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The power of artistic practices in ESD

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ABSTRACT

There exist already many practical projects that bring together Education for sustainable development (ESD) and artistic practices. They tie in with the transformative potential and the power that are attributed to the field of art in dealing with issues in the context of sustainable development. However, it is currently not clear how this potential is to be assessed in the field of formal education and especially in primary schools. This article addresses this issue on a theoretical level. It discusses how the inclusion of artistic practices in ESD can promote specific competences to help shape sustainable development and thus contribute to the overall goals of education. This incorporation takes place along four central areas, namely, development of vision, multi-perspectivity, spirit of inquiry and openness, which are central to both the educational concept of ESD and an artistic approach.

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Introduction

Society in the twenty-first century faces complex challenges and questions regarding a sustainable future. With a vision of shaping a sustainable society, the United Nations has defined the guiding principle of sustainable development and anchored it in political processes (e.g. United Nations 1987, 2015). This guiding principle aims to drive societal development that 'seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future' (United Nations 1987, para. 49). Societal change must be judged by the yardstick of whether it is compatible with the goals of a good life for all now and in the future, i.e. by applying the criterion of intergenerational and intragenerational justice. With those objectives in mind, decisions and actions which help drive sustainability must take into account all three of the principal aspects of sustainability, namely the economic, the ecological and the social (Kopfmüller et al. 2001; United Nations 1987). Thus, social development must be based on the guiding principle of promoting sustainability.

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In the current discussions on sustainability, the field of art plays an important role, as it is credited with enormous transformative potential and power, and is supposed to open up intriguing opportunities for reflection on sustainable development (e.g. Heras et al. 2021; Kagan 2019; Shrivastava et al. 2012; for concrete implementation examples, see e.g. Helicon n.d.; Neal 2015). But art is not a precisely defined concept, but rather a concept cloud that is based on a wide variety of different perceptions. Before we can go into more detail about the role of art in connection with sustainable development, we need to define our concept of art in this context. It is not so much a question of a specific art genre, art form or work of art. Rather, an understanding of art is assumed that implies an attitude that deals critically with social issues. The focus is on artistic practices (see also section 'Artistic practices') that are inspired by specific artistic positions, which go hand in hand with ways of thinking and working that focus on performative processes and in particular also include the stubborn and untamed aspects of art production and reception (Maset 2002; Sturm 2011). In this way, artistic practices offer opportunities to explore boundaries, shift perspectives, arouse emotions and stimulate processes of change, as attributed to art in the context of sustainability processes. They can also be used to make sustainability issues more visible and raise awareness. In artistic practices, participatory processes, social interaction, and intercultural approaches often play an important role. Likewise, public and political players can also be stimulated and inspired to take individual and collective responsibility in the area of sustainable development (Bentz et al. 2022; Chandler et al. 2020; Crossick and Kaszynska 2016; Deutscher Kulturrat 2019; Heras et al. 2021).

In the context of sustainable development, education is referred to as a key element in informal, non-formal and formal settings. According to the 2030 Agenda for Sustainable Development, Education for Sustainable Development (ESD) should make a concrete contribution to 'ensure that all learners acquire the knowledge and skills needed to promote sustainable development' (United Nations 2015, p. 17). The UN Decade for ESD (UNESCO 2005), the subsequent Global Action Programme on ESD (UNESCO 2016) and the ESD for 2030 Roadmap (UNESCO 2020) have been and are being promoted around the world and their significance has been clearly emphasized (UNESCO 2021). When viewed through the lens of sustainable development, education has a variety of key functions (Künzli David and Bertschy 2018; Künzli David and Kaufmann-Hayoz 2008). In primary education, the main focus is on the function of teaching specific competences for sustainable development. The aim here is to contribute to the overarching goals of education (see Künzli David and Bertschy 2018) while at the same time enabling people to reflect on societal development and their own actions in a global context and to take decisions with present and future sustainability in mind.

