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A successive change in the curriculum for sustainable public administration

Abstract. Sustainable development is considered to be one of the most important issues for the future, which is also mirrored in the growing interest in sustainable development in higher education. The change project reported in this article is an example of the efforts made to incorporate sustainability in higher education. The aim of the change project is twofold: the first one is to revise the syllabuses, reference literature, materials, and examinations for courses in Public Administration, so that every course in some way addresses sustainable development. By making sustainable development an integral part of all teaching, the change project highlights how different aspects of sustainability issues are relevant in different contexts. There are three reasons why sustainable development should be explicitly present in all teaching: education for sustainability is important to the university; sustainability is relevant especially for students in Public Administration; and to get all students engaged, education for sustainability requires a pedagogical framework. The second aim of the change project is to lay out the underlying pedagogical framework, which is based on principles found in pedagogical, psychological, and organizational theories. In this successive, integrative approach, the repeated occurrence of sustainability themes in many courses is considered to be a better option than having a single thematic course. In the first phase of the project, during the academic year 2019-2020, three courses were revised to include aspects of sustainability in relation to concepts central to the course.

Keywords: education, curriculum, education for sustainable development, sustainable development in higher education, public administration

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1. Introduction

Sustainable development is considered to be one of the most important issues for the future. This is evidenced by the growing interest in sustainable development in higher education. A recent example is the Finnish cooperation for universities, known as Unifi, which published 12 theses on Sustainable Development and Responsibility in November 2020. Thesis no. 4 states: '*Studies in sustainable development are part of all degrees and the continuous learning offered*' (*Theses on sustainable development and responsibility*, 2020). Already in 2011 more than 1400 universities worldwide had signed declarations on sustainability in higher education, but several studies show those commitments have not really been implemented (Grindsted, 2011, p. 29). A challenging issue concerning these declarations is the lack of incentive structures (Grindsted, 2011, p. 29) and the belief that a plan is an action, i.e. that implementation comes by itself.

One of the efforts aimed at improving the conditions for education on sustainable development in higher education is the Regional Teachers' Course on Education for Sustainable Development in Higher Education, offered by the Baltic University Programme (www.balticuniv.uu.se). The Baltic University Programme is one of the largest university cooperations in the world, with about 90 participating universities in the Baltic Sea Region. The Regional Teachers' Course has been organized three times, with the last edition held in the academic year 2019-2020, but there were also some predecessors (see Suomalainen, 2016). One of the central matters in the course, which aims at re-thinking the pedagogy for implementing education for sustainable development is the idea of a change project. Each participant plans and performs a project related to their teaching, where something is changed in a more sustainable direction. Examples of earlier change projects can be found in several issues of *Studia Periegetica* (2018/3(23), 2017/1(17) and 2016/1(15)).

This article describes one of the change projects from the Regional Teachers' Course 2019-2020. In this particular change project the aim is to revise the syllabuses, reference literature, materials, and examinations for courses in Public Administration at Åbo Akademi University so that every course in some way addresses sustainable development. Future civil servants and administrators in the public sector must, regardless of their own personal interests, be prepared to handle questions concerning sustainable development. The public sector and its actors are important players in many aspects of the implementation of sustainable development in education for public administration offers considerable potential benefits. Education in public administration should provide tools for working with Sustainable Develop-

ment Goals (Target #4.7)¹, even for students who are not acquainted with their underlying details. Since not all students are interested in sustainability issues, one of the problems addressed in this article is how to teach in the face of such reluctance. For the sake of clarification for the purpose of this article sustainable development is understood in the light of prevailing definitions including both ecologic, economic and societal sustainability (Rusinko, 2010, p. 251), with technological or political dimensions added at some points.

The remainder of the article is structured as follows: the next section presents the aim of the change project, with its detailed description. The project actions and their underlying pedagogical framework are presented and discussed in two subsequent sections, which are followed by a few conclusions.

2. The aim of the change project

The aim of this change project is to revise the syllabuses, reference literature, materials, and examinations for courses in Public Administration at Åbo Akademi University so that every course in some way addresses sustainable development.

The change project is mainly targeted at students attending courses in Public Administration at Åbo Akademi University. A secondary target audience includes teachers, both in Public Administration and related programmes, for whom the project can serve as a model of how the concept of sustainable development can be implemented in teaching.

