Organisation Mondiale pour l'Éducation Préscolaire
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Children's Voices about
the State of the Earth and Sustainable Development

A report for the OMEP World Assembly and World Congress on the OMEP World Project on Education for Sustainable Development 2009-2010

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Content

Introduction

Today, children of the world have a stronger position than before. Children have the right to express their opinions and influence decisions that affect them. The preschool child as a learner has the right to be involved in issues that concerns her life here, now and in the future. How can we work for a better future, individually and collectively, with and for all children? How can we work together to develop cultural identities within a social and ecological "everyday life"- context? How can we support culture focusing on a democratic and sustainable society?

OMEP has appointed Education for Sustainable Development (ESD) as the major project for the next coming years. The purpose of ESD is to reorient education in order to contribute to a sustainable future for the common good of present and future generations. The OMEP World Assembly in Lagos in August 2009 decided to start a project on ESD where we actually listen to what the children say. The idea behind the project is to introduce and invite children and professionals to discuss Education for Sustainable Development. This is one way for OMEP members and national committees to work with children on ESD, and by using the large OMEP organisation the project will have a worldwide spreading.

The aim of the project is to collect information about young children's thoughts, comments and understanding of the OMEP 2010 Congress logo and to enhance the awareness of ESD among OMEP members. For some ESD could be a tricky concept, not yet recognised or well known.

When children get the possibility to talk freely about what they see in the picture, children's interpretation of the image, the words and concepts children use, provide a good basis for approaching the children's experience. This perspective of how children reason can give cues about how sustainable development as a perspective and as a content could be handled in the pre-school.

The OMEP world project has been very well spread and more than thirty countries have joined the project. Hundreds of professionals and thousands of children have been participating in the interviews. We would like to thank all the participants sincerely. Your contributions and efforts have made the project possible.

This document is a report made for the OMEP World Assembly and Congress in Gothenburg, 2010. The report is based on the 28 national reports delivered during the spring of 2010. It will serve as a starting point for the symposium about the ESD World Project. All national project leaders are invited to a discussion about the preliminary results and the suggestions about how to continue the work with ESD within OMEP.

The full report on this project can be found on the OMEP World Web site www.omep.org.gu.se later in 2010.

Education for Sustainable Development - ESD

A view on children
Children of today are citizens - competent, active agents in their own lives with rights of their own (UN, 1989). They are affected by and capable of engaging with complex environmental and social issues. They steer away from romanticized notions of childhood as an arena for innocent play that positions all children as leading exclusively sheltered, safe and happy lives untouched by events around them. As values, attitudes, behaviours and skills are acquired already during early childhood, this is where ESD has to start (Pramling-Samuelsson & Kaga, 2008).

Children of today face a rapidly changing society with new challenges and possibilities. For four decades environmental issues have been on the educational agenda, initially named environmental education. Sustainable Development (SD) is widely understood as a form of development which meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland, 1987). Therefore, SD can be considered to represent an attempt to provide equity with, to and for, future generations.

The United Nations Convention on the Rights of the Child (UNCRC) states that children have the right to be involved and to be heard in matters that are affecting them. In Agenda 21, the UN agreement for global sustainable development from Rio 1992, children are recognized as important participants in the shaping of a sustainable future.

> "Children not only will inherit the responsibility of looking after the Earth, but in many developing countries they comprise nearly half the population. The specific interests of children need to be taken fully into account in the participatory process on environment and development in order to safeguard the future sustainability of any actions taken to improve the environment".
>
> (Agenda 21, 1992, chapter 25:12)

ESD is put on the agenda
During the past decades, the concept of education for sustainable development has influenced educational policies on international, national and local levels. The United Nations 2005 World Summit Outcome document, refers to the 'interdependent and mutually reinforcing pillars' of sustainable development; social development, economic development, and environmental protection. The three pillars are intertwined in ESD and a characteristic is that neither can be neglected.

