only became close on having an effect on mid- sized companies, but in the case of the two small companies SL had an effect that did meet the goals of ESD.

Societal Level

Steiner and Rammel stated that the effect of SL strongly depends on the orientation of the company and the integration of the SL in the company, whether it forms part of CSR or whether the company regards itself as a change maker. Clearly, when the mission of the company is to create a difference towards a more sustainable future, the potential of SL having a visible effect is higher.

The interviewed companies are roughly divided into two groups, CSR-companies and change makers. The crucial criterion is whether sustainability forms part of the core business of the company. If this is the case, companies do not need a separate CSR department to improve their impact on society.

The two large companies have more than 10,000 employees and several fields of actions, some of which are connected to sustainability and others not. Concerning the effect on a societal level, Schuh from ÖBB stated that it is very hard to tell whether SL had any effect as the company is very large. ÖBB is an important provider of alternative mobility and therefore its core business is connected to sustainability, but not explicitly. The same is true for Wiener Stadtwerke. For example, at the sub entity of Wiener Stadtwerke, Wien Energie, sustainability plays an important role, whereas in other entities CSR departments can be found. Therefore, ÖBB and Wiener Stadtwerke are somewhere in between CSR and change makers. Because of these two issues, it is very hard to analyse the effect of SL on a societal level. But the answers of the interviewees suggest that SL did not create a significant learning experience within the company or towards their role in society.

Both mid-sized companies, Merkur and A1 have CSR departments. Both interviewees stated that, as they are working in the field of CSR, the "Sustainability Challenge" did not add new perception of their role in society, as they have the feeling that sustainability is already strongly embedded in their company. This could be a case of the earlier mentioned "expansiveness bias", where due to their role within the company, the interviewees overestimate their impact. Whether this being the case or not, the data suggests that SL does not have an effect on a societal level on companies whose orientation towards sustainability is displayed as CSR in the case of the "Sustainability Challenge".

Ökostrom and Swimsol can be categorized as change makers. They do not have a CSR department as they consider sustainability as part of their corporate philosophy. When asked about the societal effect of SL on Ökostrom, Pribyl stated that rather than changing the perception of the role companies take in society, their ideal of being a change maker was enforced. As part of the SL project in 2012, students analysed the awareness of young people concerning energy encouraged consumption. The results the company in their philosophy. In the case of Swimsol, the SL also did not change their image of a company's role in society, but it became extended. According to Schmitz, SL effected Swimsol on all three levels of sustainability: On a social level by making sustainability better tangible for students and the company also experienced new ways of cooperating with other actors like universities and students. Through the output, the SL project contributed to the economical sphere of the companies as it contributed to the receiving of a research fund as well as in attracting new investors. The ecological sphere was met by an extension of use of solar power. Hence, in the case of the "Sustainability Challenge" SL had an effect on a societal level on change makers.

Analysing the section on the effect of SL on a societal level based on the conducted interviews, it seems like the orientation of the company (CSR or change maker) is a determining factor and that SL has the potential to meet the goals of ESD when implemented with companies who regard themselves as change makers.

Summarizing this section, it shows that in the case of the interviewed companies, SL does have an effect on some levels depending on size and orientation of the company in terms of meeting the goals of ESD. Clearly the detected effects on the three different levels vary and strongly depend on several factors. Having stated this, the question arises how this potential of SL contributing to ESD can be enhanced and what limits this effect?

5.3 Potential and limitations of SL with companies to meet the goals of ESD

As highlighted in the chapter 2.3. SL, the concept of this alternative teaching approach is mainly directed towards students cooperating with communities. It was not designed to be practised with companies. Nevertheless, it is possible, as the "Sustainability Challenge" proves. Still, as mentioned by the experts, some changes in application occur. In the literature review the limitations and potential of ESD and SL have been discussed. In this section all the discussed topics will be combined, focusing on the potential and limitations of SL when practised

with companies to meet the goals of ESD. As there is no literature on this very specific topic, the section is mainly based on the expert interviews as well as on the interviews with the SL-partners.

5.3.1 Potential of SL with companies to meet the goals of ESD

Even though SL was not designed for implementing it with companies, there is a potential in cooperating with them in order to meet the goals of ESD. The section first presents the potential mentioned by the experts and then the ones stated by the SL-partners.

On a theoretical level the "Sustainability Challenge" meets all of the characteristics of ESD (see 2.2.3.), which is a key criterion that needs to be considered. The first and most obvious potential is that by including different actors in the learning process, just like SL does by cooperating with companies, the goals of ESD are being met in the sense that it increases the opportunity of people to educate themselves, even though they are not part of an academic institution. Biberhofer elaborates on that by stating that reaching out towards an audience that does not have an ESD orientation holds a great potential as it is a chance to reach new actors. Hence, SL functions as a bridge between companies and ESD.

Further, according to Rammel, companies are change makers, meaning that they are key players on the path to sustainability. Therefore, he sees a potential that SL supports companies to implement radical transition towards sustainability through education, new forms of learning and innovation. Companies are crucial to create change and SL supports that.

Steiner also believes that a great potential of SL with companies lies in its experimental character. Students and companies get the chance to try out innovative ideas on a small scale. SL holds the possibility to convert theory into practical actions. Regarding the goals of ESD, this can be a very empowering experience promoting sustainable development.

Another potential of practising SL with companies, according to Rammel and Biberhofer, is the experience students' gain when cooperating with companies, as they are probably future entrepreneurs. The "Sustainability Challenge" functions like a laboratory where students try out projects meeting the goals of sustainability. By cooperating with companies they experience certain economical constraints which they will have to face in future when planning to start their own business. Therefore, SL with companies holds the potential to meet the goals of ESD, as it strengthens the education in new agendas and reorientates education.

The SL-partners were also asked in more general terms where they see the potential of SL with companies. They confirmed the raised points by the experts, stating that a great potential of SL lies in the creative mindset of the students, who are not routine-blinded and bring some fresh air. Through their transdisciplinarity they bring innovation and new ways of thinking to the company, which facilitates transformative learning.

Another potential raised by SL-partners was the networking aspect of SL, on the one side with university and students and on the other side with equally minded companies. By facilitating network creation, SL contributes to the goals of ESD.

Ökostrom and Merkur stated that by seeing the other projects and companies engaging in sustainability, they felt confirmed in their mission and encouraged to proceed in that way. Hence there is a potential of SL to mutually enforce the commitment towards sustainability among companies.

Besides the described potential of SL contributing to the goals of ESD, the SL-partners mentioned other benefits of SL with companies, for example

- benefits for image creation,
- useful project output
- and the chance to meet future employees.

As these potentials are not directly connected to the goals of ESD, they will not be elaborated any further.

Summarising the potentials, it shows that there is definitely a case for SL with companies and by engaging companies in SL the goals of ESD can be met on several levels.

5.3.2 Limitations of SL with companies to meet the goals of ESD

Besides the described potential, there are clearly some limitations towards SL meeting the goals of ESD when implemented with companies.

From a global point of view, SL with companies is very limited in its scope. According to Rammel, the UN DESD was an emergency plan because politics was too weak to lead us towards a more sustainable path; hence people should learn by themselves and by doing so letting governments off the hook. SL with companies is a very useful tool but it is not sufficient. In order to create a significant effect towards a more sustainable development, there is a need for support on more levels than only in terms of education. The limitation stated most frequently by SL-partners and experts concerning the effect of SL is time. SL with companies takes too little as well as too much time, meaning that on the one side SL projects often only last for one semester. Four months is very little time to plan, implement and reflect about a project. During these four months the SL-partners meet with the students approximately every second week for only a few hours. Hence, the time of interaction is very limited, which therefore limits the effect SL could have in terms of an approximation towards the goals of ESD. On the other side SL takes a lot of time to be implemented. It is very resource intense for students, university members who need to organize it, as well as for companies, which need to calculate extra time for this temporary project.

Additionally to the time factor, in the case of the "Sustainability Challenge", companies also have to pay for participating in the SL-program. This puts pressure on the project to create a useful output. SL focuses rather on the process and the learning experience than on the output of the implemented project. This conflicting focus strongly limits the applicability of SL with companies.

In more general terms Steiner argued that sustainability and companies pursue different and often conflicting goals. Companies need to be profit oriented in a capitalistic system and this orientation might be conflicting with sustainability, which is in most cases not financially worthwhile. Biberhofer and Steiner state that sustainability is an idealistic niche market, therefore the possibilities are limited in terms of SL-partners, considering the output of the empirical research, which suggest that SL is more effective with change makers.

If the company is not committed to sustainability, but rather to CSR, there is a danger that the SL-project is used as green washing. Biberhofer sees a danger of green washing when practising SL with companies. Steiner also warns that most of the projects are sham, with the exception of the niche market. If SL is misused for marketing purposes and disconnected from sustainability values, it loses its potential of meeting the goals of ESD.

Another limitation in terms of the use of the projects is the sustainability of the projects themselves. Steiner explains that even if the students are very motivated and creative and they design an innovative and easily applicable output; it is not guaranteed that the companies will use it. SL-projects are short term and therefore not integrated in the structure of the company. Furthermore, in the interviews some partners stated that great ideas came up with SL, but they did not have the resources to implement them as it was not connected to their daily tasks. Concerning further limitations of SL the interview partners of the large and medium sized companies (the small companies did not see any limitations/problems) stated the following points which are not directly linked to the goals of ESD. But as they are hindering the implementation of SL with companies they are relevant:

- Sharing of confidential information with students who only stay for a short time,
- High costs for an uncertain output,
- Communication problems between students and employees in terms of do's and do nots.
- Focus not only on the SL project, but also on lecture, i.e. students have too little time
- Too imprecise instructions, too vague goal setting
- Companies are too complex to then implement change
- Some students only want ECTS and do not engage and therefore the success strongly depends on student group and the individual motivation
- Too high expectations
- No specific output, no change, no improvement

The last point highlights a key limitation of the field, the lack of empirical research that explicitly assesses non- and informal learning, as well as a lack of standardized indicators and practices, which are collectively agreed upon in order to make the learning process visible and comparable. This limits the possibility of SL with companies meeting the goals of ESD because through this way an essential part of the created output, the learning effect of the partners and with the company, remains invisible for the company.

Hence, the question arises what can be done to overcome these limitations?

6 **RECOMMENDATIONS**

This section aims to contribute to an improvement of the applicability of SL with companies in order to be able to better meet the goals of ESD. The recommendations are based on the case study as they are inspired by the interviews with the SL-partners from the "Sustainability Challenge". Nevertheless they are transferable in their applicability to other SL-projects as they address mainly common issues of SL that were already stated in section 2.4.5.

