THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT IN HIGHER EDUCATION TEACHING: THE CASE OF UNIVERSITY OF TAMPERE
Abstract

University of Tampere, Department of Management Studies

Author: RADVANSKA, RENATA
Title of the thesis: The Implementation of Sustainable Development in Higher Education Teaching: The case of University of Tampere
Master’s thesis: 71 pages 1 appendix
Time: December 2009
Key words: sustainable development, higher education, policy implementation, policy output, street-level bureaucrats

The issue of sustainable development in higher education has occupied a considerable place in political discourses as well as in empirical research. Most studies revolve around the issue of implementation of sustainable development. However, they rarely address the role of implementers in the process. Therefore, the aim of this study was to investigate the implementation of sustainable development in higher education teaching from the perspective of academics. The teaching function was chosen as the most profound area of implementation initiatives. Consecutively, the implementers were represented by academics. In order to address this topic, the theory of street-level bureaucrats has been adopted as a theoretical framework. It has accounted for the role of academics as bottom-level implementers. The study was conducted as a case study at the University of Tampere, and involved interviewing the selected sample of six academics. In accordance with theoretical assumptions, the teaching of academics is often impeded by unfavourable work conditions. Yet, their discretion in decision-making allows them to adjust the working situation or their behaviour in order to cope with these conditions. Thus, they also influence the actual output of implementation efforts – their actions, which they deliver to students – the end users of policy. In this way the study of academics’ perception of their work unlocks the dynamics of implementation process from the perspective of its bottom-level implementers – the academics.
Table of Contents

Abstract ................................................................................................................................. ii
List of abbreviations .............................................................................................................. v
List of figures ......................................................................................................................... vi

Introduction ......................................................................................................................... 7

1 Sustainable development in higher education .................................................................. 9
   1.1 Concept and scope of sustainable development ......................................................... 9
   1.2 Education for sustainable development .................................................................. 13
   1.3 Higher education for sustainable development ....................................................... 15
   1.4 Higher education as an instrument in achieving sustainable development ............. 17

2 Overview of policy implementation studies ...................................................................... 19
   2.1 Policy implementation from perspective of implementers ....................................... 19
   2.2 Lipsky’s theory of street-level bureaucrats .............................................................. 22
       2.2.1. Autonomy and discretion ............................................................................... 23
       2.2.2. Conditions of work ....................................................................................... 23
       2.2.3. Practices of coping mechanisms .................................................................... 26
       2.2.4. Relevance of theory in higher education context ........................................... 29
   2.3 Follow-up studies on Lipsky’s theory ..................................................................... 30
   2.4 Concept of bureaucracy ......................................................................................... 31
   2.5 Concept of policy and policy implementation ....................................................... 32

3 Research problem and research questions ....................................................................... 34

4 Research methodology ..................................................................................................... 35
   4.1 Research design ........................................................................................................ 35
   4.2 Methods of data collection ..................................................................................... 35
   4.3 Target group and sampling ..................................................................................... 37
   4.4 Methods of data interpretation .............................................................................. 38

5 Process of sustainable development implementation in higher education ...................... 39
   5.1 International level .................................................................................................... 39
   5.2 National level .......................................................................................................... 43
   5.3 Institutional level ..................................................................................................... 45
   5.4 Level of individual academics .............................................................................. 45
6 Implementation of sustainable development in teaching at University of Tampere: perspectives of academics ........................................... 47
6.1 Means of sustainable development implementation .................................................. 47
6.2 Autonomy and discretion of academics .................................................................... 48
6.3 Conditions of academics’ work .............................................................................. 49
6.4 Strategies of academics’ coping mechanisms ......................................................... 53

7 Implementation of sustainable development in teaching at University of Tampere: broader implications ........................................... 56
7.1 Role of academics as policy makers ........................................................................ 56
7.2 Output of sustainable development implementation in higher education .................. 58
7.3 Nature of implementation process at the bottom level .............................................. 60
7.4 Evaluation of implementation studies as theoretical framework .............................. 61
7.5 Limitations and contribution of study, suggestions for further research .................... 62

Conclusion .................................................................................................................. 64
References ................................................................................................................. 67
Appendices ............................................................................................................... 70
List of abbreviations:

B21 E – Baltic 21 Education Programme
DESD (2005 – 2014) – Decade for Education for Sustainable Development
ESD – Education for Sustainable Development
HE – higher education
HEI – higher education institutions
HESD – Higher Education for Sustainable Development
IIS – International Implementation Scheme
NGO – nongovernmental organisation
SD – sustainable development
SLB – street-level bureaucrats
UTA – University of Tampere
UN – United Nations
UN DSD – United Nations Division for Sustainable Development
UNECCE – United Nations Economic Commission for Europe
UNESCO – United Nations Educational, Scientific and Cultural Organization
List of figures:

Figure 1: Theoretical model of policy implementation from the perspective of its implementers – street-level bureaucrats
Figure 2: Milestones in the implementation of sustainable development in higher education: the key documents at the international level
Figure 3: Process of implementation of sustainable development in higher education teaching
Introduction

In the light of theoretical and empirical propositions of this study the aim was to investigate how is the sustainable development implemented in the teaching activities of academics at the University of Tampere.

Starting as a response to ecological concerns in the second half of twentieth century, the sustainable development has gradually acquired a more holistic connotation. It has become an all-encompassing concept, which is meant to address the most pressing problems of today’s society and economy: preservation of scarce resources, achievement of social justice or improved quality of life. Currently, around 37 topics are listed as those related to sustainable development, according to United Nations’ Division for Sustainable Development, which indicates the complexity and pervasiveness of this issue. One of the means to achieve the goal of sustainability is an education, because by increasing the awareness about sustainable development the education presumably stimulates behavioural change towards a more sustainable way of living. Higher education in this respect contributes to the knowledge production and its transmission to society. Thus the education, known as the education that promotes sustainable development or as the education for sustainable development, has also gained a political importance by featuring in various discussions of international organisations, national governments, higher education institutions, as well as among individuals.

Consequently, the empirical studies on higher education for sustainable development have started to spread. Centred on the issue of implementation, these studies typically describe experiences with the process, but without grounding them in any implementation theory. Instead, they draw considerably on policy documents, which promote the instrumental role of higher education. One of the most profound and advanced areas of research on higher education for sustainable development is teaching, which was also in the centre of this study. By spreading the literacy about sustainable development and its related topics, the objective of teaching is to motivate students towards the action.

In order to evaluate the implementation of sustainable development in higher education teaching, the assumptions of implementation studies have been adopted as theoretical background in this study. These theories provide a useful explaining mechanism for the deviation of policy output from
intended policy goals. One of the reasons is being implementers themselves, whose decisions and actions have an immense and ultimate impact on achievement of any policy goal. According to the theory of street-level bureaucrats, which was adopted as the main frame of reference, the policy is delivered to the end users through human interaction, thus the actions of implementers comprise the actual policy output. And the main reason for the departure of academics’ actions from the designed policy goals is their extensive discretion and autonomy on one hand, and constraining work conditions on the other. Therefore, this study has attempted to investigate the issue of sustainable development implementation from the perspective of bottom-level implementers – the academics, which has not been sufficiently addressed in empirical studies on higher education for sustainable development.

For this purpose, the study was organised in a form of a single case study. The University of Tampere was selected as a research site, because of its accessibility. The main method of data gathering included interviews with academics, which were intended to shed some light on experiences of academics and their understanding of the implementation process. Nevertheless, the screening of relevant policy documents was also part of study, with purpose to gather information about implementation process at its various levels, and thus to provide the study with a broader implementation context. Consecutively, the data were analysed within the context of chosen theoretical framework and conclusions were derived about how do the experiences of academics relate to the implementation process, as well as how do they contribute to the ultimate goal of implementation efforts – the achievement of sustainable development.

Therefore, this master thesis has been structured in the following way. Firstly, the basic concepts – sustainable development and education for sustainable development, are defined and the central issues of empirical research are identified. Then the main theoretical assumptions about policy implementation are presented with an emphasis on theory of street-level bureaucrats. Based on these empirical and theoretical postulates, the research problem and research strategy are proposed. In the following chapters, the implementation process at various levels of system is briefly sketched, and findings of study are presented. In conclusion, broader implications of these findings are discussed, as well as the limitations and contributions of study are identified in the final chapter.
1 Sustainable development in higher education

The sustainable development as a very elusive concept, encompassing wide variety of issues, is difficult to pin down. From the very beginning it has been closely associated with education, because it represents a new perspective on current global issues, which education should inform about. However, the concept has obtained its prominence rather as the ultimate goal of education. Therefore, it is necessary to discuss the concept of sustainable development itself, as well as its role in higher education.

1.1 Concept and scope of sustainable development

The issue of sustainability\(^1\), as we understand it today, was initially driven by environmental concerns in mid-1960s (Ryden, 2007, in Kaivola, Rohweder, 2007), which represented a response to the onset of rapid growth of population and production. The need to curb this negative side of development and consequent depletion of natural resources has led to publication of numerous documents, such as Silent Spring, Limits to Growth, Blueprint for Survival, and Small is Beautiful. One of the first initiatives on the global scale was the United Nations’ (UN) Conference on the Human Environment in Stockholm, in 1972, when the environmental issues were put on a political agenda for the first time. All of these efforts warned about the irreversible damage to the Earth done by humankind, which is endangering all life on it. (Ryden, 2007, in Kaivola, Rohweder, 2007)

These ecological apprehensions have soon been exacerbated by oil crises in 1970s, and thus attracted the attention of economists as well.

Inevitably, a more comprehensive concept emerged – the sustainable development (SD), which also acknowledged the role of society and economy in achieving the sustainable living within the carrying capacity of Earth. Although initially the ecological goals were regarded as the core of SD agenda, while other dimensions had only auxiliary function, later these dimensions have developed into full-fledged agenda, until the efforts for reconciliation of all perspectives of SD appeared, stressing the holistic character of concept. Currently, the SD encompasses following perspectives, known as pillars: environmental, economic, social, and cultural. The exact content of respective

\(^1\) The concept of sustainability, often used interchangeably with the concept of sustainable development, has been traditionally interpreted as long-term, durable, sound, systematic (Leal Filho, 2000)
pillars is subject to discussions and different interpretations. Therefore, following descriptions represent synthesis of ideas from various sources:

The aim of environmental sustainability is to protect and preserve ecological systems and biodiversity for future generations. It involves activities such as: minimal depletion of non-renewable resources, sustainable use of renewable resources, keeping the society within the carrying capacity of supporting ecosystems, minimising the waste emissions. (IUCN, UNEP, WWF, 1991; Daly 1999)

The emphasis of economic sustainability is on reinforcing environmental sustainability. The economic growth is inevitably related to the environmental degradation. Therefore, it should be kept within sustainable limits. (Daly, 1996) On the other hand, many perceive the ecologically-friendly business practices as an economic opportunity, which may lead to significant cost savings (Jackson, Clift, 2008). Another issue is the position of nature in the economic science. The nature can be considered as externality, which is freely available for consumption, and therefore tends to be overused and degraded. Since nature and some resources cannot be easily renewed, they deserve protection through various economic mechanisms, such as taxes or tariffs. (Daly, 1973; Hardin, 1968; Cohen, Winn, 2007)

Originally, the social sustainability was meant to support environmental sustainability, by prompting a social change towards a more sustainable living, in ecological terms. However, the focus has later shifted on maintenance of a good quality of life – individual as well as within communities. Social sustainability generally revolves around issues such as: participation in decision-making (democratic governance), empowerment, individual’s rights (human rights, labour rights), health, quality of life and wellbeing (and related living standards, poverty, access to services and resources, social exclusion/inclusion), social interactions among people, social stability, peace, security, and equality and social justice. (Antola Crowe, Kohl, 2007, in Kaivola, Rohweder, 2007)

Cultural sustainability has often been identified with social dimension, or it has been regarded as a transcending and unifying element of all three pillars (UNESCO, 2005). However, the culture has gradually become a separate dimension itself – it was brought up to the discourses about SD by UNESCO “in the wake of the events of 11 September 2001” (2002: 11). The objective of this dimension is to preserve cultural diversity, to ensure survival of humanity, and to prevent segregation and fundamentalism (UNESCO, 2002: 11). Cultural sustainability therefore stands on
principles such as: diversity, tolerance, understanding among people, cooperation, support of learning, and emotional life of individuals (UNESCO, 2002; Antola Crowe, Kohl, 2007, in Kaivola, Rohweder, 2007).

It is possible to observe that the scope of issues related to SD has significantly enlarged over the time, thus rendering the concept a status of some kind of panacea to current most pressing global issues. In spite of being such a vital concept, the definition is open to various interpretations. The first and most common definition of SD appeared in the report of Brundtland Commission\(^2\) – *Our Common Future*, in 1987. In this report, the SD has been defined as “the development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987: 1).

Apparently, such definition is strongly value-laden, involving the issue of ethics. The ethics of SD is revolutionary, because its emphasis on sharing the resources challenges the traditional power structure and ownership. It also introduces new principles - the responsibility for future generations as well as for fellow humans (known as inter-generational and intra-generational sustainability). (Ryden, 2007, in Kaivola, Rohweder, 2007) Central to the ethics of SD is bio-centrism, with its new perspective, holding the same respect for all forms of life and nature. According to this approach, other life forms have a value of their own, regardless their utility as resources. This is in a sharp contrast to anthropocentric perspective, according to which the nature features as a source to be rightfully dominated and exploited by people, although within certain limits. (Rohweder, Ryden, Niiniluoto, 2007, in Kaivola, Rohweder, 2007) While this utilitarian approach arguably does not contribute to any significant changes in a lifestyle, it is still more feasible than the bio-centric fundamental approach, which is difficult to apply in practice (Rohweder, 2007 in Kaivola, Rohweder, 2007: 24).

Nevertheless, as an organising concept, SD is considered to be too vague to provide any clear achievable goal or a sufficiently detailed framework for an action (Filho, 2000; Wals, Jickling, 2002). However, many are rather in favour of a less specific definition. Firstly, it is flexible enough to allow adjustments to conduct more focused and locally relevant actions (Posch, Steiner, 2006: 279; Dale, Newman, 2005: 352). Secondly, it enhances the cooperation of various shareholders

---

\(^2\) The Commission is also formally known as World Commission on Environment and Development (WCED) and was established in 1983 by United Nations to address issues of deterioration of human environment and natural resources and the consequences of that deterioration for economic and social development.
providing them with common grounds they can work on (Dale, Newman, 2005: 352). It also enables an indirect regulation of system without necessity of national or international intervention (Posch, Steiner, 2006: 279). Thirdly, due to its unspecified character the concept can create a productive dialogue between different social groups by offering them a common platform (Wals, Jickling, 2002: 222). However, such discourses often disguise a different understanding of concept – one’s own definition of SD is influenced by his or her knowledge, experience, perception, values, and political and economic setting (Leal Filho, 2000: 16). Moreover, some argue that SD in fact incorporates the oxymoron – that development and sustainability are contradictory and mutually exclusive (Wals, Jickling, 2002: 223).

