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Future thinking and learning in improvisation and a collaborative devised theatre project within primary school students

Anna Lehtonen^{a,*}^a University of Helsinki. Finland**Abstract**

This study examines the nature of the learning process and future thinking of primary school students during improvisation practice and a devised theatre project about the future. In this research project drama education is used as an integrative method for education for a sustainable future. The main goals for the devised theatre project are to reflect prevailing cultural and individual future thinking and images and to collaboratively create future images for a theatre-play on how to change the world. Collective reflections of learning, cooperation and our future images are a crucial part of this kind of creative learning process. The prevailing media culture and the worldview could be seen as reflections in students' future thinking. Group dynamics and students' orientation during the lessons influenced students' future images, improvisations and the play-creating process as a whole.

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1. Introduction

"Our awareness of the future, the future images we believe in affect or even predict our individual and common future." (Haapala, 2002; Rubin, 2002; Cantell, Rikkinen, & Tani, 2007; Wayman, 2009). Even if all education has an aspect of the future, there is now an urgent need for futures education in the event of threatening climate change and chaotic global crises. For decades teaching hasn't been only teaching or

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sharing knowledge, but especially right now we need to have an ethical approach and give hope and create positive future images together with young people.

In the field of education for sustainability and a sustainable future the value of multi-method teaching, using word, art, drama and debate, is argued to be efficient and meaningful methods for learning and developing a sense of agency (Gilbert, 1996; Huckle, 2008; Rainio, 2008). In drama education and improvisation it is possible to create alternative realities, solutions and views of the future in the fictitious world of drama. According to the Scottish research the participatory and creative methods of drama education might allow children to develop skills and attitudes necessary for active citizenship and facilitate learning in education for sustainable development (McNaughton, 2006).

School theatre projects have long traditions in Finland as a part of end of term ceremonies and other celebrations, but the integrative teaching and participatory learning potential of these school theatre performances is not well understood or investigated. However there are many grass-root drama education and art-based ecopedagogy projects going on all around the world, but unfortunately there is not so much research on this topic.

This study aims at examining the potential of improvisation practices and collaborative devised theatre as creative and participatory teaching and learning methods for education for a sustainable future. This article is part of an autoethnographic action research project, where I as a teacher am investigating my own work when applying integrative teaching methods of drama education in education for a sustainable future. In this article I introduce the devised project and present preliminary results of the research. I describe the theoretical background, learning goals, teaching methods and experiences of the devised theatre projects for a better future.

2. Theoretical background

2.1. *Futures education*

Even if education for the future is the implicit idea of all education, it has been noted that the future is generally missing dimension in education (Hicks, 2002). Future movement with explicit purpose of contributing to social and ecological sustainability rather than engaging in more technical Futures research has been developed over the past 40 years (Dator, 2002). Futures education is a holistic education, which aims at providing pupils with better opportunities to manage in the future and to develop a better common future (Wolff, 2004, 209). A vision of a better future is the common goal for the different kinds of themes of futures education: technology, environment, population and equality.

The aspect of the future integrates all the cross-curricular themes in the Finnish National Curriculum (2004) and Responsibility for the environment, well-being and a sustainable future, is one of the cross-curricular themes of the National Curriculum. According to the Finnish National Curriculum of Finland (2004, 39) ‘The school must teach future oriented thinking and the building of the future upon ecologically, economically, socially and culturally sustainable premises.’

The main concepts of futures education are future thinking, future awareness and future images or visions. By future thinking one tries to gain knowledge, understand and evaluate information about the future. Future images and visions are based on and reflected with future thinking. In psychology future images are seen as part of the worldview. Future awareness means understanding of what and how one can influence in the future. (Haapala, 2002, 7-8; Wayman, 2009.)

Futures education has replaced the education for the future as a term in English speaking especially within British academic educational science (Haapala, 2002; Hicks, 1998). The main idea of futures education is that our conscious and unconscious future images, in which we believe, affect or even predict our individual and common future. Thinking about the future may provoke many different kinds of

emotions and anxieties (Haapala, 2002; Cantell, Rikkinen & Tani, 2007, 64; Wayman, 2009). According to the Futures Studies people either have a reactive or proactive attitude towards the future (Rubin, 2002, 30). The goal of the futures education is to promote proactive attitudes by providing people with future skills, creating alternative future images and by promoting active participation and empowerment to cope with whatever kind of circumstances in the future (Haapala, 2002).