The global interrelationships are often complex, and questions about sustainable development are not easy to answer. Handling such questions and helping learners to develop the ability to form opinions requires in-depth knowledge and skills from different subject areas, and different perspectives and consideration processes must be brought to bear. In terms of education theory, ESD is somewhat tangential to the subject matter, and calls for an interdisciplinary approach involving various different fields, thought processes and approaches (Annan-Diab and Molinari 2017; Barth and Godemann 2010; Dale and Newman 2005). Regarding teaching, the inclusion of certain subjects seems obvious. Based on topics related to sustainable development such as natural resource management, emissions or inequality, the reference to science subjects is particularly obvious. Language subjects as well as generic competences (e.g. leading discussions and presenting and justifying arguments) are also central in the context of ESD and clearly offer points of reference. Given that ESD is interdisciplinary in terms of education theory, in addition to these, art and design and the associated approaches and methods need to be brought to bear, as conduits to an aesthetic approach to the world (Brenne 2019; Dressler 2013). In the concept of aesthetic approach, both sensual-experiential, bodily-performative or artistic production and reception are equally considered. To date, there has not been much work on the theoretical foundations of why, in the context of ESD, an

aesthetic approach to the world is important, and there is a gap in the literature when it comes to systematic analysis of how such an approach to the world holds potential for ESD. Moreover, to date, there have not been many ESD implementations oriented to an aesthetic approach to the world. Educational materials and ESD practical examples for primary schools are mainly geared to natural science (e.g. Wulfmeyer 2020). It is true that we are seeing increasing efforts to interweave sustainability, art, and education. However, these tend to be projects that begin with art as a basis for focusing on sustainability topics (see, for example, Azmat et al. 2018; Braun-Wanke and Ebel 2020; Ebel 2020; Haug 2021; Osnes 2017; Sippl and Rauscher 2022). Moreover, such projects tend to involve out-of-school learning (informal and non-formal), without much focus on formal education, although great potential is seen here, especially in working with young children (Caiman et al. 2022; Caiman and Lundegård 2018; Chapman and O’Gorman 2022). Among projects within formal education (e.g. Å-zsoy 2016; Hofverberg 2020), there is usually no direct link to the central educational objective of ESD, namely to impart specific competences to help shape sustainable development. Only few studies with this focus are available. For example, Caiman and colleagues were able to demonstrate the importance of creative processes for addressing sustainability issues in preschool children (Caiman et al. 2022). The possibilities of different approaches for ESD are elaborated in another work, also considering pre-school and it was shown that the role of the teacher is crucial for a ‘multidimensional science education’ (Sundberg et al. 2019, p. 358) to succeed. Here, however, the focus remains strongly on the science subjects. Bentz and O’Brien were able to demonstrate the transformative potential of art for climate change issues in their work at high school level in Portugal (Bentz 2020; Bentz and O’Brien 2019).

Starting from the power attributed to art in the field of sustainability, the purpose of this paper is therefore to transfer these considerations to ESD in a formal educational setting, in particular primary schools, and to discuss them theoretically. The paper addresses how, in view of the interdisciplinary nature of ESD, an aesthetic approach to the world through art can be usefully incorporated *via* artistic practices, and how the subject matter in the context of sustainable development can be approached both artistically and discursively. This theoretical discussion serves as the basis for a research project in which the coming together of the two concepts in the primary school context is empirically investigated.

Section Core elements of ESD and artistic practices covers some of the fundamentals of an ESD approach, and key aspects of artistic practices. Options for incorporating artistic practices into ESD in order to encourage specific competences are also emphasized. Section The power of artistic practices in ESD discusses four key aspects: openness, spirit of inquiry, multi-perspectivity, and development of vision, and the various potentialities in those areas. Section Conclusion provides a summary and brief outlook.

Core elements of ESD and artistic practices

This section examines the constituent elements of ESD as a concept and key characteristics of artistic practices and their power in ESD.

