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Art and place-based education for the understanding of sustainability.

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Art and place-based education for the understanding of sustainability

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Icelandic teachers face complex challenges with an increasing emphasis on sustainability being demanded by the curriculum. This new demand calls for more critical approaches as teachers meet diverse student needs. Place-based education can offer a way of responding to the challenges. Teachers need to construct learning experiences that equip students with knowledge, which enables them to develop values that lead to more sustainable lifestyles. This paper describes the nature and impact of different aspects of art in the context of place-based education. The purpose of this inquiry is to examine what artistic place-based education has to offer education for sustainability (ES). Ideas are discussed on how to create settings and design activities that give art students an incentive to achieve an understanding of sustainability. The terms quality of life and well-being are discussed in relation to the possibilities that art education provides for students to better understand their own space and place in time. Examples are taken from art in Iceland and elsewhere.

Keywords: art, pedagogy, place, space, time, place-based education, education for sustainability (ES).



Figure 1. Art education students at the teacher training department, Iceland Academy of the Arts. As an art educator I want my students to get excited by a subject and let them experience why it is worth knowing the subject that interests them, preferably with reflection on their own experience and their own environment.

Introduction

Learning for the future is important, but learning for the present and in the present and from the past is just as important. This is the complex task facing schools, teachers and learners: how can school experiences be developed in such a way that meaningful connections are made between place and time? One solution can be found in the arts. Understanding the arts is important for the mind and can have a profound impact on many people. People have different motivations to express themselves. For many, art is a language. Artists, no matter with what medium they work, create works that are in close connection with their social context and influenced by current events. That is why I argue that place-based art education could be so appropriate for increasing the understanding of sustainability.

The 2011 National Curriculum for pre-, primary, secondary and vocational schools in Iceland lays out six important issues, one of which is education for sustainability (ES) and another is creative work. Other issues are literacy, equity, democracy and human rights, and health and well-being. These concerns resonate with the substance of the five learning pillars promoted by UNESCO (2005) in its implementation of the Decade of Education for Sustainable Development (DESD). The pillars are:

- Learning to know; i.e. what do we know about sustainability? What established knowledge does the concept of sustainability challenge? What knowledge do we need to work with sustainability?
- · Learning to do; i.e. learning to recognize oneself and one's skills in the context of a complex society, giving learners the opportunity to search for patterns, raise their own questions, and construct their own models.
- Learning to live together; i.e. learning the skills of shared responsibility and tolerance.
- Learning to be i.e. perceiving and understanding one's own actions and emotions.
- Learning to transform oneself and society; i.e. learning to apply systematic actions that affect the sustainability of the community.

The 2011 curriculum in Iceland promotes key competences including that students should be aware of the diversity of natural resources and be able to take a stand on their rational use knowing, understanding and respecting the environment and nature, understanding how the ecosystem puts limitations on man and understanding their own ecological footprints and how communities and nations can contribute to sustainable development. For example, by the end of the 10th grade (age 15) students should be able to critically assess the value of information on society, the environment and nature. Students should be active and contributing citizens and be able to take a critical attitude towards the environment, society, culture and economy and understand the shared responsibilities of the world the earth and its inhabitants (Ministry of Education, Science and Culture, 2011).

The key question for educators is: how can students utilise their own knowledge to make informed decisions about the future? This article discusses how art teachers can meet these new demands in education through addressing "place". It deals with the importance of learners finding ways to connect to their own lives and their local environment through critical thinking about their real needs for a good and fulfilling life and well-being. Such connections lie at the core of place-based education. The aim of the article is to clarify the potential of artistic place-based education, with respect to education for sustainability.

Place-based education

The central point of place-based education is to become more conscious of places in education and to extend the notion of pedagogy and accountability to the concept of place. 'Place' has been defined and used in different ways by various people. Place has several meanings. Some think of it in geographic terms as location by putting down a coordinate on a map. Geographical place is a material environment. It can be as natural as unspoiled nature, but it can also include artefacts like buildings or structures. Others think of place in connection with feelings of the place itself, constituted within some social process as an artefact or permanence and therefore identify a place with a name. The uniqueness can be connected to feelings of the person, who feels a sense of belonging to a certain place (Cresswell, 2004; Tuan, 2004; Harvey 1996). Place is the result of processes and practices.

It is constructed by people doing things and in this sense is never finished, but constantly performed (Cresswell, 2004). The relationship between places and spaces is connected to one's connection and feeling where space defines landscape, but space combined with memory defines place. Therefore, the landscape is seen from outside, like a backdrop when place can be defined from inside (Lippard, 1997). Each country, city or neighbourhood can therefore be described as a series of places, each with their own unique histories and iconographies. A place is not just a thing in the world, but a way of understanding the world. While we hold common sense ideas of what places are, these are often quite vague when subjected to critical reflection. Most often the designation of a place is given to something quite small in scale, but not too small. Neighbourhoods, villages, towns and cities are easily referred to as places and these are the kind of places that most often appear in writings on place (Cresswell, 2004).