The **expected outcomes** of the change project are twofold:

– sustainable development is explicitly featured in the course syllabuses as part of the normal content, because questions concerning sustainable development are to be found everywhere, if one just agrees to see them.

 the pedagogical framework underlying the change project is clearly laid out.

The expected long term **result** of the change project: students will have learned how to facilitate the implementation of sustainable development goals, how to lead change towards sustainable development goals and how to work with strategies for sustainable development goals.

There are three **reasons why** sustainable development should be explicitly featured in the courses. First of all, to show why education for sustainability is important to the university. Secondly, to make it clear why sustainability is relevant

¹ For more information about the Sustainable Development Goals and specific targets, see https://sdgs.un.org/goals

for students of Public Administration. Thirdly, to highlight the fact that education for sustainability requires a pedagogical framework.

The **first reason** can be described in terms of what *formal, immediate, applied* and *potential* values the project will bring or add to the university (building on the value creation model by Wenger, Trayner, & der Laat, 2011). The project has a **formal** value (not included in the model): it helps the university fulfil its strategy for the years 2021-2030, which features sustainability as a central part of its vision for 2030: '*Åbo Akademi University plays a significant role in international research and education for the benefit of a sound and sustainable living environment, especially within the shared Baltic Sea region.* [...] The research contributes to resolving social challenges and meeting the sustainable development goals set by the United Nations.'

The project has **immediate and realised** values in the form of strengthened knowledge and new insights for the students. Changed practices in lectures, materials and approaches as well as the sharing of project experiences with other university teachers can be regarded as **applied** values of the project. Its **potential** long-term value is a better, more sustainable world, when the model has spread to the whole university and all graduates enter the world outside equipped with their knowledge of sustainable development.

As regards the **second reason**, the public sector and its actors are important players in many aspects of the implementation of the 17 Sustainable Development Goals (*Transforming Our World: The 2030 Agenda for Sustainable Development*, 2015), towards to a more sustainable future. Although the 17 global goals are broken down into 169 targets and 230 indicators (Sustainable Development Goals, 2015) and should be *'workable and understandable'* (Kofi Annan in Kroll, 2015, p. 9), many of them are still ambiguous, at least at a local level. Public responsibility regarding, say, climate action is a real challenge, especially at local level, and the need for both innovation and implementation is considerable.

There are many sustainability issues in the public sphere. The Finnish work with the Agenda 2030 focuses on a 'carbon-neutral and resource-wise Finland' but also on a 'non-discriminating, equal and highly skilled Finland' (Government Report on the implementation of the 2030 Agenda for Sustainable Development, 2017). According to a brand new report from the Coalition of Finance Ministers for Climate Change on transition strategies, the key challenges in Finland relate to 'attitudes and behavioral changes needed especially related to mobility, change towards more plant based diet and consumption patterns in general; role of political governance; aging population and subsequent change in population structure; the development of Finnish forests (and soil) and their role as carbon sinks; technological development and their availability; uncertainties related to (bio-)CCS technologies; economic structural changes; agricultural sector; peat lands and peat use; and new district heat sourcing' (Long-Term Strategies for Climate Change, 2020, p. 12).

Further, there are a lot of other issues concerning sustainability in Finland, which are not part of the Finnish government's plans associated with the Agenda 2030. Such issues, highly relevant for the (local) public administration in Finland and its sustainable development, include, for example, sustainability of public economics, the negative effects of urbanization – or how to sustainably manage administration and services for 'those who were left behind' in rural areas, and sustainability in managing public health issues, plagued first and foremost by diseases of affluence. Other relevant issues include (local) decision-making or how to get (local) decision-makers to think in longer terms about issues that are not of their primary concern (Koskimaa & Raunio, 2020).

If students of Public Administration do not encounter issues related to sustainability during their education and if they do not see how the core knowledge in Public Administration can be used to handle such questions, they will graduate with a big gap between their expectations about the world and the actual reality. In particular, the project addresses the following Sustainable Development Goals: #4 Quality Education, #11 Sustainable Cities and Communities, #12 Responsible Consumption and Production, #13 Climate Action and #16 Peace, Justice and Strong Institutions, but administrative concepts, such as the implementation and reasonable use of common resources, can easily be shown as relevant for all 17 goals.

The **third reason** has to do with the importance of a pedagogical framework underlying education for sustainability.