- It would be important to design and to agree upon general methods to measure the impact of SL on the SL-partners in a standardised way that makes it possible to compare the results. Thus the learning process could be displayed as part of the output. By analysing and comparing the results, improvements could be implemented to better meet the goals of ESD and to facilitate the best learning process possible.
- Extend the period of the SL-project. This way projects could be better planned and implemented on a larger scale, which would increase the visibility, improve the sustainability of the projects and increases the possibility of becoming embedded in the structure of the companies.
- Develop long-term partnerships with companies. Biberhofer stated that the organisation of SL takes a great deal of resources but mostly during the initial phase. In the long run competencies develop within the university as well as within the company, which facilitate the implementation of SL and lead to an efficient learning process. This also would significantly reduce the time factor for the universities as well as for the companies as routine develops over time. Also in terms of expectations and output of the project, it might be helpful for the companies.
- Invite the SL-partners to join the lectures. This way another characteristic of SL would be met as the SL would also for the partners be embedded in an academic course. This would be an opportunity to create networks between partners and also universities. It might also contribute to the mutual understanding and communication between the students and the SL-partners. The lectures could be classified as a form of further education for employees and hereby add to the appeal of the program.
- As mentioned in section 2.4.4, reflection is the bridge between the service and the learning. Hence, to facilitate the learning of the SL-partners it would be important to encourage a reflection on the project. For example, after finishing the SL-project, send out a feedback survey that invites the SL-partners to reflect upon their experience and

collects important information to improve the SL-project. This could also be a valuable tool to improve the SL experience on an ongoing basis.

- As the analysis showed, SL has the strongest effects on small enterprises which are already engaged in sustainability. Therefore it is recommendable to focus on small enterprises and/or change makers if the economical situation allows.
- Increase the options of networking and exchange between the involved actors.
- Better recruiting of students to decrease the dropout rate of students which leads to frustration within the team.
- Strong support and supervision from university in terms of providing students with feedback and accompanying them and the companies through the process.
- Increase visibility of the program so that more companies get informed about its existence. This could help to get more diverse actors involved.
- Improve the process by which companies are selected towards free participation based on genuine interest in sustainability and suitability to the SL experience.

7 CONCLUSION

"Knowing is a process, not a product"

Jerome Brunner

7.1 Summary

The aim of this master thesis is to evaluate the potential and limits of SL with companies to meet the goals of ESD. Before being able to answer this question, it was necessary to analyse the validity of the SL method when practised with companies. This was done with the help of literature and expert interviews, which confirmed that SL is a useful method to meet the goals of ESD when practised with companies.

In order to be able to evaluate the potential and limits of SL to meet the goals of ESD, first the effect which SL has on companies had to be detected. For this purpose the "Sustainability Challenge" was used as a case study. So far, there are no generally applied indicators or methods to evaluate the effect which SL has on companies. Hence, the SL-partners were directly asked for effects of SL they experienced on a personal, a corporate and a societal level when participating in SL. The experts suggested that the effect of SL is influenced by the size of the company, its orientation towards sustainability as well as the position of the SL-partner in the company in terms of power to implement changes.

The analysis showed that the SL-partners did not have the feeling of gaining any significant knowledge on a personal level. However, their answers suggest that an informal learning process took place which is very hard to detect for the learners as well as for the researchers. This shows that the applied method was not ideal to evaluate the learning process on the personal level. Probably an impact analysis, interviewing the SL-partners before and after their participation, would have been better suited to measure the personal learning effect. In the case of this thesis, this was not possible due to time constraints.

On a corporate level, the assumption of the experts that the effect of SL strongly depends on the size of the company could be confirmed. Only the two smallest companies reported a positive effect of SL, whereas the larger companies stated that their corporate structures are too complex for SL to create an effect. On the societal level, once again the two smallest companies, who are the change makers, reported a positive effect of SL meeting the goals of ESD. Those companies engaging in CSR activities did not report a significant change.

Concerning the role of the SL-partner within the company, it was not possible in this case study to evaluated an effect due to the fact that all SL-partners where positioned in the middle management of the company. Still, the interview partners stated in some cases that there was interest from the board of directors, like in the case of Swim Sol and Ökostrom, whereas this was not the case for Wiener Linien and ÖBB.

This suggests that the main potential of SL with companies to meet the goals of ESD lies in the cooperation with small and medium-sized companies whose core business is already linked to sustainability.

Concerning the limitations of SL with companies, several points like high expenditure of time, conflicting interests and goals as well as resource intensity were detected. Still, those limitations are relatively easy to overcome as highlighted in the recommendations.

The most severe limitation is the conflict in goals between companies and ESD. Companies are and need to be output- and profit-oriented if they want to be successful in a capitalistic system. Learning in terms of ESD does not create a direct output that necessarily contributes to profit maximisation. It is a process which is influenced by many different factors and which takes into account more than mere financial aspects. Also, the benefit that arises for the company when participating in SL doesn't get displayed properly. This issue is also connected with the lack of unity in methods to display informal learning processes. As long as informal learning is not made visible and valued by companies, the potential of SL with companies being widely applied to meet the goals of ESD is rather limited.

7.2 Contribution to knowledge

This thesis contributes to knowledge by focusing on a topic that has been very little researched so far. As stated in section 1.3. most of the literature of SL focuses on students. This thesis evaluates the effect which SL has on SL-partners and therefore meets the demand of Barth et al. (2014) for more research in this field. By focusing on the effect which SL has, the thesis also fulfils the claim by Backhaus-Maul and Roth (2013). Lounsburry and Pollack's' (2001) demand for more research analysing the relationship between the involved actors, is not met in a satisfying manner because the applied research method of qualitative interviews could not point out clearly how and what SL-partners learned from the students. By evaluating the potential and limitations of SL with companies to meet the goals of ESD, the thesis contributes to knowledge as there is so far no other literature on this specific topic.

Furthermore, this thesis contributes to knowledge as it gives recommendations what could be done to better meet the goals of ESD when practising SL with companies.

7.3 Future research

As highlighted in section 1.3 there is need for more research focusing on other actors involved in SL besides students (Barth et al. 2014). The "Sustainability Challenge" is a very specific case as it operates with companies; hence it would be interesting to observe the impact which SL has on communities to then be able to compare it.

Some of the interview partners asked for more specific projects and a stronger focus. There is a need for more research to see whether a stronger focus and more specific projects lead to an improvement in learning or whether this restricts the creativity and the learning process.

There is definitely the need for more literature evaluating the effect of SL (Backhaus-Maul and Roth 2013). This is limited by the lack of instruments to measure informal learning (UNECE 2009). Therefore, there is urgent need to find methods to display informal learning processes, which can be applied in a general and simple way in order to make the benefits that emerge through SL better visible.

As already mentioned in section 2.4.5 it is very difficult to evaluate SL as there are great differences in the application. Hence, there is a strong need for more context based research. Further academic research on SL is essential in order to increase the recognition of this method.

In general, there is a strong need for more research in the field of SL in Europe, SL with companies, as well as informal learning within companies.

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APPENDICES

Appendix 1: 10 Principals of Good Practice for Combining Service and Learning

In 1989 the National Society for Internships and Experiential Education gathered over 70 different organisations interested in SL and developed the following 10 Principals of Good Practice for Combining Service and learning, which they believe are essential for SL to be effective:

"1. An effective program engages people in responsible and challenging actions for the common good.

2. An effective program provides structured opportunities for people to reflect critically on their service experience.

3. An effective program articulates clear service and learning goals for everyone involved.

4. An effective program allows for those with needs to define those needs.

5. An effective program clarifies the responsibilities of each person and organization involved.

6. An effective program matches needs through a process circumstances, service providers and service that recognizes changing

7. An effective program expects genuine, active, and sustained organizational commitment.

8. An effective program includes training, supervision, monitoring, support, recognition, and evaluation to meet service and learning goals.

9. An effective program insures that the time commitment for service and learning is flexible, appropriate, and in the best interests of all involved.

10. An effective program is committed to program participation by and with diverse populations." (Honnett and Poulsen 1989 Pg 1f).

Appendix 2: Interview guideline for expert interviews

Expert interview guideline

Thank you very much for agreeing to this interview. The purpose of the interview is to complete the empirical part of my master thesis in MSc of Sustainable Development, Management and Policy at MU University.

General information:

Time: The estimated time for the interview is 60min. Recording: It will be recorded for the purpose of transcription. Use: The gained information will be used in the empirical part of my master thesis. Type of interview: General guided interview, same general area of information collected from different interviews

Information on Master thesis:

The title of the thesis is "The Potential and Limits of Service-Learning to meet the Goals of Education for Sustainable Development. The case of the 'Sustainability Challenge' The impact of Service-Learning on Companies". My research question is

"What are the potential and limits of Service-Learning for companies to achieve the goals of ESD?"

In order to scientifically address this question (1) the goals of ESD for companies need to be defined, (2) it needs to be defined in which criteria the defined goals are reflected to measure the impact of service-learning in companies and (3) if this process meets the stated goals of ESD. Hence, the aim is to identify whether there is a non-formal learning process taking place within the companies that leads to a change in practise when participating in SL-projects.

The sub questions which I would like to answer in this thesis are the following:

- What are the goals of ESD for companies?
- What are possible criteria to evaluate the fulfilment of these goals?
- To what extent does service-learning in cooperation with companies achieve the goals of ESD regarding change within companies?
- How could the concept of service-learning be modified to incorporate the goals of ESD in companies?

The basic idea is that SL as been shown to be a valid method to meet to goals of ESD for students as it improves analytical and holistic thinking, social engagement, communication skills, empowerment, sense of responsibility and similar. Now the question arises if companies also are impacted by this non-formal learning process triggered by SL. Therefore I am planning to interview SL- Partners and to ask them questions on three different levels.

- Micro: change of mind, self-perception of partner, personal level
- Meso: change of institution, learning process within the company, corporate level
- Macro: change of society, actual changes in the institutions, societal level

Trough the expert interviews I hope to find different criteria to evaluation the impact of SL on the stated levels.

Information on the topic:

The Master thesis is based on the following definitions of ESD and SL:

"Education for Sustainable Development means including key sustainable development issues into teaching and learning; (...) it also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action for sustainable development. Education for Sustainable Development consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way."

(UNESCOc 2015)

The **objectives of ESD** stated in the Roadmap of the UNESCO are the following:

 Objective 1: "to reorient education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development" • Objective 2: "to strengthen education and learning in all agendas, programmes and activities that promote sustainable development"

(UNESCO Roadmap on ESD 2014)

"Service-learning is a teaching method which combines community service with academic instruction as it focuses on critical, reflective thinking and civic responsibility. Service-learning programs involve students in organized community service that addresses local needs, while developing their academic skills, sense of civic responsibility, and commitment to the community."

Campus Compact National Center for Community College Questionnaire

- 1) Could you please tell me your name and your profession?
- 2) What is your connection to Education for Sustainable Development? What makes you an expert in this field?
- 3) Do you have any experience with the method Service-Learning? If yes, what kind of experiences?
- 4) Do you think that Service-Learning is a valid method to meet the goals of ESD in general?
- 5) Do you think that Service-Learning is a valid method to meet the goals of ESD in the context of companies and non-formal learning?
- 6) In which way do you believe companies could be impacted when participating in Service-Learning on a Micro-, Meso- and Macro-level in terms of ESD?
- 7) What could be criteria to evaluate these changes? Which criteria could display a non-formal learning process on Micro-, Meso- and Macro level?
- 8) How do you think the concept of service-learning changes when implemented in cooperation with companies instead of communities?
- 9) Where do you see the potential of Service-Learning for companies in terms of ESD?

10) What do you think are the limitations of the Service-Learning approach in terms of ESD?

