

Shepherd Urenje

The Change Project Approach as an Action Research Strategy to Nurture Professional and Curriculum Development in Education for Sustainable Development in Higher Education

Abstract: There is an ever-increasing demand for a different educational approach to address the challenges of sustainable and equitable development that matches the pace of global change. This paper will highlight the urgency for quality and relevance in education as a response to the current global dysfunction. It will show why and how the role of education needs to change to confront 21st-century global challenges by integrating Education for Sustainable Development (ESD) into higher education. Findings emerging from cycles of participatory action research surveys and interviews established that the Baltic University Programme (BUP) ESD Course has complemented efforts to meet these challenges in three areas: access to an emerging ESD community of practice, upholding the quality of work and supporting continuing professional development. However, despite making an important contribution, the course still falls short of the ultimate ESD aim: to transform transmission education into lifelong learning experiences.

Keywords: action research, global dysfunction, ESD competences, Education for Sustainable Development, Change Project Approach, social transformation

UDC: 37.013.8

Scientific article

*Shepherd Urenje, PhD., program specialist in education for sustainable development, Uppsala University, Center for research and education on learning for sustainable development and global health, MTC-huset, Dag Hammarskjölds väg 14B, 2 tr, 751 86 Uppsala, Sweden;
e-mail: shepherd.urenje@swedesd.uu.se*

Introduction

The formal systems and institutions of education always represent a gift from the present generation to the next generation (Dozer 1972). In the 21st century, universities are experiencing the most serious crisis of confidence as institutions of learning excellence because their ability to offer sustainable solutions to current local and global challenges is questionable. As universities struggle to educate for prosperity and equity, they are pressured to respond to these challenges by educating students to cope with poverty and inequality. Worse still, universities are challenged to respond to and educate for surviving conflict and war because they continue to grapple with developing competencies that promote peace and unity. The challenge to overcome is that »the knowledge, skills, aptitudes and values necessary to industrialise the earth are not necessarily the same as those that will be needed to heal the earth or build durable economies and good communities based on principles of equity and sustainability« (Orr 2004). Universities need creative and generative spaces for social transformation, providing their teachers with competencies for reimagining teaching and learning strategies. While this may seem to be an important first step in encouraging them to become transformative practitioners as it influences their practice, including their consumption beliefs, attitudes and intentions, it is proving to be easier said than done in several instances. In the Baltic University Programme (BUP), we have been confronting this challenge through the Change Project Approach (CPA). Our findings show that tremendous progress has been made towards reorienting university teaching and learning but also, as participants get more information on the enormity of the challenges (a global dysfunction) to be overcome, negativity and other emerging barriers begin to stifle momentum for lasting change. Despite the initial success realised by the project's participants, there are times when their competencies were tested against the limits of their agency, especially when it comes to institutionalising the changes initiated in the capacity development.

As a response, the BUP has continued to support the professional capacity development of university teachers with essential competencies that enable them to reorient their courses to address the current and future risks to humanity and

the ecological environment. The BUP Education for Sustainable Development (ESD) Project was established to address environmental and sustainability challenges specific to the Baltic States Region (BSR) as a response to this question. This study seeks to scrutinise the empirical evidence there is on the effectiveness of the CPA in implementing ESD in higher education, which was supported by the BUP ESD course. It raises questions about the success that universities might have realised in initiating and sustaining transformative learning. The paper argues that, even though universities are open to transforming their teaching and learning to respond to the challenges of the 21st century, their freedom to explore this idea in ways that develop contextual sustainability competencies needs to be safeguarded against an instrumentalist and prescriptive view that would serve only to inhibit the possibilities for sustainable curriculum change.

Background

Countries in the BSR have one of the world's largest ecological footprints (Council of the Baltic Sea states 2017). Human demand on nature for food, water, timber, mining, energy and infrastructure is therefore very high in terms of available land and sea. Although the ecological footprint is not the most accurate reflection of a person's standard of living, it is still valid as a reflection of a person's lifestyle, i.e., as consumption levels rise, the ecological footprint becomes larger. This kind of lifestyle does not only affect the local socioeconomic and ecological standing it also has an effect far beyond the Baltic states and European borders. We now know that consuming more does not necessarily mean a better quality of life, hence the need to transform society from living bigger to living better. This calls for a kind of education that is capable of changing our way of thinking and acting if we are going to realise our aspirations for »the future we want« (UN 2012).

Since 2017, the Centre for Research and Learning for Sustainable Development and Global Health (SWEDESD) at Uppsala University in Sweden and the Centre for Lifelong Learning at Åbo Akademi University in Finland have collaborated to mainstream ESD in university education through the BUP ESD course. The beneficiaries of this intervention are university teachers from the Baltic States. The course is interdisciplinary and accepts participants from all university faculties. The first course attracted participants from business, humanities and natural science faculties. As of December 2020, over 80 university teachers from 8 countries have graduated from this course.

This BUP ESD course is a capacity development course designed to support BUP members in integrating sustainable development priorities into university teaching and research. The course aims to strengthen the implementation of the Sustainable Development Goals (SDGs), especially Goal 4, which seeks to »ensure inclusive and equitable quality education and promote life-long learning opportunities for all« (UNESCO 2015). The course's emphasis is placed on the relationship between ESD and educational quality, specifically on target 4.7 of SDG

4, which requires all governments by 2030 to »ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.« (UNESCO 2015)

In addition, the BUP ESD course is also expected to contribute to achieving other SDGs, including Goal 12 – *»ensure sustainable consumption and production patterns«* – and Goal 13 – *»take urgent action to combat climate change and its impacts«*. As we enter the 21st century, we are confronted with a supersonic rate of globalisation resulting in snowballing challenges that demand a different educational approach, an approach that matches this complexity in order to meet local and global challenges (Khalaim and Urenje 2020). The challenges that education needs to face up to are referred to in this paper as the 21st-century global dysfunction.