To be able to work in the 21st century, students of public administration must be able to handle sustainability issues, regardless of their own interest in the topic, which is where education for sustainability becomes relevant. Sustainable development is featured in Finnish higher education, in the form of entire programmes and within separate courses (see Karvinen et al., 2015). Still, education for sustainable development in higher education often seems to consist of courses *by* the interested, *for* the interested. That is a good starting point but the fact that *it takes a special interest* may result in a lot of students being left outside. It is unclear whether the majority of students have found their own interests in sustainable development (see Ehrström, Wolff, & Sjöblom, 2016), and the way sustainability issues are presented in educational materials has changed over time (Andersson, Öhman, & Östman, 2011), many students (still) understand sustainability in its narrow sense, i.e. as environmental education (see Jickling & Wals, 2007). What is required, then, is a more generally oriented approach.

University teaching does not usually change in giant leaps. The digital leap has been on the agenda for more than 15 years but one can get the impression that it had not really happened until the corona pandemic crises in the Spring of 2020, when most of the education activity moved online as a necessity, not as a voluntary development. Those who had previously used digital forms of teaching will probably remember the corona period differently than those who had less than a week to abruptly find out which tools to use, how to rethink exams and how to reach out to students. There is no reason to believe that a change towards education for sustainability should work differently than any other teaching development processes at universities. University teaching, as well as all other teaching, occurs in a field of institutional complexity with several competing logics (Gullberg & Svensson, 2020). Consequently, sustainability in higher education can be integrated either in a top-down or bottom-up manner (Gontar, 2018, pp. 24-25). The situation can be illustrated in the form of a matrix created by Cathy Rusinko (2010, p. 253), with two dimensions (broad or narrow focus in existing or new structures) forming four alternatives for delivery: integration into existing courses, integration into common core requirements, creation of new courses/programmes or creation of new cross-disciplinary courses/programmes (see also Khalaim & Tambovceva, 2018, p. 81 for an implementation of the matrix). It has also become clear that it is hard to institutionalize sustainability in the higher education sector (Junyent & Geli de Ciurana, 2008, p. 764), as externally triggered change policies often result in resistance from within (Jickling & Wals, 2007, p. 6; Lidgren, Rodhe, & Huisingh, 2006, p. 798).

The discussion about education for sustainable development often emphasizes the need for new methods that foster critical thinking (see Jetoo, 2018, p. 50; Nagoya Declaration, 2014), social learning or other forms of collaboration (Jetoo, 2018; Lidgren, Rodhe, & Huisingh, 2006, p. 805), active learning techniques (Jetoo, 2018, p. 44; Kostyuchenko & Smolennikov, 2018, p. 12), problem-solving capacities (Khalaim & Tambovceva, 2018, p. 88), multi- or interdisciplinarity (Ehrström, Wolff, & Sjöblom, 2016; Lidgren, Rodhe, & Huisingh, 2006, p. 805; Rusinko, 2010), learning for social transformation (Urenje & Rumjaun, 2017, p. 497), challenge-based learning (Gontar, 2018), new thinking (Urenje & Rumjaun, 2017, p. 491) and innovation (Kaaronen, 2016, p. 1333).

All novelties are associated with potential drawbacks. Sometimes the form of a given activity overshadows the topic making students more likely to remember how it made them feel, but not what it was about (see Taylor & Marienau, 2016, p. 19). Some activities seem to be an end in themselves. Social learning is frequently praised, which might create the expectation that activating learning methods by default should result in more critically thinking individuals and more sustainable thinking. If social learning in a short time would give incredible results, this should give a significantly increased quality of the student population in Finland, as the basic education in Finland have stressed collaborative learning for quite a while (*New national core curriculum...*, 2016). One might, therefore, question whether using new methods is the best or the only way forward.

It might also be overly optimistic to believe that in the future people will be more knowledgeable – but people may know more about certain topics if they are included in the curriculum. In the future people should consider sustainability as normal learning content, in the same way that human rights, gender issues and online safety have become standard topics one is expected to learn about. To reach this state of normalization regarding sustainable development, repeated occurrence in many courses might be more important than single thematic courses, regardless of how effective their particular methods are. This integrative principle, referred to as normalization, has been the object of debate in the context of education for sustainable development. It has been considered important that sustainability in higher education should not be introduced by merely adding a 'green aspect' to the existing curriculum or programme but should be built in (important enough to be integrated in all aspects of higher education), which means re-designing the foundations of the whole system (Junyent & Geli de Ciurana, 2008, p. 764; Tilbury, Podger, & Reid, 2004; Urenje & Rumjaun, 2017, p. 508).

