Sustainability Stories to Encounter Competences for Sustainability

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Abstract

We communicate, relate, educate and make our world meaningful through stories. Stories are integrated in and are a part of every sustainability issue. In this article, we develop the concept of sustainability stories, and how they can be assessed and developed to correspond with the intentions of education for sustainable development (ESD). Literature shows that valued competences such as action competence, systems perspectives, student engagement and critical reflection have difficulties when it comes to informing educational practices in profound ways. In this article, we argue for the use of sustainability stories as an educational strategy to overcome this problem. Here the didactical tool ecolocigal, pluralism, organisations, social, economic and, agents (EPOSEA) aids teachers in enhancing their ESD classroom activities as well as providing a tool for co-producing sustainability stories. We argue for the potential of serious stories in ESD to holistically engage learners in exploring complex issues.

Keywords: Education for sustainable development, sustainability stories, competences, EPOSEA, didactical tools

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INTRODUCTION

In their book *Big World, Small Planet*, Johan Rockström and Mattias Klum (2015, p. 11) argue that ‘The world needs a new narrative—a positive story about new opportunities for humanity to thrive on our beautiful planet…’. The argument is connected to problems of expecting unlimited growth on a limited planet. Rockström and Klum’s call for a new narrative is based on the insight that the way we organize the world, the way we live, act and the stories we share, must change. Two antagonistic perspectives are tightly connected with the narratives of the industrial society. On the one hand, technological innovation is posited as a means to make the industrial society sustainable. On the other hand, the capitalist and consumerist society is seen as the root of the problem (Dauvergne, 2016; Gyberg et al., 2020). Transformative education seeks to train the students for engagement, as well as critical thinking needs to find structures, ‘for a new narrative’, that enable a critical distance in order to decide on sustainable ways forward.

At least since the 1970s education has been promoted as a lever for local as well as international change (Hopkins, 2012). However, despite the hopes of the UN Decade for Education for Sustainable Development 2005–2014, progress in implementation is still slow, especially where the goal is to turn education about sustainable development into education for sustainable development (Huckle & Wals, 2015). Partly, this comes down to a lack of supporting practical and theoretical frameworks (O’Brien et al., 2013; UNESCO et al., 2014) but also a lack of generic and hands-on tools that support teachers’ work with interdisciplinary cooperation and action competence (Nordén, 2018). This, together with research on the fragmentation of the sustainability issue, shows the need for a holistic approach (Lehtonen et al., 2018). Hence, the purpose of this article is to integrate key ESD insights, particularly the Education for Sustainable Development (ESD) competences such as action competence, systems perspectives, student engagement and critical reflection, into sustainability stories as a didactical tool in ESD and environmental and sustainability education (ESE).

CONCEPTUALIZING SUSTAINABILITY STORIES

To address this purpose, we build our theoretical foundation on two perspectives: competences for sustainability transformations and storyknowing.

Competences for Sustainability Transformations

The first theoretical perspective in this article is the well-established view that a central component in ESD is a set of competences, needed to enable the transformative and empowering education sought, regardless of subject taught (e.g., Cebrián et al., 2020; Glasser & Hirsh, 2016; Shephard et al., 2019; UNECE, 2012; Wals & Kieft, 2010). In close connection with the core of these ideas and with a direct connection to sustainability, Kevin Warburton’s thoughts on deep learning for sustainability are worth mentioning (Warburton, 2003). Deep learning entails ‘paying attention to underlying meaning. It is associated with the use of analytic skills, cross-referencing, imaginative reconstruction
and independent thinking’ (Warburton, 2003, p. 45). Following Warburton, a complex understanding and meaning is relevant, not least in education for sustainability, where integrated and holistic insight is of great importance.

For this article, we have organized this slightly varied family of competences into four areas. First, we have categorized one type of competences into the ability to apply a systems perspective to get a broader understanding of the issue at hand, including the anticipation of changes. The second, action competence, implies the ability to engage and work for desired effects. It is, however, important to distinguish what kind of action competence is considered, the moralistic or the educational. On the one hand, it aims to change the behaviour of the learners in relation to the problems to be solved. On the other hand, it aims at enabling students to engage based on critical thinking and incomplete knowledge, thus without a predefined solution (Almers, 2013; Mogensen & Schnack, 2010). Meanwhile, problematizing the openness of the educational approach, since critical thinking is heavily dependent on a specific knowledge base, the didactical tool sustainability stories follows the latter and aims to provide a transparent platform for discussing the scope of the content. The third, type of competences are identified as the competence to learn, meaning that is, being an actively engaged student, reflecting upon needed information, ethics and consequences of different alternatives. Finally, the competence and confidence to critically reflect upon one’s own knowledge and ways of being constitutes the fourth identified category. Together these mutually supportive competences are all needed to enable personal and societal transformations.