Another ambiguity involves the term “future generations”, which does not offer a clear time frame for achieving the goal of SD. It is not only the context of unlimited time horizon (Illge, Schwarze, 2006: 10), but also the lack of exact knowledge about future conditions and needs of future generations (Lindquist, 2007: 19), which makes it impossible to decide about which resources should be preserved for the future. While some suggest to adopt a more refined time interval, for example the next two generations, for practicality purposes (Graedel, 2002: 348), others point out that SD does not represent any static goal but rather a process. Thus, its dynamics should be accommodated in practical actions. (Posch, Steiner, 2006: 278) However, no concrete suggestions are offered on how it should be achieved.

The ideological character of concept also contributes to some confusion in its interpretation. The concept incorporates multiple and often conflicting values. Some argue that the four dimensions of SD, which are supposed to be mutually reinforcing, are in fact qualitatively disparate and conflicting, thus prompting certain trade-offs in practical activities (Posch, Steiner, 2006). This involves making the value rational choices based on certain ethics – SD ethics (Wals, Jickling, 2002: 223; Rohweder, 2007, in Kaivola, Rohweder, 2007: 23, 24). Since in reality the absolute values are rather unusual, some kind of compromise between two goods is required, in order to arrive to win-win situation (Ryden, 2007, in Kaivola, Rohweder, 2007). However, “it [sustainability] provides no inherent clues about how one should mediate between contesting claims between advocates of incompatible value systems.” (Wals, Jickling, 2002: 222). Instead, the main strength of holistic concept of SD is in highlighting the interactions between and interrelatedness of dimensions (Niiniluoto, 2007, in Kaivola, Rohweder, 2007: 38).
Considering all these drawbacks of SD concept, some regard it as only a good-feel buzzword, without much substance (Marshall, Toffel, 2005). On the other hand, others argue that such an important concept cannot be subject to a scientifically precise analysis. It is more reminiscent of concepts such as democracy, peace, justice, welfare, which are also somehow blurred. (Daly, 1996) “Sustainable development simply provides a framework for thinking about what sort of world this could be, and what is needed to build such a world, that is, what goals, values, concepts and skills will be needed.” (UNESCO, 2002: 43)

1.2 Education for Sustainable Development

In order to make the goal of sustainability more tangible and achievable, some proxy is required. Since SD as an organising concept is very elusive, an education has been regarded as one of the main strategies in achieving the sustainability (UN DSD, 1996). Initially titled as environmental education (Stockholm Declaration, 1972), intended to raise public awareness about environmental issues, the education has been recognised as a pivotal tool in achieving behavioural change towards SD (Brundtland Report, 1987). The concept of education for sustainable development (ESD) – meaning an education, which promotes and supports awareness about SD, was originally conceived in Agenda 21 (Rio de Janeiro, 1992), although the exact term has emerged only relatively recently – in Lüneburg Declaration (2001). Subsequent initiatives, such as Ubuntu Declaration (2002) and UNESCO’s Decade for Education for Sustainable Development (DESD) 2005 – 2014, have only reinforced and further conceptualised the concept of ESD.

Besides its political significance, ESD represents also a new type of education, focused not only on gaining the relevant knowledge, but more importantly, on eliciting the action towards SD and getting personally involved: “The ultimate goal of education for sustainable development is to impart the knowledge, values, attitudes and skills needed to empower people to bring about the changes required to achieve sustainability.” (UNESCO, 2001: 1) Therefore, the ESD transcends attempts to increase the public awareness about SD and strives to prompt the behavioural change of learners. For more details, see the full version of Lüneburg Declaration, which is part of appendices of this study.
As a special kind of education, ESD should be characterised by several features:

- “Interdisciplinary and holistic: learning for sustainable development embedded in the whole curriculum, not as a separate subject;
- Values-driven: it is critical that the assumed norms – the shared values and principles underpinning sustainable development – are made explicit so that that can be examined, debated, tested and applied;
- Critical thinking and problem solving: leading to confidence in addressing the dilemmas and challenges of sustainable development;
- Multi-method: word, art, drama, debate, experience, … different pedagogies which model the processes. Teaching that is geared simply to passing on knowledge should be recast into an approach in which teachers and learners work together to acquire knowledge and play a role in shaping the environment of their educational institutions;
- Participatory decision-making: learners participate in decisions on how they are to learn;
- Applicability: the learning experiences offered are integrated in day to day personal and professional life.
- Locally relevant: addressing local as well as global issues, and using the language(s) which learners most commonly use. Concepts of sustainable development must be carefully expressed in other languages – languages and cultures say things differently, and each language has creative ways of expressing new concepts.” (UNESCO, 2005: 18)

As pointed out by various researchers, ESD is strongly value-driven and ethics comprises its inseparable part. By tapping on values and eliciting the change, ESD bears a responsibility for actual achievement of sustainability. (Rohwedder, Niiniluoto, Ryden, Wolff, 2007, in Kaivola, Rohwedder, 2007) However, the ethical side of ESD has not been fully developed because of predominantly rationalistic-logic academic environment and prevailing demands of neo-liberal economic society (Antola Crowe, Kohl, Wolff, 2007, in Kaivola, Rohwedder, 2007: 51, 61). This point is affirmed by Wals and Jickling (2002: 222): “education for sustainability runs counter to prevailing conceptions of education: it breathes a kind of intellectual exclusivity and determinism that conflicts with ideas of emancipation, local knowledge, democracy and self-determination.” Moreover, they question the very basis of ESD: “The prepositional use of “for” prescribes that education must be in favor [sic] of some specific and undisputed product, in this case sustainability.” (Wals, Jickling, 2002: 222)
1.3 Higher Education for Sustainable Development

In spite of these ideological drawbacks of ESD, the concept has become so pervasive that its scope has been recently enlarged to include higher education (HE) as well. Known as higher education for sustainable development (HESD), its role is summarised as follows: “Higher education has a catalyst role vis-à-vis education for sustainable development and the building of a Learning Society. It has a special responsibility to conduct the scholarship and scientific research necessary to generate the new knowledge needed and train the leaders and teachers of tomorrow, as well as communicate this knowledge to decision-makers and the public-at-large.” (UNESCO, 2001: 1).

One of the basic frameworks for incorporating the SD in HE revolves around the main functions of higher education institutions (HEI): teaching, research, outreach (or service to society), and processes of institutions. The content of each area has been virtually defined at the grassroots of process – by implementers themselves. Therefore, based on the review of empirical studies on HESD, the following summaries include the most common ways of implementing SD in HE and the most popular topics of HESD studies.

Teaching

The logic behind teaching function of HEI is based on a widely accepted assumption that education can affect learners’ behaviour, lifestyle, and decision-making. “Higher education in particular occupies an important position in shaping the way in which future generations learn to cope with the complexities of sustainable development.” (UNESCO, 2005: 2). Based on the evidence provided by empirical studies on HESD the most common ways of implementing SD in teaching include:

1. The content of the course. SD is addressed either explicitly or implicitly. While former involves teaching about the concept of SD itself, latter stands for teaching about topics related to SD, for example climate change, poverty, or democracy. Both methods are usually aimed to increase students’ awareness about these subjects. The concept of SD can be also used in an ideological way – as an underlying leitmotif of teaching or as a novel worldview of current issues.

2. The teaching methods. The teaching-learning process is enhanced by utilising innovative teaching approaches, such as problem-based learning, transdisciplinary case studies, transdisciplinary courses, joint lectures, projects with society.
From the perspective of national curricula, SD can be part of a separate coursework leading to a degree, or it can be a pervasive subject in courses aimed at increasing the literacy about SD.

Empirical studies concerning teaching function of HE are the most conceptualised area of research on HESD. They typically involve several levels of process and touch upon all dimensions of SD, although there is still more emphasis on environmental and economic perspective. At the national and institutional level, studies are usually conducted as surveys of existing courses related to SD. At the individual level, they represent personal experiences with implementation of SD in teaching. The individual cases mostly include a description of a specific course as well as an account of barriers and facilitators of implementation process.

Some studies concern only specific study fields (for example environmental engineers, natural scientists, or business students) and adjusting the curricula towards SD in these specialisations. The learning process and outcomes are also frequent subjects of these studies, aimed at investigating students’ perspective. Only a relatively small portion of studies examine the perspective of academics, who represent the pivotal actors in incorporating and promoting the SD in HE teaching. Moreover, these accounts of academics’ experiences with implementation are mostly presented in a form of a personal ‘journey’ without much reference to any theoretical background.

Research and outreach

The capacity of HE research to create the knowledge with high practical value renders it a significant role in promoting SD in HE. The main task of research lies in developing sustainable technologies or generating expertise. Since both outcomes have a potential to contribute to the resolution of societal problems, the research – creating the knowledge, and the outreach – transmitting the knowledge to society, are thus inherently intertwined. The implementation of SD in research and outreach involves the cooperation with local community, usually in the form of joint projects, partnerships, or research institutes. (Calder, Clugston, 2003)

Empirical studies in this area introduce various projects or research centres. They typically describe the specifics and outcomes of a project, as well as its impacts on local society. Some even list the organisational barriers to implementation. If a project is part of students’ learning activity, its impact on learning process is also part of a report. Some studies also examine the link between teaching and research and the possibility of their cross-fertilisation by applying innovative methods.
Processes of higher education institutions

HEI as organisations have a considerable potential in incorporating SD in their processes because of their status as role-models in society (UNESCO, 2005). Although most activities concern environmental dimension, known as “campus greening” (conserving energy and resources, recycling, transportation), there are also examples of socio-economic initiatives, such as corporate social responsibility (accountability of HEI for their activities to their stakeholders and society). Environmental management system (e.g. ISO 14001) and institutional policy also represent a way of incorporating SD across the whole institution. (Calder, Clugston, 2003; Walton, Galea, 2005)

Most of empirical studies in this area are conducted as case studies, although comparative studies between several institutions are also common. Individual cases usually describe “campus greening” activities, implementation of environmental management systems, or strategies of institutional commitment to SD. The studies include description of particular activities, barriers, facilitators, and results of implementation as well as the outcomes of audit of institutional activities.

Although other frameworks have also been developed in order to conceptualise the implementation of SD in HE, this framework provides a clear-cut albeit a little simplified categorisation, which also takes into consideration the core functions of HEI.

1.4 Higher education as an instrument in achieving sustainable development

The review of empirical studies suggests that the central issue in current research on HESD is the implementation. Interestingly, HE in these studies tends to have rather “instrumentalist” character – as a tool for achieving sustainability. Yet, the ample evidence on HE’s role in policy-making indicates its ability to disrupt the neatly designed programmes, thus challenging its role as an instrument in achieving policy goals. Various reasons for this diversion form intended goals have been identified, differing according to the level of analysis. From institutional perspective, for instance, Olsen (2005) understands the problem as a matter of dynamics of HEI. He argues that HEI are trying to protect their integrity and preserve their identity, therefore they do not automatically accept policies imposed on them. Gornitzka (1999), from the perspective of organisational change theories, argues that the governance structure and distribution of authority in HE are the most important factors: “The primary source of authority is the professional expertise. These are organisations marked by professional autonomy (Minzberg, 1983), both individually and
collectively placed in the scholarly community. In higher education many decisions can only be made by the professional expert. In addition, there is the (Humboldtian) tradition that the function and objectives of universities and colleges are best served in an environment of academic freedom. This implies that such organisations are ‘bottom-heavy’.” (Gornitzka, 1999: 12) Clark (1983) has endorsed this point in his discussion about personal authority of academics in higher education, which is inevitable for effective functioning of higher education systems “since it is involved in the conditions of freedom for individual initiative in research, individual freedom in teaching, and personal attention to students.” (112) Thus, the authority of academics is ideologically supported by doctrine of academic freedom and functionally based in their expertise (Clark, 1983: 111).

Moreover, an academic freedom – displayed as freedom in teaching and research and personal autonomy, is part of academics’ professional identity as ‘academic man’. Academics are professionals in their own right, thus wielding extensive autonomy and discretion. (Clark, 1983: 91) Cerych and Sabatier (1986) also acknowledge the importance of traditional bottom-level autonomy in HE. They argue that the successful implementation of a specific governmental programme in HE depends, among other factors, on implementers’ commitment to the objectives of the programme. However, the notion of implementers involves considerably wide range of actors: ministry in charge of higher education, administrators and faculty of HEI, and other agencies in higher education. In regards to academics, the tenure and peer review together with academic freedom in teaching and research circumscribe the achievement of policy goals (Cerych, Sabatier, 1986: 17, 19).

The role of implementers, therefore, appears to be pivotal for the programme’s successful delivery. It is the decisions and actions of implementers that affect the achievement of any policy goal, because of their extensive autonomy. In regards to teaching, which has been in the focus of this study as the most advanced and profound area of HESD, the role of bottom-level implementers is assumed by academics. However, empirical studies on SD in HE do not reflect much on the role of academics in implementation process, and present their experiences without grounding them in any theoretical context. As Fien (2002) has noted on account of all SD-related studies in higher education: “Important and interesting as this work is, it remains predominantly atheoretical in that few studies have sought to go beyond description to include a critical and theoretical analysis of findings or to ground explanations in social or organisational theory.” (244).

Therefore, this study investigates the role of implementers in the process of SD implementation in HE, which has often been missing in empirical research. In doing so, the implementation studies were adopted as theoretical framework.
2 Overview of policy implementation studies

Studies of policy implementation have acknowledged that for a policy to succeed, a due attention should be paid to the process of its execution. Studies of higher education have extensively drawn on theories of policy implementation in public sector in general. Since policy processes in higher education reflect broader political developments in public sector, these studies offer an important insight into the dynamics of SD implementation in higher education. Policy implementation heavily relies on implementers, who have the ability to influence the policy because of their power over the means and ends of policy. Particularly the implementers at the bottom level – those directly interacting with end users and delivering them the outputs of policy, are subjects of special attention of this study. The aim of the following chapter is to review, how the role of front-line workers in the policy implementation has been approached in various theories of policy implementation.

2.1 Policy implementation from perspective of implementers

The pioneers of implementation studies, Pressman and Wildavsky (1973) did not specifically deal with the role of front-line implementers. Although, they explain the policy failure to achieve the predetermined goals as the result of complicated implementation process, which is partly caused by exceeding number of actors – implementers. Due to the multiple interests of these actors and a need of consensus among them, the process of implementation is often delayed.