It is also necessary to acknowledge that the borderline between new knowledge and ideology is very subtle: is the presence of sustainability issues in every part of the curriculum a case of illuminating its importance or is it a kind of indoctrination? (Is indoctrination for a good cause acceptable?) Apparently the question is not new: education for sustainable development is often '*factbased, normative and pluralistic*' and researchers have claimed that the normative approach might be problematic (at least from a democratic point of view), '*as a response to Bob Jickling's and others' warnings of the capacity for or risks of indoctrination through education being 'for' something or other'* (Læssøe & Öhman, 2010, p. 4). Jickling & co dislike the concept of education for sustainability because of its connections with a neo-liberal globalization, and prefer *environmental* education (Jickling & Wals, 2007).

3. The case and the context: teaching public administration at Åbo Akademi University

The Public Administration programme at Åbo Akademi University is one of eight majors at the Faculty of Social Sciences, Business and Economics. Of their 300 credits towards a master's degree students receive at least 145 credits for their major (65 at bachelor and 80 at master level).

The Public Administration programme covers traditional administrative topics, such as democracy and bureaucracy, management, organizations theory, public budgeting, public human resource management, use of public resources, but also topics related to government/governance at different levels in the public sector, especially at the local level and as regards the relationship between politics and administration.

The public administration programme at Åbo Akademi University has been offered since 1978, but topics to do with environmental governance have been introduced at least since the middle of the 1990s, especially with regard to the Baltic Sea governance and environmental governance at the local level. As a result, Public Administration, and the related programme in Political Science, together offer an optional Module called Environmental Governance. The module consists of courses on multi-level governance as well as global and local environmental governance. Earlier, the course Multi-Level Governance has been transformed as a result of a change project (Jetoo, 2018), as has the course Environmental Politics (in Political Science) (Hermanson, 2017).

The change project described in this article began with an assessment of the current practice with a view to determining how the teaching can be transformed to address sustainability challenges, i.e. how the programme manages to meet these demands and what can be changed. Rather than choose between the option of planning brand new courses and changing or restructuring content and materials in an existing course, this change project takes a holistic approach, which means that content and materials regarding sustainable development are integrated in existing courses, not as an 'add-on' but rather as a 'built-in' component (see Junyent & Geli de Ciurana, 2008; Tilbury, Podger, & Reid, 2004; Urenje & Rumjaun, 2017). The Public Administration programme at Åbo Akademi University offers 26 courses in the major, of which most are worth 5 ECTS credits. As the Public Administration and Political Science programmes have already had several courses on environmental sustainability (as mentioned above), the holistic approach was seen as a bigger step forward than creating a new course or changing an existing one. A lot of the concepts in Public Administration are relevant for sustainable development, which creates a good opportunity for working in the zone of proximal development (by Vygotsky, in Merriam & Bierama, 2014, p. 119). By adding content on sustainability into existing courses it is easier to show students that sustainable development is not merely a question of environmental sustainability. By making sustainable development an integral part of all teaching, this change project illustrates how *different* aspects of sustainability issues are relevant in different contexts, with a view to making sustainable development a normal and obvious point of view. In the same manner, younger employees (compared to elder) working in the area of spatial planning are claimed to have sustainability considerations as a default setting (Gustafsson, Hermelin, & Smas, 2018, p. 14).

Teaching in Finnish universities should be based upon research (Universities Act 558/2009, § 2) but as regards its content, it is not regulated by state authorities (Universities Act 558/2009, § 6 about freedom of research, art, and teaching). In contrast, the national core curriculum for basic education is quite precisely defined (see *New national core curriculum*..., 2016), although there is room for local adjustments. Learning objectives in courses at Åbo Akademi University

are approved by the Faculty Board every two years. The learning objectives are not strictly set and leave teachers much liberty as to how the course should be organized. Consequently, individual teachers can introduce elements about sustainability in their courses, without having to change formal learning objectives.

The vision in this change project is to make sure that sustainable development is explicitly featured in the syllabus for every course: at first in the literature and in the examination, and gradually also in the learning objectives (once they are updated). In other words, the aim is to improve students' ability to see sustainability issues in different aspects of public administration and relations between politics and administration, because questions concerning sustainable development are to be found everywhere. By developing a model for examining a major with sustainability glasses, students can learn how to enable implementation of sustainable development (goals), lead change towards sustainable development (goals), work with strategies for sustainable development (goals), and enhance their critical thinking by taking a closer look.