Fragebogen für ExpertInnen-Interview

- a. Können Sie mir bitte Ihren Namen und Ihren Beruf nennen?
- b. Was ist Ihr Bezug zu Bildung in Nachhaltiger Entwicklung BNE? Was macht Sie zur Expertin auf diesem Feld?
- c. Haben Sie Erfahrung mit der Methode "Service-Learning"? Wenn ja, können Sie diese bitte kurz beschreiben?
- d. Glauben Sie, dass "Service-Learning" eine wirksame Methode ist um die Ziele von BNE zu erreichen oder eher nicht?
- e. Glauben Sie, dass "Service-Learning" eine wirksame Methode ist zur Erreichung der Ziele von BNE im Bezug auf Unternehmen und Non-formales Lernen?
- f. In wie weit, glauben Sie, dass "Service-Learning" Unternehmen beeinflusst auf der Mikro- (Persönliche Ebene), Meso- (Unternehmens Ebene) und Macro- (Gesellschaftliche Ebene) Ebene hinsichtlich der Erreichung der Ziele von BNE?
- g. Was könnten Kriterien sein um diesen Einfluss festzustellen? Was für Kriterien könnten den Einfluss von Service-Learning auf den verschieben Ebenen aufzeigen?
- h. Glauben Sie, dass sich das Konzept von Service-Learning verändert, wenn es mit Unternehmen anstatt von Communities durchgeführt wird?
- i. Wo sehen Sie die Potentiale von Service-Learning hinsichtlich des Erreichens der Ziele für BNE?
- j. Wo glauben Sie, liegen die Beschränkungen von Service-Learning hinsichtlich des Erreichens der Ziele für BNE?

Appendix 3: Transcript of expert interviews

Transcript of the expert interview with Christian Rammel

Place: RCE Vienna at University of Economics, Welthandelsplatz 1, Vienna Austria
Date: 17.03.2015
Time: 12:30-13:00
Duration of Interview: 30min

Name and Function of Expert: Christian Rammel, Professor at WU and Leader of RCE Contact details: Christian.rammel@wu.ac.at

Interview:

11) Können Sie mir bitte Ihren Namen und Ihren Beruf nennen?

Christian Rammel, Angestellter bei WU, Leiter der RCE, Nachhaltigkeitsforscher, Forscher für BNE, Manager für Lehren, Bildung und Impact Prozessen

12) Was ist Ihr Bezug zu Bildung in Nachhaltiger Entwicklung BNE? Was macht Sie zur Expertin auf diesem Feld?

Erster Kontakt mit Bildung, da hat früher im Bildungsministerium im Bereich Umweltbildung und Nachhaltigkeitsbildung als Nachhaktigkeitsforscher gearbeitet und dann im Rahmen der Dekade für BNE, Hauptarbeit für 7-8 Jahre Implementierung und Evaluierung von BNE bei Umweltforum Wien und UNEC Genf, wo Indikatoren für Messung gesucht wurden, RCE-Schnittstelle für Nachhaltigkeit, Wissenschaft und Gesellschaft

13) Haben Sie Erfahrung mit der Methode "Service-Learning"? Wenn ja, können Sie diese bitte kurz beschreiben?

Als Leiter und Lehrer der SC seit 5 Jahren, hat er 20-30 SL Projekte betreut; und im SEEP 15-20 Projekte; hat sich in Theorie und Praxis damit auseinander gesetzt als neue Form des Lehrens und Lernens

14) Glauben Sie, dass "Service-Learning" eine wirksame Methode ist um die Ziele von BNE zu erreichen oder eher nicht?

-wenn man als Hauptziel von BNE, den funktionalen Charakter ansieht, Bildung als Instrument um Nachhaltigkeit in dem Köpfen der Menschen zu verankern, dann ist SL ein sehr gute Methode, vor allem für Studies, verstärkt auch transformative Bildung, also Prozess der über pures wissen hinaus geht, aktiv Nachhaltigkeit gestalten und kritisch hinterfragen lernen; Wissen, Emotion und Werte werden im Prozess beeinflusst alte Pfade verlassen und kritisch mitgestalten, braucht es ganzheitliche Lernerfahrung in Kontext mit Problem, durch SL lernt Studie was es heißt Bildung zu leben um etwas zu verändern, also ja, trifft Ziel der Dekade da es mindshift auslöst, über Wissen bis zu Werte und sich dann in Handlungen zeigt.

15) Glauben Sie, dass "Service-Learning" eine wirksame Methode ist zur Erreichung der Ziele von BNE im Bezug auf Unternehmen und Non-formales Lernen?

Geht eigentlich um informal Lernprozesse, non-formal ist ohne Zertifikate, aber schon Bildungsfocus, informal ist lernen en-passend, dh alle Institutionen außer Schule, KG, uni, in Österreich gibt es eine Akademiker Quote von 18%, dh über 80% keine Akademiker, aber Lohnquote von über 90% dh fast alle arbeiten und dort müssen sie erreicht werden, unternehmen sind neue Lernorte, dort bekommen Angestellte hidden-curriculum mit und Unternehmen hat auch Vorbildfunktion für Gesellschaft, beeinflusst Kunden, und da hat SL ein gutes Potential mindshift der Unternehmens Kultur auszulösen, da gegenseitiges Lernen Grundvoraussetzung, dh wenn in Struktur verankert können auch Angestellte, die nicht mitgemacht haben erreicht werden, wenn unnachhaltige Muster über Bord geworfen werden und das kann SL gut schaffen.

16) In wie weit, glauben Sie, dass "Service-Learning" Unternehmen beeinflusst auf der Mikro- (Persönliche Ebene), Meso- (Unternehmens Ebene) und Macro- (Gesellschaftliche Ebene) Ebene hinsichtlich der Erreichung der Ziele von BNE?

-Problem bei SC, nur studies werden selektiert, aber nicht unternehmen, da wir Drittmittel finanziert sind, dh wir haben CSR unternehmen, die im Bereich Green Marketing was tun wollen und andere die Visionen haben etwas zu verändern.

-Große Unternehmen, die Green Marketing machen wollen und eine Person abdeligieren um bei SL mitzumachen, vermutlich nur marginaler Impact, wenn überhaupt, im besten Fall hat Person die mitmacht einen Aha-Erlebnis und vielleicht persönlichen Lerneffekt, dann ist aber nicht das unternehmen der Lernort sondern der Kurs der SC.

-Unternehmen, das sich als changemaker sieht, das eine Vision hat und nicht "wenn ichs mir leisten kann mach ich was gutes", wenn dann auch noch der Unternehmer teilnimmt und Größe des unternehmen überschaubar, dann kann die SC wirklich was bewegen

-dh man muss unterscheiden zw CSR und Change maker und ob Entscheidungsträger mit Möglichkeit der Umsetzung dabei oder Mitarbeiter, wo Möglichkeit vielleicht besteht, dass er Chef überzeugt, aber viel schwieriger

->Impact der SC hängt von Größe des Unternehmen und ob Entscheidungsträger mit an Bord ist

17) Was könnten Kriterien sein um diesen Einfluss festzustellen? Was für Kriterien könnten den Einfluss von Service-Learning auf den verschieben Ebenen aufzeigen?

-Individuum: hast du was gelernt? Tust du etwas anders jetzt?

-institution: Transparenz, Partizipation, hat sich Firmenkultur verändert? Und wie kann ich das überhaupt festmachen? Black-box öffnen, jedes Unternehmen unterschiedlich Indikatoren zur Messung der Kriterien

->Sehr schwer zu messen;

18) Glauben Sie, dass sich das Konzept von Service-Learning verändert, wenn es mit Unternehmen anstatt von Communities durchgeführt wird?

-ja ganz sicher, SL früher ehrenamtlich, straßensauber machen, jetzt lehr und Lernkonzept, SL entwickelt sich weiter (wir sind noch ganz am Beginn)

19) Wo sehen Sie die Potentiale von Service-Learning hinsichtlich des Erreichens der Ziele für BNE?

-Unternehmen sind Change maker. Unternehmen sind Schlüsselfaktoren, ob das System so bleibt oder sich verändert, Bsp. Effizientere Autos oder entwickel ich neues mobliäts Konzept, Unternehmen sind Bsp. für First and second order learning, und da ich Impact der SC, wie kann SL unternehmen unterstützen die radikalen Wandel im Sinne von Ziele von BNE, Wandel durch Bildung initiieren, mehr und gezielte neue Arten des lernen,

-Wandel macht das Unternehmen, SL unterstütz das

-Studies werden auch mal Unternehmen gründen und sammeln jetzt schon Erfahrung, werden zu Change maker

20) Wo glauben Sie, liegen die Beschränkungen von Service-Learning hinsichtlich des Erreichens der Ziele für BNE?

-UN Dekade als notfallvariante, weil Politik zu schwach war, a la wir können nix verbieten, die Menschen sollen selbst drauf kommen, will den Staat nicht aus der Verantwortung nehmen, SL kann viel, aber nicht allein, nicht das neue Allheilmittel -Gefahr unternehmen in Unis reinnehmen? Enterpreneural University top Thema in Unis, studies müssen in Wirtschaft lernen, Problem Base learning für konkreten Zweck des Wachstum, aber Methode von Praxis und Theorie ist die gleiche, wie bei SL nur das bei SL andere Werte, da unsere studies sollen Wachstum entgegenwirken, SL funktioniert auch gut um Kapitalismus, SL ist eine Methode und wertneutral.

<u>Transcript of the expert interview</u> with Petra Biberhofer

Place: RCE Vienna at University of Economics, Welthandelsplatz 1, Vienna Austria
Date: 19.03.2015
Time: 9:10-10:00
Duration of Interview: 50min

Name and Function of Expert: Petra Biberhofer, Project Manager at RCE Contact details: petra.biberhofer@wu.ac.at

Interview:

21) Können Sie mir bitte Ihren Namen und Ihren Beruf nennen?

-Petra Biberhofer, arbeitet seit 2012 am Institut für Ecol Econ an der WU,

-Geschichte und Erklärung von RCES, INEX

22) Was ist Ihr Bezug zu Bildung in Nachhaltiger Entwicklung BNE? Was macht Sie zur Expertin auf diesem Feld?

- Bezug via RCE, UN DECADE, Leiterin der Sustainability Challenge, Erfahrung aus Praxis, aber auch wissenschaftlich, da universitärer Anspruch

23) Haben Sie Erfahrung mit der Methode "Service-Learning"? Wenn ja, können Sie diese bitte kurz beschreiben?

- Arbeitet seit Jahren mit SL im Zuge der SC wo sie diese auch weiterentwickelt damit sie regional wachsen kann, gibt model Beispiele, aber regionaler Bezug/Anpassung sind extrem wichtig; braucht viel zeit, aber methodisch und didaktisch sehr wertvoll,
- SL kommt von experience based learning, learning by doing, nicht nur aus Büchern lernen, sondern auch Partner aus Praxis an praxisrelevanter Darstellung von Problem, Reflexion Prozess ist wichtig, Aktionsfocus, Kopf, Herz und Hand verbinden

24) Glauben Sie, dass "Service-Learning" eine wirksame Methode ist um die Ziele von BNE zu erreichen oder eher nicht?

