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Drama in Education for Sustainability: Becoming Connected through Embodiment

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Abstract

In this article, we argue that drama can serve as an interconnecting method for climate change education. In this study, we elaborate the practice of drama and participation experiences through three drama workshops: 1) process drama work on the global, social, and individual aspects of climate change, 2) outdoor drama practice on relations to nature, and 3) reflections through drama practice. The human dimension

of the sustainability issues, conditions of interdependence, and collaboration were explored and manifested through the drama practices, which created frames for embodied, creative and cognitive dialogues between people with different perspectives. Being differently—as experienced through the embodied, collective, and creative practices of drama—seemed to promote experiences of interconnectedness, widen perspectives of sustainability, and motivate acting differently.

Introduction

Societies all over the world are facing immense ecological crises such as climate change, which is only one symptom of a wider spectrum of sustainability challenges. Even though societies have produced a large amount of knowledge, our capacity to respond to these sustainability challenges is lacking (Glasser, 2018). The need to develop ways of knowing complementary to traditional, rational, linear, analytical, classificatory, and mechanistic knowing is urgent in order to promote transformative learning for sustainability (Kagawa & Selby, 2010; Lotz-Sisitka, Wals, Kronlid, & McGarry, 2015; Sterling, 2003, 2010; Wals, 2015)

The arts are regarded as a powerful approach to transformative and transgressive learning (Lotz-Sisitka et al., 2015), as the arts can challenge taken-for-granted convictions, often in an engaging and creative way, and focus on personal experiences and meaning-making related to sustainability (Eernstman & Wals, 2013; Galafassi, Kagan, Milkoreit, Heras, Bilodeau, Bourke, Merrie, Guerrero, Pétursdóttir & Tàbara, 2018). Moreover, the integration of multiple ways of learning and the combination of cognitive, embodied, intuitive, and emotional awareness through the arts enable enlightening the qualitative complexity of sustainability issues and bridging the gap between abstract concepts of sustainability and subjective experiences (Eernstman & Wals 2013). In essence, the arts can address the complex issues of humanity and serve as collective and creative approaches to transformations to sustainability (Galafassi et al., 2018).

Particularly, performative arts–based methods such as applied drama have value in devising a creative space for embodied dialogue, and hence these methods can foster social reflexivity, public deliberation, and understanding about sustainability. According to a review by Heras and Tàbara (2014), performative methods help to communicate and translate complexity around sustainability issues by embodying different kinds of knowledge, values, and perspectives. Applying these methods can promote building ecological consciousness, engagement, and emotional commitment that can lead to action (Heras & Tàbara, 2014).

In this study we investigate the potential of drama as an arts-based approach for sustainability education with an emphasis on climate change. The potential of drama is explored in relation to interconnectedness and sustainability competences, such as learning to know, to critique, to change, to be, and to care, that are regarded as central elements of transformative learning for sustainability (Wals, 2015). We elaborate the practice of drama and participation experiences through three drama workshops related to different aspects of sustainability and climate change. The workshops included: (a) process drama work on the global, social and individual aspects of climate change, (b) outdoor drama practice on relations to nature, and (c) reflections through drama practice or work. We draw on the material collected from the Open University course Drama in Education for a Sustainable Future (DESF) in Finland. The course was designed as research-based practice to promote collective reflection on the potential of DESF between experienced students of drama in education and ourselves as teachers and researchers.

Our research question was: *What kind of transformative, interconnecting, embodied learning does appear during the course Drama in Education for a Sustainable Future and emerge in the participants' reflections?* The question is part of a wider question about the potential of drama practices in climate change education.

Call for Interconnectedness in Sustainability Education

Developing effective educational strategies for complex sustainability issues necessitates a critical awareness of the prevailing thinking that promotes unsustainability (Kagawa & Selby, 2010; Glasser & Hirsh, 2016; Lehtonen, Salonen, Cantell, & Riuttanen, 2018). On a meta-level, sustainability challenges can be understood as a result of alienation or separateness, operative ways of knowing and thinking that are reflected throughout Western culture (Laininen, 2018, referring to Bateson, 1972; Sterling, 2003). People's alienation from nature originates from the beginning of Industrialism and the Enlightenment and even to Cartesian dualism, the separation of the mind and the body, which has led to a wider spectrum of separateness, typical of Modern thinking in dichotomies. This kind of separated way of thinking helps to explain the cultural and biological destruction. A critical awareness of Modern dichotomized thinking, as illustrated in Figure 1, is essential in sustainability education as it affects the prevailing thinking and education.

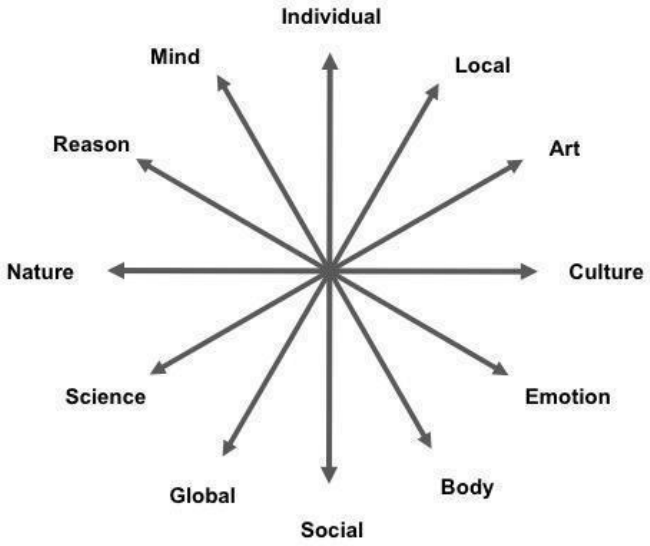

Figure 1. Modern dichotomized thinking related to unsustainability (Lehtonen et al., 2018).