21st-century global dysfunction

In November 2015, world leaders unanimously agreed on 17 SDGs (UN 2015), which accentuate the need for a different kind of development that leaves no one behind and gives everyone a fair chance of leading a decent life. In our course, we consider this global crisis as also a crisis of education because without education it is impossible for society to change its ways of thinking and acting. The BSR is not spared major environmental problems, which include accelerated natural resource depletion (eutrophication, dead seafloors, reduced biodiversity and extensive pollution), uncontrolled levels of consumption, illegal migration and increasing levels of inequality, all issues that showcase the complexity and the systemic nature of the 21st-century challenges in the region. A few of the challenges peculiar to the BSR will be discussed to exemplify the urgency of what needs to be done.

Like in other parts of the world affected by climate change, warming in the BSR is likely to exceed its global average, particularly in winter and in the northern parts of the region. The result of these projected atmospheric changes will be an increase in Baltic Sea water temperature, reduced ice cover and reduced salinity due to increased precipitation and river runoff. As a consequence of the changes in water temperature, water balance, water circulation and water salinity linked to climate change, the biological processes and biota in the Baltic Sea will be impacted, affecting the species that live in these waters, their distribution and their interactions (Council of the Baltic States 2019).

The ecological risks in the Baltic Sea continue to cause problems. Its drainage area is densely populated and heavily industrialised, which means the rate of pollution constitutes a threat to the people, flora and fauna of all the countries around these waters. Despite substantial (and sometimes successful) efforts made by state and non-state actors on local, national, European and international levels

to counteract negative environmental trends in the Baltic Sea, »it is evident that human activities still cause severe environmental and human health risks and problems. This means that there is a need to improve environmental governance structures and processes to achieve sustainable ecosystem-based management of the Baltic Sea« (Lundberg et al. 2012, p. 3).

We now live in times of globalisation and accelerated social and technological change, which means there is an ever-increasing demand for a matching educational approach to meet the demands for sustainable and equitable development that complements the complexity of change. This calls for a university education that addresses the challenges young people will face when they graduate from university, with a view to strengthening the relevance and quality of higher education courses. The BUP, therefore, opted for an action research approach to identify appropriate teaching and learning options and then produce an iterative plan of action with strategies to strive for best practices.

Research design: The Baltic University Programme Change Project Approach

There is a need to develop research designs within a critical paradigm that links sustainability with organisational learning and social theory (Fien and Tilbury 2002). The main goal of action research is to transform the theory of change into reality. Action research approaches can be referred to in various terms, including participatory action research (PAR), emancipatory action research, critical action research, collaborative inquiry, active learning and narrative inquiry (Chevalier and Buckles 2013; Carr and Kemmis 2009; Lewin 1946).

Four common features of action research used in the CPA include the following: (1) It is cyclic, where similar steps tend to recur in a similar sequence; (2) It is participatory in that the informants are involved as partners or at least active participants in the research process; (3) It is qualitative and deals more with understanding concepts, opinions or experiences rather than with numbers; and (4) It involves critical reflection upon the process, and outcomes are important parts of each cycle.

During the BUP course, three iterative action research cycles (see figure 1) that participants and their colleagues went through were called core and thesis action research cycles (Coghlan and Brannick 2010). Cycle 1 was the »core action research cycle,« which refers to the aims or content of the research project, and Cycle 2 was the »thesis action research cycle« or »meta-learning cycle,« which relates to how the project itself is being implemented and researched at the same time. In our case, the core objective was answering the question of how to transform university education in ways that develop essential sustainability competencies. The first step was institutional dialogue and a pre-course assignment. The second step was a meta-learning cycle that answered the question of how to develop and implement transformative teaching and learning in the form of change projects in university education. A third step, which is the subject of this research

paper and which emerged as the second meta-learning cycle (meta-learning Cycle 2), was the implementation and scaling or institutionalisation of the change project ideas; this phase unfolded after the formal phases of the course, although the seeds were sown during the second cycle (Urenje and Rumjaun 2017).

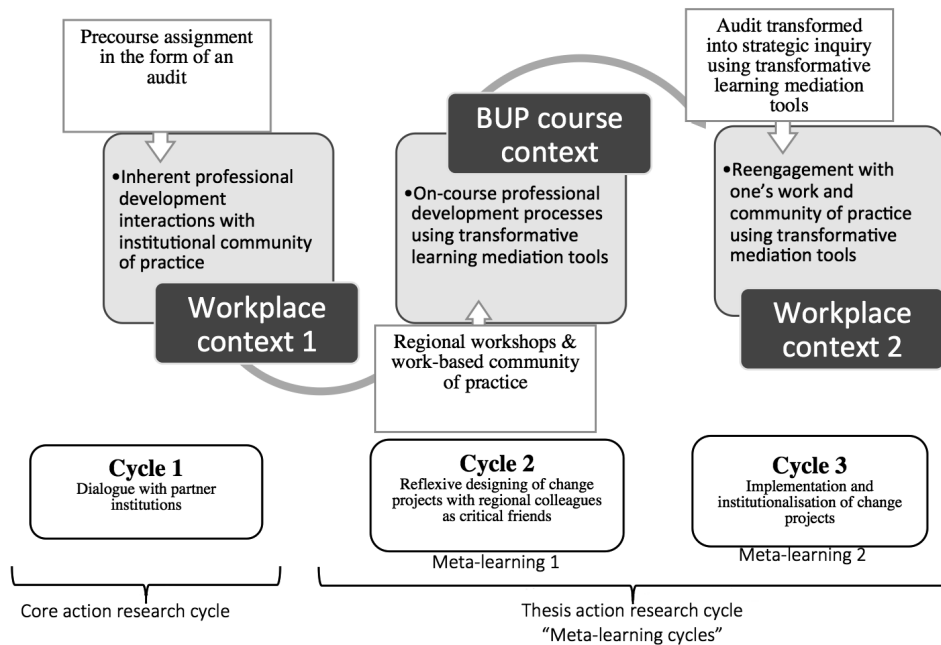


Figure 1: The change project inquiry (Urenje 2012)

The research method: Participatory action research

This investigation explored the progress made by university teachers who are engaged in researching their practices with a view to being more effective in empowering learners with essential competencies for the 21st century. It was composed of four cycles of action and inquiry, examples of which are: a) identify a problem and collect data on the problem; b) develop a plan to address the problem; c) develop action strategies and put them into practice; and d) evaluate the results of the actions taken, identify a new problem and repeat the process (MacIsaac 1995; Coghlan and Brannick 2010; Kemmis and McTaggart 2000; Waterman et al. 2010).