The linear implementation model by Van Meter and Van Horn (1975) was the first one to explicitly mention lower-level implementers and discuss their ability to disrupt policy accomplishment. Among other variables of implementation process (such as policy standards and objectives, the resources and incentives made available, inter-organizational communication and enforcement activities, the characteristics of the implementation agencies, the economic, social and political environment) the model features also the disposition of implementors [sic], whose perception is crucial for a successful implementation. Perception of implementers comprises “their cognition (comprehension, understanding) of the policy, the direction of their response to it (acceptance, neutrality, rejection) and the intensity of that response” (Van Meter, Van Horn, 1975: 472). However, the mechanism by which implementers can disrupt the process is not detailed in the study. Instead, subordinates’ participation on policy programme is discussed extensively, because of its potential to achieve a consensus on common goals and thus a successful delivery of policy
(Gross, 1971, in Van Meter, Van Horn, 1975). Participation enhances morale of subordinates, leads to their greater commitment and understanding, and thus reduces the initial resistance of subordinates to change.

In a similar way Cerych and Sabatier (1986) see the commitment of implementers to the objectives of policy as one of the factors affecting the success of policy implementation. Implementing officials can influence implementation in various ways: “interpreting vague and conflicting objectives; selecting priorities for action within those objectives […]; incorporating the new programme into the standard operating procedures of the institution; and making ‘political’ judgments about the compatibility of the reform with institutional survival and growth” (Cerych, Sabatier, 1986: 17).

Bardach (1977) has focused more on relations and negotiations among various actors of policy process, in order to achieve their vested interests. In his opinion, the ultimate outcome of policy depends on how well can respective actors negotiate.

Dunsire’s linear approach (1978) to policy implementation also discusses the role of implementers. Due to the inefficient and contradictory nature of bureaucracy, which is the main operating mode of implementing agencies, the policy fails to deliver its goals. Dunsire explains that the expert autonomy of bureaucrats and complicated communication among actors disrupt the implementation process and cause the deviation of policy output from the original goals.

The presented theories of top-down approach have been developed chiefly in 1970s, and can be associated with then-concept of social welfare state and its central role in policy making. The theories display strong belief in hierarchical control and linear rationalist model of policy implementation. However, the state’s retreat from interventionism and the arising belief in managerialism in 1980s (new public management) have caused the shift in the direction of studies of policy implementation. So-called bottom-up approaches emerged, questioning the ability of governments to generate sufficient control over the implementation process, in order to ensure its successful accomplishment.

In their work, Barrett and Fudge (1981) challenge the accuracy of rationalistic models, such as government’s ability to state clear goals, to achieve consensus on goals, or to exert control over implementers. Instead, they understand policy as an action aimed at resolving a societal problem,
and policy implementation as series of negotiations among implementers. Contrary to the top-down proposition to achieve compliance and consensus on goals, Barrett and Fudge consider negotiations inevitable for establishing norms and rules, within which implementers operate (so-called negotiated order). The actual participation of implementers in the process, however, depends on how they perceive their role in implementation. This perception is influenced by their values, attitudes, and experiences, which are socially constructed within organisations. Two explaining mechanisms of organisational influence over individuals are: professional training (education) and organisational socialisation (the process of workers’ adaptation to new organisation). This approach is a significant departure from previous studies. Not only in terms of level of analysis – Barrett and Fudge have taken up organisational perspective, but also in terms of policy making level – policy design and implementation take place at the bottom level.

Elmore (1980) has also embraced action-focused approach to policy formulation and implementation – namely in his concept of “backward mapping”. The policy implementation starts with identifying a societal problem, followed by defining desirable outcomes, implementers, tools, and resources. The role of lower-level administrators in the process is in their understanding of the problem in society, which needs to be resolved. Because of their knowledge of bottom-level conditions, administrators are able to address problem more accurately than policy makers. However, this might lead to the diversity in their performance, which is perceived as deviant by policy makers. Thus, in Elmore’s opinion the autonomy and expertise of administrators should be supported, not curbed by hierarchical control. Elmore has also addressed the role of negotiations in implementation, although differently than Barrett and Fudge. In his opinion, bargaining is a never-ending activity – the end of one negotiation is a start of another. Therefore, successful achievement of policy goals is highly subjective, and depends on the ability to attain own vested interests.

Lipsky (1980) has focused more on the role of individuals in bureaucracies – public organisations. His main contribution lies in illuminating the process of policy implementation from the perspective of individual implementers, who he considered to be the actual policy makers. In his theory of street-level bureaucrats (SLB), the implementers are delivering policy through human interaction with end users of that policy. The explaining mechanism for SLB’s departure from outlined policy is their extensive discretion and autonomy on one hand, and constraining work conditions on the other. According to Lipsky, SLB’s decisions and actions comprise the actual public policy delivered to clients. The importance of SLB theory for this study requires a more detailed review of its main assumptions.
2.2 Lipsky’s theory of street-level bureaucrats

The main dilemma of street-level bureaucrats is that they have to work within the bureaucratic mode of their organisations, yet they are also dealing with human aspect of their work – services to their clients. This is intensified by the contradiction between being entitled to a considerable discretion in decision-making, yet being limited by constraining work conditions. As depicted in the following diagram, Lipsky begins with sketching the conditions of SLB’s work – supportive as well as restrictive ones, and then describes how these conditions influence decision-making of SLB.

Figure 1: Theoretical model of policy implementation from the perspective of its implementers – street-level bureaucrats

2.2.1 Autonomy and discretion

Bureaucrats’ autonomy from organisation stems from their expertise and is maintained by their special skills, as well as their access to information, persons, and instruments. Thus, their unique position in organisation makes them irreplaceable and renders it difficult to impose hierarchical control over them. Workers’ autonomy is further reinforced by factors, such as personal interest in task, personal attractiveness, physical and social position in organisation, and abundance or illegitimacy of organisational rules (Mechanic, 1962).

The discretion, as a freedom in decision-making, results from human dimension of a working situation, which requires situational response to it, based on the expert knowledge. On the other hand, discretion is also needed as justification for SLB as experts in acting on the behalf of their clients. Therefore, autonomy and discretion are significant instruments in policy making, because by deciding about the nature and quality of services, SLB decide about policy itself. The interaction with clients can be, thus, considered a policy output, through which a policy is delivered to the end users. (Lipsky, 1980: 13 – 15)

2.2.2 Conditions of work

However, SLB are restricted by the conditions and structure of their work. The most significant conditions, as identified by Lipsky (1980: 27), include:
- inadequate resources relative to the work task,
- increasing demand for services to meet a supply,
- goal expectations of agencies, which are ambiguous, vague, or conflicting,
- difficulty to measure performance of SLB towards goal achievement,
- clients are typically non-voluntary, they mostly are not primary bureaucratic reference group.

*Inadequate resources relative to the work task*

The lack of time and information about clients are the most significant shortcomings of SLB’s work. Workers are unable to gather adequate information about their clients because of insufficient amount of time allotted for its seeking, which is the result of high work loads compelling workers to execute tasks rapidly. Thus, workers often encounter the uncertainty of a complex work situation without adequate information. Moreover, the number of clients is inappropriately higher than the time available for serving them. For instance, in educational context this means overloaded classes,
which limit teacher’s ability to offer individual attention to each student. SLB also have to spend significant part of their time on supportive services (for example keeping the evidence of their work), which further limit the time spent on the main task. Lack of work experiences or unspecified work techniques can also substantially increase workers’ insecurity about their task. (Lipsky, 1980: 29 – 31)

**Increasing demand for services to meet a supply**
The problem of insufficient resources in bureaucracies is unreconcilable. Since most services are offered for free, the demand for them is inadequately higher than supply. Thus, the increased investments in public services tend to create exceeding demand – the more workers are employed to cover the immense demand, the greater the demand is. All extra resources are then consumed by extra demand created by them, while the quality of services does not improve. Instead, the extensive demand prompts organisations to limit the access to services, as they realise they are incapable to satisfy it properly. Therefore, the intention to improve services for clients by enlarging their availability results in slack quality of services. (Lipsky, 1980: 33, 38 – 39)

**Ambiguous, vague or conflicting goal expectations of bureaucratic organisations**
Goals in bureaucratic organisations should serve as guiding principles of work for employees. Yet, the multiplicity, vagueness, or incompatibility of goals might cause confusion about which goals to follow. Ambiguity of goals results from their idealised character – they are often formulated as an unclear vision, not as a specific target. Moreover, the goals tend to change or to accumulate over the time, thus leading to conflicting expectations on workers. Sometimes the imprecise technology of social services (the techniques used to accomplish a work task) contributes to the overall confusion about how to execute the work properly. However, even if organisational goals are relatively clear-cut, workers still have to reconcile these goals with their personal orientation. Since SLB work directly with clients, they are more concerned about human aspects of their work, while organisations are usually more oriented towards effectiveness, organisational results, or societal impact of services. SLB are also subject to multiple expectations from several reference groups – public, peers, and clients, to act in their favour. (Lipsky, 1980: 40 – 45)

**Unsuitable performance measures of goal achievement**
Since bureaucratic mode of work does not follow the principles of market mechanism, the evaluation of bureaucrats’ performance is typically not based on feedback from their clients. Thus, the ability of end users to influence the performance of SLB, that is the quality of services, is
severely limited. Instead, the standards for assessment of workers’ behaviour are usually developed by organisations. However, since these standards are not directly related to employees’ performance, but to their training, work experience, and compliance with norms, they do not provide sufficient guidance for improvement of workers’ performance. Moreover, standards are rather imperfect measures: ambiguous – reflecting the vague goals; and partial – incapable to capture the complexity of human behaviour and working situation. On the other hand, these measures have a potential to steer workers’ behaviour, if they are defined carefully, because employees tend to behave in accordance with perceived incentives and sanctions. (Lipsky, 1980: 48 – 52)

**Relations with clients**

Services of most bureaucracies have usually a monopoly position in society, which lends the clients of organisations a non-voluntary character – they have no possibility to obtain services elsewhere. However, even if the organisation is not exclusive in offering certain services, clients are not regarded as a primary reference group for SLB. Instead, expectations of peers and public are more influential in bureaucratic work. This provides bureaucracies with considerable amount of dominance over their clients, and thus decreases their responsiveness to clients and aggravates the quality of service. An unequal relation might even lead to practices aimed at reducing a clientele (especially if demand for services is high). On the other hand, bureaucrats depend on clients’ approval of their legitimacy as civil servants, thus rendering clients certain amount of influence over bureaucrats. (Lipsky, 1980: 54 – 57)

The conflictual relation between clients and SLB stems from their different orientation – while clients perceive their problems as unique, bureaucrats tend to classify them in certain categories, in order to process them efficiently. To achieve this goal, workers need to seize the control of working situation by deciding about its various aspects. For example, bureaucrats decide about who is eligible for services (distribution of benefits and sanctions), about the context and structure of services, about clients’ role – to comply with rules, and about allocation of psychological rewards and sanctions, which involves categorising the clients. (Lipsky, 1980: 59 – 61, 65)

**Nature of the work of street-level bureaucrats**

The unreconcilable discrepancy of SLB’s work is embedded in contradictory requirements of their job – on one hand bureaucrats deliver services, thus act on a behalf of their clients, on the other hand they work in a bureaucratic setting, prompting them to control their clients. (Lipsky, 1980: 71)
The advocacy for clients – working on their behalf is an inherent part of bureaucratic work, integrated in the training, professional codes, and expectations of public, clients, and policy reformers. However, being an advocate of clients poses several difficulties. Firstly, within the limited time and the high case-load the bureaucrats cannot defend the interest of each client adequately. Secondly, advocacy for clients is incompatible with organisational orientation towards efficiency – advocacy means devoting time and other resources to client, and thus is not strictly economical. Thirdly, it is also in contradiction with the need to control the working situation. Finally, clients do not comprise the primary reference group of bureaucrats, and thus advocacy for their needs is in conflict with expectations of public and peers. (Lipsky, 1980: 72 – 74)

Bureaucratic nature of job, on the other hand, involves non-human elements of work, such as processing and control. In this respect, workers become detached – alienated from their work. Bureaucrats typically lack the control over the process, its inputs, outputs, and work pace. Since the interaction with clients is limited to only several occasions, workers cannot address the problems in their complexity, and thus have no influence on the eventual resolution of clients’ problems. This can compel workers to loose perspective of the whole process. Often, bureaucrats have no say in what type of clients they are handling, which can be frustrating for some of them. Finally, high workloads restrain bureaucrats’ ability to control the work pace. (Lipsky, 1980: 75 – 78)

The response of SLB to these pressures often involves a decreased commitment and responsiveness to the needs of clients. However, bureaucrats’ discretion and interaction with peers often compensate for the alienating factors of their work, and contribute to their self-actualisation, creativity, personal development, and overall job satisfaction. (Lipsky, 1980: 75, 80)

2.2.3 Practices of coping mechanisms

High level of autonomy coupled with unfavourable work conditions prompts bureaucrats to search for mechanisms, which help them to cope with adverse situation, but deliver only satisfactory results. In spite of their good intentions to conduct the work properly, it is virtually impossible to achieve an ideal concept of work within given limiting conditions. (Lipsky, 1980: 81 – 82) Coping strategies explain how the actual policy – actions of SLB, can differ from the planned policy – the governmental programme, because of the decisions of front-line workers, who are looking for the solution of their dilemmas (Lipsky, 1980: xii).
Rationing services through limitation of access to services

The aim of these practices is to handle an exceeding demand and workload (Lipsky, 1980: 87). In practice this happens by imposing costs on potential clients, with a purpose to discourage them from applying for services (Lipsky, 1980: 88 - 94):
- monetary costs (for example higher fees for services),
- time costs (queuing for services, delayed services),
- information costs (manipulating or withholding information about service, using jargon or elaborate procedures),
- psychological costs (for instance degrading handling of clients).

Alternatively, bureaucracies establish procedures to process clients efficiently, such as routines, or reduction of contact hours and intake places. Routines enable fair and equal treatment of clients, yet decrease the ability of SLB to respond flexibly to needs of individual clients. The lack of flexibility is often desirable, because it repulses further demand and curbs the workload. However, sometimes organisations and their employees might seek higher number of clients. Especially, newly established agencies or new employees need to obtain clients’ approval of their legitimacy. (Lipsky, 1980: 99 - 101)

Rationing services through selective allocation of services

These practices are aimed at reducing the number of clients, but also at choosing the most suitable ones. It occurs for several reasons (Lipsky, 1980: 105 – 106):
- to respond flexibly to clients’ needs, because of society’s expectations,
- to categorise clients in order to handle high case loads (triage),
- to achieve job-satisfaction by serving the clients flexibly, and thus improving their situation,
- to overcome work-related problems (for example limited resources).