Sustainability education needs to be developed to dismantle separateness and strengthen a sense of connectedness (Lehtonen et al., 2018). When addressing huge, global sustainability issues, it is essential to recognize the ecosocial interdependence of society and nature, and the connections between local practices and global issues. In addition, in order to engage people, it is crucial to understand the reality of climate change as socially constructed. Furthermore, it is relevant to understand how socially organized emotional responses impact attitudes, values and learning (Norgaard, 1994). The promotion of this kind of systemic and holistic understanding demands a pedagogical design based on a holistic understanding of humanness and learning (Lehtonen et al., 2018). Climate change education calls for holistic teaching approaches, where factual knowledge is combined with critical thinking, action, participation, emotions, future visioning and identity construction (Cantell, Tolppanen, Aarnio-Linnanvuori, & Lehtonen, 2019). In this article we argue that applying drama in sustainability education can facilitate empowering, collective, embodied encounters with people and issues that can promote increased awareness of interconnectedness.

Drama as Transformative, Interconnecting Learning/Education

The value of drama for sustainability education is generally known in the field and has been acknowledged by several studies (e.g. Davis, 2018; Heras & Tàbara, 2014; McNaughton 2006, 2008; Österlind, 2012). In this article, the potential of drama in sustainability education is considered from the perspective of sustainability competences (Wals, 2015) that concretize transformative learning and the awareness of interconnectedness that is essential in sustainability education.

Transformative learning is a complex, widely used concept defining change and transformation as the ultimate goals of sustainability learning and education. According to Mezirow (2000), transformative learning is a cognitive process, of which the outcome is a fundamental change in personal assumptions and actions. The process starts from a disorienting dilemma and embraces critical thinking, affective involvement and reorientation, as well as the testing and practicing of new ways of action. The role of art in transformative learning can be in presenting disorienting dilemmas, questioning conventional thinking, promoting affective involvement, and understanding the demand for reframing, which comprise the beginning of a transformative learning process (Mezirow, 2000).

Mezirow's transformative learning theory (2000) has been criticized as focusing on the cognitive process and individual learning while disregarding the emotional dimension. This critique is essential for sustainability education aiming at collective and social change, and at cultural transformations towards sustainability. How learning transfers to action and societal change is the crucial aspect in sustainability education. Moreover, Sterling (2003) points at the need to be critical on the levels of transformative learning and strive for paradigm and epistemological change, not only change on the cognitive or meta-cognitive level.

In this article we explore the transformative potential of drama related to sustainability competences defined by Wals (2015): *learning to know, to critique, to change,* and *to be and care.* According to Wals (2015), people need to learn *to know* the dynamics and the content of sustainability and adopt an integral view, such as sustainability literacy and systems thinking. The *critique* should focus on questioning hegemony and routines, and becoming aware of normativity, disruptiveness, and transgression. Competences associated with learning *to change* include leadership and entrepreneurship, unlocking creativity, the utilization of diversity, appreciating chaos and complexity, adaptation, resilience, empowerment, and collective change. Sustainable practices for learning *to be* and *care* involve connecting with people, places and other species; passion, values and meaning-making; and moral positioning, while considering ethics, boundaries, and limits.

Based on previous research, drama as a holistic, active, and participative approach can elevate these sustainability competences defined by Wals (2015). Drama can raise understanding of socioecological dynamics and has the potential to heighten our sensibilities to interdependencies within socio-ecosystems (Heras & Tàbara, 2014; Kagan, 2011). Performative methods can foster critical awareness of social dynamics and of the role of emotions, beliefs, and aesthetics in our understanding (Heras & Tàbara, 2014). Drama practices can elevate the capability to act and change through encouraging engagement in action, hence offering opportunities to develop active citizenship skills (McNaughton, 2008). Even challenging orientations of resistance can be applied as sources for learning in drama

(Rainio, 2010). Drama can provide means for creating a positive classroom climate for exploring personal and prevailing values and attitudes. Sympathetic and empathic attitudes and actions can evolve and be practiced in the caring atmosphere (McNaughton, 2008.) Moreover, it is possible to generate alternative visions of a more sustainable future in applied theatre (Heras & Tàbara, 2014). Futures-envisioning processes can be supported through improvisations, storytelling, performance-making, role-visioning, and rehearsals for action (Heras & Tàbara, 2014; Lehtonen, 2012).

Drama offers alternatives to conventional thinking as exploration, imagination, humor, and empathic experiences are typical for drama (Heras & Tàbara, 2014). Learning in drama is like *becoming*, it is process oriented, a state of change that occurs in time and space, which happens within the double frame of reality and fiction, that is, by aesthetic doubling (Østern, 2003, pp. 458, 471-72; O'Toole, 1992, pp. 166-170). The evolving understanding is based on aesthetic experiences, where self and world become integrated (Rasmussen, 2010). The aesthetic learning experiences combine facts and fiction, and embodied, emotional, creative, and cognitive thinking. The evolving understanding derives from personal meaning-making of the shared experiences and is socially constructed and interpretive (Heras &Tàbara, 2014; Rasmussen, 2010). Furthermore, the learning that drama promotes is dialogical and intercorporeal, as embodied practices intensify embodied awareness and open senses to intercorporeal dialogues. It is the togetherness of the self, the other, and the lifeworld created in drama that become intertwined and hence promotes mutual connectedness with the issues and life-worlds explored (Viirret, 2018).