Participating BUP institutions have gone through two cycles of action research (figure 2). In Cycle 1, they conducted an institutional audit, which identified their curriculum priorities to be addressed through a change project. In Cycle 2, they designed a change project strategy, which they introduced to their institutions as pilots. Participants are now in Cycle 3; its unfolding results are the subject of this paper.

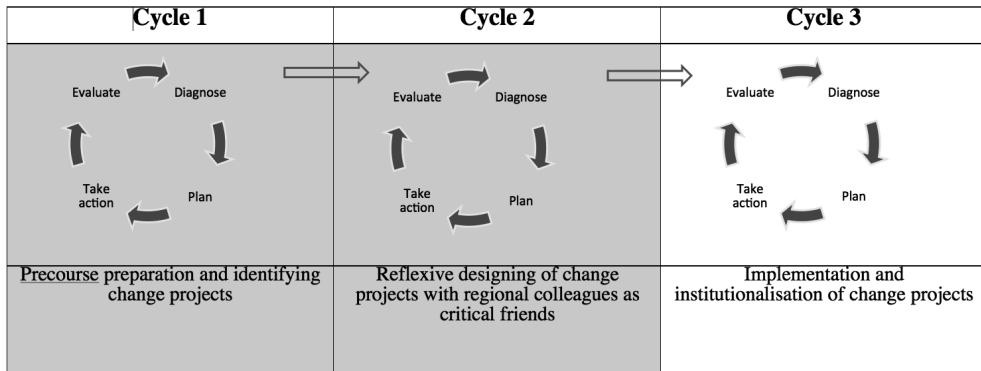


Figure 2: Change project learning cycles (Coghlan and Brannick 2001)

To begin the process, the teachers identified an issue or situation that needed to be changed in ways that address current environment and sustainability issues. It is during this process that teachers needed support in turning this curriculum challenge into a »researchable question« and then developing actions to try it out. In Cycle 2, teachers were given access to a BUP regional community of practice where their innovations were reflected upon and debated with colleagues as critical friends. When it came to interpreting the findings, teachers drew on the findings of other researchers to help develop actions to critique their assumptions and values that promise to bring about change. In Cycle 3, participating institutions are now at various levels of implementation and institutionalisation of their change projects. The whole purpose of our action research approach is to develop and sustain reflective practitioners committed to lifelong learning who can develop into transformative scholars/practitioners capable of navigating between research and practice, theory and experience (Coghlan and Brannick 2010).

Why is action research important for the case being studied?

For reasons stated above, the CPA is placed in a critical paradigm that brings about personal, professional and organisational learning towards curriculum development in ESD. In general, two main functions of education can be summarised as, social reproduction of the current cultural model (Bourdieu 1977; Sullivan 2007) and a transformation to empower learners to see the social world differently for a better and worthwhile living society (Mezirow 1978, 2018). Figure 3 is a closer view of Cycle 3, the depth of institutionalisation of the change project, and the cycle under investigation reported in this paper. Institutions are at various levels of this stage; some are struggling to take off or only beginning while others are quite advanced.

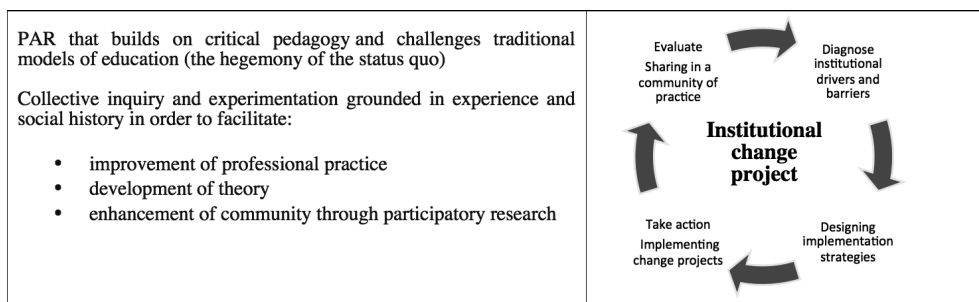


Figure 3: Change project action research, Cycle 3

Context and participants

This study took place at two BUP universities. Participants consisted of university teachers drawn from 15 universities affiliated with the BUP. These teachers were at various stages of implementing their teaching and learning change projects. Determining the specific unit of analysis (the case) was a challenge because potential participants could be drawn from 80 participants. A purposive sampling method (Cohen et al. 2007; Patton 2002; Trochim 2006) was used to access a particular subset of teachers who had been involved in the CAP programme between 2017 and 2019. The criterion that follows illustrates the five steps taken to arrive at the unit of analysis. The first step was to narrow down the number of participants from 80 based on three criteria: universities to which we had collegial access, an existing Uppsala University partnership and teachers who had participated in the ESD courses. The second step was to select universities that had completed Cycles 1 and 2 (see figure 1) and were now implementing the CPA. The third step was to use course records to isolate universities that had been represented every year between 2017 and 2019, resulting in six universities being isolated. The fourth step narrowed down this number to two universities, Sumy State University in Ukraine and Uppsala University in Sweden. In the fifth step, once the cases were decided upon, interviews were conducted with course participants, their colleagues and the CPA coordinator to determine the extent to which the CPA was being implemented. In-depth interviews were designed according to the methodological recommendations of Guest et al. (2013) and Boyce and Neale (2006).