Education for sustainable development

The fundamental educational theories behind ESD are based on ideas regarding sustainable development set forth by the United Nations (see Introduction). For educational institutions, one of the main tasks is to impart specific competencies with regard to sustainable development. What this entails is the ability to help shape future societal development through independent decisions relating to sustainability, and to participate in sustainability processes (De Haan 2008; Künzli David and Bertschy 2018; Künzli David and Kaufmann-Hayoz 2008; Marchand

2015; Rieckmann 2020). ESD is not giving guidance ‘to the solving of entrenched sustainable development problems’ (Hamborg 2017, p. 23, *translation by the authors*). Instead, as part of ESD, learners should be empowered to form their own opinions and critically reflect on their own patterns of thought and action (Künzli David and Bertschy 2018) so that they can arrive at their own independent positions and participate in societal transformation processes in the spirit of transformative learning (Singer-Brodowski 2016; Sterling 2010).

ESD focuses on issues of relevance to society as a whole. In dealing with such complex questions, it is important to consider one’s own actions, taking into account the current and future impact. In particular, thinking in a future-oriented way means thinking in terms of diverse futures, and exploring unquestioned assumptions and perspectives about the present so as to develop a vision of how society might develop in the direction of sustainability. In other words, it is not a question of halting progress or averting disasters, but rather of developing plans for the future (Di Giulio 2004).

With those objectives in mind, there are three defined didactic principles in ESD: networked learning, being participation-oriented, and being vision-oriented. In ESD, understanding complex interrelationships requires knowledge of content, as well as an awareness of the different ways of thinking and working across different fields. Networked learning involves developing that form of learning in class from a variety of perspectives and through contextualization, to encourage networked thinking. The objective is to draw attention to links between local and global conditions, and between present and future, as well as ecological, economic and socio-cultural dimensions (Künzli David 2007; Künzli David and Bertschy 2008; Overwien 2013; Rieckmann 2018). The principle of being participation-oriented relates to various aspects of social learning and coexistence in the school. It also relates to coexistence in society and the development of participation skills. Being vision-oriented involves the idea of access to opportunity and optimism about future development. As mentioned above with regard to being future-oriented, being able to think about a desirable future can also help in the process of developing vision (Künzli David and Bertschy 2008).

Artistic practices

The term *artistic practices* is used to refer to a wide range of ways of thinking and working. This does not include any creative means, but a reference to an artistic-critical attitude must be given. By critical, we mean that current topics are artistically transformed into visibility and thus offer the possibility of an examination and negotiation with them. Such artistic practices are not primarily discursive or geared to the rational and reality, and instead make use of materials that can be experienced *via* the senses and physical awareness and utilize aesthetic components and the power of imagination as key elements. Artistic practices tend to be open-ended and may involve social criticism, can stimulate the imagination and creative action. Concrete visual, auditory or haptic experiences can be the starting point for as yet unstructured imagining or further thinking. This provides space for emotional experience rendered *via* images, movement, or music, which are ambiguous and readable in a variety of ways. The focus is on open design processes and different ways of reading, whereby the artistic practices often elude an unambiguous statement and open up the opportunity for reflection beyond language. In this way, they can also provoke moments of irritation, surprises and associated emotions, which create discussion potential for social challenges (e.g. Maset 2002; Pazzini et al. 2010; Sturm 2011).

In artistic processes, the approach tends not to be systematic or standardized. Situational and artistic exploration may give rise to processes that may be somewhat meandering (Peters 2013). *via* encounters with art, and with the help of art, reflexive and critical attitudes have the chance to develop, and internal and external images may grow, thereby helping in the task of

critically questioning seemingly pre-established categories, social relationships, and relationships of inclusion and exclusion (Mörsch 2017; Sternfeld 2005) and thus cultivating a sense of possibility (Klingovsky and Pfründer 2017; Pfründer and Jörg 2019). The resulting experiential possibilities create a starting point for thinking about societal realities and challenges (Kröner 2013), thereby opening up possibilities to reflect on societal values and norms (Costa and Drechsel 2020).

The power of artistic practices in ESD

As noted above, ESD is oriented to complex societal issues and aims to help learners form opinions within the context of sustainable development. When dealing with questions about sustainability that come up in class, it is important to have a good understanding of the complex interrelationships involved, and to be able to position oneself as having the necessary knowledge and conviction. That calls for a coherent knowledge of specific subject matter which may be structured with multiple perspectives and interdependencies and may involve approaches and methodologies from different areas. With an eye on the future, it is also important to think in terms of a variety of possible futures and to create visions for societal development towards sustainability. ESD clearly must be conceived as having interdisciplinary educational foundations. To do justice to that aspiration and address it seriously, artistic practices need to be incorporated into an ESD. Wagner (2020) describes the potential of artistic practices in ESD as follows:

Competencies such as the ability to imagine, to design creatively, to perceive empathetically, to interpret and design aesthetic effects, to perceive them with all the senses, or to consciously transform and express experiences or enjoy them aesthetically, can become productive in a combative way as artistic confrontations (Wagner 2020, p. 20, *translation by the authors*).