-man kann zielen nur näher kommen; Erfolg/Annäherung an Ziele im Sinne von BNE nur schwer zu messen anhand von quantitative Indikatoren, eher durch qualitative

-Ja, Methode ist wirksam, wenn richtig genutzt. Wird in vielen Kontexten genutzt. Auch in Praxis gemerkt das SL gut, da zeigt das Probleme nicht nur in Wissenschaft. Diskursen angegangen werden soll, sondern auch in Praxis, mehr-ebenen perspektive und transdisziplinarität spielen wichtige Rolle. Bei SC transdiziplinäre Teams

-Forschungslüke zw ESD-SL-Transdisziplinarität Nexus

-Mehrebenenperspektive, inter- und transdisziplinarität, lassen sich in Methode schön verwirklichen, sowie kritisches Denken und problemlosen auch, da es auch um Spielgelvorhalten geht, studies sehen andere Dinge, schaffen neues Problembewusstsein

25) Glauben Sie, dass "Service-Learning" eine wirksame Methode ist zur Erreichung der Ziele von BNE im Bezug auf Unternehmen und Non-formales Lernen?

- SL ist spannend da formal (im Curricula) aber auch non-formales Lernen schätzt, was selten der Fall ist an der Uni.
- Guter Weg für Annäherung, hängt von Integration der Partner in Projekt ab, dauert bis unternehmen verstehen, was SL ist. Wenn sie Lernprozesse auf persönlicher Ebene in unternehmen hineintragen, kann es nützlich sein. Hängt aber sehr von unternehmen ab, sicher auf individueller ebene anregend, da auch Kontakt mit studies,

-nonformales lernen findet natürlich statt in unternehmen, primer für RCE sind studies, aber auch Praxis Partner sollen ins lernen inkludiert werden, RCE möchte vor allem non-formales lernen fördern, damit man auch neue orte des lernen schafft,

26) In wie weit, glauben Sie, dass "Service-Learning" Unternehmen beeinflusst auf der Mikro- (Persönliche Ebene), Meso- (Unternehmens Ebene) und Macro- (Gesellschaftliche Ebene) Ebene hinsichtlich der Erreichung der Ziele von BNE?

-persönliche ebene: ja fix, da im Workshop, erklären was RCE ist

-unternehmen: hängt von unternehmen ab, insofern, da Projekte den Anspruch haben, das Projekte nicht nur auf individueller ebene anzusetzen sonder direkt auf unternehmensebene, bei großen Unternehmen vermutlich unrealistisch, dass alle Abteilungen davon wissen, aber prinzipiell wird Fragestellung für unternehmensebene relevant sein

-Gesellschaft: fördert umdenken der Visionen ist Ziel von RCE aber sehr ambitioniert, aber VO reicht nicht, es müsste von der gesamten uni ausgehen, wie zb in Deutschland, sicher Einfluss auf Langezeit hin

-unis müssen auch effizient sein und da sind solche Methoden schwer umzusetzen, da Zeit intensiv, aber wird immer wichtiger zB. Responsable science, ist aber Nische

- 27) Was könnten Kriterien sein um diesen Einfluss festzustellen? Was für Kriterien könnten den Einfluss von Service-Learning auf den verschieben Ebenen aufzeigen?
 - Grundsätzlich gibt's Kompetenz Konzepte,
 - Um sowas feststellen zu können muss man das über längere Zeit begleiten, davor-dazwischen-danach
 - Stake holder sollen mit einbezogen werden,
 - Flexible Indikatoren um das feststellen zu können,
 - Anhand von Kriterien Katalog, zB. Bildungslandkarte die an die drei Ebenen koppeln und dann abfragen, möglichst nicht zu abstrakt,
 - Hat sich Werthaltung verändert? Auf persönlicher ebene
 - Interdisziplinäre Gruppen, hat das für sie gemacht? Neue Aspekte hervor gebracht?
 - Intergenerationale lernen das erzeugt wird, wertschätzender Umgang
 - Kritisches Denken und problemlösen auf individueller ebene
 - Lebenswirklichkeiten von lernenden,
 - Musst vermutlich nicht alles neu erfinden, schau was schon da ist
 - Koppel ESD Prinzipien mit SL und pass sie an eben an
- 28) Glauben Sie, dass sich das Konzept von Service-Learning verändert, wenn es mit Unternehmen anstatt von Communities durchgeführt wird?
 - In Praxis Erfahrung, leichter mit unternehmen zu arbeiten, weil die mehr Geld haben und funktioniert gut, da sie sich zeit nehmen
 - Ja, Konzept verändert sich definitiv, unternehmen hat andere Position in Gesellschaft,
 - ambitionierter Anspruch Makro ebene zu verändern, wirkt aber auch mehr, weil ich Zielgruppe erreiche die nicht BNE orientierungen entspricht, als Chance sehen
- 29) Wo sehen Sie die Potentiale von Service-Learning hinsichtlich des Erreichens der Ziele für BNE?

-wenn man Konzept nicht separat von BNE sieht hat es viele potentiale, auch abgesehen davon durch taktische Konzipierung der Methode da systemreflexisität und transdisdisziplinarität, und Diskurs Kompetenz voraussetzt, 4 Kompetenz die BNE voraussetzt und die durch SL gut gedeckt sind, deswegen viel potential, auch unabhängig von BNE, ist Definition Sache

-in USA eher müllsammel, in Deutschland ganz anders gelebt, lokalere Kontext beeinflusst das Potential, aber hier viel Potential auch für unternehmen,

-SL schafft Integration von Unternehmen in BNE Diskurs, da Zugang zu "uns"

-hat potential denken in Unternehmen zu verändern

-wenn mehr in Unis integriert, studies werden ja auch zu Unternehmerinnen werden

30) Wo glauben Sie, liegen die Beschränkungen von Service-Learning hinsichtlich des Erreichens der Ziele für BNE?

-idealistischer Nischenbereich

-zeit und Ressourcen intensiv, wichtig das zu begleiten, Reflexionsprozess fruchtbar für studies und unternehmen braucht viel zeit, aber wenn es mal etabliert ist, dann gibt's Routine und arbeitet mehr zusammen, und stellt dann großen Mehrwert da, da spannende Praxis Partner, die über SL hinausgehen, Zeitargument stimmt am Anfang, aber sehr wertvoll investiert, ökonomisch effiziente Zeitressourcen Management stimmt kurzfristig, aber langfristig entwickeln auch Unternehmen neue Kompetenzen die wichtig und gut sind für unternehmen

-gefahr für Unis mit unternehmen zu arbeiten? Man muss sehr aufpassen bzgl. greenwashing, wichtig nicht Marketing oder Consultant Projekte zu machen in Form von Klärung der Erwartungshaltung im stakeholderworkshop, wir wollen keine greenwashing Projekte, also ja, man setzt sich Kritik aus das es zu Green washing kommen kann.

<u>Transcript of the expert interview</u> with Regina Steiner

Place: Pädagogische Hochschule PH Kalplanstraße 20, Linz, ÖsterreichDate: 19.03.2015Time: 14:30- 15:30Duration of Interview: 60 Min

Name and Function of the expert: Regina Steiner, Professor for pedagogic Contact details: regina.steiner@umweltbildung.at

Interview:

31) Können Sie mir bitte Ihren Namen und Ihren Beruf nennen?

- 32) Was ist Ihr Bezug zu Bildung in Nachhaltiger Entwicklung BNE? Was macht Sie zur Expertin auf diesem Feld?

-Früher bei Forum Umweltbildung gearbeitet seit 1987-2014 dessen Kerngeschäft BNE ist

33) Haben Sie Erfahrung mit der Methode "Service-Learning"? Wenn ja, können Sie diese bitte kurz beschreiben?

 Keine persönliche Erfahrung, aber darüber gelesen und über andere, auch an PH Expertin für SL, und SL Projekte an PH, wo studies mit Behinderten Jugend. Zusammen arbeiten

34) Glauben Sie, dass "Service-Learning" eine wirksame Methode ist um die Ziele von BNE zu erreichen oder eher nicht?

-ja, auf jeden Fall, BNE ist Bildungsziel, lernenden haben die Möglichkeit Kompetenzen wie Team-Kompetenzen, Reflexions-Kompetenzen, Kommunikationskompetenzen, Erweiterung des Blickwinkels, neue Perspektive auf Themen die studies interessieren, da sie ja Thema meist selber aussuchen, selbstwirksamkeitsgefühl, Konflikt Management, Gefühl des Scheiterns und wieder rauskommen,

35) Glauben Sie, dass "Service-Learning" eine wirksame Methode ist zur Erreichung der Ziele von BNE im Bezug auf Unternehmen und Non-formales Lernen?

-Unternehmen haben keine Bildungsziele, sondern unternehmensziele ökonomischer Art, also passen diese Ziele überhaupt zusammen?

-kann mir gut vorstellen, dass wenn studies mit Unternehmenspartner interaktivieren, konfrontieren sie angestellte informelle und fordern sie heraus, zu überdenken was ihre unternehmensziele sind; Studies sind oft kritisch und hinterfragen, also SL-Angestellte können sich durch dieses informelle Setting leichter in Frage stellen und können sich leichter auf Lernprozess einlassen, da Studies auch wieder weg sind und sie nicht beweisen müssen

- 36) In wie weit, glauben Sie, dass "Service-Learning" Unternehmen beeinflusst auf der Mikro- (Persönliche Ebene), Meso- (Unternehmens Ebene) und Macro- (Gesellschaftliche Ebene) Ebene hinsichtlich der Erreichung der Ziele von BNE?
 - Meso: da muss schon was passiert sein davor, damit die beim SL mitmachen
 - Mikro: Konfrontation der Angestellten mit konkreten Anforderung (keine Vorstellung von den SL Projekten, wie die ausschauen)
 - Einfluss hängt sehr stark von Unternehmen ab, in wie weit die SL integrieren und wer vom Unternehmen dabei ist,
 - Wenn das nur abgespaltene CSR Gruppe, die irgendwas für PR tun soll, dann sind Auswirkungen auf Meso und Makro Eben sehr gering
 - Wenn das kleines Unternehmen und Nachhaltigkeit im gesamt Konzept integriert ist, dann kann SL zurückwirken/verstärken, wobei da schon im Vorhinein

37) Was könnten Kriterien sein um diesen Einfluss festzustellen? Was für Kriterien könnten den Einfluss von Service-Learning auf den verschieben Ebenen aufzeigen?

-Mikro: Verständnis von Nachhaltigkeit könnte gecheckt werden, ob sich was verändert hat durch SL -Meso: zB. In unternehmensleitziel inkludiert werden, aber glaub nicht das man das erwarten kann von so einem Miniprojekt, also wenn muss schon vorher was passiert sein in Richtung "wir wollen uns engagieren" und deshalb machen wir bei SL mit.