Drama offers a third space for being differently and collectively creative, playing in the fictive "as if" reality. This means both the freedom of being and acting in a role—differently than in daily life—and the common creation of the drama world, which is different, but close to the real world. The third space (Bhabha & Rutherford, 2006) that drama activities generate is interactive, not homogenizing, but open to the self-construction of personal experiences. In this ritual-like third space everything comes together, such as subjectivity and objectivity, the abstract and the concrete, the real and the imagined, the knowable and the unimaginable, mind and body, consciousness and the unconscious, everyday life and unending history (Soja, 1996, 57).

The creative frame of drama enables exploring emotions and attitudes with emotional distancing. Sustainability issues and climate change evoke often strong emotional responses and coping strategies related to value-laden dilemmas and existential questions (Norgaard, 2011). Arts-based approaches are needed for exploring the conscious and unconscious attitudes, images, and associations related to climate change (Lehtonen & Pihkala, 2020). As the emotional responses are socially constructed and organized, it is relevant to bring people

together to reflect on their personal and collective emotional response to climate change (Norgaard, 2011).

These challenging emotional and value-related dilemmas inherent in sustainability can be confronted by the distancing offered by a fictional context (Österlind, 2012). Process drama in particular, is often designed to work explicitly with values, conflicting perspectives, and emotional aspects. But to consciously arrange the teaching in order to 'awaken' or make use of the students' feelings can be seen also as unethical due to creating unintended results. There is a danger that "when emotions are externally imposed by the leader, the resulting drama can be superficial and melodramatic" (Heyward, 2010, p. 199). To avoid this, the participants should be protected within—not from—emotion, by the distance offered through the fictional context (Bolton, 1984, p. 150). If drama is carefully applied, it can be very useful in education for a sustainable future (McNaughton, 2013; Österlind, 2012).

Context of the Study

Here, drama is studied in the context of a two-day professional development course called Drama Education for a Sustainable Future (DESF), that was designed by the author team, consisting of three experienced drama teachers and researchers. The course consisted of three drama workshops (each four hours) and was conducted for adult students in spring 2017 by the Open University of Jyväskylä, Finland. It was planned and documented as a research-based practice by the authors. The aim of the course was above all to offer the students first-hand, personal experiences of drama in sustainable education. Additional goals were to show examples of how to apply drama in education for a sustainable future (ESF) and to promote dialogue and collective reflection on the use and utility of drama in ESF. Our roles as the teacher-researchers and participant-observers varied during the course. One of us was responsible for the first workshop and another for the second workshop, while the others participated in these workshops. The third workshop was designed and carried out in collaboration between all three authors.

The group of 16 students had a twofold focus for participation. First, they were students in drama education with adequate, previous experience of drama work. Second, they were mostly working teachers, who had already used drama in their teaching. Thus, the group was a set of co-operative professionals, who were enthusiastic, both to participate in DESF and to learn new ways to use drama in ESF. Moreover, they were able to compare and critically reflect on the workshops based on their previous drama (teaching) experiences.

Workshops

In the first two workshops of DESF, the approaches to the theme were participatory but different. Workshop 1 was conducted in a large, open studio (classroom). It was a process drama, based mainly on symbolic body work (still images) and roleplay. Workshop 2 was conducted in a forest. It consisted of embodied self-reflection practice and group improvisations such as nonverbal poetry and participatory performances. Workshop 3, also carried out in the studio, concentrated on reflective work on the experiences in Workshops 1 and 2, consisting of drama work, writing and discussion.

Workshop 1: From the Global to the Individual: Explorative Process Drama Workshop in ESD

Workshop 1 was originally designed as an example of drama teaching for students with no previous drama experience. The first part of the workshop involved individual and collective reflection on sustainability challenges. It included brainstorming some of the main problems for the globe, followed by guided relaxation and individual introspection in silence. The participants were asked, "What do you feel about these problems? Imagine an object that symbolizes your feelings." It also included sharing ideas and thoughts in pairs or in small groups, making still bodily images about the human causes of global problems and engaging in joint reflections on what needs to be done and by whom.

The second part was based on a roleplay of a fictive environmental conference. The idea of the roleplay was to look at climate change from different stakeholders' perspectives. The participants were asked to choose which group they would like to explore and to represent activists, politicians, business leaders, researchers, or something else. The teacher played the role of a hostess. At the conference, every team presented their views and interests related to climate change and discussed the issues in mixed groups. Afterwards, on an imagined journey home, each team (the students in their roles) was asked to comment "off the record" on their experiences from the conference (meta-reflection in the role), while the other participants listened. After some reflections on the roles, the workshop ended with guided relaxation and introspection, where everyone was asked to go back to their fictive object and think of something that they in fact are able to do for these global problems, and to privately make a decision on whether they were ready to actually do it.