It is important to focus place-based education on students' and teachers' experiences, so that the places have meanings to educators, students, and citizens in tangible ways. Placebased education, therefore, bridges the gap between scholarly discourses and practices and the living world. With place-based education teachers and students get a first hand experience of local life, which gives them the potential for understanding the political process taking place and hopefully to have some influence on it. We need to focus on the local and understand it if we want to transform it (Gruenewald, 2003).

Places can be fruitful learning sites for students. In order to learn to understand themselves and their environment students need to get a sense of their own place. Attachments to places vary from one person to another. One's identity changes over time, subject to both space and place and it is important to work with identity in a broad sense. One could start by looking at one's home as a house and, in the larger sense, a neighbourhood, hometown, country – and then ultimately, the earth. The identity expands and is enriched as the places in which we feel at home, if only temporarily, are multiplied (Tuan, 2004; Tuan, 1977). People have to learn to explore their close surroundings because places like home not only nurture children, but they are also highly educational. In one's home there is space and place that invites exploration.

"A little trip to the attic or basement could be an adventure and that camping in the backyard had the same sort of thrill they now have camping in the wilds" (Tuan, 2004, p. 7)

One might worry that local could create tunnel perspective but it does not have to mean isolated, self-indulgent or inbred. In order to understand the big picture you need to understand the small one (Lippard 1997), "The cleverer I am at miniaturizing the world, the better I possess it (Bachelard, 1958, p.150). People have to spend some time in a place to discover the fundamental element of it. When dwelling in a place, the spiritual and philosophical endeavour unites the natural and human worlds (Cresswell, 2004). As students mature, their understanding and involvement at the local level serves as a springboard for study of regional, national and global issues.

Today the curriculum of many countries expects schools to take notice of physical places outside the classroom. But still the local, human and natural communities are usually not core parts of the school curriculum (Gruenewald, 2003). It can be tempting, for teachers that are still expected to fulfil standardised outcomes, to avoid place-based education because of pressures on the outcome they are expected to promote in standardized tests. Place-based educators often question reforms based on standards and testing because of their tendency to cut off the process of teaching and learning from community life, where students and teachers are "learning all the time" (Holt, 1989; Gruenewald, 2003). Some even posit that pursuing locally focused pedagogies might boost achievement in relation to traditional standardised measures (Gibbs and Howley, 2001; Lieberman and Hoody, 1998; Theobald and Curtiss, 2000).

It has been pointed out that some scholars have criticised place-based education for neglecting the ways in which socio-cultural differences, inequality, and politics contribute to environmental degradation (Gruenewald, 2003). But by connecting it to ES, this concern could be solved since a radical view of ES involves taking into account society as a whole and understanding different disciplines that facilitate the adoption of a holistic approach to the issue being addressed (Huckle, 2006).

Education for sustainability (ES)

A variety of people and organizations have shaped theories of sustainable development (SD) and ES. Different worldviews influence how issues are formulated and what kinds of actions have been proposed. SD was originally conceived as the overlap of environmental, societal and economic issues, separate but connected entities. In later years some scholars argued that SD is much more complicated since one cannot look at those issues separately, they are all interconnected (Adams, 2006). Giddings, Hopwood, & O'Brien (2002) therefore proposed that the connection between human activity and wellbeing is linked to ecological issues and the environmental limits of the earth. Well-being itself takes several different forms, including well-being as a state of mind or as a state of the earth, capability for action or a basic needs approach (Dodds, 1997). Sustainability can be seen as the struggle for a balance between the good life and the integrity of nature, resulting in human actions often coming into conflict with the integrity of nature and crossing the earth's environmental limits as a result of over emphasis on the "good life" (Háskóli Íslands, 2012; Sampford, 2010; Hattingh, n.d.). Those worries are shared by other international scholars and the message enhanced by the use of satellite technology:

"Increasingly, people believe that the integrity of the earth itself is under threat - a belief that is fuelled by disturbing images and reports from outer space" (Tuan, 2004, p.15)

The Bonn declaration (2009) stated:

The challenges arise from values that have created unsustainable societies... We need a shared commitment to education that empowers people for change. Such education should be of a quality that provides the values, knowledge, skills and competencies for sustainable living and participation in society.

The core skills in ES involve taking a holistic understanding of the current situation. That involves going beyond raising awareness to address the underlying issues causing the unsustainable practices in students' daily lives and to challenge the assumptions that underpin day-to-day practices. Education can help learners develop skills that influence change within their local society. In doing so the students themselves create a systemic view around which to organise new practices. ES relies on the strengths of collaboration and cooperation (Brna, 1998) and transformed knowledge (Miller et al, 2010) that leads to action.