The goals of the education for a sustainable future and future thinking in sustainable literacy are the same as for futures education (UNESCO, 2007; Wayman, 2009). Future skills and goals of education for a sustainable future include reflection skills, critical thinking and problem solving, co-operation and participatory decision-making (UNESCO, 2007; Robertson, 2007, 24). In this research project these learning goals are called future learning. By using concept education for a sustainable future instead of futures education the perspective of sustainability is emphasized.

2.2. Education for a sustainable future and drama education - connections

The education for a sustainable future and drama education have some common goals and cultural interests. The conceptions of the human being and learning of education for a sustainable future and drama education are similar. They both have their backgrounds in humanism, critical theory and postmodernism. The common goals for education for a sustainable future and drama education are the empowerment of the participants and reconstruction of our culture. (Sava, 1993; Teerijoki, 2001, 103-104; Wayman, 2009.)

Drama has its origins in social change. Drama as a dialogical art form opens a door for better awareness, understanding, mental development and critical thinking and drama has a goal of individual and community based societal change and transformation (Teerijoki, 2001, 106). Drama could be described as the work of imagination made physical in action. Drama is a synthesis of action, intellect and emotion. Anton Franks (2006, 3) describes the connection between drama and life as “an active reciprocity between drama and life.” According to Franks (2006, 7) “Drama always encapsulates and represents something of wider social relations in particular historical and cultural time and place.” Drama also “actively feeds back social, cultural and individual sensibilities and habits of living”.

In different kinds of drama practices it is possible to reflect on our prevailing images, express different feelings and thoughts and create together preferable images. Working through the aesthetic process of drama; imaging, envisioning and reflecting on the images expressed enables both the aesthetic transformation process and the transformation of our lives and reconstruction of our culture (Østern, 2011).

2.3. Collaborative devised theatre for a better future

The methods and ideas for collaborative play-creating projects were based on the guidebooks and handbooks of Allison Oddey (1994), Tapio Toivanen (2007) and Pieta Koskenniemi (2007). In the field of drama education in Finland this method of performing drama is called “from idea to performance”. This devised theatre method is based on improvisation and experimenting. Spontaneous thoughts, ideas and experiences are encouraged and used in the play-creating process as the material of brainstorming. The main goals of this participatory devised theatre method are to encourage active participation and give real and equal possibilities to take part in artistic creation and decision-making processes of performance-creating (Oddey, 1994; Toivanen, 2007; Koskenniemi, 2007).

The collaborative play-creating and improvisation are also seen as an artistic participatory research into young people’s thinking and worldview. The teacher is acting as a joint researcher with the students, who are investigating prevailing cultural images by improvising, plot-creating and reflecting on their

learning and their experience of participation in collaboration. The created performance is a product of this collaborative artistic learning by investigating process (Heikkinen, 2005).

3. Research questions

This study has two main objectives: to present and develop a model of the collaborative devised theatre as a creative and participatory teaching method for education for a sustainable future and to describe the nature of the learning process and future thinking of primary school students during future improvisation practice and the devised theatre project. In addition the potential of the devising process as participatory teaching method is critically reflected and discussed. Research questions are as follows:

- What is the potential of the devised theatre method for education for a sustainable future?
- What was the teaching process in the devised theatre project with 11-12-year-old primary school students?
- What sort of future thoughts and images do the primary school students express and how does their future thinking develop during the future improvisation practice and collaborative play-creating process?

4. Research methodology and research data

The research methodology used in the study is a combination of different methodologies: *action research* as work based research: improvement, development and evaluation of a teaching method (Kemmis, 2007; Costley, Elliot & Gibbs, 2010) and *autoethnography* when it comes to the methods of self study, observation and investigation of the class as the learning community (Muncey, 2010; Pinnegar & Hamilton, 2011). *Reflective practice* describes the method of aiming at understanding and improving one's own practice through self-orientation. The goal of reflective practice is to make meaningful sense of the experiences inside of teaching and learning. The reflective practitioner has a commitment to the emancipatory struggle of critical theory and practice. (Neelands, 2006, 16.)

The research data consists mostly of teacher's extensive field notes, video recorded improvisation and collaborative play-creating lessons and group reflections. All the material of the theatre project: teaching material, students' drawings and answers compiled the data. In 2008 the four month theatre project of education for a sustainable future was conducted in Finland in the Helsinki metropolitan area with 11 and 12 year old primary school students. The content analysis is the method used for analyzing the data.