Creaming of clients is one of the most common tactics of selectiveness. It means selecting the best applicants for services, in order to improve one’s work performance, especially if evaluation is based on the number of successful applicants. Selection of clients might also occur due to the work bias, which is virtually an inherent part of bureaucracy, thus impossible to eliminate. The context of interaction between workers and clients is veiled by the principle of confidentiality, which precludes disclosure of potential bias. The rule of normality, known as a rule of thumb, implies that the deviant cases of clients will not receive an equal treatment. The lack of sanctions for biased behaviour or lack of adequate performance measures might too contribute to the biased processing of clients. Also the principles, such as advocacy of clients’ interest, and the fair and equal treatment of clients, often disguise biased behaviour. (Lipsky, 1980: 107 – 108, 112 – 115)
Controlling clients and work situation

Bureaucratic character of public services requires social order and cooperation of clients, in order to deliver services efficiently. Therefore, SLB develop techniques to obtain compliance of their clients: by designing the environment, in which interaction with clients takes place, by isolating clients during the provision of services, by referring to the principle of advocacy for clients, by imposing monetary costs on clients, by structuring the context of interaction (for instance time, content, procedures), and by imposing routines and sanctions for not following the routines. (Lipsky, 1980: 117 – 124) Apart from gaining clients’ compliance, bureaucrats also need to husband relatively limited resources. Therefore, they typically keep a ‘time reserve’ – they use more time on handling tasks, than they really need. This allows them to deal properly with unpredictable situations, which usually demand a substantial time. Workers also try to detach their decision-making from affected clients and thus avoid possible disagreements and delays in the process. Using other front-line workers as buffers is also a common practice. These “buffer workers” apply an unauthorised discretion in their decision-making, and thus contribute to the discrimination of clients. The most common tactics include: screening of clients (choosing the most eligible ones), rubber-stamping (labelling the suitability of clients), and referring clients to other agencies (so-called run-around). If clients express their dissatisfaction with services, organisations apply so-called ‘emergency routines’, which are designed to handle complaints and thus assure the smooth running of bureaucracy. (Lipsky, 1980: 125 – 128, 139)

Modification of concepts of work and client

The alteration of the concepts of work or client represents the last resort of SLB’s response to the pressures in their work. Workers perceive the discrepancy between an ideal and real job, which can be frustrating for them. Psychological adaptation to situation helps them to reduce the strain and reintroduce the balance between their ability to perform a task and the task itself. Therefore, they modify their conceptualisation of work or of their clients. (Lipsky, 1980: 140 – 141)

For some SLB the discrepancy is so extensive that they opt to withdraw from the work altogether, or at least to withdraw psychologically. Thus they reject personal responsibility for the way they conduct a job. In other cases, workers accept unfavourable work conditions as a “fixed reality” and decide to alter the work goal instead. By adjusting the goal to fit their ability to accomplish it, the workers achieve a job satisfaction. In order to cope with complexity, some bureaucrats specialise on certain area. This allows them to improve their skills, but prevents them from improving the work itself or from understanding the complex work situation. Instead, workers tend to see clients’
problems partially, in terms of fabricated categories. Sometimes, workers use organisational and professional ideologies to justify their simplification decisions. Since organisational and professional ideologies offer a framework for comprehension of the work, they significantly influence workers’ perception of goals and work. Another way of coping with tension is to reject the discretion, flexibility, and responsibility for work by following closely organisational rules and routines. Thus workers protect themselves against demanding requirements of clients. On the other hand, some workers might decide to refuse conventional bureaucratic practices and to apply greater extent of discretion in their decisions than they are allowed, thus leading to favouritism of clients. (Lipsky, 1980: 142 - 150)

Modified perception of clients often leads to differentiating among clients. Since bureaucrats cannot perform an ideal job for all clients, they select a group of clients, who will receive an ideal treatment, while others will be provided only with a mediocre level of service. The selection is usually based on clients’ suitability for service, which also allows workers to economise the resources spent on favoured clients. Bureaucrats also tend to attribute the responsibility for clients’ problems to clients themselves or to unfavourable circumstances, and thus reject their share of responsibility for resolving the problems. Workers usually proceed to this practice, if their inability to achieve the work task is long-term and causes them frustration. (Lipsky, 1980: 151 – 155)

2.2.4 Relevance of theory in higher education context

Although the theory of SLB applies mainly on such bureaucracies as police, health services, schools, or legal services, it has also a legitimate position in explaining the implementation in higher education primary processes, such as teaching. Higher education institutions as organisations with bureaucratic mode of work (Clark, 1983: 110 – 111) comprise bureaucratic professionals – the academics (Mintzberg, 2000: 171 – 172). Based on their expertise, academics possess discretion in their decision-making, present in the form of academic freedom, particularly in teaching and research. As such, academics’ decisions are not scrutinised by bureaucratic rules or collegial norms, which could restrict their individual discretion (Clark, 1983: 111). Instead, academics are entitled to several privileges and freedoms as well as personal autonomy and collegial self-government. Moreover, as professionals in academia, academics are portrayed as civil servants with altruistic commitment – to create knowledge, to transmit the cultural heritage to society, and to train the professionals to fulfil their highest potential. (Clark, 1983: 91) Therefore, the assumptions of SLB work can be applied on the profession of academics as well.
2.3 Follow-up studies on Lipsky’s theory

However, Lipsky’s theory has remained alone in addressing the role of front-line workers in the implementation process. The interest of theorists has shifted towards broader context: the implementation process has been studied from the perspective of networks and mutual influence of different implementers, organisations, and agencies at various levels. Indeed, in 1990s the trend of marketisation in policy making has diminished, while the role of government has been revived in a different meaning – so-called “horizontal mode”. Government cooperates with public and private actors and has more steering than leading role. (Hupe, Hill, 2002) Also, the concept of welfare state, generously supportive of public sector, has been replaced by the concept of “evaluative state” (Neave, 1998), which requires reporting from public organisations and their accountability to society. Thus, the changing conditions in policy making challenge the validity of Lipsky’s theory. For instance, the assumption of extensive and consequently inefficient public sector might be related to the situational context – the crisis of social-welfare state. Moreover, the frequently emphasised contrast between public sector and market system might be a simplistic depiction, which does not comply with current complex conditions in policy making.

Several contemporary studies on SLB, channelling Lipsky’s theory, have examined whether the assumptions of theory still hold true. For instance, Meyers and Vorsanger (2003) have explored the possibility of exerting the hierarchical control over SLB. They have studied several sources of control and concluded that professional and collective norms have the greatest influence on workers, while socio-economic system and organisational setting have only limited impact. (246 – 248) They have also investigated the role of SLB’s discretion in policy implementation. On one hand, the discretion can contribute to “bridging gap” between policy officials and citizens, for whom the policy is intended, and thus to adapt the policy to local conditions. On the other hand, goals might be misplaced by SLB because of their attempts to cope with work requirements or to fulfil their self-interest. Performance measures and incentives, therefore, play a key role in assuring a successful policy implementation. (Meyers, Vorsanger, 2003: 249 – 250)

Numerous empirical studies based on assumptions of SLB theory usually fall into four main categories (Hupe, Hill, 2002: 131 – 133):

1. qualitative single-agency case studies, which examine, how work conditions of SLB have influenced the policy implementation and outcome.
2. studies of the attitudes of bureaucrats, which have used other theoretical frameworks (theory of organisational culture) to explain behaviour of SLB.

3. quantitative single-agency studies, which analyse the individual behaviour of SLB to explain the outcome of policy.

4. studies trying to explain implementation ‘gap’ by examining the bureaucratic task and the bureaucrat-client interaction. These studies have shown that in spite of attempts of policy makers to take into consideration the discretion of SLB, the policy can still fail. The reason is an imperfect knowledge of policy makers about the conditions of SLB’s work.

In conclusion, the studies following-up Lipsky’s theory have aimed either to verify the main assumptions of theory, or to enlarge it by certain elements. Therefore, the contemporary research should draw on both – the original theory of SLB, as well as the contributions made by other researchers.

2.4 Concept of bureaucracy

Since the theory of SLB deals eminently with the concept of bureaucracy, which is often an operating mode in higher education institutions (Mintzberg, 2000, Clark 1983: 110 – 111), the concept requires further clarification.

The concept of bureaucracy was developed by Max Weber (1922). His ideal-type model of bureaucracy includes components such as: impersonal authority structure, expertise and specialisation of workers, functional labour division, hierarchy of offices in a career system, free selection based on specified rules, monetary remuneration based on clear contracts, discipline, and control in the conduct of office (Weber, 1978, in Lane, 1993). Consequently, an ideal bureaucrat is an office-holder devoted to his or her duty as a servant of citizens, strictly holding on to rules and being loyal to the office (occupation). Therefore, bureaucrat’s work can be described as the application of general rules to specific cases.

Weber’s main argument for bureaucracy is the efficiency: bureaucracy is “capable of attaining the highest degree of efficiency and is in this sense formally the most rational known means of exercising authority over human beings” (Weber, 1978, in Lane, 1993: 49). However, many authors
have argued that Weber’s ideal type of bureaucracy in fact does not hold true and its assumptions are questionable. The most critical objections to concept include:

- the lack of mechanisms maintaining the efficiency in organisation (motivation of workers); an unrealistic image of bureaucrats as officers devoted to their duty of civil servants (Lane, 1993);
- the means and ends are in reality misplaced – bureaucrats might become preoccupied with their own interests instead of being loyal to their occupation; organisation might also start promoting its own interests instead of social ends (Merton, 1957, in Lane, 1993);
- the ageing and expanding bureaucratic organisation develops certain rigid processes in order to preserve its status quo and defend itself (Downs, 1967, in Lane, 1993);
- the contradiction between two core principles of bureaucracy – the hierarchical authority of organisation and the expert autonomy of bureaucrats (Selznick, 1949, Wilensky, 1967, in Lane, 1993);
- strict surveillance of subordinates is dysfunctional and causes a tension, because organisation is composed of numerous individuals with their own agenda, making it virtually impossible to achieve consensus on one organisational goal (Gouldner, 1954, in Lane, 1993);
- centralisation of power, hierarchical structure, inability to control subordinates, and tendency to enlarge one’s own expertise can result in irresponsibility, inefficiency, and waste (Tullock, 1965, in Lane, 1993);
- the role of implicit norms, informal structure, individual motivation, and group interaction can have greater influence on individuals than the formal structures and norms (human behaviour schools, in Lane, 1993).

2.5 Concept of policy and policy implementation

Although various implementation theories offer ample definitions of the concepts of policy and policy implementation, for the purpose of this study the definitions will be derived from the theory of SLB.

According to Lipsky, the policy refers to the actions of SLB, through which they deliver services to clients. In this sense, policy also equals output, that is – what is really carried out. Therefore, what in other literature stands for output or outcome is in Lipsky’s terms a policy, and what is typically referred to a policy, Lipsky calls a governmental programme. Policy implementation then means to carry out a policy. Nevertheless, in Lipsky’s theory the term ‘policy implementation’ does not
appear as such. Instead, it is replaced by the concept of policy making, which however, transcends the mere execution of policy. The process of policy making refers to both – decision-making and carrying out these decisions. Thus, SLB are policy makers, who decide about policy – what will be delivered to clients, and carry out these decisions – make a policy. (Lipsky, 1980: xi – xii, xvi) In this respect, policy analysis takes on a bottom-up perspective, examining the implementation form the perspective of front-line implementers. However, the governmental programmes are designed at the top level, thus rendering the theory the top-down perspective.

Nevertheless, Lipsky’s terminology is slightly confusing and in contradiction with traditional use of concepts in other studies. Thus, for the purpose of this study several adjustments have been carried out. In this study, the public programmes (including governmental ones) will be regarded as policies. What Lipsky calls a policy will be then considered an output of policy – what really gets done. This definition of output was originally proposed by Dunsire (1978). Policy implementation will refer to the process of decision-making and carrying out these decisions, which is in line with Lipsky’s concept of policy making, and can be used interchangeably. The process of policy implementation consists of the following elements:
- discretion and autonomy in decision-making,
- constraining conditions of work, contradictory nature of work,
- output – the actions of implementers.

The interactions among elements of this process are as follows: discretion and autonomy coupled with constraining conditions of work and contradictory nature of work prompt implementers for action, in order to resolve problems or to cope with them.
3 Research problem and research questions

As the review of empirical studies on HESD has revealed, the central topic of these studies has been the implementation of sustainable development in higher education. Yet, the role of implementers in the process has often been neglected. Therefore, this study has attempted to cover the issue of implementation from the perspective of bottom-level implementers. In doing so, the area of teaching was selected as the most profound function of HESD agenda. Therefore, the role of implementers is assumed by academics. Also, to address this topic, the University of Tampere was chosen as a research site because of its accessibility. Therefore, the aim of this study was to investigate:

*How is the sustainable development implemented in the teaching activities of academics at the University of Tampere?*

This research question was approached from the perspective of academics and their perception of work. Based on the theory of SLB, the role of academics in implementation process is to be policy makers, not mere executors of policy. It is their decisions and actions that comprise the policy output. Therefore, to understand the implementation of SD in teaching from academics’ vantage point means to understand the underlying work conditions and discretion, and how do they influence the actions of academics. This involved answering subsequent questions:

1. What is the role of discretion and autonomy in academics’ decision-making?
2. What are the main constraining conditions in teaching, and how do they influence academics’ decisions?
3. How do the actions of academics relate to the output of implementation efforts in teaching?

Thus, the academics’ experiences are linked to implementation studies on one hand, and to the HESD agenda on the other. Any SD implementation efforts in higher education need to be evaluated against the expectations of HESD agenda, which has specifically delineated the means and outcomes of implementation process, and thus represents the main referential framework for this study.
4 Research methodology

In order to assure the transparency of research, the description of chosen research strategy inevitably ensues in this chapter. This involves description and justification of methods of data collection and their analysis, the sampling method as well as the sample specification. Also, possible threats and limitations of used methodology and the way of minimising their negative effect on findings have been included in the discussion.

4.1 Research design

In order to address research questions, the approach of single case study has been chosen, because of its established position in other studies on SLB (Meyers, Vorsanger, 2003: 251 – 252). The University of Tampere has been chosen as a case for its proximity and manageability of a research process. The advantage of this approach was the possibility to study SD implementation in an enclosed, specifically delimited environment – the setting of university. This has allowed a detailed analysis and a more profound understanding of implementation dynamics at the bottom level. On the other hand, case study does not allow generalisation of results on the whole population; it rather depicts a representative case of any university in a Finnish context.