Data collection and analysis

Throughout this study, multiple forms of data were collected to triangulate evidence (Creswell 2012), including CPA course documents, revised course schedules, institutional policies, departmental meeting minutes, transcriptions of individual interviews with each participant and participants' summative reflections

related to their perceptions of CPA implementation. A survey was initiated to collect data from the university teachers using a structured questionnaire (Creswell 2009) consisting of close-ended and open-ended questions that sought to find out the drivers and barriers to integrating ESD, as perceived by university teachers who had participated in the BUP ESD course between 2017 and 2019.

The survey was followed by an in-depth description of two cases from Uppsala University, Sweden, and Sumy State University, Ukraine. Additional information was obtained from personal interviews with the change project coordinators. Whilst iterative cycles of diagnosing, planning action, taking action and evaluating action lie at the heart of each change project, the precise form was determined by the context of each institution. The participants volunteered for the interviews, which were conducted by video link and face-to-face. The research responded to the question: »*In what ways is the Change Project Approach creating drivers for transformative learning and nurturing professional and curriculum development in ESD in BUP Higher Education institutions?*« There were three categories of questions for the interview: (1) questions on the course concept, (2) questions on learning outcomes and (3) challenges and recommendations for further development of the course.

The collected data were first compiled in the basic register and were then transcribed and processed according to the principles of qualitative content analysis. A three-step data analysis strategy followed: First, data generated from each university were analysed as a single case study through coding and categorising of patterns, trends and recurring themes (Creswell 2012); second, these interpretations were summarised in descriptive narratives and shared with the participants who verified their accuracy (Merriam 2001; Yin 2003); and third, this was followed by a cross-case analysis where the experiences of each university were analysed and their experiences compared so as to understand the change processes. The investigation was carried out descriptively according to category-led content analytical criteria (Mayring 2015) corresponding to the results summarised below.

The findings

In the BUP course, action research was a powerful exploratory tool that pushed university teachers to initiate and sustain changes, and also to improve knowledge of teaching and learning for themselves, their students and their institutions (institutional development). The aim was to create conditions in which the educator became a learning teacher and the students were co-learners, creating a transition from a learner-centred to a learning-centred environment (Bremner 2019). The most explicit findings were perceived through teacher experiences and reflections as well as those of colleagues while integrating ESD in their work. Explicit principles of action research were identified through the change project processes, and these represented an umbrella for the different kinds of outcomes. According to Cebrián et al. (2012), some of the essential features of action research include the vision that all the participants involved in the research

have something to learn and contribute. An analysis of course documents, the online survey and the questionnaires revealed that the CPA was instrumental in enabling a community of ESD practitioners (cumulative professional agency), it generated institutional and regional professional collaboration (agentive practice) and teachers gained confidence in their work (professional capital). Results also show that participants were often frustrated when they were not able to take action despite what they knew and were able to do (action deficiency syndrome) when it came to implementation.

Cumulative professional agency

One major finding was the emergence of a cumulative professional agency. At Sumy State University in Ukraine, teachers from different departments found space to meet and discuss with colleagues outside their comfort zones, as shown by this quote: »The CPA has been a catalyst that influenced different departments to include principles of ESD principles when revising their curriculum.« The teachers also stated that »at the moment almost every teacher training program at the university includes parts on active learning techniques (e.g., ,Innovative Pedagogy', etc.)« (Sumy State University). This had never happened before. At Uppsala University, the CPA has become a meeting point for researchers and teachers from anthropology, business and engineering in a collaborative effort. A participant from Uppsala University had this to say: »The course provided a platform for discussing different teaching techniques, frameworks and approaches with each other. Moreover, the informal environment allowed us to share our own values, feelings and frustrations related to teaching as well. Consequently, through participating in the workshops, we were exposed to Tilbury's ESD principles ourselves« (Uppsala University). Again, the first of its kind in the context of a professional agency. In both cases, the BUP course has demonstrated that the participants have engaged colleagues outside their academic disciplines, become co-researchers and co-learners, worked on merging knowledge and theory, and made reflection and action two core elements of their practice; moreover, the whole learning-by-doing process is demonstrated (Cebrián et al. 2012). This enabled personal, relational and collective agencies, which have collectively merged to become cumulative professional agency (Urenje 2012).

Three sub-categories have emerged from the data as a result of the CPA co-learning activities. The first subcategory is personal or individual agency, which refers to one's ability (Sen 1999) to originate and direct actions for given purposes. The second subcategory, relational agency, was demonstrated by participants' ability to offer support to and seek support from their colleagues. The concept is intended to capture a capacity to align one's thoughts and actions with those of others to interpret aspects of one's world and to act on and respond to those interpretations (Edwards 2007). The third subcategory, collective agency, was demonstrated through the ability of participants to negotiate and make decisions within the constraints of collective arrangements. This capability is assumed to

positively influence rule-making and resource distribution. Participants were distinguished mainly as resource appropriators ingeniously deploying sociocultural norms and positions in making the most of their access to and use of resources (Bandura 2000). This combination of personal, relational and collective agency coalesces to become collectively known as agentive practice, which acquiesces to a superior level of professional practice, cumulative professional agency.

Agentive practice as instrumental in curriculum and pedagogy restructuring

Agentive practice (Urenje 2012) is explained as the ability to take decisive action resulting from the knowledge and skills acquired during a learning intervention. In this case, participants cited the CPA as a catalyst enabling curriculum reorientation in ways that respond to 21st-century challenges. The agentive practice was unmistakable in curriculum development, where participants harmonised social construction orientation with learner-centred pedagogy, as shown by this quote: »During the workshops that followed, the focus shifted from abstract mental constructs towards more practical applications. I did not have any experience with developing education myself before I started the course. However, listening to other people's experiences and learning from their projects was a great way for me to get an idea of what education means to different people and what it takes to create a good lecture or seminar.« (Uppsala University 2021) »As a result of the change project course, a new approach for teacher training has been applied for the last two years. Nevertheless, there is still an obligation to have teacher training once during a five-year period of time, [but] there is an option to have several smaller training sessions every year. And teachers can choose the training by themselves.« (Summy University 2021)

It can be argued that the participants found it easier to integrate the new pedagogy because of their exposure to colleagues in the CPA. The regional exposure helped the participants to experience pedagogical methods practiced by others, and this demonstrated that these methods are feasible in their institutions. This affirmation gave them the passion to initiate lifelong learning programmes with the potential to develop freedom in their students.