5. Goals and the devised theatre method in practice

In the process of collaborative play-creating there are four phases: improvisation, play-creating, performing and reflecting. The goals of each phase are described in the figure 1.

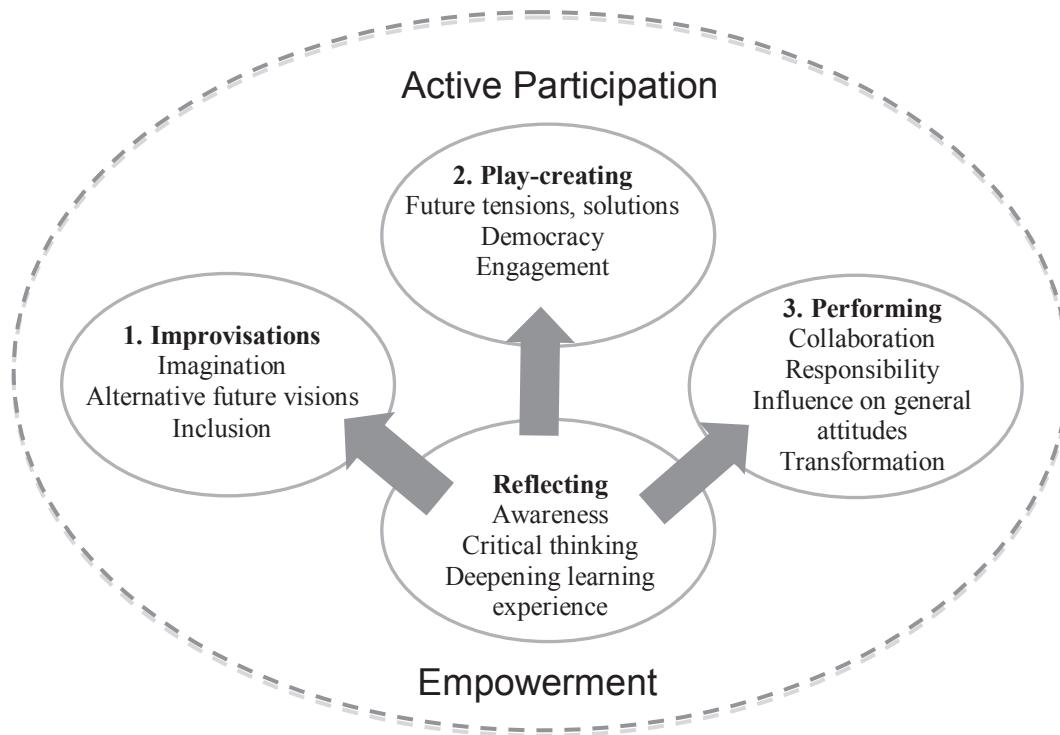


Fig. 1. Goals of future learning during collaborative devised theatre project.

5.1. Collaborative play-creating

When it comes to development of the proactive attitudes and participation as the goals of education for a sustainable future, the devised theatre is a suitable method as it aims at artistic democracy by common multivocal text creating. Devising is based on improvisation and experimenting: spontaneous thoughts, ideas and experiences are encouraged and used. In the collaborative process the different meaning perspectives of the participants meet and get investigated at the common meeting place in the world of drama through fictitious time, space and character (Teerijoki, 2001, 105-107; Oddey, 1994, 1-4; Heddon & Milling, 2006).

All the material pupils created in future improvisations were part of the play-creating process as the material of brainstorming and future improvisations also had an influence as a shared common experience, about which we could discuss and reflect on later on during the project. However the main story was created from the base of the stories about the future. Plots for the stories were invented in teams with the help of special questions about dramatic tensions in the future. What was threatening the world and why? What were the consequences of the problem? Who suffered most from that? How could this problem be solved and by whom? The threat and the theme for the play were voted on. When the theme for the theatre play was decided, the class started to create situations and roles. During the play-writing process pupils could suggest dialogues and write proposals for the texts while the teacher worked as the final scriptwriter. The teacher was the secretary who listened to pupils' proposals and asked for ideas and opinions. In the end every pupil had invented something for the common story and the manuscript. The

plot of the story was a combination of the ideas, future images and thoughts during the future improvisations and the proposals pupils made during the play-writing process.