In an attempt to translate the definitions of sustainable development into educational goals Pramling-Samuelsson and Hägglund (2009) also stress the integration of environmental, social and economical dimensions but they add value dimensions. They point out the similarities between ESD and peace education, education for democracy and values and citizenship education. These fields are ideological and political and normative approaches are common.

ESD is also a problematic concept
Education for sustainable development as a concept is also challenging. Modern educational systems are closely integrated with the global economy and the economy directs education towards needs that are themselves the product of systems nourished by global market ideologies. Researchers have expressed concerns about the uncritical acceptance and promotion of educational programmes based on 'developmentally appropriate practices'. The dominance from the Minority world, e.g. the North, industrialised or the American-European societies, has even been interpreted as cultural imperialism towards the Majority world, e.g. the South, non-industrialised or the previously called developing countries (Siraj-Blatchford, 2009).

There are reasons to re-define this one-directed model based on the strong theoretical and empirical insights on the strong impact of contextual and situational dimensions in all kinds of learning (Pramling-Samuelsson & Hägglund, 2009). The global economy does not follow the border of nations or cultures.

In Africa, the indigenous traditions and ways of passing on knowledge to future generations has often been excluded from the formal school education. In some countries schooling instead of being a way to employment, it has become a mechanism for unemployment, poverty and exclusion, due to the fact that the things children are taught in school are not adapted to the local context and needs. There is a need for a balance between indigenous and foreign knowledge systems, leaning on traditional life skills, entrepreneurship, flexibility and risk- taking, where young people are the most important resources (Mbebeb, 2009). The third millennium should educate children in their own culture while simultaneously provide competencies needed in a global perspective – a phenomenon also called glocalisation, reinvention of the local within a global context.

ESD is grounded in the belief that formal education has a significant role to play in establishing beliefs and practices that will promote more sustainable approaches. Ideally, ESD should empower children and societies by equipping them with values and basic skills aligned with sustainability. However, the spread of dominant European American notions about 'best practice' and preferred outcomes in early childhood challenge traditions and values in the majority world, such as learning from the elders and connection with nature (Pearson & Degotardi, 2009). If ESD is to be meaningful and successful, it has to be rooted in the local concrete reality of young children. Change and sustainability may co-exist if they are accepted both in the local and in the global society. Innovations need to be meaningful to children, teachers and the extended families if they will promote a sense of agency and empowerment.

In China the old confusion concept *He*, translated as *harmony*, offers a new theoretic basis for understanding Sustainable Development. There should be harmony within the individual, between individuals and between human beings and nature. Harmony presupposes the existence of differences and thus recognises diversity. ESD could thus be about recognising 'different and yet harmonious' (Chan, Choy & Lee, 2009). People are increasingly beginning to understand that natural resources are finite and that it is important to make individual actions. In regards to harmony between human and nature, environmental awareness can be promoted within early childhood education. Social harmony and sustainability can be promoted by highlighting cultural diversity and global interdependence.

In the minority world contexts, the priority may be to encourage greater respect for finite resources, and an understanding of global interdependence. In many majority world contexts, the priority is to provide basic care and education for children and to improve literacy.

Working with the important aspects
There is a tendency over the years that the efforts and projects started within environmental education have tended to focus on green issues. To recapture the original intentions from the middle of the twentieth century Australian teachers and researchers have adopted the concept education for sustainability (EfS), which includes the pros in sustainable without being compromised of the negative connotations to development. EfS emerges out of critical theory and also turns the focus towards the pedagogies of humans as agents for change (Elliott & Davis, 2009).

Recognising the child as a world citizen and, at the same time recognising the difference between being child or adult, leads to a need for addressing ethics and moral issues and for balancing values, e.g. solidarity versus individuality and how children think about taking care of themselves, of each other and the world. Both children and teachers need competencies such as courage, integrity, critical thinking and responsibility. Listening to and respecting children create real meetings, where relationships can be built and learning may take place (Johansson, 2009). However, research shows that discipline and obedience are values or priority from the perspective of teachers. Do preschools really provide an environment for critical thinking?