Art, place-based education and education for sustainability

In ES the aim is for the public to participate in a community that promotes good health and integrity and takes precautions. To value culture and the possibilities that arts and cultural providers offer can help us to understand the impact of human activity on the environment.

The arts have educational potential in promoting ethical values and should be used to promote responsible behaviour (Hicks and King, 2007). For example, by getting students involved in "real world" situations, and/or when confronting important social issues through artistic endeavours, many artists deal with values in their works. In art education students learn that works of art, artists and designers have a place in their communities and that specific works of art contain cultural narratives about their own and other cultures. Even though technical skills are important they should never preclude visual imagination.

Visual culture can be understood in relationship to the meaning and value of people's daily living habits. Visual arts have been used through the years as a reflection on people and our actions; when looking at certain art we can see a different perspective of the world. The visual message of art is for some more accessible and easier to grasp than the message in a written text. Artists of all periods have dealt with ecological and social issues and have often contributed to changes in public conscience, values and attitude (Brenson, 2001).

Environment, racism, sexuality, fear of homosexuality, gender, homelessness and AIDS, are all issues that artists have used as creative inspiration (Desai, 2002). Artists began to rethink and recreate nature as early as 19th century. Before the nineteenth century, most art was neither fine nor popular, but connected to lived experiences (Krug, 2003). The early artworks taught the public to respect nature and understand the importance of it (Hicks, 1990). Artworks relevant to place-based ES are those that reflect the community, deal with political problems and point out the futility of violence and injustice of conflict. Works that deal with people's social status such as attitudes, values or gender identity also have potential for ES as well as works dealing with issues of the environment i.e. the impact humans have on it.

Some artists create works that are site specific. The artist Mark Dion is one of them. In most of his work he inserts himself into the social history of the place. He sees himself as a 'trouble-shooter' who looks at issues with a new pair of eyes and a new set of categories and shows an interest in social, political and natural ecologies (Art 21, 2001). His search for understanding of interrelatedness of things is in harmony with ES. It is this kind of connection between things that is so important but often missed in cultures. Place-based art education, like ES, has the potential for life centred approaches that encourage inquiry as a means for critically investigating and understanding everyday issues within communities and nationally and globally.

Common issues in ES and place-based education

The two concepts, ES and place-based education, go well with each other. Both in ES and in place-based education it is important to look at the conclusions researchers have come to when looking at the quality of life, well-being and personal values. Sen (2005), Felce and Perry (1996), Schalock (1996), Day and Jankey (1996) and Keith (2004) have all emphasised the important part played by personal values when determining quality of life. Values are the desirable principles in someone's character. Morals work with the judgment of values as they emerge in actions. Schools should help students to revalue what wellbeing really is and create opportunities for them to rethink their values in life. A task for teachers is to take part in stimulating their students in developing their values so they are likely to live their lives within the limits of the earth's resources.

When education leads to action we can say that the process transforms students' and teachers' ideas and values. As we try to justify our beliefs we deal with our values and feelings and that depends on the context - biographical, historical and cultural - in which we are embedded. We make meaning with different dimensions of awareness and understanding. In the absence of fixed truths, and confronted with often rapid changes in circumstances, we cannot fully trust what we question, our own points of view, what we

know or believe and these call for revaluation (Mezirow, 2000). When educational settings make us question our own viewpoints, it provides us with a more dependable way to make our living meaningful. We can be looking and reflecting on alternate points of view and creating a new way of knowing that may be different from our old habits. This requires us to become tolerant towards others' points of view (Mezirow, 2000).

When one's life is rated as having quality, one will simultaneously have a sense of selfesteem and pride regarding his or her life. But these two are inextricably linked: a happy individual will live a fulfilling life and vice versa. And quality of life is often confused with material consumption. Happiness and well-being are linked to quality of life (Meeberg 1993).

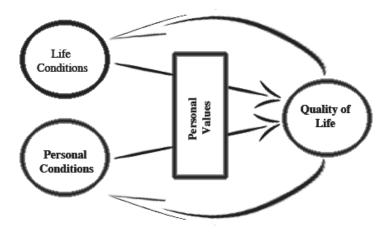


Figure 2. Adapted from Felce and Perry (1995, p. 55)

In ES it is important to keep in mind that what is considered to be well-being and/or the good life varies between individuals, and between different societies and cultures. Every school setting has to develop its own goals towards ES because it would be misleading to take the concept of the good life developed in one cultural context and apply it to other cultures (Keith, 2004).

In ES teachers might deal with topics such as human rights, poverty reduction, sustainable livelihoods, peace, environmental protection, democracy, health, biological and landscape diversity, climate change, gender equality, and protection of indigenous cultures. Placebased education could deal with all these issues where the local environment and community are the primary resources for learning. The students' own sense of place derives from background when it comes to dealing with environment, culture, economy, literature, history and art. This way students start to learn to understand their own culture, places and spaces before they move on to broader global subjects. Place-based education is always related to real life (Gruenewald, 2003).