**Storyknowing**

The second theoretical perspective for this article relates to stories and how humans use stories to make sense of who we are, where we are heading and why. They also point to the challenges expected on the way there and how to deal with them. This is the case for scientific accounts as well as fiction. Environmental historian William Cronon (1992) exemplifies how scientists understand socio-environmental crisis through the frames set by different stories, simplifying human-environment relations and making them meaningful. Thus, any attempt to make sense of changes in a complex chronology involves a story with ‘a rhetorical razor that defines included and excluded, relevant and irrelevant, empowered and disempower’ (Cronon, 1992, p. 1349). The most powerful stories are those that succeed in the act of separating themselves from the category of stories. Hence, seemingly neutral scientific accounts are also stories in this sense. Given the power of stories, the ability to engage with important stories in our lives becomes a matter of empowerment. This was elegantly phrased by Salman Rushdie (1991, p. 8, Section B): ‘Those who do not have power over the story that dominates their lives, the power to retell it, rethink it, deconstruct it, joke about it, and change it as times change, truly are powerless, because they cannot think new thoughts’.

As argued by Reason and Heinemeyer (2016, p. 560), stories have a specific value since they contain ‘storyknowing’, a tacit mode of knowledge that brings in lived experience, which in turn makes a story’s explicit content seem believable or not. Thus, using storytelling as a reflexive participatory practice makes it a useful
didactical approach to make sense of complex issues (see Alterio & McDrury, 2003; Facer, 2019; Hadzigeorgiou & Judson, 2017; Jehangir, 2010).

Sustainability stories should always be in resonance with scientific understanding and thus what Lugmayr et al. (2017) call serious stories, even if they potentially include fictive elements, such as talking animals, if needed to bring in otherwise unheard perspectives and voices. However, serious stories go beyond entertainment to become tools for learning. As stories, they need to include accounts of cause and effects leading up to a present or into a future, ideas of good and evil, virtues and vices, the storyknowing that makes the narrative believable and engaging. Also, this cultural and existential dimension of stories makes them a useful tool for critical engagement with how we perceive ourselves and our world (Facer, 2019). At the same time, we must recognize stories’ potential as rhetorical tools for manipulation (Cronon, 1992).

Thinking about serious stories in the context of ESD, that is, sustainability stories, requires that our attention goes beyond the sustainability content, and adds the outlined ESD competencies, empowering individuals to reflect as well as act. Combining the insights from ESD and serious storytelling, this article proposes sustainability stories as a didactical tool, assisted by the content and connections mapping tool EPOSEA, as a common base for co-creative and integrated sustainability stories. The next section of this article addresses the EPOSEA tool’s components in relation to its contribution to ESD competences and then focuses on the interconnectedness of these components/dimensions. The third part speaks to the opportunities offered for co-created and integrated sustainability stories in sustainability teaching and learning. Finally, the article connects this to questions about using the stories to enable critical thinking in ESD.

SUSTAINABILITY STORY COMPONENTS—BROADENING THE HORIZON FOR SUSTAINABILITY DIDACTICS

A challenge to ESD is the tendency for accounts to be too sectoral, primarily focusing on just one sector of an issue (e.g., Lehtonen et al., 2018). In addition, sustainability education is something more than just a matter of content. It is also about an approach to lifelong learning that should also generate action competence (Chang et al., 2020; Nordén et al., 2018; Sund & Wickman, 2011).

The sustainability stories envisioned here require elaborated views of the relevant components to assemble into a story. Hence, the first challenge addressed is the competence to apply a systems perspective. The EPOSEA tool bridges the gap between ESE/ESD theory and educational practice by making the system perspective visible and thus creates good conditions for a holistic perspective.