-Makro: Die studierenden selber haben viel lerngewinn und werden in späteren Arbeitsleben Einfluss haben; das Unternehmen durch SL beeinflusst wird und dadurch was verändern, glaubt sie eher nicht so sehr, kann sich nur vorstellen das studies Denkprozesse auslösen, die länger vl was bewirken, aber das kann man nicht kurzfristig mit irgendwelchen Indikatoren festmachen; sondern wenn nur längerfristig

-Was genau ist ihr Verständnis von Nachhaltigkeit? (Vorher/Nachher)

38) Glauben Sie, dass sich das Konzept von Service-Learning verändert, wenn es mit Unternehmen anstatt von Communities durchgeführt wird?

-Unternehmen sind gewinnorientier, deswegen ist es ein anderes Konzept, muss zur Unternehmenskultur passen, Klar haben unternehmen eine CSR Schiene, -wenn man SL so definiert, das sie ein Gemeinwohl orientiertes Ziel haben, dann ist unternehmen schon integrierbar ZB. Altersheim ist auch profitorientiert, und trotzdem Dienst an Gemeinschaft

39) Wo sehen Sie die Potentiale von Service-Learning hinsichtlich des Erreichens der Ziele für BNE?

-Leute merken wie schaut Ding in Realität aus, wie einfach oder nicht einfach ist das Erreichen von Nachhaltigkeit in der Gesellschaft?

-Vision: Projekt entwickeln bei SL, das Unternehmen sagt, wir wollen mehr davon, aber das hängt stark von Unternehmen ab;

-größeres Potential eher bei kleinen als bei großen Unternehmen

40) Wo glauben Sie, liegen die Beschränkungen von Service-Learning hinsichtlich des Erreichens der Ziele für BNE?

-Gewinnorientierung, weil Nachhaltigkeit oft teuer, ja auch zB. Waldviertel gibt -Nachhaltigkeit ist nicht rentable für Unternehmen, lässt sich nicht mit Kapitalistischen System vereinbaren; Müssten anderes System entwickeln wo das dann möglich ist,

-Augenauswischerei geht schon, so wie betriebskindergarten, aber Nachhaltigkeit als Unternehmens Philosophie in diesem System kaum möglich, abgesehen von Nischen;

-SL ist Ausnahmezustand, super Rahmenbedingung um etwas zu entwickeln, gibt auch viele Unternehmen die Ressourcen für Innovation bereit stellen;

-Studies geben ihr kreatives Potential den Unternehmen, Die Frage ist was machen Unternehmen dann damit? Wollen sie sich wirklich neue kreative Idee holen und die dann auch weiterentwickeln oder sagen sie, lassen wir sie mal werkeln und dann schau ma...hängt stark von Offenheit gegenüber studies und vom Mittleren Management ab.

Appendix 4: Interview guideline for SL-partners

Interviewleitfaden für ehemalige Service-Learning Partner

Vielen Dank für die Zustimmung zu diesem Interview. Mein Name ist Elena Zepharovich. Ich studiere einen Master of Science in Sustainable Development, Management and Policy. Im Moment schreibe ich meine Masterarbeit über die Lehrmethode Service-Learning und ihren Einfluss auf Unternehmen hinsichtlich der Ziele einer Bildung für Nachhaltige Entwicklung. Dieses Interview soll zur Vervollständigung meiner empirischen Forschung dienen.

Allgemeine Information:

Zeit: ca 20-30 Minuten

Aufnahme: Das Interview wird zwecks Transkription aufgenommen Verwendung: Der Output des Interviews dient dem empirischen Teil der Masterarbeit Interviewtyp: Leitfadengestütztes Interview mit teils offenen und geschlossenen Fragen

Sprache: Deutsch

Information zur Masterarbeit:

Der Titel der Masterthesis lautet "The Potential and Limits of Service-Learning to meet the Goals of Education for Sustainable Development. The case of the 'Sustainability Challenge' The impact of Service-Learning on Companies". Meine Forschungsfrage ist folgende

"What are the potential and limits of Service-Learning for companies to achieve the goals of ESD?" /Was sind die Potentiale und Limits von Service-Learning hinsichtlich einer Annäherung an die Ziele einer Bildung für Nachhaltige Entwicklung?

Der positive Effekt von Service-Learning für Studierende hinsichtlich der Ziele von Bildung für Nachhaltige Entwicklung wurde ausgiebig erforscht und belegt, da Service-Learning unter anderem Fähigkeiten wie kritisches und vernetztes Denken, Zusammenarbeit in transdisziplinären Teams, Selbstreflexion, sowie soziales Engagement und Problembewusstsein fördert.

Für mich stellt sich die Frage, ob dieser Lernprozess nur auf die Studierenden beschränkt ist, oder ob auch die Service-Learning Partner bzw. Unternehmen davon profitieren. Das Ziel der Masterarbeit ist es also den Effekt von Service-Learning auf Unternehmen zu evaluieren hinsichtlich einer Annäherung an die Ziele von Bildung für Nachhaltige Entwicklung.

Die Sustainability Challenge des RCE (früher INEX) dient als Case Study. Anhand von 6 Interviews mit diversen Service-Learning Partnern, soll festgestellt werden, ob und wie die Teilnahme an der Sustainability Challenge (bzw. am Service-Learning Projekt) Unternehmen auf den folgenden Ebenen beeinflusst wurden:

- Mikro Ebene(Persönlich, Selbstwahrnehmung, Individuell)
- Meso Ebene (Veränderung im Unternehmens, Lernprozess)
- Makro Ebene (Gesellschaftlich, allgemein Wohl, konkrete Veränderungen)

Da die Interview Partner die ExpertInnen bezüglich ihrer Unternehmen sind und am besten den Einfluss von Service-Learning erkennen, möchte ich ihre Expertise nutzen um die Potentiale und Limits der Methode Service-Learning für Unternehmen zu evaluieren.

Die Tatsache, dass einige Projekte schon länger zurückliegen ist insofern von Vorteil, als es mir ermöglicht den Langzeiteffekt von Service-Learning festzustellen.

Information zum Thema :

Die Masterthesis basiert auf den folgenden Definitionen:

"Bildung für Nachhaltige Entwicklung BNE befähigt Lernende, informierte Entscheidungen zu treffen und verantwortungsbewusst zum Schutz der Umwelt, für eine bestandsfähige Wirtschaft und einer gerechten Gesellschaft für aktuelle und zukünftige Generationen zu handeln und dabei die kulturelle Vielfalt zu respektieren. Es geht um einen lebenslangen Lernprozess, der wesentlicher Bestandteil einer hochwertigen Bildung ist. BNE ist eine ganzheitliche und transformative Bildung, die die Lerninhalte und -ergebnisse, Pädagogik und die Lernumgebung berücksichtigt. Ihr Ziel / Zweck ist eine Transformation der

Gesellschaft." (UNESCO 2014)

Ziele von BNE:

Zielsetzung 1: "Neuorientierung von Bildung und Lernen, sodass jeder die Möglichkeit hat, sich das Wissen, die Fähigkeiten, Werte und Einstellungen anzueignen, die erforderlich sind, um zu einer nachhaltigen Entwicklung beizutragen"

Zielsetzung 2: "Stärkung der Rolle von Bildung und Lernen in allen Projekten, Programmen und Aktivitäten, die sich für eine nachhaltige Entwicklung einsetzen" (UNESCO 2014)

Service-Learning ist eine Lehrmethode, bei der Studierende praktische Erfahrung sammeln, wodurch ein Service für Communities/Unternehmen entsteht. Die Methode unterstützt kritisches und selbst-reflektiertes Denken, soziales Engagement, Transdiziplinarität sowie kollaborative Entscheidungsfindung. Die Service-Learning vereint die akademische Lehre mit konkreten lokalen Herausforderungen, wodurch ein Gewinn auf Seiten der Studierenden sowie auf Seiten der SL-Partner entsteht im Sinne der Bildung für Nachhaltige Entwicklung.

FRAGEBOGEN

-Name des Interviewpartners/Partnerin:

-Namen des Unternehmens:

-Anzahl der Angestellten:

-Position im Unternehmen:

-Welchen Platz nimmt Nachhaltigkeit in ihrem Unternehmen ein? (Teil welcher Abteilung? In Mission&Vision Statement?)

-Jahr der Teilnahme an der Sustainability Challenge:

-Warum haben Sie bei der Sustainability Challenge teilgenommen? Können Sie Ihre Erfahrung/ihr Projekt kurz beschreiben?

-Was haben Sie persönlich durch die Teilnahme am SL Projekt gelernt? Hat die Teilnahme irgendetwas für Sie persönlich verändert?

-Hat sich ihr Verständnis von Nachhaltigkeit durch die Teilnahme an der Sustainability Challenge verändert?

-Auf einer Skala von 1-10 in wie weit hat die Teilnahme folgende Eigenschaften bei Ihnen beeinflusst?

Eigenschaft	1(gar nicht verbessert)-10 (sehr stark verbessert)
Kritisches Denken	
Verständnis von anderen Realitäten	
Vorstellung von Zukunftsszenarien	
Treffen von Entscheidungen in einer partizipativen und kollaborativen Art und Weise	
Problembewusstsein bezüglich Nachhaltigkeit	
Werthaltung gegen über anderen Disziplinen	
Soziales Engagement	

-Hat das SL-Projekt einen Einfluss auf der Unternehmensebene gehabt bzw. hat sich daraufhin etwas im Unternehmen (wie klein auch immer) verändert? Wenn ja, welchen? Können Sie Beispiele nennen?

-Hat die Teilnahme am Service-Learning Projekt die Wahrnehmung des Unternehmens/der Unternehmensführung hinsichtlich ihrer Rolle in der Gesellschaft verändert? zB. In Form eines internen Lernprozesses. Wenn ja, können Sie ein Beispiel nennen?

-Wo sehen Sie die Potentiale von der Methode Service-Learning mit Unternehmen? Welche Projekte eignen sich besonders dazu?

-Was könnte man nach ihren Erfahrungen mit der SC bei Service Learning Projekte besser machen? -Wie könnten Service Learning Projekte noch besser eine Brücke zwischen nachhaltigkeitsorientierten Unternehmen und Universitäten bilden?

-Wo liegen für Sie die Beschränkungen von Service-Learning mit Unternehmen?

-Würden Sie wieder an einem SL Projekt teilnehmen?

Appendix 5: Transcript of SL-Partner interviews

Transcript of SL-Partner interviews

1)ÖBB

2)Stadtwerke

3)Merkur

4)A1

5)Ökostrom

6)Swimsol

1)Interview Transcript ÖBB

-Datum, Zeit, Ort: 09.04.2015 um 11:00-11:40, ÖBB Zentrale Praterstern 2

-Name des Interviewpartners: Mag. Thomas Schuh

-Namen des Unternehmens: ÖBB Infra

-Anzahl der Angestellten: 16.250

-Position im Unternehmen: Nachhaltigkeitskoordinator für ÖBB Infra

-Welchen Platz nimmt Nachhaltigkeit in ihrem Unternehmen ein? (Teil welcher Abteilung? In Mission&Vision Statement?) keine CSR Abteilung, verändert sich immer wieder, schon in Strategie drinnen, Thema und Verständnis wächst,

-Jahr der Teilnahme an der Sustainability Challenge: 2013

-Warum haben Sie bei der Sustainability Challenge teilgenommen? Können Sie Ihre Erfahrung/ihr Projekt kurz beschreiben?