Agentive practice has been demonstrated in the curriculum reorganisation in several ways. Successful participants demonstrated the capabilities to approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Such an efficacious outlook fostered intrinsic interest and deep engrossment in activities. Participants in both the Swedish and Ukrainian institutions confronted the challenge of curriculum innovation with a different view than they might have had previously.

The two examples that follow are drawn from Uppsala University in Sweden. The first example is a new master's course, Sustainable Destinations, that has been introduced on Campus Gotland. The course draws from university expertise in close collaboration with the tourist industry, regional authorities and the

community. »The programme aims to familiarise students with issues relating to sustainable regional and destination development from many different perspectives for use in their future occupation, encompassing supervision, community planning, education, research, communication, management of natural resources, entrepreneurship or decision-making.« Important parts of the education process take place outside the classroom, in the real world, with excursions and collaborations with public and private actors on Gotland. Teaching and learning are closely related to the large, multidisciplinary research programme Sustainable Visits, in which 30 researchers from 9 disciplines (including economics, business, anthropology, archaeology and tourism) are studying and developing sustainable destination development on Gotland (Uppsala University 2021).

In the second example, in 2021, change project coordinators at Uppsala University initiated an international collaboration on the project Teaching Entrepreneurship for Sustainability, which aims at comprehensively implementing sustainability in entrepreneurship education. This goes two ways: involve sustainability more strongly in the entrepreneurship courses and »marry« sustainability with the entrepreneurship approach in one module. The aim is to create a better understanding of the ways and dimensions in which sustainability and entrepreneurship are and are not compatible. Additionally, the project aims to contribute to the quality of teaching in sustainability and entrepreneurship education. Furthermore, the project aims to develop a working approach that students can adopt to achieve sustainable results in a highly uncertain and changing environment. This work approach focuses on soft skills development for students as future actors of sustainable entrepreneurship, as there is not a »syllabus« to follow in reality. This includes re-gearing entrepreneurial processes to a variety of contexts and situations and embedding uncertainty into the learning process. There are in total three participants involved in this project, all with their courses and programmes in entrepreneurship: 1. Uppsala University (Campus Gotland), Sweden, master's programme Sustainable Destination Development course: Introduction to Entrepreneurship in the Tourism Industry; 2. Rijksuniversiteit Groningen (Campus Fryslan), the Netherlands, master's programme in Sustainable Entrepreneurship; and 3. Nord University, Norway, bachelor's programme Business Administration course: Knowledge-Based Business Development and Sustainable Business Development (Uppsala University 2021).

Three examples of agentic practice can be drawn from Sumy State University in Ukraine:

- Example 1: *There are several, more than 10 different teacher training programs at Sumy State University at the moment. The program on active learning techniques was transformed into »Methods for Activating the Educational Process: Modern Trends.« The title changed, but the idea is the same. It includes such topics as:*
 - Gamification: the use of the game approach in the educational process.
 - Storytelling: creating a story for learning.
 - Workshops: development of new skills in group interaction.
 - Facilitation: collective problem-solving in teamwork.

- Team quest: step-by-step solution of intellectual and creative tasks.
 - Scribing: creative visualisation for educational purposes.
 - Trainings as an active form of the learning process.
- Example 2: *Every teacher training program at the university includes parts on active learning techniques that were drawn from the CPA experiences.*
- Example 3: *Additionally, I would like to mention, a document titled »Ecological policy at Sumy State University« was adopted at the university in December 2019. It also includes the points, that environmental and Sustainable Development issues are to be included in the courses taught at the university and in the teacher training programs. (Sumy State University 2021)*

Professional capital

The development of professional capital (figure 4) was a crucial component of the CPA that enabled educational transformation. Professional capital in this study illustrates the enhanced capability that participants experienced when they were more discernible, recognised and appreciated in the execution of their services in the institution. The concept of professional capital is a construct borrowed from the notion of social capital (Bourdieu 1977, 1992; Putnam 1993, 1995), which highlights the value of social relations and the role of cooperation and confidence to accomplish collective agency that strengthens combined productive potential. Just like physical and human capital, the potency of professional capital is embedded in its capacity to facilitate creative activity. It enables individuals to achieve their interests over and above those that can only be attained independently.

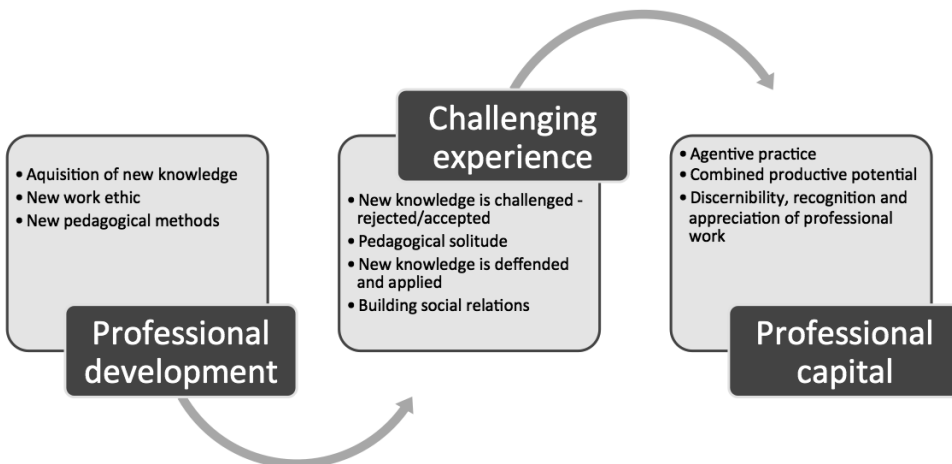


Figure 4: Development of professional capital (Urenje 2012)

The CAP has provided participants with two-fold access to an emerging ESD community: a) access to each other and b) admission to the culture and practice of ESD in the BUP. I will argue that the CPA enhanced the capability of participants to network at institutional, national and international levels.