Inspired by Lourdel et al. (2007), the tool consists of six dimensions providing a broad view of sustainable development. While Lourdel et al. evaluated outcomes of higher education, it is used here as a didactical tool. This mapping tool is named EPOSEA after the first letter in each of its six dimensions: environment, pluralism, organization, social, economy/technology and agents. The representation as a wheel signals the equal importance of all six spokes, or rather, dimensions (Figure 1).
The three dimensions to the right, environment, social and economy, are the well-known pillars of sustainable development that have been at the core of sustainability discussions since the United Nations report *Our Common Future* (Brundtland et al., 1987). The economy is tightly connected to production, that is, the practice of extracting and transforming resources into goods and services. Therefore, technology is included in the economic dimension to remind us about the material dimension of the economy.

The three dimensions to the left, pluralism, agents and organizations, need more description. Focusing on agency and different views, these dimensions are needed since stories that only address the three classic pillars risk static descriptions of issues and, as argued by Cronon (1992), the illusion of objective non-story. Almers (2013) shows the importance of role models to inspire action. The ambition to train action competence therefore makes it important to visualize examples of possible change, both past and present, and integrate descriptions of problems, agency, and possible solutions to include these role models. Therefore, the tool includes two dimensions needed for the drama, agents and organizations. The distinction between them is in many ways artificial, but fulfils a didactic purpose.

*Agents* are individuals who are included to draw attention to the persons who are making decisions every day, that is, everyone. This individualistic approach paves the way for the inclusion of the student. Perhaps a more suitable but longer label should

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**Figure 1** The Six Dimensions of EPOSEA

*Source: The authors.*
be *Me and other agents*. However, this individualistic perspective is problematized by *organizations*, since the agency of a person is highly affected by his/her place in a web of organizations and institutions (Meijerink & Huitema, 2010). A simple example could be the committed environmentalist working as environmental manager in a large company. Vast resources are available, but at the same time the person must operate within corporate logics.

Organization also covers the legal and political decision-making structures, that is, anywhere where agents operate in the name of something else. As such the EPOSEA tool remains open in the struggle between structural and agent-based perspectives when understanding social change. Hopefully, the distinction will spur discussions on these profoundly ideological standpoints.

*Pluralism* reminds us that things can be understood from different perspectives, where there is not necessarily a right or wrong (Öhman, 2008; Rudsberg & Öhman, 2010). Conflicts of interest relate to normative ethics (Franck & Osbeck, 2018), but also more profound questions such as the amount of risk individuals or societies should accept with climate change or when introducing new products. Pluralism also points to other perspectives that cannot even in theory be solved by science, that is, how to prioritize different temporal and spatial scales.

**Deep Understanding—Mapping the Connections**

Closely related to the challenge of too narrow a scope is the risk of fragmentation of sustainability issues (Lehtonen et al., 2018; Nordén, 2018; Pettersson, 2014). This can be due to both a lack of time and/or knowledge, or the forms of examination, but also an idea that it does not fit into the core of a subject or that it is someone else’s commitment. Therefore, the second step in the work with the EPOSEA tool is to connect the aspects in the map to show the interconnections, cause-effect, and thus develop a systems perspective (Figure 2). This also enhances the ability to explore anticipated effects from changes at one place in the system.

In practice, the process so far could look like this. In a classroom, a first 5–10 minute round of adding key words along the six dimensions, like a mind map, shows the initial associations made by an individual or group. Second, inspired by the Socratic maieutic method (Leigh, 2007; Panerai, 2013), questions are used to encourage critical thinking rather than providing answers. Thus, associations made are challenged by pointing to gaps in the map. For example, what should be in the gaps on actors and economic aspects, assuming that these are empty? Third, lines are drawn to visualize relations between aspects, preferably with a short comment on cause-effect. Continue the questioning and make sure most aspects have at least one thing that impacts upon it and one effect on another. Now, a far from complete system perspective is emerging and the view of the issue has been broadened and interconnected, based on the students’ pre-understanding. The map will also show the need for further learning.

While using the EPOSEA as a tool to assist in brainstorming around an issue in the context of sustainable development, it becomes clear that many things fit best between two or more of the six dimensions. These things are perhaps the most interesting parts of the brainstorming, since they bridge fields of knowledge and thus
make the importance of interdisciplinarity visible. However, the next and important step is to make the conceptual map quicken and come to life as a sustainability story.