Therefore, in order to provide the study with a broader policy and implementation background, the screening of relevant documents was executed. The objective of a review was to gather information about SD implementation process at various levels of system – starting from international, through national, to institutional level. This included examining declarations of international organisations, which have been most influential in the field, strategies and development plans of Finnish Ministry of Education, strategy and mission statements of UTA, previous surveys concerning the implementation of SD at UTA, and curriculum descriptions. However, the main strategy of data gathering was interviewing of academics, who represent the target group of this study.

4.2 Methods of data collection

A research on street-level bureaucrats typically utilises the combination of interviews and observation (Meyers, Vorsanger, 2003: 251 – 252). However, in the view of study’s research questions and manageability of research process, it has been decided that interviewing will be the
main source of primary data. The advantage is in gaining the direct access to academics’ perception and comprehension of their work. However, the extent of behaviour that has been explored during interviews depended significantly on academics’ awareness of their behaviour and their willingness to share it with interviewer. The actual behaviour of person and behavioural changes are not so readily accessible through interviewing. Instead, an observation of teaching activities in longer span could compensate this drawback. However, such procedure was virtually unattainable for this study – most of the relevant study courses were not open during the execution of this research. Moreover, the subtle changes in behaviour of academics or in their teaching are not easily accessible even through observation. Also, observation is generally very laborious and time consuming method, thus requiring a lot of resources. As an alternative method, amending this difficulty, a questionnaire to academics was also considered. Its advantage is the possibility to research larger samples and thus to achieve greater generalisation of results. However, the ability of questionnaire to explore individual perception and attitudes is significantly lower than during interviewing, which has led to its ultimate rejection.

Nevertheless, the different character of methodology used in this study, as opposed to other studies on SLB, might have affected the character of findings. Instead of exposing the unconscious behavioural changes, the study has focused more on intentional aspects of academics’ behaviour.

The themes covered by interviews were intended to approach the topic of academics’ work in a broader context – besides the description of teaching process and working conditions, interviews prompted academics’ reflection on their motivation for teaching and SD issues in general. Therefore, the following topics were included in the interviews:

1. Clarification of main concepts – sustainable development and sustainability, which is necessary in order to achieve the common understanding.
2. Description of the courses, namely the goals, content, learning outcomes, teaching methods, and assessment. The aim was to describe the teaching process in order to identify the actual behaviour of academics.
3. Initial motivation or interest in SD-related issues and teaching. The aim was to identify academics’ ideal concept of work.
4. Facilitating work conditions in implementing SD in teaching. The aim was to identify supportive factors of SD implementation. It involved questioning about various documents, organisations, networks, reward system or other incentives, which might have had an impact on academics’ everyday work.
5. Constraining work conditions, including the questioning about time constrains, size of group, or any relevant inhibiting factors. The aim was to identify any organisational barriers to implementation of SD in teaching.

6. The effects of these limitations on teaching. How do academics balance constraints with their original concept of work? How do they deliver their teaching despite discouraging conditions? The aim was to identify potential changes in teaching.

4.3 Target group and sampling

The target group of this study comprises the academics of the University of Tampere, who are already active in SD implementation. The function of teaching – as one of the areas, through which HE can contribute to SD, was chosen based on its significance in HESD agenda. Consequently, the group of academics – teachers, was chosen because of their status as bottom-level implementers in HE teaching.

Therefore, the sampling of target group was purposive. Since the initial population (target group) was too large to begin with, a snowball or chain sampling was applied (Miles, Huberman, 1994, in Marshall, Rossman, 1999). The aim was to gain the access to the key persons, who possess relevant information – the academics, who are already active in SD implementation in teaching, as well as to improve the representativeness of study. The contact person, who provided the references to participants, was the environmental coordinator at UTA. The main criterion for being selected into this study was that the teaching of participant was related to SD issues. No additional selective criteria were applied – the academics of both genders, of different age and rank, and from various departments were represented in the study. The participants were coming from various departments of Faculty of Education, Faculty of Economics and Administration, and Faculty of Social Sciences. The interviewees have mostly had long-term experiences with teaching and with their area of expertise, although younger academics were included also. The sample comprised both – academics still active in their teaching as well as those, who already had ceased their teaching or have postponed it temporarily in favour of conducting research. The ultimate number of interviewed persons depended on their accessibility and responsiveness to the inquiry, and finally comprised 6 persons.
4.4 Methods of data interpretation

The theory of SLB was used as a main reference framework, within which the data from interviews were coded and explained. Firstly, the key categories – such as working conditions, were identified. Secondly, relations among them were searched for, in order to identify academics’ perception of work conditions and their impact on academics’ decisions and actions. The reliability of findings was enhanced by repeating the process of forming assumptions, testing them against data, then adjusting them, and finally retesting them again. The advantage of this approach – applying the theoretical framework on data, is in its relatively stable and reliable guidance of the process of data collection and data interpretation. On the other side, the danger is the possibility of omitting some new concepts or unexpected findings emerging during the process of analysis, which ultimately curbs an explorative potential of study.

During the process of analysis several threats of research methodology have been discovered. The interviewing could have been biased by researcher – the way of questioning could have prompted answers in a certain direction. This risk was taken into consideration during the analysis stage – the findings were verified by searching for additional statements in the interview, which would confirm the plausibility of findings. Next, the interpretation of data might have been biased by researcher’s cognitive system – her experiences, knowledge, and personality. This kind of influence is, however, impossible to eliminate entirely, and thus should be taken into consideration by a reader.
5 Process of sustainable development implementation in higher education

Since the issue of SD has been on political agenda for a considerable time, the process of its implementation in HE has necessarily become more complex. Not only has the scope of agenda enlarged over the time, also the number of involved actors has increased significantly. Initially concerning only international organisations, the discourses on HESD were later joined by regional networks, national governments, and higher education institutions. Nevertheless, it is important to keep in mind that with the constantly evolving concept of HESD, the ways of its implementation are open to different interpretations, thus rendering the process a complicated character. The following discussion offers rather a simplified review of the process, covering only the most dominant and recurring themes of HESD agenda.

5.1 International level

The policy of HESD has evolved in two separate tracks at international level – one within the context of international organisations, such as UN and its agencies, the other among associations of universities. Although both tracks are mutually reinforcing and influencing each other, there are some differences between their goals, areas of focus, and types of actors involved.

The role of HE in ESD has not been particularly delineated in the UN documents. Instead, much of a discussion focuses on education in general. Education has initially had only environmental perspective, with purpose to raise the public awareness about environmental issues (Stockholm Declaration, 1972). However, with the onset of SD movement, it has acquired also social and economic dimension, and its role in achieving sustainability has gained more importance. Most declarations on ESD revolve around the area of teaching and learning, and their role in promoting SD. Namely, reorienting education towards SD, increasing public awareness, and promoting training are the core focus areas of Chapter 36 of Agenda 21 (UN’s Conference on Environment and Development in Rio de Janeiro, 1992). In the process of achieving these goals, the role of various stakeholders in society – businesses, NGOs, media, scientific community, has been emphasised. Still, it is chiefly the responsibility of national governments to endorse recommendations of international declarations and to adopt necessary strategies in order to facilitate the process of SD implementation in HE.
Perhaps the most significant programme for education, at the international level, is UNESCO’s DESD (2005 – 2014) Programme. Adopted by UN on its 57th session in 2002, the Decade aims to maintain ESD and to promote the education in general. Within this agenda, HEI assume a specific role in promoting SD as societal role models and as intermediaries in knowledge transfer. The programme is coordinated by UNESCO, which has also developed a tool for its implementation – the International Implementation Scheme (IIS). The scheme represents a comprehensive strategy, delineating the core areas, dimensions, outcomes, tactics, and actors of the process, but does not address HE in particular. For further details, see the Figure 2.

The efforts to achieve SD through education have soon attracted the attention of international associations of universities and led to the series of conferences in early 1990s. Unlike UN agencies, the approach of these associations has been more grass-root, stemming from their expertise in higher education, thus offering useful insight into the practical aspects of implementation process. From the beginning, the various declarations have been rather specific and have delineated concrete goals, actions, and measures for implementation. HEI are treated in a complex way – as organisations with various functions. Consequently, the proposed strategies for SD implementation in HE are more comprehensive, encompassing areas such as teaching, research, outreach, institutional commitment, partnerships with society, cooperation within HE, institutional operations, students’ opportunities, reward system, and ethics. This approach implies the direct responsibility of HEI for the implementation, although other stakeholders (NGOs, financial and business sector) have been also included in the recommendations of associations.

Therefore, the areas of SD implementation in HE can be conceptualised either from the viewpoint of their activities (as elaborated by associations of universities), or as proposed by UNECE’s strategy (containing areas of: policy delineation, formal, non-formal and informal education, training the educators, learning tools and materials, research, and cooperation and partnerships). Nevertheless, the originally distinct frameworks have gradually become more fused by cross-fertilising each other.

3 Association of University Leaders for a Sustainable Future (ULSF), International Association of Universities (IAU), Conference of European Rectors (CRE) – currently European University Association (EUA), Global Higher Education for Sustainability Partnership (GHESP)
At the regional level, Baltic 21 – an initiative of countries in the Baltic Sea region, has been of great consequence for Finnish national policies and institutional strategies. Initiated by prime ministers of involved countries\(^5\) in 1996, the Baltic 21 is a network based on Agenda 21 and aimed at promoting regional sustainable development. The network connects various stakeholders, such as government ministries, European Commission, NGOs, financial, academic, business, and city networks.

There are several platforms, through which Baltic 21 is trying to promote SD, one of which is the Baltic 21 Education (B21 E) developed in 2000. The aim of the programme is to incorporate SD aspects into education systems of countries. The action plan for education – Agenda 21 for ESD in Baltic Sea Region, was adopted in 2002 and specifies the key goals, actions, outcomes, measures, and actors of the process. The main action areas, which later served as a template for UNECE’s strategy, involve:
- policies and strategies;
- competence development within education sector;
- continuing education;
- teaching and learning resources;
- research and development of ESD.

Thus, B21 E participates on the actual implementation of SD in HE, apart from contributing to the formulation of ESD policy itself. By supporting the interaction among various actors the programme puts into practice one of the key aims of ESD – strengthening the cooperation on ESD.

A more specific description of international developments in HESD agenda is depicted in the following overview. The key documents have been categorised into three levels of discourses: supranational, international, and regional, according to which agency has had the most significant influence on the formulation of respective declaration. In order to follow the gradual development of HESD agenda, the following categories have been included in the overview: the key actors involved in implementation, the concerned dimensions of SD, and the goals of implementation efforts.

\(^5\) Denmark, Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russia, and Sweden
Figure 2: Milestones in the implementation of sustainable development in higher education: the key documents at the international level

Supranational level – represented by UN agencies

<table>
<thead>
<tr>
<th>Declaration</th>
<th>Proponent</th>
<th>Implementers</th>
<th>Perspective</th>
<th>Areas of focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stockholm 1972</td>
<td>UNEP</td>
<td>governments</td>
<td>environmental</td>
<td>awareness</td>
</tr>
<tr>
<td>Rio de Janeiro 1992</td>
<td>UN</td>
<td>governments</td>
<td>SD with emphasis on environmental</td>
<td>* awareness * reorientation of education * training</td>
</tr>
<tr>
<td>DESD Programme: International Implementation Scheme 2005</td>
<td>UNESCO</td>
<td>governments</td>
<td>SD – holistic</td>
<td>* awareness * reorientation of education * training * quality of education</td>
</tr>
<tr>
<td>UNECE Strategy 2005</td>
<td>UNECE</td>
<td>governments</td>
<td>SD – holistic</td>
<td>* policy, strategies * formal, non-formal, informal learning for SD * educators’ competences * learning materials * research * cooperation</td>
</tr>
</tbody>
</table>

International level – represented by associations of universities

<table>
<thead>
<tr>
<th>Declaration</th>
<th>Proponent</th>
<th>Implementers</th>
<th>Perspective</th>
<th>Areas of focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talloires 1990</td>
<td>ULSF</td>
<td>HEI</td>
<td>SD with emphasis on environmental</td>
<td>* curriculum * research * operations * outreach * reward system * students * institutional commitment * cooperation with society * networking among HEI * ethics of SD</td>
</tr>
<tr>
<td>Halifax 1991</td>
<td>IAU, UNU, AUCC</td>
<td>HEI</td>
<td>SD – holistic</td>
<td>* learning materials * educators’ training * ethics * awareness * networking * research</td>
</tr>
<tr>
<td>Kyoto 1993</td>
<td>IAU</td>
<td>HEI</td>
<td>SD – holistic</td>
<td>* learning materials * educators’ training * ethics * awareness * networking * research</td>
</tr>
<tr>
<td>Copernicus 1994</td>
<td>CRE/EUA</td>
<td>HEI</td>
<td>SD – holistic</td>
<td>* curricula, teaching * educators’ competence * networking</td>
</tr>
<tr>
<td>Lüneburg 2001</td>
<td>IAU, EUA, ULSF, UNESCO</td>
<td>governments</td>
<td>SD – holistic</td>
<td>* policy, strategies * educators’ competences * continuing education * learning materials * research</td>
</tr>
<tr>
<td>Ubuntu 2002</td>
<td>UNU, UNESCO, IAU, EUA, ULSF</td>
<td>Governments</td>
<td>SD – holistic</td>
<td>* curricula, teaching * educators’ competence * networking</td>
</tr>
</tbody>
</table>

Regional level – represented by countries in the Baltic Sea Region

<table>
<thead>
<tr>
<th>Declaration</th>
<th>Proponent</th>
<th>Implementers</th>
<th>Perspective</th>
<th>Areas of focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltic 21 Education Programme 2002</td>
<td>Baltic 21</td>
<td>governments</td>
<td>SD – holistic</td>
<td>* policy, strategies * educators’ competences * continuing education * learning materials * research</td>
</tr>
</tbody>
</table>

Source: Own preparation based on review of declarations
5.2 National level

From the perspective of international organisations, the role of national government is to facilitate the implementation of SD, by endorsing their recommendations. On the other hand – from the perspective of HEI, by incorporating these recommendations into legislation, the government also sets preconditions for the implementation, and thus contributes to the formation of HESD policy. Thus, the national government has a double function in the process – as an implementer of policy as well as its designer.

Finnish government contributes to the implementation of HESD by embedding the concept of SD in Finnish constitution, which serves as a very general framework for HE steering, and by defining the Development Plan for Education and Research, which outlines the national HE policy.

However, the most important document in ESD implementation remains the Finnish National Strategy for Education for Sustainable Development, technically organised by Education for Sustainable Development committee. The Strategy, as an overall national policy for ESD, encompasses both – the national adaptation of DESD, as well as of B21 E. On one hand, the goals of strategy comprise those of the National implementation plan of B21 E:
- institutional commitment through institutional strategy,
- know-how on SD through curricula of the courses,
- expertise through teachers’ training,
- research on SD and development of ESD.