Workshop 2: Into the Forest's Arms: Reflections on One's Personal Relationship with a Forest

The second workshop took place in a Finnish forest. The forest was located in a nature protection area near the sea with a large old birch and coniferous trees. It was early spring, only a little bit of snow here and there, and occasionally snow fell from the sky. When entering the forest, the participants were asked to listen to the sounds of the forest and pay

attention to the atmosphere during the whole workshop in order to intensify their presence in the situation, the sensual impressions and the embodied character of the experience.
The workshop started with a reflection on the question: "How has your personal relationship with the forest changed from childhood until now?" The students were asked to find a place of their own in the forest, to stay there for a while and have an inner dialogue with the forest. The task was also to pick something from nature, an object or an idea, and create a gesture with a sound or a song about the experience. After sharing these ideas nonverbally and finding a peer through a dialogue based on gestures and sounds, these pairs created nonverbal poems about these experiences. After performing the poems to the whole group, the pairs were asked to form groups of four, again without speaking, and create participatory performances, where the original ideas of each participant were transformed into a collective creation. Within the performances we were invited, for example, to play in a forest like a child, imagine being a tree, and participate in a party as animals. Before leaving, everyone was asked to pick an object from the forest. The workshop ended with self-reflection on the experience in silence while walking back, led by the question: "Hold the memory of this experience in your hand; how does it feel?"

Workshop 3: Reflection Through Collaboration and Embodied Creation
The third workshop, Reflections, was documented and filmed for research purposes. The reflection on the potential of drama was structured to take place in three steps: first, by students' reflections on their own participatory experiences of the two previous workshops; second, by discussion from a teaching point of view; and third, within a frame of interconnectedness. Workshop 3 started in the afternoon after the second workshop that had been carried out in the forest. First, the participants did free reflective writing about their experiences in the forest. After that, the participants were divided into three groups and asked to share and reflect on their experiences in the forest and then compare those to their experiences in the global workshop (Workshop 1). Finally, a brief lecture about human alienation and the theory of interconnectedness was given to inspire and enrich the discussions. All three steps included a combination of drama work and reflective discussion.

Data Generation and Analyses

To answer our research question, the students were asked to reflect on their own thinking and participatory experiences in the workshops in several ways. They answered individual questionnaires after Workshop 1 (WS1), they did free individual writing after Workshop 2 (WS2), and they discussed reflectively and did drama work (still images) in small groups during Workshop 3 (WS3). Furthermore, two weeks after the course most of the students (n=10) wrote reflective essays as part of their assignment for course credits. Moreover, a year after the course the participants were approached again and asked to tell us what they remembered from the course. As mentioned above, the students used a double frame for

reflecting on the potential of DESF. They reflected on their personal thinking and experiences of the workshops in relation to sustainability issues, but also on drama as a teaching tool as drama educators. The data was analyzed using content analysis, searching for themes emerging in the data (Elo, Kääriäinen, Kanste, Pölkki, Utriainen & Kyngäs, 2014). The potential of DESF was analyzed related to transformative learning and interconnectedness in all the drama practices of all the workshops.

By presenting our findings through arts-based methods, a poem, and pictures of the still images, we hope that readers will receive the data differently. Through the poem, we aimed to, as Leavy (2009) describes, paint "a feeling picture" of the participants' experiences. According to Leavy (2009), poetry offers a very particular form in which to interpret and represent human experience, and poetry as a "research strategy challenges the fact–fiction dichotomy and offers a form of evocative presentation of data" (pp. 63-64). The poem and the pictures of the still images are open to both objective and subjective interpretations and further personal meaning-making.

In addition to verbal or written reflections, the still images presented in the next section serve as illustrations of drama as an arts-based, embodied practice applicable to education and research. The still images emerged in the moment and involved both personal and collective reflection in parallel. They were created intuitively and represent drama as a situational way of knowing.

The data was collected at several occasions and in different ways:

- A questionnaire with open questions (WS1) = Data 1 (D1)
- Reflective writing (WS2) = Data 2 (D2)
- Video-recorded discussions (WS3) = Data 3 (D3)
- Video recordings and photos of drama practice (still images) (WS3) = Data 4 (D4)
- Reflective essays (after the course) = Data 5 (D5)
- Open question on the participants' memories of the course, one year later = Data 6 (D6)

Findings and Discussion

In this section, we present and discuss the learning potential of DESF based on analyses of the students' reflections on their experiences. We analyze the participants' experiences and reflections related to the sustainability competences—*to know*, *critique*, *change*, *be and care* (Wals, 2015)—and related to interconnectedness (Lehtonen et al., 2018). We draw upon the participants' reflective answers, writings, and discussions, and look at the drama practices from a theoretical perspective. Furthermore, we present a poetic analysis of the participation experiences of WS2 in the forest. Moreover, examples of the still image practice are presented

as an exploration and illustration of the embodied, collective reflection of the participation experiences.

The Potential of Drama According to the Reflection on Participation Experiences

According to the students' reflective essays, their learning experiences in the DESF course were significant and emotionally engaging. However, the students might have had a tendency to write about their experiences positively as these essays were part of their assessment, even though no marks were given. The students seemed to be emotionally engaged during the whole course. Emotions and embodiment were strongly present in both workshops (WS1 & 2) even though the process drama was designed mainly to encourage cognitive thinking and the drama in the forest was aimed at engaging the senses. Drama practice in its embodied form allowed the participants to experience and express emotions, and this enabled them to see and understand emotions in others (cf. Wright, 2011, p. 113). Emotion, cognition, body, and mind were integrated in the students' reflections on their learning experiences.