CO-CREATING INTEGRATED STORIES FOR SUSTAINABILITY

Navigating the Map

Sustainability stories as a didactical tool in ESD use the content identified with the EPOSEA tool and compose a story that brings the components together. The value of stories and storytelling in learning processes is well documented in relation to sustainability (Facer, 2019; Franck & Osbeck, 2018; Hadzigeorgiou et al., 2011; Russell, 2020; Wall et al., 2019). Stories or storytelling have the potential to create a common thread in complex situations (Franck & Osbeck, 2018). Therefore, stories are used to combine the aspects in the EPOSEA map into a meaningful whole. A story must be clear on how one thing leads to the next and thus the risk of fragmentation is reduced. Also, as stories connect people to the events, it becomes easier to engage emotionally (Hadzigeorgiou & Judson, 2017). At the same time, training action competence, it is important to balance this emotional engagement with a critical distance (Almers, 2009). Storytelling also assists ethical competence, or ethical literacy (Franck & Osbeck, 2018).
Integrated sustainability stories combine important elements from environmental, economic and social dimensions of the issue into a meaningful whole that also brings in agents’ emotional engagement, leading to ethical literacy and action competence. These stories will often deal with ‘wicked problems’ that are complex, making it difficult to clearly define even what the problem really is. Therefore, it is important that the students develop a story that becomes meaningful to them. But this does not mean that anything goes. The story becomes co-created in the sense that teachers and peers use maieutic questions to help the author to write a story that also makes sense in the local social context, that is, is the scope broad enough, do the characters act in realistic ways? Hence, being empowered to tell one’s story is not just about writing it down; it is also the ability to tell a story that is perceived to be relevant by others.

We continue with the example of the hamburger. The EPOSEA map has already shown many different possible aspects and the relations between them, and how they can be visualized. However, we want to take this a step further and explore the possibility of making this into a sustainability story. A teacher can initiate the story by making any aspect of the EPOSEA map a starting point. With the hamburger at the centre of the story, we again use the barbecue as a start. From the very beginning, it is possible to involve the students. Where we go in the EPOSEA map depends on what questions the teacher asks, but also what answers the students give, and thus what type of story this develops into. By being able to get through the map by relating different aspects to each other, prerequisites for understanding the relations are created. No matter what the starting point is and no matter what it is that is put in the middle of the EPOSEA model, it is part of a complex system that consists of social, technical and environmental parts, but also of structures and agents and ethical aspects and conflicts. And in order to talk about issues, problems or phenomena based on the concept of sustainability, these different pieces must be involved. Sustainable development requires that questions and objects are put into context, and a sustainability story makes this holistic view possible. In order to achieve a sustainability story, aspects from the six different dimensions must somehow be touched upon. This therefore becomes an important goal for the teacher. However, this can be done in different ways, and it is not necessarily the case that the teacher is the one who leads the students through the model. A central component is to make the students co-creators of the story, as a way to create student engagement.

Conflicts of Interest as Starting Point

The EPOSEA map provides a point of departure for the story. It could be anywhere the co-producers of the story identify an interesting conflict of interest. Exemplifying with hamburgers, the story starts at a barbecue, and the conflicts of interest emerge in a discussion over vegetarianism and the environmental impact of meat. Most people would easily get clear but probably slightly diverging ideas about this situation and the people involved. Hence, the barbecue provides a concrete point of departure. From here the exploration can start and we assume that the focus slides towards the social dimension and the cultural values related to meat and vegetarian diets. It is useful to highlight the path through the map to see what areas have been covered.
The exploration might then shift over to environmental impacts of the diets. Hey, you might object, why did the exploration go from cultural values to the environmental impacts? That is the beauty of stories. The format requires believable transitions from one point to the next and thus forces us to consider what happened. However, it soon becomes obvious that the economic modes of production have significant effects on the environmental impact. Keeping in mind the conflicts of interest at the barbecue, a more elaborated understanding of the issue and alternative solutions emerge.

Still, the exploration needs to continue since no agent of change has yet been introduced in the story. Therefore, at some point, the focus must shift towards the agents and organizations that shape and reproduce the current situation. Here farmers, shop owners, politicians, consumers and others emerge as co-creators of the situation in the context of larger organizations, states, corporations and the laws that regulate these. In turn, that opens up questions about power relations and agency. Who can do what? The increasingly complex issue of hamburgers (or meat versus vegetarianism) will also venture into the pluralistic dimension of the EPOSEA map, considering the values of open landscapes and the relevance of animals’ interests.