On the other hand, the framework of strategy is adopted from the National Strategy for DESD:
- teaching and research activities,
- partnerships with universities,
- operations of universities,
- institutional commitment through university’s strategy.

Apart from designing the national policy, Finnish Ministry of Education is also active in steering the universities. The main tool in this process is a three-year performance agreement, which is negotiated with each institution individually and revised annually. The agreement includes common goals related to national higher education policy as well as individual objectives, intended to support HEI’s specific profile and strategic goals. Thus, Finnish HEI have a considerable amount of
autonomy in their main activities – they are solely responsible for the quality of teaching and research; for self-assessment and participation on external assessments; for complying with the national and international standards of education; and also for high ethical quality of their operations.

The mutual influence of various documents in the process of SD implementation is depicted in the following diagram. The process involves several levels, which tend to reinforce and cross-fertilise each other.

**Figure 3: Process of implementation of sustainable development in higher education teaching**

![Diagram showing the process of implementation of sustainable development in higher education teaching](image)

*Source: Own preparation*
5.3 Institutional level

According to most international and national initiatives, the institutional level is the last link in the implementation process, which is reflected in the definition of HESD goals – most of them are aimed at the level of HEI. This renders HEI ultimate responsibility for implementing the SD in HE. Although this assumption is questionable, the extent of institutional achievement of ESD goals in the area of teaching should be examined, because it determines a context within which the activities of individual academics take place. From the perspective of UTA, the most significant document is Finnish National Strategy for ESD, which is also reflecting an international agenda (UNECE’s strategy, DESD, Copernicus Charter, and B21 E).

In terms of institutional commitment, the UTA has stated its position towards SD in its performance agreement with Ministry of Education, which includes the clause: “All universities have to promote sustainable economic and cultural development of the society. The universities also have to promote welfare of the (Finnish) society and its success in international competition.” (Ministry of Education, 2008: 1) However, the UTA has not specified actions, which should contribute to this target. Commitment to SD was also reinforced by the Council for Teaching and Research Affairs at its 8/2007 session, by expressing the support for SD, which should become a generic principle in teaching and research activities. However, the Council concluded that university should not commit itself to any ideology. (Minutes from the Council for Teaching and Research Affairs 8/2007 Session, 2007)

5.4 Level of individual academics

Nevertheless, neither institutional commitment nor national policy can exert much influence over the individual level, especially in regards to teaching. As the survey of SD implementation in teaching activities of UTA (2007) concluded, the initiatives of national level have not yet reached the level of individual academics, and are utmost known at the institutional level. The main findings of this survey can be summarised as follows:

- SD is implemented in teaching mainly through the content of the course and less through teaching methods;

---

6 The Council comprises of representatives of faculties, student union, library, open university, and language centre
7 Raatikainen, S., Routa-Lindroos, S. (2007): Promotion of SD in teaching at University of Tampere
- teaching methods, which promote SD, are quite popular at UTA, and include problem-based learning;
- there are considerable differences among the departments in awareness and implementation of SD-related issues in teaching.

The reason behind downplaying the influence of upper levels on the actual implementation at the bottom level might be the internal governance at the university. Although the administration offers support and assistance to university units in their activities, the ultimate responsibility for conducting the primary process rests on individual academics and their departments. A department comprises teaching and research in one or more disciplines, and is led by the head of department assisted by departmental council. In regards to teaching activities, the head of department supervises and develops the departmental operations, and approves the work plans of teachers, while the departmental council makes proposals regarding the curriculum.  

Academics are typically required to conduct 1600 hours of work a year in the areas of teaching, research, administration, and outside relations. The exact division of work is a matter of agreement between individual academics and their department, and to a great extent depends on discretion of individual academics. (M. Ihonen, Academic Development Unit, personal communication, 31. 3. 2009) The role of faculty is rather auxiliary in that matter: the task of faculty council is to further develop degree programmes and teaching and research activities at the faculty level.  

---

6 Implementation of sustainable development in teaching at University of Tampere: perspectives of academics

However, it is important to realise that HESD strategy represents only a framework for implementation of SD in HE. In fact, the implementation can be investigated from different perspectives as well. The aim of this study was to explore, how SD is implemented in teaching at UTA from perspective of academics, who are directly involved in the process.

The study has revealed that academics’ interest in SD issues has developed prior to the national or institutional efforts. Most interviewees have attributed their motivation for SD to the altruistic motives (such as criticality of SD topics in resolving worlds’ global issues), or to their intellectual curiosity developed during their studies. However, some interviewees were also motivated by emerging societal problems and the need to resolve them, which renders the implementation process a bottom-up direction. Nevertheless, to claim that international discourses on SD have no impact on individual level would be a simplification. Since the public awareness about SD issues has increased considerably since their first occurrence on political agenda, it is highly probable that academics have been stimulated by international debates (albeit perhaps unconsciously).

6.1 Means of sustainable development implementation

Participants of this study have promoted SD in their teaching mostly through the content of the course, with majority of them teaching about SD-related issues. The most common topics included: poverty, education, environmental issues, social order, technology, and global and international social issues. Thus, all four dimensions of SD – environmental, economic, social, and cultural, were equally present in the study. Also, several academics have applied the sustainability as an underlying idea of their teaching, which offers a new perspective on current issues. Although academics have not dealt explicitly with the concept of SD as such in their teaching, the content covered in the courses was closely related to a broader notion of SD.

In spite of general use of rather conventional teaching methods (lecturing, seminars), interviewees have also employed non-traditional methods in their teaching, for example: joint projects with society, transdisciplinary lecturing, use of ICT and other technologies. Academics have also used discussion to elicit critical thinking, and thus improve learning process of students.
6.2 Autonomy and discretion of academics

The discretion and relative autonomy of academics from their institution are important instruments in delivering the policy in higher education. Being the experts in their own specialisations and having a thorough knowledge of teaching and learning process, academics have the authority to decide about the most important parameters of quantity and quality of teaching (such as the course content, teaching and assessment methods, the frequency and nature of interaction with students, structure of the course, and learning materials). If the teaching is defined as a service to students – the end users of policy, the way of performing it can be understood as means of delivering a policy, because it has a direct impact on students. Thus, the most important decisions about teaching with significant effect on students are fully in competence of academics – the implementers of policy.

The academics possess a considerable amount of autonomy from institution, originating chiefly from their expertise in a specific disciplinary field. By the virtue of academic freedom, academics decide for themselves about the subject of their research and teaching, thus maintaining their domain of expertise. The findings of this research suggest that the more unique was the area of expertise, the higher level of freedom in deciding about the teaching substance. This expertise was in some cases augmented by networking, participating in international organisations, and maintaining the contacts with specialists in the field. However, some academics have reported the necessity to comply with institutional orientation, instead of developing their own area of expertise: “it’s difficult to concentrate on anything, difficult to build up a focus” P3. Interestingly, this was the case of a department specifically devoted to ESD, where academics didn’t have to justify their choice of expertise. On a contrary – their specialisation was in line with departmental, and perhaps this has led to a decreased individual autonomy.

There were several cases of negotiations between academics and the department, concerning the teaching content. As suggested by interviewees, the overall result of negotiations depended on financial resources available at the department, but also one’s ability to “combine own interest with the interest of the department” P6. The flexibility to teach the course as elective in return for liberty in deciding about its content has also played an important part in negotiations. Thus, choosing the subject of teaching does not appear to be solely individual decision, but rather some kind of compromise achieved mainly through bargaining with institution. This renders the relationship between institution and individuals a double character – conflictual, yet dependent. While the
conflict stems from different goals of both sides, the dependency is a consequence of each side having something valuable to exchange – the institution offers an environment for academics to conduct their work, while academics possess skills and expertise to carry it out.

By incorporating SD-related issues in their teaching, academics directly deliver HESD policy to the end users – students. However, academics are not obligated to implement SD in their activities. Due to the nature of the concept and the process, academics’ participation on implementation is voluntary, based on their persuasion about the value of SD. Also, the rewards for participation are rather moral than financial. Therefore, any coercive mechanisms to implement HESD cannot be expected to be successful. Indeed, this study suggests that academics actively search for policies and ideologies to justify their career choices, in this case ESD policy, instead of trying to apply any “imposed” policy, as suggested by the theory of SLB. In this respect, the process of HESD implementation can be regarded as bottom-up process – academics deciding about the means of implementation as well as carrying out these decisions. On the other hand, in terms of the concept’s origins, it is important to recognize that the SD had been defined at international level, and only consecutively adopted at national, institutional, and even individual level. From this perspective the HESD policy is a top-down process with clearly linear direction.

6.3 Conditions of academics’ work

In order to understand the implementation process from the perspective of academics, it is first necessary to understand the conditions, which are determining their work. The significance of these conditions for an every-day work appears to be dependent on one’s autonomy from institution. The more unique expertise and position at the department, the less restricted by organisational barriers did the academics feel. On the other hand, an undistinguished position in the department rendered academics more dependent on conditions stipulated by the institution. In the following sections, the data obtained from the interviews with academics have been organised under the categories of work conditions developed in SLB theory.

Insufficient resources relative to the work task

The resources of academics’ work chiefly refer to the availability of time in relation to the work load. Academics have experienced lack of resources in several ways. Firstly, some interviewees found their classes overloaded, which prevented them from possibility to pay individual attention to
each student. Secondly, the lack of personnel at the department has resulted in difficulty to properly accommodate the teaching. For instance, a required assistance with administrative tasks was not permanently available at the department and depended heavily on accessibility to human resources. Also, another interviewee had to cover a wide scope of diversified courses because of the lack of teaching staff. This has in turn had an adverse effect on another activity – the research. In other instances, interviewees were not able to apply non-traditional methods in their teaching, because they were more time-consuming, albeit creative, than conventional methods.

However, not all academics experienced the time constraints. Thanks to the departmental assistance with accommodating the teaching activities, some academics have not perceived any constraints on that account. Although this finding seems to be in a contradiction with theory’s assumption – that any additional human resources are likely to be consumed by increased number of students, its interpretation should be taken with care and evaluated only within the longer time-span.

The lack of teaching experiences is another limitation of resources, which may obstruct a proper accomplishment of work. Although interviewees have admitted the lack of experiences in early stages of their work, they have rather emphasised the eventual improvement of their skills. It was also hinted that the lack of experiences had caused insecurity about teaching and had called for rearrangement of the course design.

**Vague and conflicting goal expectations**

The ambiguity of goals in academia refers to multiple expectations of society on HE. Some of these expectations have been incorporated in an evaluation system, thus gaining an importance in HE activities. However, in the case of HESD policy the conflict of goals stems mainly from different orientation of both – an institution and individual academics.

Several interviewees have spoken of a departmental opposition towards the subject of their teaching. Few others have mentioned a lack of institutional support for their teaching, especially limited financial resources. Most of these conflicts were resolved through negotiations with the department. Occasionally, though, the interviewees had to limit the extent of their teaching. However, academics were overall able to follow their professional interests, although at the cost of some compromise.
A more important conflict of interests relates to the quantity and quality of teaching. Institution seems to be more concerned with maintaining high number of students. As noted by some interviewees, the funding system of HEI is based on the number of graduates, thus giving a direct incentive for institution to accommodate ever increasing demand for HE services. More specifically, in Finland the funding of HEI teaching activities depends on the number of master’s-level qualifications and doctorates awarded over the period specified in the performance agreement (European Commission, 2008). This leads to the situation of overloaded classes, as perceived by academics. On the other hand, academics are more interested in the quality of teaching. They prefer smaller groups of students with the possibility of individual interaction, which maintains students’ deeper learning. Therefore, sometimes the large classes were regarded as obstructive in an effort to achieve good quality of teaching.

**Problem of performance measures**

The infamous lack of feedback on performance in bureaucratic organisations has transpired in academics’ work in a form of the solitary process of self-improvement. When asked about the factors contributing to the improvement of their teaching, most interviewees referred to the individual process of gaining teaching experiences and subject-related knowledge. The following activities were regarded as inherent parts of that process: “follow the literature and try to keep up with the specialists in the field” P3, “to have an aim and then try to think about how to achieve it” P6, “more experience in life in general” P5. Other factors enhancing the performance included: the interaction with and advice from colleagues and students’ feedback. However, students’ opinions were regarded more as a motivation factor, than a performance measure.

A reward system represents a significant tool for steering academics’ performance. At UTA, the evaluation of academics’ personal performance is included in a bonus of salary, which contains factors, such as: commitment to work, contribution to work, special skills in relation to the work, and employment of abilities. However, the system includes no specific incentives for implementation of SD in teaching. (M. Ihonen, Academic Development Unit, personal communication, 31. 3. 2009) Therefore, it has rather marginal relevance for evaluation of or motivation for SD-oriented teaching. Moreover, several interviewees did not consider a reward system to be particularly important factor, because their remuneration was not dependent on the area of their specialisation – “the university pays for teaching” P6 and they felt their position “compensates enough”, so they were “not in a great need of” P1 financial support for the implementation of SD in their teaching.
Unequal relationship with students

The relationship between academics and students tends to be dominated by the former. However, students are not completely disadvantaged in this relation – their consent is needed to approve academics’ position as teachers. Moreover, the current system of HE funding, related to the number of graduates, requires academics to be more responsive to students’ needs. Still, the extent of academics’ compliance with these needs remains disputable.

Interviews suggest that students’ feedback was considered indispensable, when teachers needed students’ approval of their teaching ability. It typically occurred upon commencing the teaching, when the level of teachers’ insecurity about their work was highest. However, in most cases the academics have sought the control of teaching process, and thus of students, which is inevitable for maintaining the social order in working situation. They were able to exert certain level of control, particularly by determining the course design. Their decisions about teaching methods (face-to-face lecturing versus e-learning methods), the frequency of lectures and seminars, were chiefly influenced by availability of financial resources, as noted by some interviewees. In order to economise these resources, teachers had to design the course in a way which would allow them to conduct an efficient teaching and also to maintain a required number of the course participants.

Nature of academics’ work – human services in bureaucratic context

Higher education as public service inevitably involves human interaction between teachers and their students, which rests on an altruistic motive for teaching – acting on the behalf of students. Several interviewees, for instance, mentioned their concern for students’ deeper learning. As some of them noted: “the first aim is to get students involved” P6, “they [students] might simply pursue into learning more deep” P1. Some interviewees even preferred their teaching over research, or tried to build a closer relationship with students during the course: “I would love to have it as lecture and seminar – more discussion, more group work” P5.