One of the biggest challenges in education for sustainable development in higher education is that so much else than teaching is considered so much more important at universities, i.e. there is a multiplicity of competing institutional logics (see Gullberg & Svensson, 2020). There are other, teaching-related barriers to incorporating sustainability in the curricula, too, such as the lack of time, rewards, knowledge etc. (Lidgren, Rodhe, & Huisingh, 2006, p. 803).

Courses in Public Administration at Åbo Akademi University are subject to continuous quality improvement in a cyclical manner (see Hutchings & Cerbin, 2011; also, Urenje & Rumjaun, 2017, p. 499). It is considered to be a realistic ambition that 2-3 of them are revised every academic year, during the following 5-6 years.

Students' performance in courses in Public Administration is usually tested by essays, small-scale case-studies, book reviews or other written assignments. Students of Public Administration benefit from 'learning by writing' (see Tsang, 2009), as a lot of work in the public sector, regardless of task or sector, requires writing skills. All the courses use web-based platforms for distributing materials and handing in assignments.

4. Actions taken in the change project

The first aim of this change project is to revise reference literature, materials, and examinations for courses in Public Administration, so that every course in some way addresses sustainable development. To reach the expected outcomes several actions were undertaken. In the first phase of the project, which took place during the academic year 2019-2020, three courses were adjusted in a more sustainable direction in relation to concepts central to the course. To reach successful work in the public sector civil servants need to know how to implement multi-level and ambiguous policies, how to budget for them, and maybe, why sustainable development in some cases works differently than in others. These three courses are described in more detail below.

The first one is a very first basic course on democracy and administration and the relation between them. Most participants are first year students. As this is their very first contact with administrative sciences, many core concepts are introduced for the first time, including institutions (which relates to target #16.6), decision-making (#16.7), transparency (#16.10) and corruption (#16.5). The syllabus consists of 10-12 traditional lectures (including discussions) and assigned readings, and the examination is based on 4 written assignments. Sustainability content was incorporated in two lectures, including readings on sustainable development goals and one of the assignments was written based on these readings. The sustainable development goals were connected to challenges associated with multi-level governance, implementation, and change leadership.

The second course to be transformed is a basic course on public budgeting. The course syllabus consists of seven parts, with topics and readings on decisionmaking in budgetary processes at governmental and local level as well as budgeting in the university sector. The course can be accomplished either with lectures or as self-directed studies, in both cases the course completion is based on written assignments. During the course different theoretical models of budgeting are presented and discussed, among them both participatory (#11.3), gender-based (#5.C) and CO2-based (#13.2) budgeting; all these models are promoted as recommended solutions from a sustainability perspective. Municipal budgeting processes are a central theme in the course, because municipalities in Finland have a strong self-government, an extensive mandate and a great responsibility for providing public services (Anttiroiko & Valkama, 2017; Haveri, 2015). The 311 municipalities in Finland vary in size and have very different means to maintain a sustainable local economy. Despite its small population, Finland also faces many challenges as a result of urbanization, some in growing cities and probably even more in declining areas (#11). By examining how these matters affect their home municipality, students are made aware of connections between drivers, context and outcomes that affects possibilities for local sustainable development.

The third course to be updated in this first phase of the change project is a master-level course about public resources. One of the matters in the course is the sustainable use of public resources in relation to the welfare state (#10.1, #10.4). Another one is the role of indicators for measuring productivity, effectivity, and strategy fulfillment or for setting targets and analysing consequences. A third matter of interest is that the public sector both promotes a sustainable future but also uses mechanisms that hinder sustainable decisions concerning resources. Some rules to be reconsidered include the use of outsourcing (#12.7) to reach sustainable public procurements (*Skills for a High Performing Civil Service*, 2017). Most students are adults who work full time. By highlighting how public recourses can be used, students can gain valuable insights concerning their own working environments. This course is organized in a similar way as the other two, but with a bigger emphasis on how sustainability can be reached in different settings.

5. The pedagogy behind the successive change approach to curriculum

The second aim of this change project is to lay out the pedagogical framework that underlies the successive, integrative approach, which is based on principles found in pedagogical, psychological, and organizational theories. The framework is not designed to be fully coherent, but it tries to account for how people learn and be relevant for the course content and for practical considerations of teaching.