Place-based learning and ES aim for complementary competences and can be combined to accomplish critical school and community goals. By engaging the local community, a placebased project has the potential to promote civic knowledge, responsibility, and participation in individual and collective actions. To find a solution to issues of public concern, looking for community-based opportunities can result in student actions that have great impact. Educational experiences can be developed around personal and social knowledge across many different subject areas. It is for this reason that I advocate using an integrated curricular approach based on life-centred issues.

Examples of an artistic approach to place-based education

Artists have always been moved and inspired by the beauty and mysteries of nature. There is sincere commitment in artists' efforts to raise consciousness about the ecologically critical time our planet is going through. An artistic approach to place based education can be very rewarding, both for students and teachers. Many works of arts can be an inspirational start to a place-based education project.

A journey through life is composed of movement punctuated by pauses, which produce a place. Long pauses produce homes or home-like places. Our journey through time has a different character because there is no pause, not even in our sleep. It is a common experience that both space and time can seem discontinuous. We need stasis so we notice a change in ourselves, to recuperate, but also to take stock of what the world is like and who we are (Tuan 2004). Some artists frequently deal with the relationship between time and nature. Rúrí, one of Iceland's most internationally known artists of today, is one of them. In her series of photographic and sound installations "Endangered Waters" (figure 3), she documents how the natural landscape is threatened with extinction as a consequence of human intervention. She catalogues the qualities of individual waterfalls in Iceland, preserving their unique sounds and appearance, for a future in which they may have ceased to exist. Her work exposes the environmental costs of Iceland's exploitation of hydroelectric power by highlighting the threat to the survival of Iceland's waterfalls posed by extensive dam building. Two-thirds of the energy produced is used by the multinational aluminium industry at below market rates. Her work has a strong spiritual dimension and a real political edge. For Rúrí, art is philosophy; her works are concerned with the connections between man, the earth, and the universe. She looks at the relationship between the existence of mankind and the inestimable age of the universes: and considers human perceptions (Schoen, 2011). The work is an interactive installation that comprises 52 photographs of waterfalls which Rúrí has taken of different waterfalls. The pictures are developed on transparent film, mounted between two sheets of glass and arranged in sliding slots installed inside a large steel frame structure. All the photographs are labeled and when a photograph is drawn out one can hear the sound of that specific waterfall.



Figure 3 Rúrí, Archive- Endangered waters

The installation was the representation of Iceland at the 50. Biennale di Venezia – 2003. This work has great potential in place- based education. Everyone can connect directly to the work through interaction. The powerful sound effect produced by waterfalls in their natural environment has been silenced with dams and Hydropower plantations. Teachers can ask students to think of places and spaces in their own surroundings that they would want to protect. When taking action through formal study students are more likely to become active citizens. Visual culture can be understood in relationship to the meaning and value of people's daily living habits.

The British artist Simon Starling creates works, in installations and performances, dealing with issues surrounding the growth of global capitalism and man's relationship with the natural world. Most of his works are site-specific projects where each work is deeply linked to the space or to the place from which it is conceived. Starling describes his artistic process as finding homes for projects:

"I tend to carry around a bunch of half-baked ideas for things that for some reason or other suddenly find their place or are triggered by a particular set of circumstances. It's a question of joining the dots. I always approach sites with very particular baggage but I guess you develop a noise for the global in the local or something like that"

(Bonaspetti, 2008, p. 9)

Starling got the Turner prize in 2005. It was his solo exhibition at the Modern Institute in Glasgow and at the Fundació Joan Miró in Barcelona that got him shortlisted for the prize.



Figure 4 Fuel-cell-powered bicycle



Figure 5 Solar panels

Simon Starling, Tabernas Desert Run, 2004.

His work Tabernas Desert Run (Figures 4-5) fits well within the discussion of place-based education. In this work he documents the artist's journey across southern Spain's Tabernas desert. He travelled on a self-made electric bicycle that produced water as a byproduct. To document this artistic process he collected the wastewater from his bicycle and used it to paint a simple watercolor of a cactus. The catalogue from the 2005 Turner prize says of this work

"The contrast between the supremely efficient cactus and the contrived efforts of man is both comic and insightful, highlighting the commercial exploitation of natural resources in the region."

An ecological ethic where humans have to value life in relationship to nature has been a catalyst for some artists to create socially responsible artworks. Libia Castro and Ólafur Ólafsson, often described as "citizens of the world", have worked together since 1997. They seek to find connections and utilise different media in order to raise questions addressing social issues and urban politics. The aim of their work is to portray a group of people living in a specific cultural, social and economic environment and mapping the spatial and

architectural context where they live. With their "site-related practices," they engage with the dynamics of locality, reactivating and revealing its current concerns. In Figure 6, the artists are portrayed wearing the Icelandic national women's costume. They stand in front of the first Icelandic aluminum smelter. In this work they question the environmental costs of Iceland's exploitation of hydroelectric power by highlighting the threat to the survival of Iceland's traditions and cultures posed by an emphasis on heavy industry. Two-thirds of the energy produced in Iceland is used by the multinational aluminum industry at below market rates.