Action deficiency syndrome (action deficiency disorder)

Despite the initial success realised by the participants, there were times when their competencies were tested against their agency to act. Occasionally, participants became paralysed by inaction as they could not proceed even when they had developed the competence required for their task: »Well, for me it has been when trying to fit »sustainability competencies« into the university bureaucracy in terms of examination and grades: there is an openness to transforming the classroom activities, but when it comes to grades and examination the open door closes. Then we are back to writing, individual [examinations], which basically examine the student ability to write what the teacher likes, rather than [demonstrating] sustainability competencies.« (Uppsala University 2021)

This inability to take action, despite having the essential knowledge, skills and attitudes, resulted in an action deficit syndrome or action deficit disorder, which I refer to as agentive paralysis (Urenje 2012). It describes circumstances when participants’ actions gave the impression they were paralysed. This »tacit jinx« may have resulted from an analysis paralysis in which the action was hard to pin down due to overthinking about the complex and uncertain details surrounding the participants on one hand and/or the convolution was just overpowering (see figure 5).

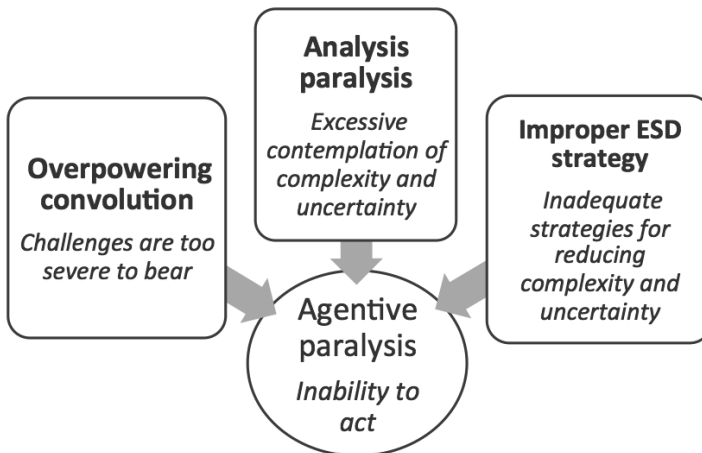


Figure 5: Some factors contributing to action deficit syndrome in the BUP

Four factors have been identified as standing in the way of translating competencies into agentive practice. First, pedagogical solitude resulted from institutional resistance to working collaboratively. Pedagogical solitude was exacerbated when participants were not well received on their return to their workplaces. This could have resulted from resentment because colleagues envied the travel opportunities and wished they had participated in the programme themselves. It could also have been due to a lack of prior information before attempting new ideas as demonstrated at Sumy State University where there was huge resistance from colleagues when they joined the training program for the first time.

Second, institutional expectations, either real or perceived, were too high. Colleagues expected a lot from the ESD experts when they returned. They expected them to turn things around in a short space of time without necessarily involving them. At Sumy State University when it turned out that they too had to pull their weight to make the new ideas work, they were reluctant. They did not expect the work but were keen to see the perceived result. They preferred the role of spectators, as ESD fans, and not as players on the field.

»The bureaucracy allows me to build in sustainability competencies as goals both for individual courses and for a whole programme but does not allow me to use adequate (appropriate ESD) grading scales (pass/fail) or examination methods to measure those goals and without any rational argument. Grades and examinations are simply emotional loads that are not open for discussion.« (Uppsala University 2021)

Third, institutional policy also constrained the participants. This resulted from the slow pace that the national institutions have in implementing any kind of policy change in line with ESD. The new ideas could only be implemented effectively if they were in line with institutional policy: »Secondly, we have teachers and students coming from different spheres – mathematicians, lawyers, economists, engineers, translators, etc. (multidisciplinary). It is not an easy task to explain to them why there is a need to add sustainable development issues into the courses. We are still moving forward with the question. Having an Ecological Policy adopted at the university is the first step here.« (Sumy State University 2021)

Fourth, due to the complexity of the challenges associated with ESD activities, many willing practitioners were overwhelmed by the enormity of the challenges. Take climate change, for example; arguably one of the most critical and urgent problems of our time, it represents a »wicked problem« (Rittel and Webber 1973; Gibson and Fox 2013). »Wicked problems« are problems that cannot be resolved by one individual alone because they are complex, ill-structured, and of public concern. They have no definite formulation, have no true-false but rather good-bad solutions and are symptoms of other problems (Rittel and Webber 1973; Gibson and Fox 2013). Climate change is the result of collective action and can only be solved by collective action. Since many people are not choosing to do the right thing seems to signal that this is a losing battle, and people naturally do not want to be associated with the losing side, even when moral obligations come into play. They are less prepared to own up to their social responsibility in their communities. Another example is when participants realise that the mobile phone

that has become part of our lives is dependent on minerals from the Democratic Republic of the Congo, a country where armed rebel groups are connected with forced child labour, rape and murder-for-profit from the trade of these minerals (BBC 2018, 2015; Banco 2011). The question is: Could it be true that the mobile phone you are so dependent on is fuelling a war that has become the most violent since World War II?

The change project as an action research approach enabled participants to reflect and take action. In Ukraine, they were able to deal with negativity through resilience and grit: »Firstly, there was huge resistance from the colleagues who had to join the teacher training programs, as they did not want any changes. Later on, when there was the first positive experience, the resistance declined a little bit, and curiosity took place. There was support from the administration. I think that helped a lot.« (Sumy State University 2021)

Also, plans have been put in place to have mandatory professional development every five years to make practical the idea of a learning teacher who keeps abreast of change.