A way to integrate sustainable development into the agenda for pedagogical activities is to handle it as a vision or a perspective rather than a specific content (Hägglund & Pramling-Samuelsson, 2009).

UN Decade for Education for Sustainable Development
UNESCO has declared a UN Decade of Education for Sustainable Development 2005-2014. Formal, informal and non-formal education and learning processes for sustainability must be strengthened and prioritized. The purpose of ESD is to reorient education in order to contribute to a sustainable future for the common good of present and future generations. The following key education principals are addressed in the United Nations 2005 World Summit Outcome document:
- interdisciplinary and holistic
- values-driven
- critical thinking and problem solving
- multi method
- participatory decision making
- applicability
- locally relevant

Participation and involvement are necessary components of ESD, with an emphasis on empowerment and agency for active citizenship, human rights and societal change. Re-orientation is necessary at all levels and in all phases of education, and encompasses community learning, thus making ESD a wider process challenging the form and purpose of education itself (The Gothenburg Recommendations, 2008).

Specific recommendations for Early Childhood Education and ESD are also included in the Gothenburg Recommendations (2008) on the following themes: Access for all to a process of lifelong learning, Gender, Learning for change, Networks, arenas and partnerships, Professional development to strengthen ESD across all sectors, ESD in curriculum, Sustainable development in practise and Research.

Early childhood education and ESD
Although there are international and national objectives for ESD, research indicates that the texts are not well known and do not give sufficient guidance although early childhood education has a pedagogical tradition well aligned with ESD. The integrated curriculum approaches, thematic oriented instruction and authentic topics are embedded in children's everyday lives. Close relationships between teachers and children and leaning on child participation are important perspectives in early childhood education as well as within ESD. Experiential learning, values clarification, creative thinking, problem solving, story telling and inquiry learning are important in both early childhood education for sustainability.

In spite of the growing interest at international, national and local levels about sustainability, international and national research on ESD is still very limited (Davis, 2010). A relatively well-developed field is the child's thoughts on various phenomena in the surrounding environment and nature. A longitudinal study from the UK shows that children already at the age of four had knowledge of their environment and showed simple but accurate understandings of the effects of environmental change and its impact on different habitats and individuals (Palmer & Suggate, 2004). From a Nordic perspective, research surveys show that there are no contemporary studies on the theme of learning for sustainable development and children's agency in Scandinavia (Persson, 2008). There is a huge gap to be filled and an entirely new field of research focusing on learning for sustainable development for kindergarten and preschool children has to be built (Davis, 2009).

Every interaction in preschool can be analysed with regards to certain questions, e.g.:
- In what ways do this activity or this projector this daily routine contribute to sustainability?
- What possible learning about global citizenship, solidarity and individuality might come about in the preschool?
- What kinds of value conflicts evolve?
- What issues of power and powerlessness are actualised?
- How is participation or lack of participation expressed?

ESD in ECE should be recognised as dynamic rather than static, as a means rather than an end, and as a challenge for continuous cultural and social change rather than a once and for all measurable outcome (Hägglund & Pramling Samuelsson, 2009). A way to integrate sustainable development into the agenda for pedagogical activities is to handle it as a vision or a perspective rather than a specific content.

This OMEP World Project report *Children's voices about the state of the earth and sustainable development* can be read as a contribution to the research field.

Method

As was already mentioned in the introduction, the aim of the project was to collect information about young children's thoughts, comments and understanding of the OMEP 2010 Congress logo and to enhance the awareness of ESD among OMEP members.

To come to this aim, the coordinators of the project came up with instructions for participants on national level how to proceed during the whole project. The first step was **Information about the project to National Project Leaders (August 2009)** in which OMEP members all over the world were invited to organise informal interviews with children 1-8 years. The idea behind the project was to introduce and invite children and professionals to discuss Education for Sustainable Development (ESD).