Figure 6 Libia Castro and Ólafur Ólafsson, Untitled 2000-06

Even though a global perspective is important when designing action to improve sustainability, it is also good to start to act locally and think how one can change one's own action towards a better design of our physical environment that can be constructed and/or managed to improve sustainability.

Teachers can help students to shadow artist methodology that was implemented in other settings. The most important step is personalisation - when students think of what an artwork means to themselves and how it makes them feel and how they place value and importance and how they perceive the work. Critical discussion and explorations into what one really needs to live a good and fulfilling life can be a good starting point in art education. These explorations can use individual experience as a starting point for changing one's daily habits, by starting locally, i.e. to help lower energy waste and respect the integrity of the earth.

October 22nd 2011, the first day of winter in Iceland: a new sculpture garden was opened in Reykjavík. For the occasion Halldór Ásgeirsson fused together 5 lava rocks in a hole (Figures 7-8). The rocks came from volcanoes in France, Italy, Japan, China and Iceland; countries where he has worked on different lava-melting projects. Ásgeirsson melted down the lava using a blow- torch. All the lava on the earth is originally the one and the same object in the earth mantle. The performance in the sculpture garden reminds us that the earth is one closed system. The performance included participation of representatives from each country. They formed a circle around the hole, sending a message, a manifesto as to the brotherhood of mankind. Underlining the message Ásgeirsson wrote a poem on a wall and a concrete floor in the garden with the alphabets of the nations represented, informing us that the languages are essentially the same. In the statement with the show he says:

"Art is a common expression of mankind, albeit our different origins, colors, languages or nationalities. Culture originally comes from the conversation between man and nature; art is a natural part of this world, just as the people living in it...The mysterious letters written on the wall might be a message from earth, a type of encouragement for a conversation between different cultures, in the same way the lava rocks form a brotherhood in the park"

(Ásgeirsson, 2011)





Figure 7 and Figure 8 BRÆÐ(R)ALAG - FRATERNITÉ - FRATERNITÀ - 友愛 - 兄弟會

The work focuses on the impact every person has, both on the ecosystem and on a society's culture. The performance can be seen as a metaphor for the importance of human unity in modern existence.

In the same way one can look at and interpret the work of the Canadian photographer Edward Burtynsky. In his works he explores how nature is transformed through industry. In his photo series Nickel Tailings we see works that are aesthetically fascinating and at the same time a horror show.

Burtynsky uses his photographs to inform the public, corporations and governments about how people are drawn by a desire for a comfortable life and how the world is suffering for our fight to achieve this 'success' (Nickel Tailings No. 34, Sudbury, Ontario 1996). He says about his work: "I feel an urgency to help make people aware that what we give to the future are the choices we make today" (Burtynsky, 2010). His ideas are in harmony with the ideas of ES discussed earlier. The core function of art is to give people a fresh understanding and awareness of our environment and how we interact with it. The arts have the potential to build a relationship with the physical world and global society through the senses, intellectually and emotionally.

This kind of approach works in place-based art education and in ES because it enables a conscious and holistic response to finding the delicate balance between the integrity of the earth's environment and human wellbeing.

Teaching critical thinking should be part of SE, which makes students more competent in identifying values and understanding the importance of taking action and being an active participant in the community (Breiting et al, 2005). Many art projects that engage with sustainability emphasise a combination of critical and creative thinking. Such projects are often focused on perceiving and exposing social and political contradictions, and thereby empowering viewers and participants to transform oppressive conditions. In many cases art creation will help students to place emphasis on issues that they feel are worth fighting for, and thus build a bridge between knowing and acting. One can talk about students achieving "action competence" when they have developed the ability, motivation and desire to play an active role in finding solutions to problems and issues they feel are worth fighting for (Mogensen and Schnack, 2010). Using their acquired knowledge to change their environment, Jóhannesson (2008) points out that school projects that emphasise critical thinking and that involve action competence have not only a personal impact on the student when developing his creative and critical thinking, but the work can also have an impact on the community.

Critical thinking encourages an analysis of situations and arguments to identify faulty or unreliable assertions or meanings. This expectation of action or social change distinguishes critical pedagogy from critical thinking but still both invokes the term "critical" as a valued educational goal: urging teachers to help students become more skeptical toward commonly accepted truisms. Critical pedagogy is interested in collective action so individual and social criticalities are intimately linked (Burbules and Berk, 1999). Critical Pedagogy embraces a raising of the consciousness, a critique of society, as valuing students' voices, as honouring students' needs, values, and individuality. Critical pedagogy is a hopeful, active pedagogy enabling the students to become participatory members of a society. Peter McLaren explains that critical pedagogy is an approach adopted by progressive teachers attempting to eliminate inequalities on the basis of social class, and that it has also sparked a wide array of anti-sexist, anti-racist, and anti-homophobic classroom-based curricula and policy initiatives (McLaren, 2000).