1. **Make it visible**. In a teacher's resource guide about education for sustainable development McKeown claims that 'every discipline and every teacher can contribute to sustainability education and that [such] topics [...] are often already inherent in the existing educational curricula but may not be identified and highlighted in that context' (Lidgren, Rodhe, & Huisingh, 2006, p. 804). Being able to identify and recognize these topics is one of the keys to moving forward; another one is starting by ensuring that teachers are familiar with the concept of sustainability (Lidgren, Rodhe, & Huisingh, 2006, pp. 804-805).

In this change project aspects of sustainability are made visible in ordinary teaching (not only in a thematic course given by and prepared for those already interested), as questions concerning sustainability are found everywhere in the public sector, if one just agrees to see them.

2. Work step by step. Education for sustainable development often calls for transformation (see Nagoya Declaration, 2014; Urenje & Rumjaun, 2017). According to Albrechts (2010, p. 1118), transformative change rarely occurs in instant revolutions, but evolves in many small ways, to produce an emerging pattern. In pedagogical terms, it means *assimilation until accommodation*, because, in essence, transformative learning is making meaning of one's experience (Merriam & Bierama, 2014, p. 84). The biggest learning is claimed to occur in the zone of proximal development (by Vygotsky, in Merriam & Bierama, 2014, p. 119), when the topic is neither too distant, nor too close.

This change project tries to combine the familiar (administrative core concepts) with the new sustainability content in various courses as a way of incrementally building up relevant knowledge. An incremental approach to teaching sustainable development, also as regards the organization of teaching (starting with small groups, which can be expanded if they prove to be successful) has also been recommended earlier (Rusinko, 2010, p. 252).

3. **Build on positive emotions.** The pressing need for sustainable development is expressed by everyone, for example: *'The increasing sustainability challenge cannot be overemphasized'* (Urenje & Rumjaun, 2017, p. 489) or *'Society as a whole has to accept that it lives in a world in which much of what it does and how it does it simply cannot continue'* (Albrechts, 2010, p. 116, see also *The Future is now...*, 2019). Some are claiming that *time is running out* and that *gradual change is not any longer enough* (Leach et al., 2012). *'A radically new approach to innovation'* (Leach et al., 2012, p. 1) is required. This kind of doomsday rhetoric may be legitimate, but if it only creates anxiety and inability to act, nothing is won. Teaching cannot build on fear, because anxiety hinders change: if we want people to care and act, the rhetoric should not build on fear, but on positive emotions and caring (Taylor & Marienau, 2016, p. 297).

Sustainable development is important, but students who are not particularly interested in the topic can feel overwhelmed by the seriousness of interlinked global issues. The problem is not necessarily that these students do not care but merely that they do not know where to start. In this change project assignments, which combine theoretical knowledge with case studies at the local level (usually students' home municipalities), have been designed to create a bridge between the new and the familiar in order to build on students' positive emotions rather than fear. If people care about their local physical environment, they usually want the development in that area to be sustainable. People who are attached to the local community also tend to have better health, better relations and vote more often (Kitchen, Williams, & Simone, 2012), all those things found in the concept of social capital (Rothstein & Stolle, 2003).

4. **Avoid complexity.** Areas in need of sustainable development are complex: 'Complex sustainability concerns require commitment, determination and ambition' (Kaaronen, 2016, p. 4) and we 'are in dire need of interdisciplinary, intersectoral and intersocietal tools to solve widespread societal and sustainability concerns' (Kaaronen, 2016, p. 4).

When change in people's behavior is desired, concretization often is the key. That is why efforts to recycle plastic waste (#12.5) and actions aimed at reducing food waste (#12.3) are fairly popular; they are practical and easy to implement and the result is visible, at least at household level. By taking practical measures one can be part of a global movement. (This is no news. UN has even published *The Lazy Person's Guide to Saving the World* (n.d.).)

Teachers must help students realize that they do not have to understand all environmental mechanisms – how pollution in one place leads to erosion, insufficient availability of soil nutrients or the loss of biodiversity in another – but only to handle issues associated with administration. After all, there are administrators and economists in hospitals doing a credible work, even though they do not know very much about medicine. In practice, they follow the advice of Greta Thunberg; *'listen to the scientists'* (Milman & Smith, 2019). In this change project students are shown practical examples of sustainable solutions in a municipal setting so that they can learn how to handle these issues administratively: to form policies informed by ideology, to form proposals and plans in accordance with experts' recommendations.

5. **Critical thinking** is highly appreciated in the sustainable development movement. In this case, critical thinking refers to the process, which enables students to become aware of two set of assumptions: scientific ones and their own (Merriam & Bierama, 2014, p. 213).