-Schuh hat bei Veranstaltung davon gehört, großes Interesse an Interdisziplinarität;

-Verkehrsstation der Zukunft: Wie schaut eine Haltestellt 2030 ausschauen? Studies Rahmenbedingungen erklärt und dann frei lassen; am Schluss sollte Katalog erstellt werden, aber Zeit war zu kurz um fertigzustellen, aber nächster Schritt wurde nicht umgesetzt

-Was haben Sie persönlich durch die Teilnahme am SL Projekt gelernt? Hat die Teilnahme irgendetwas für Sie persönlich verändert?

-alle 2 Wochen getroffen, zwei drei andere Kollegen dazu geholt, für die Thema neu war

-Freude daran wie engagiert Studies waren

-Hat sich ihr Verständnis von Nachhaltigkeit durch die Teilnahme an der Sustainability Challenge verändert?

-Nein, da schon lange mit Thema beschäftigt, vielleicht die anderen Kollegen

-Auf einer Skala von 1-10 in wie weit hat die Teilnahme folgende Eigenschaften bei Ihnen beeinflusst?

Eigenschaft	1(gar nicht verbessert)-10 (sehr stark verbessert)
Kritisches Denken	1
Verständnis von anderen Realitäten	3
Vorstellung von Zukunftsszenarien	3
Treffen von Entscheidungen in einer partizipativen und kolla- borativen Art und Weise	2
Problembewusstsein bezüglich Nachhaltigkeit	1
Werthaltung gegen über anderen Disziplinen	1
Soziales Engagement	1

-Hat das SL-Projekt einen Einfluss auf der Unternehmensebene gehabt bzw. hat sich daraufhin etwas im Unternehmen (wie klein auch immer) verändert? Wenn ja, welchen? Können Sie Beispiele nennen?

-Interesse von Führungseben vorhanden, und auch von Planungsabteilung, aber nichts Neues dahergekommen

-Nicht bis zum Vorstand vorgedrungen

-Einer der Studies hat Job gefunden

-Hat die Teilnahme am Service-Learning Projekt die Wahrnehmung des Unternehmens/der Unternehmensführung hinsichtlich ihrer Rolle in der Gesellschaft verändert? zB. In Form eines internen Lernprozesses. Wenn ja, können Sie ein Beispiel nennen?

-Nein, aber bei so großem Konzern prinzipiell schwer zu sagen, bei kleinem Startup ganz anders,

-Wo sehen Sie die Potentiale von der Methode Service-Learning mit Unternehmen? Welche Projekte eignen sich besonders dazu?

-Zukünftige Angestellte kennen lernen

-Frischer Wind, Kreativität

-Transdisziplinarität ist super

-Planungsprojekte eignen sich gut, aber viele Dinge in starkes Regelwerk gegossen, das verengt den Spielraum sehr stark,

-Bereich von Partizipation, zb. Bauprojekt mit Anrainern

-Inspiration die ins Unternehmen gebracht wird

-Für konkretes Ergebnis hilfreich wenn länger dauert.

-Was könnte man nach ihren Erfahrungen mit der SC bei Service Learning Projekte besser machen?

-hat so ganz gut empfunden, klarer roter Faden, Betreuung war gut,

-Wie könnten Service Learning Projekte noch besser eine Brücke zwischen nachhaltigkeitsorientierten Unternehmen und Universitäten bilden?

- Vielleicht mit anderen Plattformen kurzschließen um andere Unternehmen anzuwerben, damit Angebot auch andere erreicht.

-Wo liegen für Sie die Beschränkungen von Service-Learning mit Unternehmen?

-Zeitliche Beschränkung, dadurch kann man sich nicht viel erwarten

-Bedenken bezüglich Betriebsgeheimnissen, jmd. soll guten Einblick bekommen, aber ist dann weg

-Kosten relativ hoch für Studentenprojekt, Input-Output?

-Interne Richtlinien, die es zu beachten gilt

-Losgelöst von Unternehmensstruktur, Studies wollten weiterarbeiten, aber an Internen Dingen gescheitert wie Finanzierung, gibt's schon was usw. ÖBB zu groß, zu komplex, scheitert daran, dass Entscheidung nicht gefällt wird

-Würden Sie wieder an einem SL Projekt teilnehmen?

-Ja schon, aber Themen sind sehr ähnlich, also wäre wieder gleiche Projekt

2) Interview Transcript WIENERSTADTWERKE

-Datum, Zeit, Ort: 08.04. 2015 von 9:00-9:45, Wiener Stadtwerke Thomas Klestil Platz 14

-Name des Interviewpartners/Partnerin: Kathrin Brunner

-Namen des Unternehmens: Wiener Stadtwerke Holding AG

-Anzahl der Angestellten: 16.000

-Position im Unternehmen: Koordination für Forschung, Technology und Innovation im Konzern

-Welchen Platz nimmt Nachhaltigkeit in ihrem Unternehmen ein? (Teil welcher Abteilung? In Mission&Vision Statement?) Stabstelle in Konzernleitung "Nachhaltigkeitsmanagement" seit 2010 in Unternehmenstrategie

-Jahr der Teilnahme an der Sustainability Challenge: 2014

-Warum haben Sie bei der Sustainability Challenge teilgenommen? Können Sie Ihre Erfahrung/ihr Projekt kurz beschreiben?

-Von Rammel kontaktiert, 3 verschiedene Projekte:

1)Mulitmodale Mobilitäts Assistenz, wegeketten vernetzen, Smart City Strategie Vienna: individueller Verkehr soll um 50% reduziert werden, also müssen Kombinationsmöglichkeiten optimiert werden, Carsharing, ÖBB, Wiener Linien kombinieren und Ticket online kaufen, Challenge "Was sagt ältere Generation dazu" Handy APP Smile

2) Wiener Linien: Nachhaltige U-Bahnstation

3)Wien Energie: Zukunft der Easy Home Control, Umgang der Generation 50+

-Erfahrung: Schwierig da viele Ausfälle, von 6 auf 2 Personen reduziert, hat Umsetzbarkeit der Projekte stark beschränkt

Grund für Teilnahme:

1)Kooperationsgedanke mit Wiener Forschungsinstitutionen um bessere Sichtweisen zu gewinnen, um Komfortzone zu verlassen und andere auf eigene Probleme blicken lassen

2) Hoffnung auf Sensibilisierung im Unternehmen hinsichtlich Nachhaltigkeit

->Deshalb kosten Nutzen zahlt sich auf und Entscheidung mit drei Projekten an SC teilzunehmen.

-Was haben Sie persönlich durch die Teilnahme am SL Projekt gelernt? Hat die Teilnahme irgendetwas für Sie persönlich verändert?

-Erwartungshaltung war zu hoch, Transdisziplinarität ist extrem schwierig und wird vom RCE unterschätzt, Bedarf großen Aufwand Projekte durch zuführen, wenn es aber geschafft wird ist es sehr fruchtbar Bsp. Kooperation mit TU 10 Doktoranten über 3 Jahre

-Mangel an Ressourcen bei SC

-Gute Idee, kann sehr fruchtbar sein, aber braucht mehr Ressourcen um Projekt umzusetzen,

-Zu breit, Qualität für Quantität

-Große Herausforderung für Studies, da schwierig mit anderen zusammen zu arbeiten, parallel mit VO, Prüfung,

-Hat sich ihr Verständnis von Nachhaltigkeit durch die Teilnahme an der Sustainability Challenge verändert?

NEIN

-Auf einer Skala von 1-10 in wie weit hat die Teilnahme folgende Eigenschaften bei Ihnen beeinflusst?

Eigenschaft	1(gar nicht verbessert)-10 (sehr stark verbessert)
Kritisches Denken	1
Verständnis von anderen Realitäten	3
Vorstellung von Zukunftsszenarien	1
Treffen von Entscheidungen in einer partizipativen und kolla- borativen Art und Weise	1
Problembewusstsein bezüglich Nachhaltigkeit	2

Werthaltung gegen über anderen Disziplinen	1
Soziales Engagement	1

-Hat das SL-Projekt einen Einfluss auf der Unternehmensebene gehabt bzw. hat sich daraufhin etwas im Unternehmen (wie klein auch immer) verändert? Wenn ja, welchen? Können Sie Beispiele nennen?

Nein, aber glaubt, dass es bei kleineren Organisationen der Effekt größer ist, da Wiener Stadtwerke Experten hat, die sich nur mit Nachhaltigkeit beschäftigen, und SL zu klein um was zu verändern,

-Change maker oder CSR?

Beides, kommt auf Bereichsunternehmen an, zB. Bei Energie wird Nachhaltigkeit gelebt, bei Konzernleitung eher CSR

-Hat die Teilnahme am Service-Learning Projekt die Wahrnehmung des Unternehmens/der Unternehmensführung hinsichtlich ihrer Rolle in der Gesellschaft verändert? zB. In Form eines internen Lernprozesses. Wenn ja, können Sie ein Beispiel nennen?

Nein, da eh viel in Stakeholderkontakt

-Wo sehen Sie die Potentiale von der Methode Service-Learning mit Unternehmen? Welche Projekte eignen sich besonders dazu?

-Größtes Potential für Studies, da Praxiserfahrung gewinnen

- 2 von 3 Projektenhaben Fragestellung verändert um diese leichter Erfüllen zu können, geht im Arbeitsleben einfach nicht; anders als beim Studium; haben Praxis an ihre Theorie angepasst

-Vernetzungsgedanke wird immer wichtiger, eines der größten Potentiale

-Zukünftige Angestellte kennen lernen

-Lerneffekt wie ticket nächste Generation, Studies werden immer selbstbewusster

-Was könnte man nach ihren Erfahrungen mit der SC bei Service Learning Projekte besser machen?

-Besseres Rekrutin um Ausfallquote zu reduzieren, zB. In Zusammenarbeit mit Unternehmen

-Bessere Ressourcen Ausstattung, mehr Betreuung von Seiten der Uni,

-Studies vorbereiten bei Dos&Donts in Arbeitswelt zB. Wie schreibe ich Mails, wie bereite ich mich vor (Handgeschriebener Zettel mit papierfranzen!!!)

-Qualität vor Quantität, weniger Leute aber besser betreuen,

-Bessere Teamzusammenstellung zB. Bei Wiener Linien "Nachhaltige U-Bahnstation" kein TUler

- Mehr Priorität von SL Projekt; ECTS, SL ist nicht der Fokus, da auch VO und Test; nur beschränkter Einsatz

-Wie könnten Service Learning Projekte noch besser eine Brücke zwischen nachhaltigkeitsorientierten Unternehmen und Universitäten bilden?

-Anfangsworkshop war gut, Experten zu VO einladen

-Wo liegen für Sie die Beschränkungen von Service-Learning mit Unternehmen?

-Ressourcenthema für Unis und Unternehmen,

-Sehr kurze Laufzeit

-Würden Sie wieder an einem SL Projekt teilnehmen?

-Wir schließen es nicht aus, aber wir warten ob es sich verbessert;

Freut uns das Feedback gehört wird.