According to our data, the students experienced the course and its three workshops as inspiring, thought-provoking, and meaningful. "Drama is a great way of making invisible things visible and handling important issues," one student reflected in the open questionnaire about the process drama workshop. During the course discussions, some of the students thought they could apply the drama work directly in their own practice, especially with adults, and that it would be possible to adjust the drama work for younger participants as well. One year after the course (D6), when asked, some of them had used elements of the course or an entire workshop in their own practice. According to the written reflections one year later (D6), the course had been a powerful experience, and the respondents (n=11) remembered very clearly what had happened during the workshops and how their attitudes and/or daily and professional acts had been changed with respect to sustainability.

Becoming Connected with Global Challenges in a Process Drama

In Workshop 1, which used process drama, global issues were explored collectively in several ways: through brainstorming, making still images about human causes, and engaging in roleplay. The embodied awareness was intensified in the relaxation practice that took place both after brainstorming and after the roleplay in a fictive environmental conference through the lenses of stakeholders representing different interest groups. The students were free to choose and create their personal role, either close to their personal perspective or a role opposed to their own experiences and point of view. The process of choosing and playing a role involves both conscious and unconscious thinking, in which personal ideas become transformed into the role.

According to the participants' reflections, the fictive practice promoted a deeper understanding of the complex character of sustainability issues. Within the roleplay, it became clear that the different stakeholders looked at the issues from varying perspectives, which made it difficult for the participants to find common ground. Several participants mentioned that the workshop contributed to a better understanding of the many conflicting perspectives on sustainability issues: "It seems that everyone looks at things from their own point of view"; "We got to experience ourselves the difficulty of influencing/changing the world, why [the] world is not /.../ sustainable, why things are not working better."

However, the still images and the roleplay also seemed to provoke some stereotypical thinking, according to the participants, which is interesting from an educational perspective. In two group discussions, the participants put forward the notion of stereotypical roles and actions, and the tendency of staying on the surface in discussions in relation to the theme. One participant shared, "I found myself and [our] small group kind of avoiding talking about what 'I' or 'us' can do, so in a way drama can strengthen stereotypical ideas of bad and good." The critical notion of stereotypical roles is related to the workshop design, where no time was given to prepare for individual, multifaceted characters to play the roles. This design needs to be reconsidered. The tendency to discuss issues on a general level can be a way to avoid confrontation (cf. Læssøe, 2010). If this tendency is recognized and reflected upon (Gallagher, 2001), it may contribute to increased awareness and a deeper understanding of individual attitudes and behavior.

The students noted how emotion, cognition, experience, and understanding become integrated in learning in drama, and in some cases the drama work encouraged them to take action in their daily lives. The introspective relaxation exercises at the beginning and end of the workshops were experienced as especially intensifying with regard to personal and emotional reflection and engagement.

The whole process drama workshop was found to be emotionally engaging and promoted self-reflection among the participants. The immense global challenges evoked feelings of helplessness. The workshop "made me think about my own attitude towards protecting nature ... I think how little I can do and do." Some participants even expressed inner resistance, a wish not to think about these problems:

> The topic is important but oppressive in many ways. The still image we made remained in my thoughts. Don't hear, don't see, don't say. Somehow, I would like to creep into the still image and stay there, not be aware of this.

Becoming aware of one's inner resistance or denial is a crucial step towards increased knowledge, insight, and the motivation to act.

The participants expressed eco-anxiety, feeling powerless and numb in front of the overwhelming global sustainability challenges. The emotional perspective is central to climate change education and the participants' notions confirm understanding of how drama enables participants to address evolving emotions by distancing (cf. the discussion of drama and emotions in sustainability education in Österlind, 2012, and the discussion of drama in dealing with eco-anxiety in (Lehtonen & Pihkala, 2020). The participants reflected (D3) on how sharing their thoughts and working with these issues together with other people helped them to cope with their eco-anxiety. One wrote (D5) about how she became more hopeful by sharing her concerns with other people, creating scenes about the future, and nurturing a sense of humor during the drama practice. The participants reflected on how they can cope with eco-anxiety through drama by distancing, using humor as a coping strategy to distance themselves from the issues instead of turning to denial. They discussed (D3) how, in drama, it is possible to overcome emotional resistance when introducing the issue in the form of a narrative—distancing oneself, dealing with the issue, and evoking emotions in a fiction. They found (D3) being in the forest (WS2) comforting after dealing with the oppressive questions related to global aspects in WS1.

Becoming Connected in a Forest

The experiences of being in the forest, expressed directly afterwards in free reflective writings, were analyzed with content analysis. The results were condensed and represented in a poem. This form of presenting data was chosen as the workshop included a practice described as non-verbal poetry. Furthermore, several free writings were poetic or included rhetorical sentences, questions, or statements, and when reading them several times they seemed to be in dialogue with each other. The poem representing the participants' experiences was created by one of the authors after reading and analyzing the content of the participants' reflective writings (D2) several times.