This approach helps artists and art teachers to engage with activities to free themselves from taking the stereotypical position of a teacher. Through critical discussions students are encouraged to think about different ways of knowing and modes of working and questioning decisions, rather than merely receiving them. It is important that students learn by doing something or experiencing it, not just hearing about it. In place-based art education and ES, teachers can see students as actors in building their own knowledge and understanding its value. As the challenges of sustainability are often contradictory and complex, it is important for students to discuss conflicts and complex realities (Breiting, Mayer and Mogensen, 2005).

Place-based art ES encourages a sustainable lifestyle and participation in a democratic society. Artists use their imaginations to reflect the world and reflect on it. The issues they focus on emerge through interesting metaphors, which do not have to be realistic because imagination and creativity are part of the real world. Artists sometimes work with issues that provide viewers with new perspectives, connected to their daily life, in order to interpret and connect with their own experiences and community structure.

Some works of art deal directly with the community. Ólöf Nordal was asked to create an altarpiece for a church in the town Ísafjördur, which is located in the west fjords of Iceland. The work received the name *Birds of heaven* (Figure 9). She chose to build an altar table from a story in the bible where the bird golden plover is a metaphor for absolution of sins. When creating the work she had in mind that the work should have wide appeal with close connection to Icelandic cultural traditions. She also wanted to relate to the environment and personal relationships within the parish. She created the work with volunteers from the local community that formed the birds for the altarpiece. The work consists of 730 clay birds, formed by 730 individuals (Figures 10-13), and it can be said that it represents the diverse and multicultural group living in the same place (Morgunblaðið 2007).



Figure 9 Ólöf Nordal, Birds of heaven (2007)



Figure 10 - 13 Volunteer participants working on Birds of heaven

Nordal bases her work on extensive and detailed research. Her work, in which she often uses diverse materials, tends to deal with social issues that are closely related to the values that form the basis of ES. Many of her works could be described as showing in a simple and clear way a complex issue in one piece.

Behind most artwork is conceptual development, often both through the medium and the idea. Much contemporary art work involves research, which may be a good model for students' research. When artists work with place-specific art their work reveals new depths of a place to engage the viewer or inhabitant, rather than abstracting that place into generalisations that apply just as well to any other place. Some artists can strengthen the bonds among art, audience and context. Their interest is in the narrative landscape, understanding place and history to include people (Lippard, 1997). Nordal and Dion use approaches that allow participants from the communities to become part of the social multicentre.

As discussed earlier it is important to keep in mind the influence of time when working with a place. The meaning of artworks can change over time and it can also be given different meaning depending on the society in which it is shown. Some artworks are meant to speak to global settings but others are designed to be more local. They can be beautiful or provocative. Many contemporary artists work with complex contemporary issues and aim to use the works to make the audiences ask themselves tough questions, often dealing with matters mentioned earlier in this article in the context of sustainability. When working with the contemporary in the art room the teacher challenges students to look at their world in new ways.

When locating art education within a critical place-based pedagogy, standardised pedagogy is disturbed. When valuing the peculiarities of the local and when we take it for granted to question assumptions about progress and our relationship with nature, we encourage our students to think critically. In this way, teaching becomes responsive to ecology and local culture (Graham, 2007). Place provides nurture but it is also an important source of our identity - a key to who we are. The arts are, like nature, symbolic and revelatory. What you strongly like or dislike, says a lot about you (Tuan, 2004).

Conclusion

Visual arts are a vital part of cooperative and collaborative approaches in ES. Such education must be based on critical thinking and moral foundations, creating a general attitude that could lead to a brighter future for everyone. Place-based education offers a way to address important issues in education promoted in the 2011 national curriculum in Iceland. It does so by offering opportunities for integrating the arts within and across other subjects. To connect to one's own place, experience and values through critical reflection should be a natural part of all learning. The art discussed in this paper looks critically at ideas and issues, making connections and crossing disciplinary boundaries, juxtaposing forms and ideas that bring the viewer to new insights and new knowledge about personal places.

Working with localised social actions, activating the inhabitants gives a potential for conservation with an ecological approach where human culture is nested in ecological systems (Gruenewald 2003). Smaller societies like Scotland and Iceland can develop local models of sustainability with place-based education as a central element.

Iceland has become rapidly urbanized and the connection between the new urban population and traditional rural society is a complicated one. It is entirely possible that such rapid social change can cause deep ruptures in the traditional fabric of society. Place based approaches to education for sustainability are bound to become increasingly important in this context. New emphasises in the national curriculum reflect these concerns.