In general, the interaction with students was considered as invigorating element of academics’ work. The possibility of “being able to share some of it [knowledge] with the students” P1 was regarded as a motivating factor related to the job satisfaction. Interacting with colleagues or participating in various networks was also considered to be an important factor in overcoming the obstacles related to teaching: “there are people who help you” P2. However, an important supportive factor for academics, apart from human interaction, is also their dual role as teachers and researchers. The position of researcher enabled interviewees to deepen their specialised knowledge,
and thus to fulfill their intellectual interest, while being a teacher allowed them to transfer this knowledge to students.

On the other hand, academics have also encountered alienating elements in their teaching, related to the control of process. Interviewees mentioned they could not influence the composition of class in terms of students’ quality. Some interviewees preferred the classes of highly-motivated students, which would allow them to teach a more-advanced knowledge or to transmit the values of SD more easily. Since both options could improve the teaching and learning process, the composition of student group is also related to the quality of teaching-learning process. Several academics have also perceived that they could not influence students’ choices regarding their consequent studies. Thus, academics have also experienced the lack of control over the outcomes of their teaching.

### 6.4 Strategies of academics’ coping mechanisms

This study has also highlighted behavioural aspects of bureaucrats, which were not particularly outlined in the theory of SLB. Unlike the theoretical suggestion that bureaucrats seek only surrogate mechanisms to cope with unfavourable situation in their work, this study has revealed that academics prefer to actually resolve the problem, not only manage its consequences. The following sections delineate how academics approach some persistent difficulties in their work. They typically develop certain mechanisms, which have been organised under the categories of SLB theory.

**Controlling the work situation**

Since the resources for teaching are typically limited, academics must seek economical ways of employing them. In order to ensure efficient provision of HE services, a social order and students’ cooperation on process need to be achieved. This is mainly achieved by exerting a control over the working situation. There are several practices of maintaining the control over the teaching process, such as designing the course in terms of teaching methods, the frequency and timing of teaching. The findings of this study suggest that courses were designed in a way, which enabled academics to make the best use of available resources. For instance, the lack of financial resources has ultimately influenced the arrangement of teaching process in favour of large-scale lecturing or electronic forms of teaching.
Rationing services through selection and limitation

The strategies of selective allocation of services are often applied either to curb the exceeding number of students, represented by overloaded classes, or to handle the unfavourable composition of the class, both of which aggravate the overall teaching-learning process. Therefore, a selection procedure is often employed, to achieve a suitable size or composition of class. In practice, academics stipulate the preconditions for enrolling to the course, in regards to the previous studies of students, which must be related to the specialisation of department.

However, in some instances this practice was precluded by institution, and interviewee was compelled to accept all applicants to the course, regardless their educational background. In other cases, the selection process was institutionalised by creating a collective initiative at the department. The procedure was aimed at high-school students, in order to select the best applicants, and thus to achieve a coherence between departmental and students’ profile. This situation is desirable for academics, because it improves the composition of class, which in turn enables them to perform an ideal concept of their work: “Educators tend to be idealists, and try to improve the world, and transfer these ideas into their jobs.” P4 Thus, being able to carry out one’s vision of an ideal job is closely related to the job-satisfaction and self-fulfilment.

The limitation of services was rather uncommon practice among participants of this study. If academics decided to reduce their teaching activity, it was mainly to pursue a research. On the other hand, some interviewees have experienced the need to maintain the high number of students, in order to obtain a positive feedback from them, which serves as an approval of academics’ position and legitimacy. This need of approval was particularly important upon commencing the teaching activity, when academics lacked the experiences and thus felt insecure about their position.

Modification of concept of work

A psychological adaptation helps academics to reconcile with unfavourable conditions in their work. It represents the last instance of their response to a persistent work problem. If academics are unable to achieve a resolution of the problem either through collective efforts or by applying discretion in their decision-making, they tend to accept the limiting conditions as fixed and focus on other manageable aspects of their work. This is confirmed by some of interviewees’ statements: “over the years one becomes more realistic” P1, “I need to make a compromise between those aspirations and reality” P6, which indicate the tendency to modify the concept of work.
The conditions such as the availability of personnel at department, the size or composition of class, the control over the learning outcome, or the institutional support, have proved to be difficult to influence. Since it is not in the competence of individual academics to decide about these aspects of their work, they had to eventually accept them as restrictions in achieving an ideal vision of work. Although there is an assumption that academics have redirected their focus on other controllable aspects of their work, only few of them have indicated this decision. For instance, instead of controlling the size of group, an interviewee has restructured the course content. In another case, interviewee decided to reduce the teaching activity and to pursue the research instead, because of perceived lack of institutional support. In this respect, the dual role of academics – as teachers and researchers, plays a significant part in allowing them to shift between these two positions. Especially, if academics were unable to cope with difficulties in one of the areas, they would move to another, which prevented them from complete withdrawal.

Overall, the academics were trying to resolve the existing tensions in the most feasible way, which was available to them. It usually involved examining several solutions and settling on one, which has resulted in acceptable results. There is no particular relation between the type of difficulty academics were facing and the kind of strategy they have chosen to apply.
7 Implementation of sustainable development in teaching at University of Tampere: broader implications

In order to understand how experiences of academics and their comprehension of work relate to the context of SD implementation in teaching, it is necessary to discuss these experiences in a broader implementation context. In fact, the work conditions of academics participating on this study might not differ significantly from the conditions of their colleagues. In both cases, academics must face certain difficulties stemming from their institution. Therefore, an evaluation is required of how the actions of academics account for policy making, how they influence the output of HESD efforts, and what is the nature of implementation process at the bottom-level.

7.1 Role of academics as policy makers

This study has revealed that academics cannot be regarded as mere executors of HESD policy. As the further discussion suggests academics are policy makers, who contribute to the formation of policy itself – through their decisions and actions. However, they are not inevitably aware of their role in the implementation process. Moreover, they do not even associate themselves with any specific policy or its implementation. Instead, they perceive their teaching as an everyday work. Therefore, the most suitable explaining mechanism for academics’ role as policy makers is through their perception of work, and the role of work conditions and discretion in their decision-making.

The discretion of academics, which is available to them in the form of academic freedom and their thorough knowledge of teaching process, provides them with a considerable freedom in their decision-making. By deciding about the course content, academics also opt to implement a certain policy such as HESD in their teaching. As the evidence of this study has shown, often they do so unconsciously, being interested in the general idea of SD in the first place. HESD agenda is used only consecutively in order to justify their career choices – to apply SD ideas and topics in teaching. This indicates that the implementation of SD in HE teaching might not comply with the theoretical assumption of implementers as executors of an imposed policy. Instead, academics are designers of a policy itself – they create HESD through their own teaching, not just adopt a ready-made programme into their activities. Consequently, academics attribute the SD-related elements of their teaching to the realisation of their everyday work. Indeed, they prefer to see their work as a contribution to the goal of sustainability, not as a part of HESD agenda.
Nevertheless, academics’ ideal concept of how to achieve SD through their teaching is often impeded by the working conditions. The unsuitable size or composition of class have both aggravated the quality of teaching-learning process by preventing academics to conduct a more individually-adjusted teaching. The lack of personnel at the department has posed a pressure on academics to accommodate their teaching within limited time. The lack of teaching experiences has led to academics’ insecurity about their position and the need to obtain the approval of their position from students. The lack of control over students’ learning outcomes has caused academics dissatisfaction with their teaching. Therefore, academics had to perform certain adjustments, in order to put their ideal concept of teaching into practice. While some aspects of work allowed academics to negotiate them with institution (for example the teaching content or financial support); the others required modifications of work (for instance the size of class or the lack of teaching experiences). The last resort of academics’ response (such as lack of personnel or composition of class) was to accept the unfavourable situation and to refocus their effort on other elements of work.

Consequently, the work conditions of teaching influence academics’ actions, prompting them to resolve these tensions through various coping mechanisms. The first option usually involves the application of their discretion in decisions about teaching process, or discussions with institution about aspects that are not in their individual competence. Thus, they husband the available resources by designing the course outline; they select students according to their profile through selection process; they modify teaching methods to improve their teaching position; they restructure the course content to accommodate teaching within the context of limiting conditions; or they ultimately accept and reconcile with constraining conditions.

Nevertheless, it is difficult to estimate the effect of academics’ behaviour on policy output, because it would require a long-term observation of their activities. Instead, any adjustments to teaching can be attributed to one’s process of self-improvement, by deepening one’s expert knowledge and gaining experiences with teaching. As novices in their occupation, academics initially hold certain preconceptions about teaching, students, or learning outcomes. Only gradually – by gaining experiences, they learn to discern which of these assumptions are relevant and then they adjust their teaching accordingly. As pointed out by academics themselves, any alterations to teaching are aimed at improving the process itself. Academics typically carry out these changes in consideration of the goals and vision of teaching, which they had defined beforehand. They prefer adjusting the means of teaching, such as teaching methods, over altering the ends, such as the concept of teaching. Therefore, behaviour of academics can be described as goal-oriented.
7.2 Output of sustainable development implementation in higher education

Moreover, there is not sufficient evidence to state whether academics’ performance deviates from designed output of HESD or not, mainly because no standards about actual behaviour of academics are available for such evaluation. Most HESD agenda is aimed at national and institutional level, delineating specifically their actions and rendering them responsible for setting the preconditions for the implementation. The final outcomes of HESD are described in terms of learning outcomes, which is a different conception of policy output, than the definition adopted in this study – the actions of academics. Indeed, the role of individual academics is somehow omitted in HESD policy, leaving its organisation entirely in their competence. This precludes the possibility to evaluate academics’ performance against some standards. Instead, their behaviour should be assessed against the ultimate goal of their endeavour – the contribution of their teaching to the achievement of SD.

The way of attaining this objective has already been elaborated in HESD policy. The implementation of SD in the four HE areas (teaching, research, outreach, and processes) has been stipulated as the means of achieving sustainability through HE. The learning outcomes, particularly students’ awareness and empowerment for the action, have been defined as the ultimate ends of HESD-type education. The logic behind this variable is that HESD presumably elicits an action towards SD and produces a new kind of knowledge, which allows students to make informed and educated choices about their lifestyles. Thus, the education can prompt behavioural changes of learners, and thus ultimately contribute to the achievement of sustainability.

However, to adequately assess students’ awareness about SD issues or their behavioural changes would require a further examination of students’ learning process. This analysis, prompting additional observation and interviewing of students, was beyond the scope of this study. Nevertheless, it is necessary to discuss the accomplishment of learning outcomes from the perspective of academics. Thus, the following discussion involves the conclusions about how academics’ teaching has contributed to the objectives of HESD agenda, as the main framework for implementation of SD in HE.

Participants of this study have mostly stipulated the students’ awareness about topics of SD as the main aim of their teaching. Although the concept of SD as such has not been addressed explicitly in the teaching content, students were provided with broader context – the issues related to SD, such as
social order, technology, education, or environmental issues. Alternatively, some participants have applied sustainability as an underlying principle of their teaching, and thus tried to influence students’ awareness in a subtler way by providing them with new perspectives on current social issues. The results of these efforts are somewhat mixed, depending on one’s expectations. Several interviewees claimed to have received a positive feedback from their students on broadening their understanding about particular issues. On the other hand, few other have expressed their disappointment that students did not follow-up the newly-acquired knowledge in their career or educational decisions.

Nevertheless, the expectations of HESD agenda on teaching are even more specific. According to the DESD Programme (2005 – 2014), the education that promotes SD should be characterised by certain features. The teaching of participants of this study has displayed several of these features:

- Interdisciplinary and holistic: The possibility of academics to implement SD in the overall curriculum of their students was severely restricted by the limited interaction they had with students – usually only during one course. However, academics have tried to familiarise their students with different perspectives on teaching substance, for instance by arranging transdisciplinary lectures. Also, the subject itself, which was covered during the course, has had mostly a transdisciplinary nature.

- Values-driven: It is difficult to estimate whether or how the values and principles of SD were made explicit during the teaching process, since the process itself was not subject to analysis in this study. Nevertheless, the evidence suggests that the values of SD were addressed in teaching mainly by discussing SD topics, which inherently involve values and principles of SD.

- Critical thinking and problem solving: Academics have tried to elicit students’ critical thinking mostly through open discussions during seminars, and thus prompt students to look at issues from different perspectives and scrutinise the traditional views. Also, presenting the course content in a critical way was aimed to inspire students to approach the issues likewise. On the other hand, the problem-solving capacity of students was evoked through assignments on practical problems.

- Multi-method: Participants of this study have utilised different sets of methods in order to maintain students’ learning. For instance, discussions were intended to arouse or increase students’ interest in topics of SD. The individual assignments were applied consecutively to foster this interest and deepen students’ understanding. Various technologies were useful for the efficient transfer of knowledge or for stimulating students’ interest in SD topics. Some academics have even organised transdisciplinary lecturing or joint projects with society.
- Participatory decision-making: Although academics decide about most aspects of teaching, including the methods of teaching and assessment, students usually have a substantial freedom in deciding about their assignment, particularly its topic. Thus, students have the possibility to improve their knowledge about specific topic of their interest.

- Applicability: To estimate how learning experiences have been integrated in students’ personal and professional life would require a thorough analysis of learning outcomes and behavioural changes of learners, which was beyond the scope of this study. Although the positive feedback from students suggests that the courses have contributed to their deeper learning, the impact of learning on personal lifestyle is unknown from this kind of feedback.

- Locally relevant: Most participants of this study have addressed global topics of SD in their courses. Their intention was to familiarise students with broader context of SD and make these issues relevant in a local context too. The language of instructions was either Finnish or English, depending on the type of issues covered in the course (local or global issues) as well as on the need to communicate the message to students accurately.

Nevertheless, HESD as a framework for implementation of SD in HE does have its limits in conceptualising the process of implementation.

### 7.3 Nature of implementation process at the bottom level

The evidence of this study has shown that the process of implementation at the bottom level is not as simple and linear as assumed. In reality, it does not follow the neatly delineated HESD agenda, but has a dynamics of its own.

The activities of individual academics appear to be fairly disconnected from other levels of implementation. One of the reasons might be that academics are not primarily interested in HESD programme itself or in the concept of SD. Their interest is rather action-driven, in many cases a response to a local problem or an intellectual interest in SD-related issues. HESD programme is recognised only as an instrument to justify academics’ decision to pursue their personal interest. Thus, the implementation at the bottom level begins with an idea, personal interest, or a local problem, not with a political agenda.
Consequently, academics tend to be more concerned with their own specialties than with the initiatives at other departments or institutions. This fragmentation results from their tendency to regard teaching as an individual choice, not as an element of a complex implementation process. However, several instances of joint projects between various departments or institutions show that some academics are willing to go beyond disciplinary or even institutional boundaries in their effort to put SD in practice. These academics believe that implementation of SD in HE requires a cooperation within the whole HE as well as with society, and thus should not be restricted to the individual activity. But even in these instances, academics regard teaching as their personal responsibility, particularly in regards to teaching goals and course design.