Then, appointed national project leaders got detailed instructions how to organize interviews with children (**Interview Guide for the interviewers, August 2009**):

> **(1) Interviewing children** (1-8 years) is a skill, where the interviewer must concentrate on *Listening to the child/ren,* trying very hard to understand what the child is talking about. There are no right answers to the questions put, not even an easy Yes or No.
>
> **(2) Preparation.** When choosing children for the interviews, make sure to follow accepted national standards for research with children, including requirements for (a) obtaining institutional approval, where necessary, (b) obtaining parent and child consent, and (c) maintaining confidentiality /anonymity. It would be better to get fewer responses than to have more responses without adequate ethical considerations.
>
> **(3) Arrange for a suitable, quiet place.** Interviews can be arranged with individuals, pairs of, or smaller groups of children. Choose between showing the child/ren the picture on paper or on a computer screen. You can use paper & pen, audio or video recordings, taking ethical considerations into account.
>
> **(4) Introduction to interview.** Tell the child/ren that you have got a picture that belongs to a project and that you are very interested in talking with the child/ren about the picture. You are not to bring up the words or the concept of Sustainable Development in advance. We are interested in the children's actual comments on the picture without directing them in any special way. If you are using a tape/video recorder, which will be very helpful, you could let the children get acquainted with the technical advice before you start the actual interview.
>
> **(5) Interview questions:**
> - Please look at this picture. Tell me about this picture. **What is going on? Tell me more. What can you see in the picture?**
> - Follow up question: **Why are they doing this?**
> - **Anything more** you want to tell me the picture?
> - **Anything else** that has to do with the things we have talked about?
> - For some children, when relevant, elaborate on:
>   **Have you heard of Sustainable Development? Do you know what it means?**
>
> **(6) After the interviews.** Interviewers were asked to follow these instructions:
>
> - Write down all the answers as exactly as possible as they were put by the child/ren
> - Tell shortly about background data, number of girls, boys, age, place et cetera

- Please, mark some meaningful or expressive quotes
- If relevant, add a photo or drawing, (make sure you have permission from the child)
- Send your report to your project leader **not later than December 31, 2009**

As this is an international project, where comparisons must be possible, national leaders were asked to use coordinated steps for the analysis after collecting data on national level (**Letter to the National Project Leaders with a Guide for analysis of the answers, January 2010**):

(1) Read through all the interviews
Start by reading through all the interviews to get an overview of the answers and the variation.

(2) Organise the answers following to the interview questions suggested in the interview guide. What are the different answers to these questions?
  - **A.** What is going on?
  - **B.** Why are they doing this?
  - **C.** Anything more?
  - **D.** Anything else?
  - **E.** What do the children say 'Sustainable Development' means?

(3) Put similar answers together and describe the most common answers, for instance:
Question **A** (What is going on?)
A1: Answers about certain idea (description of the idea + number of answers)
A2: Answers about next idea (description of the idea + number of answers)
A3: Answers about other ideas (in the same structure)
and then go on and describe the different kinds of answers under question **B** and then for answers under questions **C**, **D** and **E**.

(4) Give some examples of very interesting answers,
try to find **5 – 10 illustrating and typical good quotes** and sort them according to the questions (A, B, C, D, E).Using the actual words from children give authenticity to the results.
Let us give you an example:
A: Idea: Children all together clean the Globe.
Quotes: "They work together." and "They cooperate on cleaning the earth…."

(5) Sum up the background data:

Some information connected to the written answers should be organised and summed up as **background data**. Write a short description. Some of this information will also be important when filling in the Summary:
  - Total number of children interviewed
  - Age and sex of children interviewed
  - Form of interview: individual, pair or group
  - Place: preschool, home, other institution
  - Type of location: rural, urban, other
  - Number and sex of interviewing adults

6) Write 5 – 10 pages of summary report using this structure:
  - Summary Form (see attachment)
  - Short description of aim, organisation and process
  - Main findings: The children's answers to questions A, B, C, D, E
  - Some Quotes connected to these questions

- Discussion, your thoughts about the findings and about the specific context in your country
- References

Analysing the national reports

The 28 national reports have been collected and analysed by the coordinators. Firstly, basic statistics on the project were organised: number of participating countries sorted by regions, number of interviewed children, their age and gender, number of involved adults and their gender, and number of institutions where the interviews were carried out.