»At the moment, all the teacher training programs have changed (and include the new methods), that is why there is no sense for resistance. A new approach for teacher training has been applied for the last two years. Nevertheless, there is still an obligation to have teacher training once during 5 years, there is an option to have several smaller training sessions every year. And teachers can choose the training by themselves.« (Sumy State University 2021)

Discussion

The CPA is an approach that needs to be tailored to suit the context, without which it still remains a theory of change that by itself will not affect change. When alternative ways of teaching and learning are stifled, there is a very strong temptation to slide back to business as usual, probably version 2 of business as usual (attempts to change without transforming the status quo), and therefore nothing really changes except that we become better at not achieving the result we want (Walls and Waal 2014). This becomes a dysfunction of practice in addition to a global dysfunction of environment and sustainability issues. The hegemony of the status quo stubbornly resists change, which means many underlying fundamentals are still the same. The more things change, the more they stay the same (Alphonse 1849). A change of heart must accompany experience before a lasting change occurs. However, when CPA is applied effectively as a learning process, it affords participants the opportunity to challenge existing worldviews, beliefs, feelings, values and assumptions based on past experiences. Riel (2019) outlined three goals of transformational learning in action research: a) the improvement of professional practice through continual learning and progressive problem solving; b) a deep understanding of the practice and the development of a well-specified theory of action; and c) an improvement in the community in which one's practice is embedded through participatory research.

First, on the personal level, the focus was on a systematic set of methods for interpreting and evaluating one's actions with the goal of improving practice. In this case, action research was often located in formal university institutions, and it was conducted by participating teachers together with their colleagues. The process of doing action research involved progressive problem solving, balancing efficiency with innovation, thereby developing an »adaptive« form of expertise (Riel 2019). In so doing, participants were able to participate in developing cumulative professional agency, which became an essential part of their institution's professional capital and reinforced the stamina to confront agentic paralysis.

Second, at the organisational level, action research is about understanding the system of interactions that define a social context. Lewin (in Riel 2019) proposed action research as a method of understanding social systems or organisational learning. Lewin argued that the best way to test understanding was to try to effect change by going beyond self-study because actions, outcomes, goals and assumptions are located in complex social systems. In the BUP course, the CPA focused on the intentional introduction of change into the university system with assumptions about the outcomes. Testing the CPA as a theory of change required careful attention to data and skill in interpretation and analysis. This was, however, tested by a number of barriers that participants needed to get past.

Third, at the scholarly level, through the change project, the researchers produced validated findings and assumed the responsibility to share these findings with those in their local community as well as with the larger research community. Apart from acquiring expertise in their workplaces, researchers also valued the process of building knowledge through ongoing dialogue about the nature of their findings. Engaging in this dialogue through writing or presenting at conferences is part of the process of action research.

Conclusion

The cases studied demonstrate action research as a valuable and valid research methodology for implementing ESD in BUP universities in addition to recognising its appropriateness in reorienting education towards sustainability. Practitioners and their institutions have been offered an open space for communication and participation in formulating and deciding on a theory of change in a collective and reflective manner, empowering them with thinking and action tools to push the educational and social situation towards sustainability. The results suggest that the CPA within the framework of action research demands a proactive approach and that the participants were empowered with cumulative professional agency, by which they have become co-researchers and co-learners challenging the educational status quo. Furthermore, research-based inquiry and learning on the concepts of implementing ESD provoked participants to a higher degree of thinking and acting due to the complexity of ESD discourse, regional interactions and institutionalisation. When given time and space and institutional support, they have become agentic practitioners who are instrumental in curric-

ulum and pedagogy restructuring. In trying to effect change, participants were confronted with uncertainties, dilemmas and tensions that threatened to suffocate the implementation of ESD thinking, methods and tools on an intellectual as well as on a practical level; and the change project inquiry proved to be a reliable approach to address the challenges. The change project created conducive spaces as opportunities for individual, collective and institutional learning.

References

- Alphonse Karr, J. B. (1849.) *Les Guêpes* (6th series, 1849).
- Bandura, A. (2000). Exercise of human agency through collective efficacy, Current directions in psychological science. *American psychological society*, 9, issue 3, 75–78.
- Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge: CUP.
- Bourdieu, P. (1992). *Language and Symbolic Power*. Cambridge: Polity Press.
- Bremner, N. (2019). ‘From learner-centred to learning-centred: becoming a ‘hybrid’ practitioner.’ *International Journal of Educational Research*, 97. pp. 53–64.
- Carr, W. and Kemmis, S. (2009). Educational Action Research: A Critical Approach. In: S. E. Noffke and B. Somekh (Eds.). *Sage Handbook of Educational Action Research*. SAGE Publications Ltd, pp. 74–84.
- Cebrián, G., Grace, M. and Humphris, D. (2012). Developing People and Transforming the Curriculum: Action Research as a Method to Foster Professional and Curriculum Development in Education for Sustainable Development in Higher Education. In: *Sustainable Development at Universities*. New Horizons, pp. 273–284.
- Chevalier, J. M. and Buckles, D. J. (2013). *Participatory Action Research: Theory and Methods for Engaged Inquiry*. UK: Routledge.
- Coghlan, D. and Brannick, T. (2010). *Doing action research in your own organization*. 3rd ed. London: Sage.
- Coghlan, D. and Brannick, T. (2001). *Doing Action Research in Your Own Organization*. London: Sage.
- Council of the Baltic States. (2019b). Retrieved from <https://www.cbss.org/safe-secure-region/tfthb/> (Assessed on 3. 4. 2022).
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Dozer, D. (1972). *The Educational Dilemma*. Retrieved from <https://fee.org/articles/the-educational-dilemma/> (Assessed on 3. 4. 2022).
- Edwards, A. (2007). Relational Agency in Professional Practice; A CHAT Analysis. *An International Journal of Human Activity Theory*, issue, 1, pp. 1–17.
- Elliot’s. (1991). *Action research for educational change*, Open university press, Milton Keynes
- Kemmis, S. (2010). What is to be done? The place of action research. *Educational Action Research*, 18, issue 4, pp. 417–427.
- Kemmis, S. and McTaggart, R. (2005). Participatory Action Research: Communicative Action and the Public Sphere. In: N. K. Denzin and Y. S. Lincoln (Eds.). *The Sage handbook of qualitative research*. Sage Publications Ltd, pp. 559–603.
- Lewin, K. (1946). Action research and minority problems. In: G. W. Lewin (Ed.). *Resolving Social Conflicts*. New York: Harper & Row.
- Mayring, P. (2014). *Qualitative content analysis: theoretical foundation, basic procedures and software solution*. Klagenfurt. Retrieved from <https://nbn-resolving.org/urn:nbn:de:hbz:5:1-63864-p0017-9>