Through the inclusion of artistic practices in ESD, critical artistic positions flow in and thus new approaches can be opened. Existing things can be rethought and the familiar critically questioned, as art also points out uncomfortable things. However, the approach in the school context should be designed in such a way that it is above all also about hopeful perspectives that can stimulate engagement. Thus, the specific elements of artistic practices can help ESD open up a wide range of educational moments.

Based on the explanations on ESD and artistic practices, we identify at least four areas in which the main objectives and principles of ESD and the specific elements of artistic practices interact and usefully complement each other: development of vision, multi-perspectivity, spirit of inquiry, and openness. Below, we discuss how the innovative capacity associated with artistic practices can manifest itself in ESD *via* these four areas, and how to help create opportunities to engender educational processes.

Development of vision

ESD is forward-looking and geared to the guiding principle of a good future for all; ESD lessons should therefore duly take into account superordinate questions about desirable models for the future, based on the didactic principle of orientation of vision (Künzli David and Bertschy 2008). This can help enable learners to address various different possible visions of the future. Creativity, fantasy, and imagination, as well as alienation or irritation (e.g. through performative means, unfamiliar materials, or changing known things) can open new approaches and unthought perspective for learners. This can help them to envision models for the future and can stimulate reflection (e.g. Maset 2002; Sternfeld 2005). This can also open up further possibilities, as according to Wimmer (2007) artistic approaches 'can fulfil an important task as a critical collective where the goal is not to formulate possible future scenarios but rather to question and challenge

them. The methods can be playful and non-exclusive, creating a new openness to alternative ways of viewing' (Wimmer 2007, p. 31, *translation by the authors*). Artistic practices can constitute an attempt to undermine certainties, as a way to imagine the hitherto unimaginable as well as to encourage development of innovative visions of a desirable future. Pupils can be encouraged, in diverse ways and using different senses, to develop their own and shared plans for the future in ways that go beyond habitual patterns of thought and to portray them in a creative manner. By processing with unthought and unfamiliar perspectives and discussing and working through them in the classroom, they can also be encouraged to deal with contradictory realities. Through artistic practices, they learn that something could be completely different from what they thought and experience emotions that can arise when dealing with controversial sustainability topics. This way of dealing with contradictions is a central aspect of ESD in order to arrive at independent positions and to participate in consideration processes regarding social transformation processes.

Multi-perspectivity

Multi-perspectivity and a body of knowledge based on that approach are important aspects of dealing with the complex questions that arise in an ESD in class, so that models for the future can be developed. Based on the didactic principle of networked learning, ESD postulates that interconnections and interdependencies need to be duly recognized. Different perspectives, and ways of dealing with contradictory perspectives, need to be acquired so that learners can arrive at their own well-founded assessments. Contextual knowledge can be conveyed by emphasizing connections, relationships and causalities between different knowledge components and perspectives (Barth 2017; Künzli David and Bertschy 2008). What artistic practices can do is introduce perspectives that go beyond mere factual knowledge, by focusing instead on fantasies, stories, and visions beyond the realm of the familiar and known, and by encouraging learners to question the familiar (Sturm 2011). Assessing art that can be interpreted in ambiguous ways can be a new and fruitful way to present a topic (Mörsch 2017). Artistic practices can encourage learners to cultivate new and unfamiliar ways of seeing and to question perspectives and positions in the discussion, thereby introducing a multiplicity of perspectives and promoting networked learning.