5.2. Rehearsing and performing

As drama education is a combination of theatre and education, the aesthetic dimension of drama education is a crucial part of the learning process. In the collaborative play-creating the common goal of building a performance enforces the artistic point of the action, the experiences of common improvisations are transformed to the theatre-play. The performance as the common goal and source of motivation promotes commitment in the group work. The experience of performing also strengthens students' self-confidence, which in turn fosters a sense of connection to the community (Beare & Belliveau, 2007, 7).

The performance is a crucial possibility for the students to experience their ideas being shown and voices being heard by the audience. By performing and being thought provoking, participants also have a chance to influence the attitudes and future thinking of the audience and so take part in the process of trying to change or alter the general unsustainable development of our culture. In this project the final theatre performance was created by improvisations and experiments. The teacher was the director and listened to the proposal and feelings pupils expressed during the rehearsals. Pupils invented some dances and songs for the performance.

5.3. Reflecting

Reflecting is the crucial part of each drama lesson and the project as a whole, because it increases understanding. Students become aware of their own thinking and learning. Reflecting deepens the learning process and the meaning of the experiences. Reflections were conducted throughout the entire project. The group reflections were made after every improvisation lesson and the teacher-researcher noted down individual and group reflections during the whole process. The main reflections when it comes to the learning of the whole process were done at the end of the whole project. Pupils wrote about the experiences and acted group reflections were video-recorded. Students made improvisations about their memories and experiences during the process.

Pupils memorized and reflected by performing different roles and social situations during the project. They pondered, how their future thinking and future images had been changed during the process, what they had learned: what kind of impacts the project had made on them and what were the meanings of their experiences and of the theatre-play. The future images and the plot of the theatre play were compared to their own views of the real world.

6. Teaching and learning experiences

6.1. Future images and thinking

From the teacher-researcher's observation at the beginning of the project students found it difficult to think spontaneously about the future and the images of the future of the world were mainly negative. Improvisation practice provoked fiction, surrealistic and humorous future thinking. According to the pupils' imagination everything would be either flying or extraordinary small or huge and not possible according to the laws of physics. Several imaginative travels to the future especially reminded the teacher of either sci-fi, action or horror movies. The prevailing media culture and the worldview could be seen as reflections in the students' future thinking.

The more realistic future views were expressed mostly during the end of the practice reflections. The teacher provoked critical thinking during the group reflections at the end of the improvisation practices. By the end of the whole project students self-reflected that their future thoughts had become more realistic. The pupils could mention and were aware of how they could have a positive influence on our common future by more sustainable life-styles. From the teacher's point of view pupils had gained more information and their concepts of their future thinking had become richer and their views of the future were more sustainable and realistic.

According to the teachers experience the future improvisations had worked out to be thought and question provoking and a good-start for further learning by investigating. The several month integrative artistic studying and working process inevitably challenged students' thinking and deepened their relationship with the topic. The teacher reflected that the learning process was successful, regarding a better understanding of the world. The level of reflections and re-evaluation skills of prejudices and misconceptions were quite high when we refer to the 11 and 12 year old primary school students' level of thinking.

6.2. Learning democracy, participation and collaboration

The main goals and tasks of the drama teacher were to create a safe learning environment for improvisations, teach collaboration by improvisation games, lead collaboration, take care of students' equal opportunities to participate in democratic collaborative play-creating. The group dynamics challenged the play-creating process as a whole and the students' individual orientation influenced the improvisations and the students' future images during the lessons.

In the process of collaborative play-creating the teacher encouraged and asked for active participation from each student. So students got a possibility of real participation, but pupils performed differently: some were more active than the others. Their orientation in learning situations varied. Some pupils were more interested in the plot-creating and script-writing while the others were more interested in communicating and having fun with their classmates. When the teacher asked for the students' proposals, some seized the opportunity to have a more active part in the plot-creating and script-writing while other students were not so interested in the project.

The group dynamics and frictions were used within the theatre play. During the play-creating and rehearsing process the class was divided into smaller groups. In these groups they had more opportunities to participate in creating scenes and roles. The manuscript was refined during this process. In the reflection session at the end of the project all the pupils could name something that they had created or contributed to the common theatre-play. Democracy was achieved when proposals were asked from everybody in turn and when voting about decisions considering the theatre-play. Pupils reflected that they had influenced the outcome and had participated in the decision-making.