- bn:de:0168-ssoar-395173 (Assessed on 3. 4. 2022).
- McNiff, J. and Whitehead, J. (2002). *Action Research: Principles and Practice*. London: Routledge Falmer.
- Mezirow, J. (1978). Perspective Transformation. *Adult Education Quarterly*, 28, pp. 100–110.
- Noffke, S. (2009). »Revisiting the Professional, Personal, and Political Dimensions of Action Research.« In: S. Noffke and B. Somekh (Eds.). *The Sage Handbook of Educational Action Research*. Los Angeles, CA: Sage, pp. 7–23
- Ollus, N. and Lietonen, A. (2016). Addressing human trafficking in the Baltic Sea. *European institute for crime prevention and control*, pp. 1237–4741.
- Orr, D. W. (2004). *Earth in mind: On education, environment, and the human prospect*. Washington, DC: Island Press.
- Putnam, R. D., Leonardi, R. and Nanetti, R. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, N. J: Princeton University Press.
- Riel, M. (2019). *Understanding collaborative action research*. Retrieved from http://base.socioeco.org/docs/center_for_collaborative_action_research.pdf (Assessed on 3. 4. 2022).
- Rittel, H. W. and Webber, M. M. (1973). »Dilemmas in a General Theory of Planning.« *Policy Sciences*, 4, issue 2, pp. 155–169.
- Sen, A. K. (1999). *Development as freedom*. Oxford: Oxford UP.
- Sterling, S. (1996). Education in Change. In: J. Huckle and S. Sterling. (Eds.). *Education for Sustainability*. London: Routledge, pp. 45–63.
- Sullivan, A. (2007). *Bourdieu and education: how useful is Bourdieu's theory for researchers?* London: Earthscan Publications Limited.
- Tilbury, D., Stevenson, R. B., Fien, J. and Schreuder, D. (Eds.). (2002). *Education and Sustainability: Responding to the Global Challenge*, Commission on Education and Communication, IUCN, Gland, Switzerland and Cambridge, UK. xii + 206 pp.
- UNESCO. (2015). *SDG4-Education 2030, Incheon Declaration (ID) and Framework for Action. For the Implementation of Sustainable Development Goal 4, Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All*, ED-2016/WS/28.
- UNESCO. (2012). *Education for Sustainable Development: Sourcebook*. Paris: UNESCO.
- Urenje, S. and Rumjaun, A. B. (2017). *Transforming Teacher Education for the 21st Century: Developing Relevant Competences For A Changing World*. USA: Academic Star Publishing Company,
- Urenje, S. and Khalaim, O. (2020). Change Project Approach for Reorienting University Teaching Towards Sustainability Principles' Implementation, In *Universities, Sustainability and Society: Supporting the Implementation of the Sustainable Development Goals*. Springer International Publishing
- Urenje, S. (2012). *The role played by the International Training Programme in professional development and institutional competence in Southern Africa*. Doctoral thesis. London: University of London - Institute of Education.
- Wals, A. E. J. and Waal, M. v. d. (Eds.). (2014). *Sustainability-oriented social learning in multi-cultural urban areas: The case of the Rotterdam Environmental Centre*. Frankfurt: Springer.
- Waterman, H., Koshy, E. and Koshy, V. (2010). *Action Research in Healthcare*. United Kingdom: SAGE Publications.
- Lundberg, C. Renn, O. and Wolowicz, M. (2012). *Report on Environmental Risk Governance of the Baltic Sea (RISKG0V)*.

Shepherd URENJE (Univerza v Uppali, Švedska)

CHANGE PROJECT APPROACH KOT STRATEGIJA AKCIJSKEGA RAZISKOVANJA ZA SPODBUJANJE STROKOVNEGA IN KURIKULARNEGA RAZVOJA NA PODROČJU IZOBRAŽEVANJA ZA TRAJNOSTNI RAZVOJ V VISOKEM ŠOLSTVU

Povzetek: Vse več je povpraševanja po drugačnem izobraževalnem pristopu k izzivom trajnostnega in pravičnega razvoja, ki bi ustrezal hitrosti spreminjanja okoliščin. Prispevek poudarja nujnost zagotavljanja kakovosti in ustreznosti izobraževanja kot odziva na trenutno globalno disfunkcijo. Pokaže, zakaj in kako se mora z vključevanjem izobraževanja za trajnostni razvoj v visoko šolstvo spremeniti vloga izobraževanja, če se želimo soočiti z globalnimi izzivi 21. stoletja. Ugotovitve, ki izhajajo iz participativnih akcijskih raziskav in intervjujev, so pokazale, da je baltski univerzitetni program VITR pripomogel k reševanju teh izzivov na treh področjih: dostop do nastajajoče skupnosti prakse VITR, ohranjanje kakovosti delovanja in podpora stalnemu strokovnemu razvoju. Kljub pomembnemu prispevku pa program še vedno ne dosega končnega cilja izobraževanja za trajnostni razvoj, tj. preoblikovanja transmissijskega izobraževanja v vseživljenjsko učenje.

Ključne besede: akcijsko raziskovanje, globalna disfunkcija, kompetence VITR, vzgoja in izobraževanje za trajnostni razvoj, Change Project Approach, družbena transformacija

Elektonski naslov: shepherd.urenje@swedesd.uu.se