Spirit of inquiry

ESD and the question of a desirable future for all go hand in hand with a spirit of inquiry. As part of ESD, in line with the didactic principle of orientation of vision, pupils should be presented with an optimistic approach to social developments and plans for the future. Nonetheless, this does not mean that societal problems should be ignored (Künzli David and Bertschy 2008). Given the overarching objective of helping learners develop the ability to form opinions, as part of ESD it is important to develop a well-founded, albeit provisional, answer to the question of what constitutes a desirable future. The inclusion of artistic practices provides additional opportunities in ESD teaching, as they can be a driving force that encourages questioning of existing answers and thereby helps ensure that learner's preliminary answers undergo critical examination. This helps develop critical thinking within ESD, as a pathway to developing the ability to form opinions. One of the functions of art is to examine the invisible and the unsayable in the context of familiar (power) structures (Settele and Mörsch 2012; Sternfeld 2005); artistic practices can therefore provide opportunities for dismantling familiar patterns of thought and disrupt tacit assumptions about everyday knowledge, by asking certain questions. Critical assessment through artistic practices in the form of disruptive moments can stimulate questions that encourage critical

examination of basic assumptions and ways in which they are socially constructed. That, in turn, can provide a basis and opportunity for ideas about our current and future society and world and can build an awareness of one's own actions as part of sustainable development.

Openness

To help pupils achieve the goal of being able to shape the future, in ESD they should be encouraged to develop a range of different ways of seeing and invited to adjust their perspective, based on the spirit of inquiry. For example, in ESD a lesson might try to have students come up with well-reasoned answers to questions about or blueprints for a desirable future. One should not assume that there are clear answers to such questions, and therefore it is unlikely that there is a right or wrong answer. The aim should be to encourage the ability to form independent opinions. As part of an unfinished process, questions and supposedly fixed answers should always be aligned with prevailing social circumstances and established knowledge based on them. Future developments and provisional answers should be critically questioned with regard to their current and future validity (Künzli David and Bertschy 2018). An open attitude to outcomes is inherent to ESD, and the inclusion of artistic practices is a way to reemphasize that openness. Artistic practices require an inquiring, open-ended approach, and revolve around the unknown and unpredictable (Sturm 2011). Along with this open attitude to outcomes, a situational approach, experimentalism and experientialism are also crucial aspects (Brenne 2019; Peez 2013). This creates various useful avenues in ESD, by opening up new ways of thinking and working *via* artistic practices, by strengthening creativity and the imagination, by breaking down boundaries in thought patterns, and by assisting in the search for new and unimagined solutions.

Conclusion

In this paper, we have discussed some of the theory and concepts behind artistic practices in ESD and their power, including interdisciplinary aspects. We have also looked at ways to integrate artistic practices into ESD, to include an aesthetic approach to the world. We have discussed four key areas – development of vision, multi-perspectivity, spirit of inquiry and openness – and we have shown on a theoretical level the potential of incorporating artistic practices in ESD and the related issues. These potentials should definitely be further explored and empirically underpinned. In particular, subject matter can be approached with artistic stubbornness in a pictorial, sound-based or performative manner and tackled in class artistically as well as discursively. The assumption is that this type of interplay as part of ESD can open up new approaches to and spaces for educational processes, and that pupils will be better enabled to help shape the future. This reflects that fact that art is seen as having growing potential in ESD as part of formal education (e.g. Deutscher Kulturrat 2019; UNESCO 1998).

It is also worth pointing out that the conceptual principles discussed here are the basis for the ongoing research project *Garten bildet: BNE und Kunstvermittlung im Dialog* (Garden educates: ESD and art education in dialogue)¹. Among other things, the project highlights potential areas of interplay between ESD and art education, *via* an iterative process of theoretical foundations, practical experimentation, and reflection. The goal is to develop ideas for successful teaching in which the two areas and their constituent elements are fruitfully combined. To accomplish that, interdisciplinary and trans-disciplinary collaborative efforts are in progress, and scholarly support is being provided for the practical implementations. In qualitative interviews, teachers and students will be asked about their perception of the lessons and how they deal with them. This can be used to show how ESD teaching with artistic practices can be

implemented in formal education at primary level and how the assumed potentials actually work.

Note

1. <https://www.fhnw.ch/ph/realexperimente> [accessed 7 March 2023]

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