-Wäre wichtig dass schon Projekt da und nicht extra ein Projekt suchen müssen

3)Interview Transcript MERKUR

-Datum, Zeit, Ort: 08.04.2015, von 11:00-11:50

-Name des Interviewpartners/Partnerin: Andreas Purin

-Namen des Unternehmens: REWE International AG Merkur Warenhandels AG Abteilung Genussküche

-Anzahl der Angestellten: 37

-Position im Unternehmen: Leiter der Abteilung Genussküche

-Welchen Platz nimmt Nachhaltigkeit in ihrem Unternehmen ein? (Teil welcher Abteilung? In Mission&Vision Statement?) Eigene Nachhaltigkeitsabteilung, jede Handelsfirma fokussiert sich auf eigenen Punkt in Rahmenstragtegie, Merkur hat sich Regionnalität ausgesucht

-Jahr der Teilnahme an der Sustainability Challenge: 2012/2013

-Warum haben Sie bei der Sustainability Challenge teilgenommen? Können Sie Ihre Erfahrung/ihr Projekt kurz beschreiben?

-Um Ideen zu generieren

-um ohne Scheuklappen an gewissen Themen heranzugehen, in der Hoffnung das die SC neue Perspektiven

-Ökoprofit

-2012: Eines für Produktion und eines für nachhaltige Verpackung, Studies haben Produzenten gefunden und auch getroffen, aber Essen sehr schwierig in Handhabung. Und Ökoprodukte sehr teuer

-2013: Lieferanten nach Nachhaltigkeitsschlüssel bewerten, wenn zwei Lieferanten gleich gut, dann würde Merkur "nachhaltigeren" Lieferanten wählen, Studies haben Fragebogen erstellt und Index erstellt, aber Zentraleinkauf zu komplex, da jetzt schon so viele Aufgaben, das Nachhaltigkeit nicht erste Priorität. Will Lieferanten nicht quälen. Muss auch überwacht werden, also entweder ganz oder gar nicht, also gar nicht. Eh so viele Zertifizierungen. Man will auch weniger Salz und weniger Fleisch in Produktion, aber man muss sich auch nach Markt richten;

Scheitert am Tagesgeschäft und am Operativen

-Was haben Sie persönlich durch die Teilnahme am SL Projekt gelernt? Hat die Teilnahme irgendetwas für Sie persönlich verändert?

-Nein, weil selber Nachhaltigkeit studiert hat, also nix neues. Hat Ansprüche an Nachhaltigkeit reduzieren müssen, da durch wirtschaftliche Rahmenbedingungen in großem Konzern beschränkt. Weg der kleinen Schritte in großen Unternehmen, wenn KMU, Chef sagt, das mach ma, dann wird's gemacht

Persönliches Lernen durch Frischheit der Jungen, sind noch idealistischer und unverdorben,

"Keiner will in Schönheit sterben" REWE tut viel, aber kann nur sich um Nachhaltigkeit kümmern solange ein Profit gemacht wird.

-Persönlicher Lerneffekt?

Horizonterweiterung, oft in der Praxis viel zu schnell bei Lösung, ohne Alternative abzuwägen, durch verschiedene Disziplinen bekommt man anderen Blickwinkel und durch Teilnahme an SC wird Nachhaltigkeit nochmal mehr ins Bewusstsein gerückt

-Hat sich ihr Verständnis von Nachhaltigkeit durch die Teilnahme an der Sustainability Challenge verändert? Nein, aber erweitert, da auch Kontakt mit anderen Unternehmen, man hängt die Lampe höher, bekommt andere Sicht, anderen Fokus,

-Auf einer Skala von 1-10 in wie weit hat die Teilnahme folgende Eigenschaften bei Ihnen beeinflusst?

Eigenschaft	1(gar nicht verbessert)-10 (sehr stark verbessert)
Kritisches Denken	7
Verständnis von anderen Realitäten	9
Vorstellung von Zukunftsszenarien	7
Treffen von Entscheidungen in einer partizipativen und kolla- borativen Art und Weise	5
Problembewusstsein bezüglich Nachhaltigkeit	9
Werthaltung gegen über anderen Disziplinen	5
Soziales Engagement	6

Unternehmen müssen im Haus auch Transdisziplinär denken, von jedem das Beste rausbekommen, bei SL hats sehr gut geklappt,

Als Abteilungsleiter sollte man auch losgelöstes denken haben, das gesamt Bild sehen, wie Studies, durch Teilnahme an SC wird das auf jeden Fall besser.

-Hat das SL-Projekt einen Einfluss auf der Unternehmensebene gehabt bzw. hat sich daraufhin etwas im Unternehmen (wie klein auch immer) verändert? Wenn ja, welchen? Können Sie Beispiele nennen?

Sehr schwer zu beantworten, wir sind Handelskonzern, aber nicht wirklich produzierend,

-SL ist zu klein, aber wir hätten was verändern können, wenn mehr Zustimmung von Nachhaltigkeitsabteilung gekommen wäre bzgl. Lieferantenbewertung

-Hat definitiv potential, aber muss mehr konkretisiert werden, in kleinem Bereich besser umsetzbar zB. Betriebsrestaurant

-Öko Profit

-Hat die Teilnahme am Service-Learning Projekt die Wahrnehmung des Unternehmens/der Unternehmensführung hinsichtlich ihrer Rolle in der Gesellschaft verändert? zB. In Form eines internen Lernprozesses. Wenn ja, können Sie ein Beispiel nennen? Nein, weil Nachhaltigkeit generelle ein starkes Thema ist.

-Wo sehen Sie die Potentiale von der Methode Service-Learning mit Unternehmen? Welche Projekte eignen sich besonders dazu?

- Besser kleinere konkrete Projekte
- Studies haben keine Betriebsblindheit, neues Wissen, Neuer Mix, das ist sehr wertvoll

-Entwicklung von Ideenpools, frei losgelöstes Denken,

-TU ->Energieeffizienz, Ressourcen schonen und sparen

- -Transdisziplinarität
- Kreativ und Innovativ, neuer Input

-Zukünftige Angestellte kennenlernen

-Was könnte man nach ihren Erfahrungen mit der SC bei Service Learning Projekte besser machen?

-Mehr Fokus

-Mehr konkret

-Besser vernetzen, mehr Austausch zwischen Akteuren zB Ökoprofit

-Wie könnten Service Learning Projekte noch besser eine Brücke zwischen nachhaltigkeitsorientierten Unternehmen und Universitäten bilden?

-Projekte sind eh ein guter Ansatz, für Unternehmen immer wichtig, was ist der Output?

-Zusammenarbeit mit Unis ist wichtig, aber er hat beschränkten Handlungsspielraum

-Wo liegen für Sie die Beschränkungen von Service-Learning mit Unternehmen?

-Hauptbeschränkung: Personelle Ressourcen

-Bei KMU ganz anders, wenn Boss das will setzt er das um

-Große Unternehmen sind sehr komplex,

-Schwierig in der Umsetzung, da viele Stake holder und Interessen

-Würden Sie wieder an einem SL Projekt teilnehmen?

Ja, aber grad viel zu tun mit Neubau

4) Interview Transcript A1

-Datum, Zeit, Ort: 16.04.2015, von 10:00-10:45

-Name des Interviewpartners/Partnerin: Werner Sagmeister

-Namen des Unternehmens: A1 Telekom Austria AG

-Anzahl der Angestellten: 8.500

-Position im Unternehmen: Umweltmanager in der Abteilung Corporate Communication and Sustainability

-Welchen Platz nimmt Nachhaltigkeit in ihrem Unternehmen ein? (Teil welcher Abteilung? In Mission&Vision Statement?) Teil von Corporate Communication& Sustainability, Berichten direkt an Vorstand, "Wir versuchen das Unternehmen als grünes Unternehmen darzustellen", zB. CO2 neutrales Netz; Energieverbrauch gleich wie Stadt Linz, deswegen Nachhaltigkeit wichtig, seit 10 Jahren CSR, EMAS zertifiziert, "Internet für alle" Projekt

-Jahr der Teilnahme an der Sustainability Challenge: 2013

-Warum haben Sie bei der Sustainability Challenge teilgenommen? Können Sie Ihre Erfahrung/ihr Projekt kurz beschreiben?

-Teilgenommen um System kennen zu lernen, über den Tellerrand schauen, neue Perspektive auf Unternehmen bekommen

-Mitarbeiter zu nachhaltigem Denken bewegen war Aufgabe, Mobilität und Kommunikation, Richtlinien für Reisen angeschaut, sehr breit gefächert, nicht fokussiert, Mitfahrbörse war Favorit, Telefonkonferenz mit Unternehmen, aber nicht umgesetzt worden da kein Budget, Anforderungen an Mitarbeiter bei Dienstreisen, wie man mehr Bahnfahren kann.

-Was haben Sie persönlich durch die Teilnahme am SL Projekt gelernt? Hat die Teilnahme irgendetwas für Sie persönlich verändert?

-Sehr interessant mit jungen Studies zusammen zu arbeiten, sehr lehrreich für beide Seiten, transdisziplinarität war spannend,

-Netzwerke entwickeln, einer wurde Chefredakteur,

-Es hat schon Nachdenkprozess und kritische Diskussionen gegeben

-Hat sich ihr Verständnis von Nachhaltigkeit durch die Teilnahme an der Sustainability Challenge verändert?

-Nein, da wir schon sehr weit in der Richtung

-Auf einer Skala von 1-10 in wie weit hat die Teilnahme folgende Eigenschaften bei Ihnen beeinflusst?

Eigenschaft	1(gar nicht verbessert)-10 (sehr stark verbessert)
Kritisches Denken	1
Verständnis von anderen Realitäten	3
Vorstellung von Zukunftsszenarien	2
Treffen von Entscheidungen in einer partizipativen und kolla- borativen Art und Weise	1
Problembewusstsein bezüglich Nachhaltigkeit	1
Werthaltung gegen über anderen Disziplinen	1
Soziales Engagement	5

-Hat das SL-Projekt einen Einfluss auf der Unternehmensebene gehabt bzw. hat sich daraufhin etwas im Unternehmen (wie klein auch immer) verändert? Wenn ja, welchen? Können Sie Beispiele nennen?

-Nein, nur in Reiserichtlinie, nie abschlussbericht bekommen, da SC dann vorbei war

Aber keine Veränderung stattgefunden bei uns, Muss vom Unternehmen kommen, bei A1 Nachhaltigkeit schon gut verankert und zu groß für

-Hat die Teilnahme am Service-Learning Projekt die Wahrnehmung des Unternehmens/der Unternehmensführung hinsichtlich ihrer Rolle in der Gesellschaft verändert? zB. In Form eines internen Lernprozesses. Wenn ja, können Sie ein Beispiel nennen?

-war spannend andere Projekte zu sehen, inspirierend,

-Wo sehen Sie die Potentiale von der Methode Service-Learning mit Unternehmen? Welche Projekte eignen sich besonders dazu?

-kleine Projekte mit klaren Ziel das in kurzer Zeit erreichbar

-Zukünftige Angestellte kennenlernen, auch Angebote an Teilnehmerin geschickt

-Marketingmöglichkeit

-Was könnte man nach ihren Erfahrungen mit der SC bei Service Learning Projekte besser machen?