The themes represented in the poem that emerged in the content analysis were: (a) a sensuous, embodied encounter with the forest and the spring, (b) a reflection on the past and present, (c) a fairytale or mysterious encounter with a person not physically present, (d) a confrontation with and acceptance of oneself and one's personal emotions, (e) overcoming a feeling of strangeness, (f) respecting nature and interdependence, and (g) a sense of holistic interconnectedness. The lines of the poem are nearly literal quotations created from the participants' writings. The numbers at the end of each line refer to specific essays in which the thought surfaced or the ideas were apparent, and they highlight the shared points of view.

"Alone, but together"

Today, I met spring.
In peace, but there was no silence. (5, 8, 10)

The forest called me. (1)
- I am sorry, if I am disturbing you.
But the forest replied:
- Look, I have plenty of room.

On the bridge between past and present (1, 2)
I met my mother as a fairy. (2)

Comfort and joy.
I am here myself the way I am and I am present. (6, 9, 10, 11, 12, 14)

- Why can't I live like a child? (11, 13)
Feeling strange but enjoying.
- Couldn't I do things in my own way? (12, 13)

Nature's work of art (5, 7)
A Symbiosis, a connection between a tree, moss, a stone, and an animal.
- How many passers-by have seen and wondered at this? (5, 7)

I am a part of the whole. (1, 7, 12, 13, 14)
Alone, but together. (1, 7, 14)

The poem illustrates the experiences of the people wandering in the forest with open senses, self-reflecting on their memories and evoking emotions, and being part of the whole. The participants found it easy to be in the forest; they felt released from self-evaluation, which people need to cope with in drama and in life in general. In the poem, the different aspects of knowing are visible. The experiences in the forest were both individual and collective, and the sense of interconnectedness among the participants and with nature seemed to be strong. The experiences also evoked deep reflection and understanding of being a part of the whole eco-social system. New experiences and meaning-makings had occurred through non-verbal dialogues with the other participants and through the preparation of and participation in the performances in the forest. The drama practice called for creative collaboration, which in itself was engaging and empowering. Joining the creative flow of collaboration in drama, based on intersubjectivity, generated experiences of joy, flow, and attunement to the collective

thinking, which created a strong sense of interconnectedness. The unusual context of doing drama in a forest seemed to strengthen these experiences. The nonverbal exercises at the beginning of the workshop strengthened embodied awareness and opened the senses to listen to oneself and nature. The embodiment and self-reflexivity of this practice enabled intuitive and creative encounters with imagination and childhood memories as well as strengthened emotional reflection and engagement.

The poem represents drama as an embodied, affective, and collaborative form of artistic knowing and illustrates how the sense of connectedness with other people and the forest emerged. The poem is also an example of how individual reflections on participation experiences can become transformed into a collective, which is a common principle of collective creation in drama.

Reflection through Making Embodied Still Images

Collaborative and embodied reflection, a typical form of learning in drama, is illustrated below with two still images (see e.g. Boal, 1995). The practice of making still images of learning and reflection in action occurs through the transformation of an individual idea into embodied expressions. This can be done either one by one or in small or large groups. While preparing, performing, and watching still images, the participants reflect on how their own personal experiences are related to others' experiences.

While creating the still image, the participants might take on a role or choose to express their own personal thinking, which is typical for drama. The participants have the option to act in a role as well as behind the role, so they do not need to reveal their personal thinking. As acting in drama is based on embodied action in a fictive mode, the attitudes and opinions in roles can also be mixed and partly unconscious (Slade, 1995). In the practice of making still images, learning and reflection in action occurs through the transformation of individual ideas into an embodied expression. The images are shared by presenting them in turns to each other. As the focus in this practice is on embodied expression and reflection, this intensifies the embodied aspect when watching the still images other groups have made.

The whole process of self-reflection, expression, and the interpretation of others' expressions is based on intersubjective dialogue and reflection and happens parallel to the intuitive "I can" and the cognitive "I think" modes (see more e.g. Tanaka, 2013; Viirret, 2018). For example, when a small group that works well together is given a task to make a still image of the theme, the dialogue may start by participants trying different positions and stances without words. In this kind of working—and especially if the group is acting out a scene on the theme, their impressions of others' positions (and words) cause their own positions to change, mostly in the "I can" mode. Naturally the "I think" mode intertwines with the "I can" mode during the

dialogue. The intercorporeal, dialogical, and reflective intersubjectivity affects both making and watching drama (Viirret, 2018, p.162).

Below, we have chosen to present the discussions and preparations related to two of the still images to serve as examples of the students' work. The first example, Figure 2, illustrates different aspects appearing in the group discussions: self-reflection, a critical pedagogical perspective, and a societal perspective. The transformation from the themes of the reflective discussion into a joint still image is also illustrated in Figure 2. The second example (Figure 3, which is presented later) is then discussed and presents the participants' perspectives on the course's theme, "Social Responses to Sustainability." Both of these still images were created during Workshop 3, but the technique was used in other workshops as well.

Figure 2. Different aspects of DESF.

Before making the still image presented in Figure 2, the participants had done free reflective writing about their experiences in the forest. After that, the participants were divided into three groups and asked to share and reflect on their experiences in the forest and in the

workshop on global challenges. Finally, students were tasked with making a still image based on the discussions about the two previous workshops.