For the next step, qualitative and some quantitative content analyse were used. Categories were created based on the answers to each interview question. These categories are not organized according to the interview questions but according to their logic. They are supported by illustrative citations, mostly with the country of origin noted.

Finally, a first comparison between the reports was made. The comparative analysis led to recognizing some differences and commonalities in terms of age of children, their gender (only for some countries which provided data on it), and region where they live. The comparison also helped us to formulate new questions about this project and about how to continue the work with ESD within OMEP.

Unfortunately not all national reports followed the instructions, which mean that not all of them provided complete and reliable information. But still, we believe that the final result gives us a valuable picture on small children's views, thoughts, and understanding of sustainable development.

Methodological considerations

Pilot studies have been carried out in the Czech Republic and in Turkey. These initiatives were helpful and especially important for a world project. As learning is contextual and varies between different places, countries and cultures, pilot studies can be an important complement to global instructions and proposals. Translation to other languages has also been made during the project, initiatives which were helpful during the process and for some countries necessary, as for instance the concept of Sustainable Development does not exist in all languages. In Bulgaria, China, Turkey and USA university students were active in the project, performing some of the interviews. Thus, the OMEP World project has influenced the academic world, a collaboration that has been very fruitful.

The very task to interview small children has also been challenging. The report from Panama states that it is important to note that the presentation of the logo caught the attention of also the youngest children. At the beginning they were silent and watched the image carefully. After a while they chose to comment the picture and to respond to the questions. In Slovakia the logo was perceived in two ways: the children did not like the picture very much, it had negative effect, and it evoked negative emotions. They didn't really try to look at the picture in a different way *or* the children liked the picture straight a way. They started a lively discussion about what was is in the picture, and looked for ways to help the planet.

Some reports tell about difficulties. How much should you prepare the children in advance? How important was it to strictly follow the proposed questions? Many methodological problems linked to the chosen form – informal child interviews – have been discussed and are also raised in the report from Japan.

In the report from Korea, there is a detailed analysis of the correlations of the answers depending on age and gender, which interestingly showed very few differences. A Korean comparison between individual and group interviews showed that the children gave richer answers during individual interviews. The answers from group interviews were more conform and with fewer examples. The Slovak report also states that individual discussions were more effective from a point of quality of the answers, because the children were not influenced by opinions from previous statements of other children. On the other hand, the individual form was more challenging from time point of view.

The report from New Zealand comments on the role of the interviewer; where the teachers direct the conversation and/or seem to make assumptions about the children's knowledge and thinking, the responses seem to be less rich and meaningful.

In USA, there were some problems originating in rules for research ethics, to get in contact with the children.

All these considerations, and others, can be brought up and discussed during the OMEP World Assembly and Congress 2010, for the benefit of future projects.

Result – Value the children's voices

The project has been of great interest for many OMEP national committees. So far, as many as 28 national reports have been delivered from different parts of the world. 9 142 children at the age of two to eight have participated in the interviews, which were carried out by 641 interviewers mainly females in 385 preschools, schools and other settings for small children in 241 cities and regions around the world! A statistic summary of the reported data is attached to this report (Attachment 1-4).

While it is impossible to draw definite conclusions, it does seem that the majority of the children have a sound beginning knowledge of the planet earth and how people might live their lives in relation to it. Although a number of children do respond to the project questions with 'I don't know', overall they confidently offer their thoughts, comments and questions showing that they live in a real world about which they know something worthwhile.

The result shows that children interpret the picture in many different ways. Most common is the answer that the children are cleaning the globe because it's dirty. But many children also thought that the children on the picture were painting the globe. The reasons why the children are cleaning or painting are aesthetical, or looked upon as a garbage problem or because they want to promote health. Some children think that it's a stone or an elephant and some of them were intrigued by the size of the earth on the picture.