Moreover, academics prefer pursuing their teaching activity over coordinating their common activities with other participants of implementation process. This is partly due to the difficulty to gather relevant information about who actually is participating on SD implementation in teaching. As mentioned before, academics do not think of themselves as implementers of policy, nor are they aware of this role. Therefore, they might not necessarily perceive the need to coordinate their activities.

However, to regard academics’ teaching as entirely isolated from other layers of system would be a simplistic assumption. The mere awareness of academics about the concept means that they recognise a broader international context of these issues. For instance, the definition of SD concept adopted at the bottom level often reflects its conceptualisation at the international level. However, the vague meaning of SD concept prevents it to be a guiding principle of individual choices at the bottom level. Academics, therefore, have to define for themselves the concept substance as well as the way of its application in teaching. This provides academics with a considerable influence over the means and ends of policy. Therefore, the actions of academics, as bottom-level implementers, are important in HESD policy-making.

7.4 Evaluation of implementation studies as theoretical framework

The theory of SLB has been employed in this study in order to address the issue of academics’ experiences within the context of HESD implementation. The aim was to address it from the perspective of implementation studies, which has been often missing in empirical studies on HESD. The theory has shed the light on the dynamics of implementation process from the perspective of its
implementers. However, applying the framework of implementation studies entails several limitations.

The implementation of SD concept in teaching activities of academics has rather character of implementing an unframed idea, not a well-defined programme. Therefore, the theories of policy implementation might not account for all particularities of HESD policy. This could have been a reason for some contradictions between the theory of SLB and conclusions of this study. While the theory assumes that implementers are working with an imposed policy programme, the evidence has shown that academics participate on HESD implementation voluntarily, motivated by their personal interest in issues of SD.

Moreover, applying the framework of implementation studies might lead to the preference of means over the ends of policy – being more concerned with the process than with the output of HESD. The implementation can be defined as a part of a more complex process, consisting of several stages – planning, implementation, and evaluation of outcome. Therefore, the results of this process should not be neglected.

Furthermore, the postulates of implementation studies assume that the implementation process is already well under way, without reflecting on its purpose or relevance. This might lead to a less critical view of SD in HE, and automatic acceptance of HESD policy as an imperative for HE. In this respect, higher education is regarded only as an instrument in achieving the goal of sustainability. However, the internal purpose and integrity of HE should not be overlooked in the efforts to implement SD in HE teaching.

7.5 Limitations and contribution of study, suggestions for further research

Although the findings of study appear to confirm theoretical assumptions, they should be interpreted with care. The statements of academics represent their perception of situation, not reality per se. This interpretation of findings, known as interactionism in research tradition (Silverman, 2000), is affirmed by theory of SLB itself – it is rather person’s perception of work conditions than the conditions themselves, which influence person’s decisions and actions.
Moreover, since the theory of SLB has been developed on the basis of extensive research, it requires large samples and use of comprehensive research methods to arrive to the similar extent of results generalisation, which was beyond the scope of this study. Instead, this study offers an insight into individual experiences of academics. By investigating their comprehension of work, the study displays the implementation process from its grassroots perspective.

However, the study can be criticised for not mapping the overall situation of SD implementation in teaching of UTA, because only highly-motivated individuals with advanced knowledge and experiences with implementation were involved in the sample. On the other hand, if the study was conducted as a survey of implementation activities at UTA, it would not generate relevant information to address the research questions.

Therefore, the further research on academics’ role in implementation of HESD could make use of some shortcomings of this study. For instance, a study sample could be enlarged in order to achieve a greater generalisation of data. Also, other methods of data collection could be employed. Particularly, observation of academics’ teaching could reveal some unconscious behavioural patterns, which were unattainable through interviewing. Likewise, the interviews could be arranged as a set of interviews with each participant, in order to achieve deeper insight into academics’ perception. Finally, it should be emphasised that the framework of SLB theory investigates the issue of SD implementation in teaching only from one perspective. Thus, the further research could also employ other theoretical frameworks or analyse the issue at other levels of system.

Nevertheless, in spite of its limitations, the study has been useful in offering the insight into the circumstances and perspectives of bottom-level implementers of SD in HE teaching, which has been so little addressed in empirical studies on HESD. The main strength of this study is in connecting academics’ understanding of their work with implementation of HESD policy, thus providing those involved in formation of HESD with an insight into the dynamics of processes at the bottom level. Academics’ role of bottom-level implementers in the process is best understood through their decisions and actions, which ultimately comprise the output of HESD policy.
Conclusion

The aim of this study was to investigate the implementation of sustainable development in higher education teaching from the perspective of its bottom-level implementers.

Nevertheless, in order to position the study within a broader context, the implementation process was analysed at various system levels. As the review of policy documents has revealed, the process is somewhat complicated – encompassing numerous actors at several levels, and dealing with extensive agenda.

Initiated at international level, the process has evolved in two separate paths – one represented by United Nations’ agencies and the other by associations of universities. While the former focuses almost exclusively on teaching-learning dimension and deals with higher education only marginally, the latter is solely focused on higher education institutions and their functions in promoting sustainable development. Consequently, the national level of process functions as both – the implementer of recommendations of international level, as well as the policy maker in setting the preconditions for institutional processes. The basic document of national policy – the Finnish National Strategy for Education for Sustainable Development, reflects the influence of supranational movements as well as of regional initiative (Baltic 21 Eduaction Programme). At the institutional level, the process of implementation takes the form of institutional commitment. The University of Tampere has stated its support for sustainable development in its performance agreement with Ministry of Education.

Nevertheless, the implementation process at the level of individual academics does not meet the expectations of policy proponents. Firstly, the activities of academics appear to be separated from other levels of process – academics are not interested in political agenda, but in the idea of sustainable development. Secondly, academics typically regard teaching as their individual activity and not as a part of broader implementation efforts. Thirdly, being involved in their own specialisations, academics do not care for coordinating the process. Nevertheless, the impact of international discourses on individual activities of academics is visible in some aspects of their teaching – namely the definition of main concepts (such as sustainable development).
In order to further investigate how academics experience the implementation process, the interviews were conducted with a group of academics already involved in the process. Moreover, their experiences were analysed within the context of street-level bureaucrats theory.

The autonomy and expertise of academics provides them with the discretion to make decisions about the teaching process and its particularities. This allows them to implement the sustainable development in their teaching. They even develop a vision of how to achieve this goal.

However, their expectations are often dashed by various organisational limitations, which they encounter during the process. The most influential ones include: the lack of personnel at the department, the overloaded classes, the lack of teaching experience, the lack of institutional support for implementation of sustainable development in teaching, the lack of performance measures for academics, the conflict between academics’ and institutional orientation, and the lack of control over the teaching outcomes or the composition of class. However, the work of academics entails also positive elements – such as interaction with students and colleagues, and the possibility to conduct a research.

In order to resolve the impediments in their work, academics either apply discretion in their decision-making, or try to negotiate the problem with institution. Thus, they exert the control over the working situation by designing the structure of interaction with students; they choose the most suitable students through the selection process; they limit the students’ numbers by stipulating the preconditions for enrolment to the course; or they eventually accept the given situation and perhaps focus on other aspects of their work instead.

However, to evaluate whether academics’ behaviour is purposefully evasive or simply a result of gaining experiences, an evaluation of output of their efforts is required. Academics generally try to maintain the original concept of their teaching. If their efforts are impeded by adverse work conditions, they prefer altering the means over the ends of their teaching. Thus, their behaviour can be regarded as goal-oriented.

In terms of policy output, the agenda of higher education for sustainable development has a significant role as well. It defines the ultimate learning outcomes of higher education, which promotes sustainable development – namely the students’ awareness about sustainable development, because the education presumably stimulates behavioural change of learners towards
sustainability. In order to assess the achievement of this goal, a comprehensive analysis of students’ learning would be required, which was beyond the scope of this study. Nevertheless, the study has covered the evaluation of how academics’ teaching contributes to accomplish this goal.

The participants of this study have generally tried to address this goal by including the topics of sustainable development in the teaching content. Also, their teaching has displayed several features of education for sustainable development, as defined in Decade for Education for Sustainable Development (2005 – 2014): holistic and interdisciplinary character, value-driven, eliciting critical thinking and problem-solving capacity, multi-method, participation on learning process, and locally relevant. Nevertheless, it is important to keep in mind that the agenda of higher education for sustainable development is only an instrument in achieving the sustainability. In fact, the process of implementation might differ from the expectations of policy proponents, as the evidence of this study has shown.

It is also important to be aware that the study involves several drawbacks. Relying heavily on interviewing, the study examines only conscious part of academics’ behaviour, while the unconscious part is accessible only through observation, which however was not part of this study. Also, a larger sample of study might have increased the generalisation of data. These limitations of study represent the potential for further research, which could investigate the implementation of sustainable development in higher education to a greater extent. The theoretical framework adopted in this study also involves some limitations. The context of implementation studies implies that the process is already taking place without first examining its purpose. Sometimes, it might also mean that the means of implementation are preferred over its ends.

Nevertheless, the contribution of this study is in enlightening the dynamics of sustainable development implementation process at the bottom-level of higher education, which has not been sufficiently addressed in empirical studies. Academics’ role as bottom-level implementers is best understood through their decisions and actions, which comprise the actual output of policy. By applying discretion in deciding about their teaching, academics effectively define the policy of higher education for sustainable development. Therefore, it is the behaviour of academics that matters in delivering the goals of this policy.
References:


APPENDICES

Appendix 1: Lüneburg DECLARATION

Education in all its forms plays an indispensable role in addressing the critical challenges of sustainable development. The interconnected issues of globalization, poverty alleviation, social justice, democracy, human rights, peace and environmental protection require inclusive partnerships to create a global learning environment.

Higher education has a catalyst role vis-à-vis education for sustainable development and the building of a Learning Society. It has a special responsibility to conduct the scholarship and scientific research necessary to generate the new knowledge needed and train the leaders and teachers of tomorrow, as well as communicate this knowledge to decision-makers and the public-at-large.

The ultimate goal of education for sustainable development is to impart the knowledge, values, attitudes and skills needed to empower people to bring about the changes required to achieve sustainability. Quality education for sustainable development needs to be based on state of the art knowledge and to continually review and update curricula and teaching materials accordingly. It needs to serve teachers, other professionals and all citizens as life long learners to respond to society’s challenges and opportunities, so that people everywhere can live in freedom from want and fear, and to make their unique contribution to a sustainable future.

In October 2001, a conference on "Higher Education for Sustainability: Towards the World Summit on Sustainable Development 2002", was held at the University of Lüneburg, Germany. The conference was jointly organized by the University of Lüneburg and the COPERNICUS Programme of the European University Association (EUA) and was sponsored by the Global Higher Education for Sustainability Partnership (GHESP) formed by COPERNICUS, the International Association of Universities (IAU), the Association of University Leaders for a Sustainable Future (ULSF) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

GHESP partner organizations and the experts in attendance at this conference endorse the following:

1. Taking into account the recommendations and results of:
   • UNCED: Chapter 36 of Agenda 21 (1992);
   • The International Work Programme on Education, Public Awareness and Training for Sustainability adopted by the UN Commission on Sustainable Development (1996);
   • International Conference on Environment and Society (Thessaloniki, 1997);
   • World Conference on Higher Education (Paris, 1998);
   • World Conference on Science (Budapest, 1999);
   • World Education Forum (Education for All) (Dakar, 2002); and

2. Building upon the significant networks of the three academic associations which founded GHESP, beginning with over 1000 colleges and universities which pledged to implement comprehensive sustainable development action steps by signing the charters and declarations sponsored by these three organizations;

3. Calls on higher education institutions, NGO’s and other stakeholders to:
   a. Ensure the continual review and updating of learning materials to reflect the latest scientific understanding of sustainability;
   b. Ensure that the reorientation of teacher education towards sustainable development continue to be given priority as a key component of higher education;
   c. Provide continuing education to teachers, decision makers and the public at large on sustainable development;
d. Encourage all educational institutions to include in their activities a strong component of reflection on values and norms with respect to sustainable development;

e. Raise awareness and increase understanding of the importance and relevance of technology assessments and risk assessment;

f. Promote the creative development and implementation of comprehensive sustainability projects in higher education, and all other levels and forms of education;

g. Increase attention to the international dimension and provide more opportunities for inter-cultural exchange in the learning environment;

h. Increase a focus on capacity development and intensified networking among institutions of education; and

i. Promote stronger integration of training and research and closer interaction with stakeholders in the development process.

4. Calls on governments to ensure that the World Summit on Sustainable Development includes education in general, and higher education in particular, in the future international programme of work.

5. Calls upon the United Nations to:

   a. highlight in the Secretary-General’s main policy report the indispensable role of education in general, and higher education in particular, in achieving sustainable development as stated in chapter 36 of Agenda 21.

   b. to make education a discussion topic during the multi-stakeholder dialogue sessions to be held during the preparatory committee meetings for the Johannesburg Summit and during the Summit itself.

6. Calls on UNESCO as task manager for chapter 36 of Agenda 21, in cooperation with UNU and other relevant parts of the United Nations system, to support these efforts concerning the Johannesburg Summit.

7. Furthermore, the EUA-COPERNICUS, the International Association of Universities (IAU), and the Association of University Leaders for a Sustainable Future (ULSF) commit to achieving the following targets within next five years:

   a. Create a global learning environment for higher education for sustainable development;

   b. Promote expanded endorsement and full implementation of the Talloires, Kyoto and Copernicus declarations;

   c. Produce an action-oriented Toolkit for universities, managers, administrators, faculty and students designed to move from commitment to concrete action. The Tool Kit would include:

      ▪ implementation strategies for colleges and universities depending on size, type, demographic characteristics, etc.;
      ▪ strategies for reform in particular areas of university activity, including teaching, research, operations and outreach, or for comprehensive change across all universities activities;
      ▪ an inventory of available resources;
      ▪ an inventory of best practices and compilation of case studies;

   d. Enhance the development of Regional Centres of excellence in both developed and developing countries, and effective networking among them.

The Lüneburg Declaration on Higher Education for Sustainable Development was adopted by the GHESP partners (IAU, ULSF, Copernicus Campus and Unesco), on 10 October 2001 in Lüneburg, Germany, on the occasion of the International COPERNICUS Conference, ”Higher Education for Sustainability – Towards the World Summit on Sustainable Development (Rio+10)” held at the University of Lüneburg 8 – 10 October 2001.