6.3. What prevented or impeded equal and active participation?

As usual, there were some social problems in the school class participating in this collaborative project. According to the research on the collaborative play-creating process by Beare and Belliveau (2007) and Jonathan Neelands (2006) there are reasons that might impede the reflective practice and pupils getting empowered and giving visions. The first step of creative collaboration is inclusion: participants need to feel secure in the group. When individual participants feel included in the group they are able to move on to the control stage and the group can start to explore the tension between cooperation and competition. (Beare & Belliveau, 2007.)

People start to take initiatives, when they are familiar with the subject, methods and rules of the social situation. Neelands (2006) describes reflexive practice as the principle way for real participation. The goal of reflexive practice is to make the structure of collaboration visible for participants so that they become aware of the teaching practices and can take part in the decision-making procedures.

When it comes to this study the improvisation situation was new to these students. At the beginning of the project students explored the boundaries and limits of the group norms and they tested possibilities to use new power relations by disturbing and resisting during the working process; improvisations and decision-making procedures. There were problematic power relations, some individuals had lack of self-confidence, some had problems in fitting into the collaboration work, because of the over-exposure of self, lack of self-control and overwhelming feelings of self-consciousness.

From the teacher's point of view the improvisation lessons and the devising method offered a great possibility to work with the group dynamics. Unfortunately the dual role of teacher/researcher the video-recording and writing field notes took time instead of focusing on the collaboration skills and group phenomena.

7. Conclusions

This study has described how improvisation and collaborative play-creating can be applied to future thinking and education for a sustainable future for creating more positive images of the sustainable future. Primary school drama education has a great potential to integrate different subjects, topics and themes. Improvisation, devising and collaborative play-creating are valuable methods for education for a sustainable future and learning by investigating and teaching democracy in practice.

When it comes to development of the proactive attitudes and participation as the goals of future education, I consider the devised theatre as a suitable method as it aims at artistic democracy. Devising is based on improvisation and experimenting: spontaneous thoughts, ideas and experiences are encouraged and used in multivocal text creating. In the collaborative devising process the different meaning perspectives of the participants meet and get investigated at the common, creative meeting place. (Oddey, 1994, 1-4; Teerijoki, 2001, 105-107.)

However collaboration and collective processes are not simple and conflict-free. From the critical point of view it is relevant to ask, on which level is the real change and transformation of the culture allowed to happen and is participation just altering the existing order rather than becoming the real change agent. The work and role of the drama teacher is not easy. The drama teacher works in the school institution which has its own hidden curriculum with social norms and values, role expectations, questions and division of power. Kathleen Gallagher (2007, 140) has called drama the pedagogy of conflict as the drama class is a sensitive space for expressing artistic and social tensions. During the research project I have been asking myself, what could be the ideal and realistic reflective and reflexive practice within a normal primary school class setting?

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References

- Beare, D. & Belliveau, G. (2007). Theatre for positive youth development: A development model for collaborative play-creating. *Applied Theatre Researcher*, 8. <http://oajournals.blogspot.com/2011/02/applied-theatre-researcher-journal.html>
- Cantell, H., Rikkinen, H. & Tani, S. (2007). *Maailma minussa – minä maailmassa*. Studia Paedagogica 33. Helsinki: Helsingin yliopiston soveltavan kasvatustieteen laitos.
- Costley, C., Elliot, G. & Gibbs, P. (2010). *Doing work based research. Approach to enquiry for insider-researcher*. Los Angeles: Sage.
- Dator, J. (Ed.) (2002). *Advancing Futures: Futures studies in higher education*. Westport: Praeger Publishers.
- Denzin, N. K. (1997). *Interpretive ethnography. Interpretive ethnographies for the 21st century*. Thousand Oaks: Sage.
- Finnish National Core Curricula for Basic Education* (2004). Helsinki: Finnish National Board for Education.
- Franks, A. (2006). Drama, school and social change: Theoretical approaches to learning in history and culture. *Applied Theatre Researcher*, Vol. 7. <http://oajournals.blogspot.com/2011/02/applied-theatre-researcher-journal.html>
- Gallagher, K. (2007). *The theatre of urban: Youth and schooling in dangerous times*. Toronto: University of Toronto Press.
- Gilbert, R. (1996). Identity, culture and environment: Education for citizenship in the twenty-first century. In J. Demaine & H. Entwistle (Eds.), *Beyond communitarianism: citizenship, politics and education*. New York: St. Martins Press.
- Haapala, A. (2002). Mitä on tulevaisuuskasvatus? In A. Haapala (Ed.), *Tulevaisuuskasvatus* (pp. 125-140). Jyväskylä: PS-kustannus.
- Heddon, D. & Milling, J. (2006). *Devising performance: A critical theory*. New York: Palgrave Macmillan.
- Heikkinen, H. (2005). *Draamakasvatus – opetusta, taidetta, tutkimista!* Jyväskylä: Minerva Kustannus.
- Hicks, D. (1998). Introduction. In. D. Hicks & R. Slaughter (Eds.), *Preparing for the future. Notes and queries for concerned educators* (pp. 22-38). London: Adamantine Press.
- Hicks, D. (2002). *Lessons for the future: The missing dimension in education*. Oxford: Trafford Publishing.
- Huckle, J. (2008). Sustainable Development. In J. Arthur, I. Davies & C. Hahn (Eds.), *The SAGE Handbook of Education for Citizenship and Democracy* (pp. 342-354). Los Angeles: Sage Publications.
- Johnstone, K. (1989). *Impro. Improvisation and the theatre*. London: Methuen Drama.
- Kemmis, S. (2007). Action research. In. M. Hammersley (Ed.), *Educational research and evidence based practice* (pp. 167-180). London: Sage.
- Koskenniemi, P. (2007). *Osallistava teatteri, devising ja muita merkityksiä*. Vantaa: Opintokeskus