This presentation of some results is structured to give priority to what the children have actually said, presented as quotes. Some of the quotes are translations from the children's mother tongues, made by the interviewers or the national project leaders. The result is organised with sub heading, where each section collects the children's answers within this area. It strives to value the children's voices. The last two sections in this chapter are based on information coming from or with more active participation from the adults.

Children are able to comment on objects, people and actions in multiple ways
All children were able to give detailed comments on what they saw in the pictures. In some reports, there is a difference reported linked to age, where younger children name objects and not always recognise the 'ball' or 'stone' to represent the Earth. This was also reported from child interviews in rural areas in some countries.

I see children.
They are washing.
They are washing the earth.
They are painting a stone.
I see a bucket.
There are boys and girls.
They are playing.
They are brushing the earth's teeth.
The children are painting a stone.
I can see some countries.
The children have built a planet.
They are washing the Earth.
They are defending the Earth.

A boy with a watering can.
A cloth and brushes.
They are protecting the earth.
The children have made a large ball from a large paper.
They are surrounding the world, watering and cleaning it.
Helping the earth get healthy.
Des enfants lavent la balle, le ballon.
Le vert, c'est l'herbe; le bleu, c'est les poissons.
Je vois les amis autour du ballon
Ils lavent la terre pour l'environment

Una bola grande
Un mondo con muchos niños
Están lavando el mundo
Se está limpiando el planeta

Children register a lot in their environment
While looking at the logo, children tell about the associations they make to other experiences and things in their environment.

I saw rubbish in the water at the beach and I saw the digger cleaning it up and the rubbish made me feel sad. I didn't want it to be there (Australia)
Il y a des enfants de différentes nationalités (Canada*)*

People cannot live without the earth (China)*.*
On voit des pays, des villes sur un globe (France)
C'est les enfants du monde entire, on le voit à leurs cheveux (France)
C'est les arbres qui nous font vivre (France)

Are they washing the earth? You cannot wash the earth by going to space
Are they really cleaning up the earth, or just washing the globe? (Japan)

I know ecology. I heard from commercial (Japan)

The earth is very contaminated so they're cleaning to get rid of it. I want to clean too. I especially want to clean the U.S. Because the U.S. is big. Ahn Joong Keun will protect and clean our country (Korea)

Hay varios niños que están ayudando a limpiar el mundo (Mexico)

The children are from Sweden, Denmark, Thailand, Japan and Bergen. We can see that they are from several countries because they have different hair, shoes, hands and look different (Norway)
The Earth didn't recognize where it rolled so it became dirty (Norway)

The children have the watering can, the broom, the soap and water. There are many children because they have lots of work. People polluted everything (Poland)
This dirty planet was ugly. When it is dirty we can be ill. When water is dirty the fish will die.

The children want health and happiness for everybody (Poland)
There are nine children cleaning the earth. The adults are busy and can't do the cleaning (Sweden)

Children demonstrate aesthetic sense and human values in relation to the Earth
Children of all ages expressed opinions and concerns reaching beyond the immediate picture.

Clean because the Globe shall be beautiful (Bulgaria)
Pour que ce soit beau et pour que ça brille (Canada)
Pour faire belle la terre (France)
To make it beautiful and clean (Singapore)
To make the earth colourful so someone will say it is a beautiful one (Turkey)
Están limpiando el planeta, lo quieren más brillante y más lindo (Uruguay)

Les enfants sont solitaires (Côte d'Ivoire)

The children are happy and like to work together (Finland)
I can see they are helping each other, it means they are being friendly to one another. Being nice, the world is like a family (Ireland)
I know why they are cleaning the world, because they are trying to show you to stop littering, because if you litter you're destroying your country (Ireland)

If the earth feels clean, I'll feel happy. Earth's friend will like it. Earth's friends? The sun and the moon (Korea)

Porque el planeta está contaminado, y debemos limpiarlo para una nueva esperanza (Mexico)
Están cuidando, le están dando cariño al planeta, también le dan amor y le dan vida el mundo (Nicaragua)
Todos los niños están ayudando a limpiar el planeta porque todos viven allí (Panama)

The children want the globe to be clean because it is our home (Poland)
Maybe they shall show it to some people, and then it can't be dirty (Sweden)

Children are able to see causes and consequences of bad environment
Taking the congress logo as a starting point, children volunteered information and suggestions about the state of the earth.