Two remarks are important here. The first is that, considering the value of a holistic understanding of an issue, a sustainability story must cover content from all the six dimensions. Preferably the story will go back and forth between different parts of the dimensions. Of course, a tool is never more than a tool to think with, but this criterion challenges us to broaden the scope of our understanding.

The Plurality of Possible Stories

The second remark is that a sustainability story explores ways to solve the identified problem. Preferably different paths are explored and evaluated in relation to systemic effects and the probability of success. In any given case, the story’s primary agents, who are identified with, must be a part of the solution. In other words, the sustainability story must visualize a realistic mode of becoming an agent for the main characters, regardless of their position. After all, an important feature of a sustainability story is to promote action competence.

Navigating through the EPOSEA map visualizes the many possible paths, and thus that the chosen one is just one of many. Of course, it is also possible to follow the steps above on one’s own. However, co-production of stories enhances the didactical values. Considering the plurality of possible narratives, it is important to work with open-ended stories. Valuing students’ engagement, the best way to co-create stories is to let each learner explore their own path, gathering relevant data at each step of the way. As a teacher, the role is to constantly challenge the suggested story and thus encourage further exploration of hitherto unidentified dimensions of the issues at hand. Engaging the learners as co-creators of knowledge is supported by a shared and transparent tool as a basis for discussions. Based on such a tool, teachers and students gain a solid foundation for assessing the landscape that they are about to explore.
STORYKNOWING FOR SUSTAINABILITY TRANSFORMATION

We began this article with the premise that humanity has entered into a new relationship with the environment, where our collective activities have the capacity to radically change the global dynamics that earlier, in the end, governed human activity. In turn, this raises challenges for an education system that was designed to meet the needs of the emerging industrial society. Decades of initiatives have sought to implement ESD as a tool for education reform, but the practical implications for educational practice have not been surmounted.

In relation to this knowledge, this article argues that sustainability stories provide a valuable didactical tool for efforts to increase students’ competence in systems perspectives, action competence, creativity and critical thinking. As such, it brings together earlier insights in the field of ESD (Balsiger, 2015; Nordén, 2018) into a concrete framework, primarily designed for use in education. It is also useful for analysis of the narratives that students encounter, that is, broadness of perspective and the integration of different dimensions. Stories made concrete as narratives, together with the didactical tool EPOSEA, provide a shared framework to enhance the ability of students, teachers and researchers to critically assess the quality of education and educational material.

However, as a didactical tool, sustainability stories are primarily designed to enhance a learner’s ability to develop their own stories, enhanced by maieutic questioning by teachers and peers. The learning process starts with an issue (e.g., food, clothes or birds) and a question about how this can be made more sustainable. Preferably this is connected to some conflict of interest. Then an overview of the topic is assembled by mapping associated phenomena, structured by the six dimensions of the didactical tool EPOSEA. The classic pillars of sustainable development constitute three of these dimensions. The contribution of the tool is an added focus on agency and conflicts of interest, made visible by the next three dimensions: agents, organizations, and pluralism. As expected from earlier research (Lourdel et al., 2007), the initial mapping probably displays a bias towards one or two of the three initial dimensions. In turn, this directs our attention to blind, or peripheral, spots in our understanding of the sustainability issue at hand. Hence, the EPOSEA mapping also visualizes how solid sustainability stories need input from a broad range of educational subjects.

With a broader picture of the issue at hand, the second step elaborates the map further by connecting the aspects to highlight cause-effect relationships. To encourage integrative thinking, it is valuable to connect each aspect in the map to at least two other aspects, using questions of cause and effect. This work will probably raise a range of questions that motivate further learning based on the students’ own reflections. Also, following Lourdel et al. (2007), it is possible here to distinguish between three stages of understanding: fragmented with few relationships, sectorial with relationships within dimensions and, finally, holistic understanding connecting aspects from different dimensions. Here, teachers’ maieutic questions support students’ capacity to turn fragmented understanding into a more holistic one, including all six dimensions of the EPOSEA and connections between them. Without a broad understanding, integrated stories become very difficult to achieve.
The third step is to turn the elaborated maps into a story, following one or more lines of cause and effect, which puts flesh and bone on the facts. As argued in the literature on storytelling (e.g., Franck & Osbeck, 2018; Reason & Heinemeyer, 2016; Russell, 2020), this enables the use of practical thinking to critically reflect upon the unfolding narrative and thus challenge previous understanding. The story as a format also connects facts with empathy, and thus links ethics to engagement and action competence (Franck & Osbeck, 2018). Furthermore, using stories, made concrete in narratives, as a didactical tool enables the learners to use and develop their own practical reasoning to assess whether the narrative makes sense, and whether something relevant is missing (Reason & Heinemeyer, 2016). The development of a story also works the other way around. Encounters with broader perspectives around an issue challenge and sometimes develop new ideas about what is reasonable and relevant (Bruner, 1991; Moezzi et al., 2017). As such, story development takes the abstract EPOSEA map and turns it into a realistic sustainability story in a way that can transform learners’ deeper structures of reasoning, that is, gaining a broader and more integrated view.