References

Adams, W. M., (2006). The future of sustainability: Re-thinking environment and development in the twenty-first century. *The World Conservation Union*, January 2006.

ART 21. (2001). Episode place. Available: http://www.pbs.org/art21/watch-now/episode-place (30/03/2013)

Ásgeirsson, H., (October 22nd, 2011). *Bræðalag (brotherhood)* – Performance at the Reykjavík Sculture garden, Nýlendugata Reykjavík. With courtesy of the artist. Photos: Guðmundur Ingolfsson.

Bachelard, G., (1994/1958). The poetics of space. Boston: Beacon Press.

Bonaspetti, E., (2008). Simon Starling, interview, *Mousse,* **13**(3), p. 9. Bonn declaration, world conference on education for sustainable development, (2009). Bonn, Germany. Available: http://www.esd-world-conference-2009.org/en/whats-new/news-detail/item/%20bonn-declaration-adopted.html [Date Accessed: 20/01/2013]

Breiting, S., Mayer, M., and Mogensen, F., (2005). *Quality criteria for ESD schools: Guidelines to enhance the quality of education for sustainable development* (Austrian Federal Ministry of Education, Science and Culture). Available: http://seed.schule.at/uploads/QC_eng_2web.pdf [Date Accessed: 20/01/2013]

Brenson, M., (2001). Visionaries and outcasts: The NEA, Congress, and the place of the visual arts in America. New York: The New York Press.

Brna, P., (1998). Models of collaboration. Available:

http://homepages.inf.ed.ac.uk/pbrna/papers/bcs98paper/bcs98.html [Date Accessed: 30/03/2013]

Burbules, N., and Berk, R., (1999). Critical thinking and critical pedagogy: Relations, differences and limits. In: T. Popkewitz and L. Fendler, eds., Critical theories in education: Changing terrains of knowledge and politics. New York: Routledge. pp. pp. 45-65.

Burtynsky, E., (2010). *Artist statement* Available: http://www.prixpictet.com/artists/statement/165 [Date Accessed:14/03/2013]

Castro, L and Ólafsson, Ó., (2000-06). Untitled. Part of an ongoing performance and photographic series.

Cresswell, T., (2004). Place, a short introduction. Oxford: Blackwell Publishing.

Day, H., and Jankey, S. G., (1996). Lessons from the literature. Towards a holistic model of quality of life. In: R. Renwick, I. Brown, and M. Nagler, eds., Quality of life in health promotion and rehabilitation. Conceptual approaches, issues and applications. Thousand Oaks: Sage. pp. 39-50.

Desai, D., (2002). The ethnographic move in contemporary art: What does it mean for art education? Studies in Art Education, 43, pp. 307-323.

Dodds, S., (1997). Toward a science of 'sustainability': Improving the way ecological economics understands human well-being. Ecological Economics, 23, pp.95-111.

Felce, D. and Perry, J., (1995). Quality of life: Its definition and measurement, Research in Developmental Disabilities, 16(1), pp.51-74.

Felce, D. and Perry, J., (1996). Assessment of quality of life. In: R.L. Schalock, ed., Quality of life. Volume I: Conceptualisation and measurement. Washington, DC: American Association on Mental Retardation. pp. 63-72.

Gibbs, T. and Howley, A., (2001). "World-class standards" and local pedagogies: Can we do Available: http://m.cedu.niu.edu/lepf/foundations/thresholds/journal/2001.Volume.XXVII/Issue.3 4/51. World-Class.Standards.and,Local,Pedagogies.Can,We,Do,Both,pdf [Date 20/03/2013]

Giddings, B., Hopwood B., and O'Brien, G., (2002). Environment, economy and society: fitting them together into sustainable development. Sustainable Development, 10(4), pp, 187-196.

Graham, M. A., (2007). Art, ecology and art education: Locating art education in a critical place-based pedagogy. Studies in Art Education, **48**(4), pp. 375–390.

Gruenewald, D. A., (2003). The best of both worlds. A critical pedagogy of place, Educational Researcher, 32 (A), pp. 3-12.

Harvey, D., (1996). Justice, nature and the geography of difference. Cambridge, MA: Blackwell.

Hattingh, J., (n.d.). Faultlines in the concepts of sustainability and sustainable development. Available: http://pubs.iied.org/pdfs/G02464.pdf [Date Accessed: 20/03/2013]

Hicks, L., (1990). A feminist analysis of empowerment and community in art education. *Studies in Art Education*, **32**(1), pp. 36-46.

Hicks, L. and King, R., (2007). Confronting environmental collapse: Visual culture, art education, and environmental responsibility. *Studies in Art Education*, **48**(4), pp. 332-335.

Holt, J., (1989). Learning all the time. Reading, MA: Addison-Wesley.

Huckle, J. (2006). Education for Sustainable Development: A briefing paper for the Training and Development Agency for Schools (London, Training and Development Agency for Schools).