Kansalaisfoorumi.

- McNaughton, M. J. (2006). Learning from participants' responses in educational drama in the teaching of Education for Sustainable Development. *Research in Drama Education*, 11(1), 19-41.
- Muncey, T. (2010). *Creating Autoethnographies*. Los Angeles: Sage Publications.
- Neelands, J. (2006). Re-imaging the reflective Practitioner: towards a philosophy of critical praxis. In J. Ackroyd (Ed.), *Research Methodologies for Drama Education* (pp. 13-38). Staffordshire: Trentham Books.
- Oddey, A. (1994). *Devising theatre. A practical and theoretical handbook*. London: Routledge.
- Pinnegar, S. & Hamilton, M. L. (2011). Self-study inquiry practices: Introduction to self-study inquiry practices and scholarly activity. In S. Schonmann (Ed.), *Key Concepts in Theatre/Drama Education* (pp. 345-350). Rotterdam: Sense Publishers.
- Rainio, A. P. (2008). From resistance to involvement: Examining agency and control in a playworld activity. *Mind, Culture and Activity*, 15(2), 115-140.
- Robertson, M. (2007). The gap between global rhetoric and local realities: How to build sustainable future. In M. Robertson (Ed.), *Sustainable futures. Teaching and learning: a case study approach* (pp. 22-37). Victoria: ACER Press.
- Routarinne, S. (2004). *Improviso!* Helsinki: Tammi.
- Rubin, A. (2002). Nuorten ohjenuorat. Tulevaisuusnäkökulman avaamisen merkityksestä. In A. Haapala (Ed.), *Tulevaisuuskasvatus* (pp. 28-49). Jyväskylä: PS-kustannus.
- Sava, I. (1993). Taiteellinen oppimisprosessi. In I. Porja & P. Väyrynen (Eds.), *Taiteen perusopetuksen käsikirja* (pp. 15-43). Helsinki: Kunnallislisliitto.
- Teerijoki, P. (2001). The potential for Change – the Transformative Potential of Drama. In B. Rasmussen, T. Kjollner, V. Rasmussen & H. Heikkinen (Eds.), *Nordic Voices in Drama/ Theatre and Education* (pp. 100-109). Bergen: IDEA publications.
- Toivanen, T. (2007). *Lentoon! Draama ja teatteri koulussa*. Helsinki: WSOY.
- UNESCO (2007). Teaching and learning for a sustainable future. <http://www.unesco.org/education/tlsf/>
- Wayman, S. (2009). Futures Thinking, The Ability to envision scenarios of a more desirable future. In A. Stibbe (Ed.), *The Handbook of sustainable literacy. Skills for a changing world* (pp. 94-98). Devon: Green Books.
- Wolff, L.-A. (2004). Ympäristökasvatus ja kestävä kehitys: 1960-luvulta nykypäivään. In H. Cantell (Ed.), *Ympäristökasvatuksen käsikirja* (pp. 18-29). Jyväskylä: PS-kustannus.
- Østern, A.-L. (2011). Transformation. In S. Schonmann (Ed.), *Key Concepts in Theatre/Drama Education* (pp. 59-63). Rotterdam: Sense Publishers.