Generalization of studied cases is important and therefore the EPOSEA tool is designed as a generative conceptual model. Hence, it visualizes dimensions needed in any sustainability story. Experiencing what is missing in a narrative represents a high level of critical thinking. Fortuin et al. (2011) point to the value of conceptual models when dealing with complex issues, such as sustainability. So, experience of that deeper structure provides a basis to critically understand other accounts of sustainability, especially the content (e.g., actors or conflicts of interest) that should be expected to be there but that is left out by the narrator.

The competence of critical thinking is present in all the steps above in the sense that they challenge the broadness of the present understanding, as well as the level of realism in the interconnections described. However, the sense of realism is in many ways a habit or a social construct and not always very well underpinned. The design of the story also has the capacity to let students, and teachers, reflect upon the stories that guide their thinking. A common critique against sustainability education is that it seldom breaks out of a mindset focused on technological solutions, consumer focus and responsibility and shame placed at the individual level (Gyberg et al., 2020; Huckle & Wals, 2015; Ideland & Malmberg, 2015).

At the same time there is a range of almost given truths in the environmentalist story, such as the perils of genetically modified organisms, the value of ecological agriculture, etc. Sustainability education can easily tip into indoctrination of given values, where children use different kinds of assessment tools to see how far they are from being the good green citizen (see Ideland & Malmberg, 2015). Hence, given the polarization of the discussion, it is important to train students in critically engaging with their own, and others’, stories.

This critical thinking competence resonates with the values of democratic education (Öhman, 2008) and is a prerequisite for autonomous life-long learning (Barth, 2015). Hence, an important role in the co-creation of sustainability stories is to shift between assembling narratives and critically test whether they really hold when challenged by a broader picture of the problem.
At a more structural level, the stories should be used to problematize the way that the student and other individuals are connected to the studied case. Research (e.g., Almers, 2013) shows that a sense of ownership and belonging is crucial for engagement.

At one level, it is important that the learners are encouraged to develop their stories in directions that are relevant to them. It is well established that engagement requires a meaningful connection to the lived experience of the learner (Taylor & Parsons, 2011). Hence, the design of sustainability stories must be an open process to let learners develop their elaborated view of the connection between the current and a preferred future state, including oneself and others as agents. However, teachers and peers have an important role in broadening the view by asking maieutic questions to expose blind spots and one-sided views. While a story in its broad and deep sense includes all relevant components of the issue, the narrative is unavoidably delimited and events are presented in a particular order. Of course, this will give some perspectives, topics and conflicts prominence above others. Reflecting upon what has to be left out in the narrative and the possibility of alternatives brings in the pluralistic dimension, showing that no narrative is self-evident. This part of the approach with sustainability stories trains competence of critical thinking, looking for missing but relevant components and the links between them, in one’s own as well as other narratives.

CONCLUSION

We definitely need new stories to understand and engage with the sustainability challenges of our time (Facer, 2019; Haraway, 2016; Rockström & Klum, 2015). Avoiding the closed stories of what Jickling and Wals (2008) call big-brother sustainability and feel-good sustainability, our suggested approach with sustainability stories follows their third mode of education, seeking to emancipate the learners in training the ability to think new thoughts and place these in meaningful, transformative contexts.

What we hope to have achieved in this article is to show how sustainability stories provide a practical, albeit demanding, didactical tool that combines the central themes in ESD into a manageable resource for education for sustainable development.

Looking ahead, it would be interesting to apply the approach described here to analyse the structure of educational material used in schools. Also, using the approach together with practitioners to support action research and to plan, implement, and evaluate learning activities seems to be a promising next step.

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