They are watering all the plants on the planet (Australia)
If you put rubbish in the sea you will kill the seals (Australia)
Plastic bags kill the fish (Australia)
Sharks eat fish –if the water is dirty then the fish die then the sharks don't have any fish and then they all die. (Australia)

Ils font ça pour entretenir le monde pour que le monde soit prospère à l'avenir (Cameroun)

Because they hope the weather be better, and less storm (China)
There are plants and animals and we should protect them (China)

On construit des choses qui polluent. Si on pollue, on peut s'évanouir (France)
I know why they are cleaning the world, because they are trying to show you to stop littering, because if you litter you're destroying your country (Ireland)
Nowadays, many people smoke, so that the amount of garbage has increased. The children clean up the earth (Japan)
Because the globe-warming is very serious problem and it would lead to the last day of the earth (Japan)

They're cleaning because we die if the earth dies (Korea)
The adults did bad things (Korea)
If you are blind and can't see the smoke, you can still smell it (Norway)

We should clean the earth, because on the earth live the animals, there are the plants and we live there (Poland)
We use the earth very badly; there is pollution (Turkey)
We cannot breathe if the earth is not clean (Turkey)

Children are able to name things which should be done for the environment
The very image of the logo made children name different things that can be done for a more sustainable world. Their suggestions were very well connected with their concrete everyday experience.

Rubbish should go in the bin (Australia)
You need to not throw the rubbish down and stop, everyone else should stop too (Australia)
We could give food that is not (in) plastic bags. (Australia)

Le recyclage va aider à nettoyer la terre (Canada)
Things that you don't want to use, you can give them away to others (USA)

They want to protect it. Do not throw trash (China)
We should not waste the paper. If we draw a picture, use both sides. (China)

Pour faire reviver la terre (France)
C'est pas bien de mettre des ordunes dans les rivières, ça fait mourir les poissons (France)
Sur la terre ça pollue – il y a des gens bêtes qui jettent des cigarettes (France)

Nowadays, many people smoke, so that the amount of garbage has increased. The children clean up the earth (Japan)
You know, my home has changed to all electricity system (Japan)

Throw trash in the trash can (Korea)
People drove cars around and the smoke went up (Korea)

You know, it is very easy. You just turn off lights or electricity when not in use (Japan)

Para que no nos enfermemos y nos bañemos en el mar limpio (Nicaragua)
Se limpia el planeta para no tirar basura en la casa y no esté sucio (Nicaragua)

We need to consume less water and electricity (Turkey)

Para cuidar el planeta, está bien limpiar el planeta. Lo están lavando para que el mundo esté más salusable y tenga alegría (Uruguay)

Children recognise that taking care of the Earth is our common task to share
Children express in various ways the interdependence between all people and between human and nature.

Pour la paix (Canada)
People cannot live without the earth (China)

Les enfants unis travaillent ensemble , ils veulent la paix pour développer le monde (RDCongo)

If plants would fade and trees didn´t grow anymore animals should starve to death when there would not be lawns for horses nor food. And giraffes would not get food anymore. Some animals should die out when their mouth could not eat. Even lions wouldn't play when their prey animals had died already. And then lions would disappear one day because of lack of food since their food is running out (Finland)

There is more to this than cleaning you know (Ireland)

They are doing it as a group activity since it would be much fun rather than playing alone. (Japan)

We're curing the earth because it's sick. Harmful UV lights are coming in and making holes and making the animals and plants sick (Korea)