In the discussion among one group, three perspectives emerged in relation to the task: a professional/pedagogical perspective on how group members could use these experiences in their own work, a personal perspective on how they themselves had experienced the practice, and an ethical–moral perspective on what is right or wrong to do in the forest (such as picking up moss or playing with sticks and cones). WS1 was described as: "easy to use" and "I didn't feel guilty about the theme." From the pedagogical perspective, group members talked about how well-functioning the workshop was, for what target group the workshop would be appropriate, and how to avoid possible anxiety about the huge challenge of altering non-desirable development as well as reflecting upon what parts of the workshop could have been organized differently. About WS2, they reflected on how the practice in the forest had evoked memories of childhood. In addition, a critical perspective on the focus of WS2 was also brought up: the danger of associating sustainability education with only certain kinds of "back to nature" activities that are not regarded as relevant to all fields or target groups.

After the two-part discussions, the group quickly agreed on the content and form of their still image. They didn't negotiate much about the content—each one of them just stepped into the picture expressing their own view. However, in the still image, the participants seem to have contact with each other and the theme through embodied emotional expression. When the participants created the still images, they recalled through bodily expression their memories of WS1 or WS2. The students were also asked to formulate one thought in a few words and to "think aloud," which prompted them to say the thought when asked by the teacher while keeping their posture. After a short discussion, this group ended up with the still image and "thinking aloud" sentences seen in Figure 2.

Upon further analysis, the participants in the picture seem to be engaged in two dialogues. In the picture, according to the participants' discussions before making their image, the one lying on the floor is recalling her experience of being in the forest like in her childhood. The other one, in a squatting position, seems to be in dialogue with her critical reflection that sustainability education is not only about hugging a tree. The two standing people seem to be in dialogue as well. The one standing on the left aims to call people to action. In the discussion, she reflected on how difficult it is to motivate teachers to change or teach differently. The last individual is either self-reflecting or thinking about whether she should act or not.

The interaction in the still image can be described as intercorporeal (Merleau-Ponty, 1945), which is a very typical form of interaction in drama practices. The individuals are able to

share each other's understandings and experiences though perception and dialogue—but not the exact content of the inner individual experiences based on intersubjectivity[1] (e.g. Ammaniti & Gallese, 2014; see also Viirret, 2018). The still image represents essential aspects of climate change education, where drama has value as an approach to draw attention to these essentials: self-reflection, connection with self and memories, critical reflection, emotional engagement, people engaged in dialogue, embodied empowerment, and the practicing of action.

Varying Aspects of Sustainability Issues

The second picture (Figure 3) presented here was chosen because the still image represents the central dimension of DESF—relations between the personal and the collective, me and others. Preparing and watching this still image enabled a deeper understanding of the variety of responses and attitudes related to climate change and of approaches to nature. The still image was created by a small group after their collective reflection on their participatory experiences. In their still image, they illustrate their discussion on various attitudes towards sustainability issues, with "think aloud" comments added.

[1] Merleau-Ponty (1945, 159-162) describes how interaction in the lifeworld is primarily intercorporeal, on the basis of "I can" (and not of "I think"). This is the basis for intersubjectivity, in which the dimensions of self, other and world are interconnected (Zahavi, 2012).

Figure 3. Still image – reflecting on the personal and the other, the relations between individual and social in DESF.

According to their discussion before making their still image, the first person on the left is saying that drama allows for exploration of a wider time perspective on sustainability dilemmas: "looking both to the past and to the future." All the others seem to put forward a different aspect of the relation between the personal and the collective, which is very central in sustainability education. The second person on the left reflects on "being alone, but together," having space for her own thoughts parallel to being part of a group. The third person on the left reflects on how the drama practice changed her personal zone in the forest to become a collective space and how she has a strong feeling of ownership with her own forest at home. The first person on the right reflects upon how drama brings people together and connects people, enabling collective encounters with different issues, and is thus empowering. The second person on the right reflected on how she explored the role of "a bad person" in the roleplay. She played the role of a "free rider," reflecting a careless attitude

towards sustainability issues and considered it an eye-opening experience: “I don’t know what is happening, but I am loving it.”

Relating one’s personal response to the responses of others deepens self-awareness regarding the actual theme when watching and making still images. Reflection on this still image can contribute to an increased awareness of the prevailing social responses to sustainability issues. According to Norgaard (2011) and Vogel (2015), it is very relevant to become aware of how we socially construct our responses to climate change and how our emotional response is socially organized. People need to collaborate with each other across different backgrounds and with other views on sustainability and varying relationships to nature in order to combat climate change and other sustainability challenges. Understanding other people’s points of view is needed to enable varying collective responses.

Learning to Act Differently through Drama

Both workshops seemed to promote motivation to act differently for the environment, as several students also expressed an increasing willingness to do something related to their experiences even though this aspect was not included in their assignment. Most of the students wrote afterwards that the workshops had influenced them even after the course in a way that they wanted to do more for the environment: "I was more aware of what I need to change in my lifestyle for the environment. I also felt more motivated to do it." Some participants reflected on how every person is part of a bigger pattern. One described this by using a metaphor: “a big river consists of small streams.” In their reflective essays, students wrote about their personal impact, such as how they can make an impact in the context of their daily, personal life and in their work as educators. For example, students stated: “Impressive and effective participation experiences have influenced my thinking and action in daily life and provoked more eco-friendly decision-making—more recycling, buying second-hand, and more going into nature.”; and “I want to act as a positive role-model for my students and my own teenagers.” According to the participants, drama as collaborative arts-based learning can be an effective tool for environmental and sustainability education on many levels.