-Nie Feedback bekommen, was aus den Projekten geworden ist

-Klarer formulieren der Projekte

-Konkreterer Fokus

-zu große Erwartungshaltung

-Ressourcenplanung verbessern

-Mehr Vernetzungsmöglichkeit zu anderen Unternehmen

-Wie könnten Service Learning Projekte noch besser eine Brücke zwischen nachhaltigkeitsorientierten Unternehmen und Universitäten bilden?

-Eh schon Kontakt mit Unis via anderen Projekten

-Wo liegen für Sie die Beschränkungen von Service-Learning mit Unternehmen?

-Für manche haben nur die ECTS gezählt und waren nicht beteiligt

-Sehr Zeitintensiv für kleines Ergebnis

-Kein Mehrwert, keine Veränderung

-Datenschutzproblem, Geheimhaltsungsverpflichtung

-Sehr wenig Zeit für Umsetzung

-Erfolg hängt sehr stark von Studie gruppe ab, in wie weit die Motiviert sind

-Unternehmen sind Ergebnisorientiert, kollidiert mit Prozessorientieres-Lernen Fokus von SL

-Würden Sie wieder an einem SL Projekt teilnehmen?

-Momentan nicht aus Ressourcen gründen, vielleicht ja, wenn ein konkretes Projekt vorhanden

5) Interview Transcript ÖKOSTROM

-Datum, Zeit, Ort: 07.07.2015, 14:50-15:20; Ökostromzentralle Laxenburgerstraße 2

-Name des Interviewpartners/Partnerin: Andreas Pribyl

-Namen des Unternehmens: Ökostrom

-Anzahl der Angestellten: 31

-Position im Unternehmen: Key account Manager, Mittleres Management

-Welchen Platz nimmt Nachhaltigkeit in ihrem Unternehmen ein? (Teil welcher Abteilung? In Mission&Vision Statement?) Change maker, Part of core Business

-Jahr der Teilnahme an der Sustainability Challenge: 2012 und 2013

-Warum haben Sie bei der Sustainability Challenge teilgenommen? Können Sie Ihre Erfahrung/ihr Projekt kurz beschreiben?

In 2012, INEX hat Anfrage geschickt, Unternehmen hat AP gefragt, ob er das übernehmen will, generell auf Nachhaltigkeit ausgerichtetes unternehmen, würde gerne wissen wie Energiebewusstsein für jüngere Bevölkerung ausschaut, AP hat dann selbst auch mitgemacht als Student,

-Was haben Sie persönlich durch die Teilnahme am SL Projekt gelernt? Hat die Teilnahme irgendetwas für Sie persönlich verändert?

Gruppe von allen vier Unis, Unterschiedliche Zugänge, Schwierig aber auch Fruchtbar, Transdiziplinarität und Konfliktlösungsskills haben sich verstärkt entwickelt

-Hat sich ihr Verständnis von Nachhaltigkeit durch die Teilnahme an der Sustainability Challenge verändert?

Erweiterung und Vertiefung, vor allem auf Technischer Seite, aber nicht tiefgreifend verändert.

-Auf einer Skala von 1-10 in wie weit hat die Teilnahme folgende Eigenschaften bei Ihnen beeinflusst?

Eigenschaft	1(gar nicht verbessert)-10 (sehr stark verbessert)
Kritisches Denken	3
Verständnis von anderen Realitäten	7
Vorstellung von Zukunftsszenarien	6
Treffen von Entscheidungen in einer partizipativen und kolla- borativen Art und Weise	7
Problembewusstsein bezüglich Nachhaltigkeit	3
Werthaltung gegen über anderen Disziplinen	5
Soziales Engagement	2

-Hat das SL-Projekt einen Einfluss auf der Unternehmensebene gehabt bzw. hat sich daraufhin etwas im Unternehmen (wie klein auch immer) verändert? Wenn ja, welchen? Können Sie Beispiele nennen?

Nein, nicht direkt, Interesse ja auch von Marketing und Führungsebene, bring etwas auf Bewusstseinsbildung viel gebracht, aber nichts konkretes, haben großen Datensatz gesammelt, hat schon etwas Einfluss genommen, aber nicht so viel

-Hat die Teilnahme am Service-Learning Projekt die Wahrnehmung des Unternehmens/der Unternehmensführung hinsichtlich ihrer Rolle in der Gesellschaft verändert? zB. In Form eines internen Lernprozesses. Wenn ja, können Sie ein Beispiel nennen?

Nicht verändert, aber bestätigt, da höhere Schulen und herausgefunden, dass starkes Bewusstsein da bei Jungen, Ökostrom ist Change maker, Komisch wenn große gewisse Konzerne mitmachen

-Wo sehen Sie die Potentiale von der Methode Service-Learning mit Unternehmen? Welche Projekte eignen sich besonders dazu?

-Bestärkt unternehmen in dem was es tut, stärkt vorhanden potentiale von changemaker

-Zusammenarbeit mit Unis sehr wichtig und sinnvoll für Unternehmen,

-gutes Image für Unternehmen

-möglicher Kommunikationskanal, Unternehmensmission in Gesellschaft tragen,

-Was könnte man nach ihren Erfahrungen mit der SC bei Service Learning Projekte besser machen?

Lange her, bessere Koordination, schwer zu sagen wegen spezieller Rolle, Kommunikation war gut, mehr konkreteren Bezug zum Thema, was genau man fördern will

-Wie könnten Service Learning Projekte noch besser eine Brücke zwischen nachhaltigkeitsorientierten Unternehmen und Universitäten bilden?

Man sollte Unternehmen mehr einbinden, aber kommt aufs Projekt und Unternehmen drauf an, deshalb schwer generell Aussage zu treffen

-Wo liegen für Sie die Beschränkungen von Service-Learning mit Unternehmen?

-Große Bandbreite, deshalb schwer zu sagen,

-Ressourcen intensiv für INEX und Ökostrom

-kommt drauf an was Unternehmen will

-besser auf ein Jahr ausweiten, da nur wenig Zeit;

-Würden Sie wieder an einem SL Projekt teilnehmen?

Kann er sich gut vorstellen, da positiv für Unternehmen, deshalb auch zweimal teilgenommen

6) Interview Transcript SWIMSOL

-Datum, Zeit, Ort: 17.04. von 10:00-11:00 im Cafe Phil, Gumpendorferstr.

-Name des Interviewpartners/Partnerin: Dominik Schmitz

-Namen des Unternehmens: Swimsol

-Anzahl der Angestellten: 9 Vollzeit 17 Part-Time

-Position im Unternehmen: Shareholder and Businessdevelopment, sehr flache Hierarchien

-Welchen Platz nimmt Nachhaltigkeit in ihrem Unternehmen ein? (Teil welcher Abteilung? In Mission&Vision Statement?) Change maker, Core Business ist Photovoltaik, keine CSR Abteilung

-Jahr der Teilnahme an der Sustainability Challenge: 2014

-Warum haben Sie bei der Sustainability Challenge teilgenommen? Können Sie Ihre Erfahrung/ihr Projekt kurz beschreiben?

Könnte für Studies interessant sein mit Startup zusammen zu arbeiten, wir können Dinge entwickeln, die wir sonst nicht tun würden

-Analyse von 5 Megacities, die am Wasser liegen ob potentieller Markt für Swimsol, Kriterienkatalog entwickelt,

-Was haben Sie persönlich durch die Teilnahme am SL Projekt gelernt? Hat die Teilnahme irgendetwas für Sie persönlich verändert?

- gelernt um gut zu betreuen, muss man auswand machen, Zusammenarbeit hat gut gepasst, aber nichts Neues gelernt, da sonst auch viel mit Transdisziplinarität auf Boku

-Hat sich ihr Verständnis von Nachhaltigkeit durch die Teilnahme an der Sustainability Challenge verändert?

Nein, aber schon interessant und radikale Diskussionen geführt, Blick von außen war hilfreich,

-Auf einer Skala von 1-10 in wie weit hat die Teilnahme folgende Eigenschaften bei Ihnen beeinflusst?

Eigenschaft	1(gar nicht verbessert)-10 (sehr stark verbessert)
Kritisches Denken	2
Verständnis von anderen Realitäten	2
Vorstellung von Zukunftsszenarien	1
Treffen von Entscheidungen in einer partizipativen und kolla- borativen Art und Weise	2
Problembewusstsein bezüglich Nachhaltigkeit	2
Werthaltung gegen über anderen Disziplinen	4
Soziales Engagement	1

-Hat das SL-Projekt einen Einfluss auf der Unternehmensebene gehabt bzw. hat sich daraufhin etwas im Unternehmen (wie klein auch immer) verändert? Wenn ja, welchen? Können Sie Beispiele nennen?

Neue Erfahrung mit Studierenden zusammen zu arbeiten,

Ökonomischer Aspekt: neuen Markterschließung beigetragen, müssen neue Investoren suchen, bis jetzt nur Tropische Inseln, jetzt auch Städte, können Material des Projektes nutzen

Ökologischer Aspekt: Erweiterung der Nutzung

Sozial: Wie kann man auch anders mit Studies zusammenarbeiten, nicht nur Diplomarbeiten

-Hat die Teilnahme am Service-Learning Projekt die Wahrnehmung des Unternehmens/der Unternehmensführung hinsichtlich ihrer Rolle in der Gesellschaft verändert? zB. In Form eines internen Lernprozesses. Wenn ja, können Sie ein Beispiel nennen?

-Nachhaltigkeit für Studies greifbarer gemacht,

-Bild von Rolle des Unternehmens in Gesellschaft ergänzt

-Wo sehen Sie die Potentiale von der Methode Service-Learning mit Unternehmen? Welche Projekte eignen sich besonders dazu?

-Persönliche Kontakte/Netzwerke, Studentin kannte Tourismusressorts in Malediven

-Schneller und kostengünstiger Mehrwert

-Neue Mitarbeiter kennenlernen, zB. Eine Teilnehmerin hat sich beworben

-Möglichkeit für Cocreation (Mit Unternehmen etwas Neues entwickeln)

-Material wurde genutzt für Forschungsantrag, den Swimsol dann auch bekommen hat

-Möglichkeit andere Unternehmen kennenzulernen

-Gründer hat sich zwei Stunden Zeit genommen, den Studies die Geschichte zu erklären wie er seine Idee verwirklicht hat,

- Sehr konkretes Projekt gehabt, da auch in Verbindung mit Forschungsantrag

-Was könnte man nach ihren Erfahrungen mit der SC bei Service Learning Projekte besser machen?

-Echt gut gelaufen, nicht zu Zeit intensiv,

-Gute an kleinen Unternehmen, direkter Zugang zur Führungsebene, und nicht halbes Jahr später erfahren das Vorstand das Programm abgesägt hat,

-Wie könnten Service Learning Projekte noch besser eine Brücke zwischen nachhaltigkeitsorientierten Unternehmen und Universitäten bilden?

K.a.

-Wo liegen für Sie die Beschränkungen von Service-Learning mit Unternehmen?

-Kein Problem mit Datenweitergabe

-Eine Abgesprungen, aber die anderen waren voll motiviert

-Würden Sie wieder an einem SL Projekt teilnehmen?

Ja auf jeden Fall, wenn Thema passt.