Jóhannesson, I., (ed). (2008). *Andi sjálfbærrar þróunar í námskrám og menntastefnu – náum honum til jarðar*. GETA til sjálfbærni – menntun til aðgerða. Skýrsla 1. [Report] [The spirit of sustainable development in the curriculum and educational policy: Bringing it down to earth]. Available: http://skrif.hi.is/geta/files/2008/05/p4_300408.pdf [Date Accessed: 20/03/2013]

Jónsdóttir, Á., (2011). Listir og sjálfbærni, Áhrifamáttur sjónlista í menntun til sjálfbærni [Art and sustainability. The potential of arts in ES]. *Netla* Available: http://netla.hi.is/arslok-2011 [Date Accessed: 22/02/2013]

Keith, K. D., (2004). International quality of life: Current conceptual, measurement, and implementation issues. Available: http://www.sciencedirect.com/science/article/pii/S0074775001800057 [Date Accessed: 16/02/2013]

Krug, D., (2003). *Teaching art in the context of everyday life*. Greenmuseum. org. Available: http://greenmuseum.org/generic_content.php?ct_id=134 [Date Accessed: 18/01/2013]

Lieberman, G. and Hoody L., (1998). Closing the achievement gap: Using the environment as an integrated context for learning. Poway, CA: Science Wizards.

Lippard, L., (1997). The lure of the local, senses of place in a multicentered society. New York: The New Press.

Háskóli Ísland., (2012). *Sjálfbærni og -umhverfisstefna*. [University of Iceland. Sustainability and environment policy]. Háskóli Íslands

Massey, D., (2005). For Space. London: SAGE publications.

McLaren, P., (2000). Paulo Freire's Pedagogy of Possibility. In: S. Steiner, H. Krank, P. McLaren, and R. Bahruth, eds., *Freirean Pedagogy, Praxis and Possibilities: Projects for the New Millennium*. New York and London: Falmer Press. pp. 1-22.

Meeberg, G. A., (1993). Quality of Life: a Concept Analysis. *Journal of Advanced Nursing*, **18**(1), pp. 32-38

Mezirow, J., (2000). Learning as transformation. San Francisco: Jossey Bass.

Miller, T. R., Munoz-Erickson, T., and Redman, C. L., (2010). Transforming knowledge for sustainability: towards adaptive academic institutions. *International Journal of Sustainability in Higher Education*, **12**(2), pp. 177-192.

Ministry of Education, Science and Culture., (2011). Ný menntastefna - útgáfa námskrár. educational policy publication curriculum]. Available: [New of the http://www.menntamalaraduneyti.is/frettir/Frettatilkynningar/nr/6004 [Date Accessed: 20/02/2013]

Mogensen, F., and Schnack, K., (2010). The action competence approach and the "new" discourses of education for sustainable development, competence and quality criteria, Environmental Education Research, **16**(1), pp. 59 – 74

Nordal, Ó., (2007) Fuglar himinsins (Birds of the heaven). [Clay and steel pillars] Altarpiece in the church of Isafjordur. With courtesy of the artist.

Rúrí, (2003). Archice - Endangered waters. Courtesy of the Artist. The installation was the representation of Iceland at the 50. Biennale di Venezia. With courtesy of the artist. Photo: Jonsdottir, A. 2011 at Iceland National Gallery.

Sampford, C., (2010). Re-conceiving the good life: the key to sustainable globalization. Australian Journal of Social Issues, **45**(1), pp. 13-24. Available: http://eprints.gut.edu.au/42574/ [Date Accessed: 14/02/2013]

Schalock, R. L., (1996). Reconsidering the conceptualisation and measurement of Quality of Life. In: R.L. Schalock, ed., Quality of Life, Vol. 1. Conceptualization and Measurement. Washington: American Association on Mental Retardation. pp.77-87.

Schoen, C., (ed). (2011). Rúrí, monograph. Germany: Hatje Cantz.

Sen, A., (2005). Human rights and capabilities. Journal of Human Development, **6**(2), pp. 151-166.

Starling, S., (2004). Tabernas Desert Run, Production photograph The Tabernas Desert, Almeria, Spain, 2004. With courtesy of the artist and the Modern Institute/Toby Webster Ltd., Glasgow Photo: Simon Starling.

Theobald, P., and Curtiss, J., (2000). Communities as curricula. Forum for applied research and public policy, **15**(1), pp. 106–111.

Tuan, Y. F. (2004). Place, art, and self. Chicago, IL: University of Virginia Press, Santa Fe, NM and Columbia College.

Tuan, Y.F., (1977). Space and place, the perspective of experience, Minneapolis: University of Minnesota Press.

UNESCO. (United Nations Educational, Scientific and Cultural Organization) (2005). United Nations decade of education for sustainable development. Available: http://www.unesco.org/new/en/education/ [Date Accessed: 07/01/2013]