Conclusions

The aim of this article was to produce a multifaceted understanding of the potential of drama in transformative learning for ESF, sustainability competences (Wals, 2015), and awareness of interconnectedness (Lehtonen et al., 2018). This research was based on a case study, a university course on drama in education for a sustainable future, which was conducted for students who were familiar with, or professionals in, working through drama. Different kinds of qualitative data were collected during three workshops, which were combined to create a multifaceted picture of the potential of drama in ESF. The results show that drama promotes a

sense and awareness of interconnectedness and transformative learning, resulting in the capacity to know, to critique, to change, to be and to care (see Wals, 2015). The participants reflected on their participation experiences and the potentiality of drama by making drama. Using drama as a research method provided a deeper understanding of the challenges of climate change education and its own potential as an embodied, emotionally engaging approach. Our findings on the participation experiences are presented in the condensed form of a poem, which provides an open space for both objective and subjective interpretations and for further personal meaning-making.

DESF worked very well with this group of students, who had previous experience with drama. It provoked significant learning experiences, and different dimensions of transformative learning were apparent. The participants considered drama to be an effective tool for working through narratives, creating distance and humor in this emotionally challenging theme. According to the participants' reflections, drama was regarded as a powerful tool, as the participation experiences seemed to have had an impact on the participants' behavior and attitudes, even after the course.

In this case, DESF reflective learning in collective, creative interaction through drama seemed to promote sustainability competences and transformative learning to know, critique, change, be, and care. The human conditions of interdependence and collaboration were explored and manifested through drama practices. In the roleplay, the perspectives considering the human dimension of sustainability issues became clear when the participants critically reflected on the prevailing responses to climate change. Drama practices created frames for embodied, creative, and cognitive dialogues between people with different perspectives. Transformative learning occurred through cognitive, emotional, and embodied reflection in parallel with personal and collective reflection in the creative, joint interaction. Intensified embodied awareness and emotional engagement in creative collaboration, thus *being differently* in drama, seemed to promote a deeper understanding and motivation to act differently.

From the perspective of interconnectedness, DESF made it possible to dismantle and integrate the dichotomies of art and science, the individual and social, nature and culture, the local and global, reason and emotions, and mind and body. In the roleplay, the human, eco-social aspects of global issues were explored in a local context through narratives created by the participants. This action promoted the widening of meaning perspectives and the emotional, cultural, and self-awareness of the interconnectedness regarding sustainability issues. Creative and critical thinking was applied when the participants explored the options for change during the roleplay. This offered a deeper understanding of different stakeholders' perspectives and behavior, eco-anxiety, and inner resistance, and provided several reasons for why people may not want to know more about sustainability issues. However, the participants raised the

criticism that the drama provoked stereotypical thinking since there was no time to prepare for or collectively reflect on individual, multifaceted characters for the roles. The workshop in the forest promoted an embodied awareness of interconnectedness with the forest that was collectively explored through non-verbal performative dialogues among the participants.

The examples of still images (Figures 2. and 3.) illustrate the embodied, dialogical, experiential knowing that the drama workshops promoted. In this practice, individual reflection in action was connected with others' various ideas, when after the self-reflection and collective discussion the participants created an embodied position while watching others' actions. Thus, students became aware of their own and others' intentions and ideas through reflection on actions that integrated cognition, emotion, and bodily awareness. Figure 4 below illustrates how the integration of creative, embodied, emotional and cognitive learning in intersubjective dialogue in drama promotes transformative learning. This kind of being differently, intensified embodied awareness, enabled learning to know and critique, learning to act and change, and learning to be and care. Our tentative conclusion is that the integration of embodiment, emotions, and cognition, and the intertwining of the individual and collective in creative collaboration contributed significantly to an increased awareness of interconnectedness among the participants.

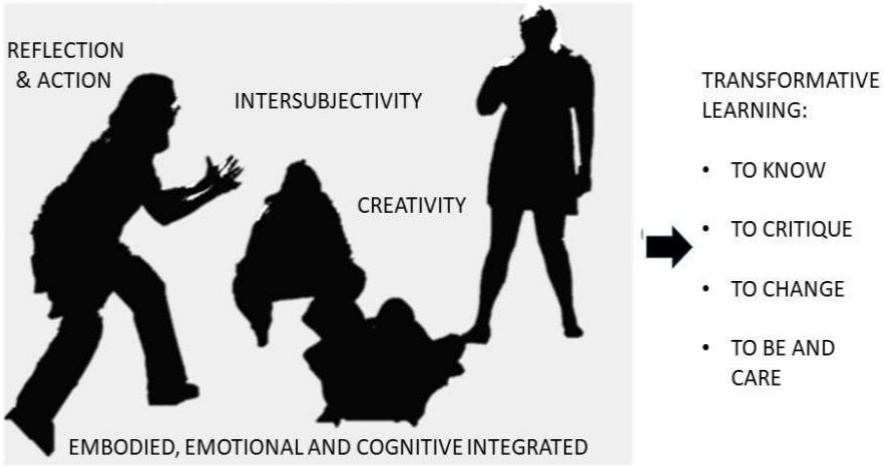

Figure 4. Transformative, interconnected learning in drama.

In facing the reality of climate change, we acutely need to unleash our full human potential and engage people in taking part in the creation of a more sustainable world, for instance by finding ways to use DESF more efficiently, or as one student put it: "*We just need to explore the strength of imagination and discover the possibilities, and try out what works!*"

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