In the public sector, as in all organizations, critical thinking is very useful, for example the Japanese 5 *whys technique, double loop learning* (Morgan, 1986) or other similar notions. By applying organizational theories to sustainability **this change project can show students how organizational aspects affect output**, and equip them with tools which will enable them to trouble shoot when organizational matters hinder sustainable development.

6. Results and conclusions

The literature on education for sustainable development in higher education contains a lot of reports of change projects (Alshuwaikhat & Abubakar, 2008, p. 1777; Rusinko, 2010), but does not provide nearly as much information about their effects (see Lidgren, Rodhe, & Huisingh, 2006). This change project started only in autumn 2019 and is scheduled to continue for several years, so the earliest assessment of the effectiveness of sustainability teaching cannot be expected until 2024 or 2025.

The **expected outcomes** of the change project are twofold. The first objective, i.e. to *make sure that sustainable development is explicitly featured in course syllabuses, to make sustainable development an integral part of course content,* has been reached, which represents the first phase of the project. During the academic year 2019-2020 the syllabus, reference literature, materials and examinations in three courses in Public Administration were transformed, mostly by increasing the share of sustainability-related materials and by pointing out connections to sustainability issues, where relevant. This part of the project continues. The second expected outcome, i.e. the presentation of the *pedagogical framework underlying the change project*, has also been achieved, as reported above.

As a long-term **outcome**, it is expected that *students will have learned to facilitate the implementation of sustainable development goals, to lead change towards sustainable development goals and to work with strategies for sustainable development goals.*

How can such a long-term result be measured? The plan is to make a comparative evaluation of students' master's theses, to examine whether students' argumentation concerning sustainability-related matters before the launch of the change project (in 2019) and afterwards (maybe 2024), by which time most of the courses should have been updated. In the worst-case scenario, such an evaluation will show no signs of change in students' thinking. In the best-case scenario, sustainable development will be taken into account in students' theses in all relevant cases. The actual result is likely be somewhere in between. In any case, as a result of the changes, we expect the share of public officials with a sound knowledge of issues regarding sustainable development to increase. That would be an acceptable result.

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Etapy zmian programu nauczania zrównoważonej administracji publicznej

Streszczenie. Rozwój zrównoważony uważany jest za jedną z najważniejszych kwestii dotyczących przyszłości, o czym świadczy rosnące zainteresowanie zrównoważonym rozwojem w szkolnictwie wyższym. Projekt zmiany opisany w tym artykule jest przykładem wysiłków podejmowanych w celu włączenia rozwoju zrównoważonego w program szkolnictwa wyższego. Cel projektu zmiany jest dwojaki: modyfikacja programów nauczania, literatury źródłowej, materiałów i egzaminów dla studiów na kierunku "administracja publiczna", w taki sposób, aby każdy kurs w jakiś sposób odnosił się do kwestii zrównoważonego rozwoju. Czyniąc rozwój zrównoważony integralną częścią całego nauczania, przedstawiony projekt podkreśla znaczenie różnych aspektów kwestii zrównoważonego rozwoju w różnych kontekstach. Istnieją trzy powody, dla których rozwój zrównoważony powinien być obecny w nauczaniu: edukacja na rzecz zrównoważonego rozwoju jest ważna dla samej uczelni; rozwój zrównoważony jest szczególnie istotny dla studentów administracji publicznej; aby zaangażować wszystkich studentów, edukacja na rzecz zrównoważonego rozwoju wymaga odpowiednich ram pedagogicznych. Drugim celem projektu jest nakreślenie podstawowych ram pedagogicznych, opartych na zasadach zawartych w teorii pedagogicznej, psychologicznej i organizacyjnej. Zdaniem autorki, w przedstawionym w artykule podejściu integracyjnym powtarzanie się tematów dotyczących zrównoważonego rozwoju na wielu kursach jest lepszym rozwiązaniem niż opracowanie pojedynczego kursu tematycznego. W pierwszej fazie projektu, w roku akademickim 2019-2020, dokonano przeglądu trzech kursów w celu uwzględnienia aspektów zrównoważonego rozwoju w odniesieniu do pojęć kluczowych.

Słowa kluczowe: edukacja, program nauczania, edukacja na rzecz zrównoważonego rozwoju, zrównoważony rozwój w szkolnictwie wyższym, administracja publiczna



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