Creo que es para respirar major, que no se ensucie, para limpiar todo, para que todos los niños puedan vivir mejor (Mexico)
Los niños limpian su planeta porque es nuestro hogar. Porque están cuidando la tierra (Panama)

All the children are cleaning our planet here. They all live here and they feel bad because everywhere is dirty. The children love our planet and they care about the world. These children are from different races. Every child should care about the planet (Poland)
The children want the globe to be clean because it is our home (Poland)

So we can live well here on this earth of ours (Slovakia)
So we have clean Earth, would not throw rubbish out of the window, so we separate rubbish. People have no manners and children have to clean rubbish after them. If Earth will not be clean we will be sick (Slovakia)

I save water for the earth so other people can have water too (USA)

Children are aware of many things related to sustainable development
Children are aware of the state of the earth and they are involved in thoughts around our common future. They understand that problems are complex and interconnected.

Children need to be cared for (Brazil)

Il faut de l'eau (France)

Because the global warming is very serious problem, and it would lead the last day of the earth (Japan)

Que debemos darnos una segunda oportunidad para concientizarnos del mal que le hemos hecho a nuestra propia casa la tierra (Mexico)
Tener más alimentación permite que menos niños y niñas mueran de hambre en el mundo (Panama)

If everybody cleans it will be cleanly and colourful. The children want everybody to be healthy and everybody has happy life. We have to protect environment against death. Without plants we will also be ill. Without the trees oxygen will disappear (Poland)

Our planet used to have firm cover around it self and now it has holes because exhaust gasses from cars damaged it, smoke from chimneys, fridges, sprays and now when the cover is damaged the sun shines strongly and damages everything (Slovakia)

Es un planeta. Porque esos niños fueron a la escuela y aprendieron que cuidar el planeta es más importante que todo (Uruguay)

Why? I have to clean my room. Is it like cleaning my room? (USA)

Ideas on the term 'Sustainable Development'
A final question, to be put to the children who were really interested in the topic was: *Have you heard of Sustainable Development? Do you know what it means?*

Most of children did not recognise the concept, and there is not even a corresponding concept in all different languages, that are spoken in the participating countries. According to the Chinese report 91% of children had "nothing to say" on this concept. In Singapore, Turkey and USA, there were no relevant answers, in Sweden only one child, the oldest, recognised the concept. Some interviewees broadened the question by for example mentioning the environment. Although few children mentioned 'sustainable development' or 'environment' when asked to describe what is happening in the picture, several children did show knowledge of environmental issues.

The above taken into consideration, there were still some children who came up with very interesting definitions on Sustainable development:

When you cut down a tree it breaks it (Australia)

Action, love and care for nature (Brazil)

Ensuring everyone a better future (Brazil)

Le développement durable, c'est le fait d'entretenir le monde (Cameroun)

Let our country be more developed (China)

Moving forward, develop better (China)

It means to test things to work, that development lasts or make an invention and it will be history (Finland)

I think it might mean, like, to save the world for later (Ireland)

Yes, yes, it means generous to the earth (Japan)

Cuando se les pregunto sobre el desarrollo sustentable, ningún grupo de niños supo, todos dijeronque no sabían que era eso, dijeron no sabemos. Pero sin embargo cuando se les pregunto que si sabían jacerca de la educación ambiental, respondieron rápidamente, que eran los árboles, las flores, las mariposas, que es portarnos bien, respetar, cuidar todo, que es el amor con nuestros padres, que ellos nos quieren (Mexico)

It means that everybody makes something for the globe (Poland)
Sustainable Development exists when there is not rubbish here. Everybody has a right to live healthy in this world (Poland)

To make the earth last longer; if the sun becomes too strong then it will be too war for the people on earth (Sweden)

So that the earth is not to die and humans would need to live on another planet (Turkey)

So we will always have stuff, the water and food to eat. We have to take care of the earth and don't use too much … Only use what we need (USA)

Adults have a tendency to underestimate the children
One parent made the comment "But why are they asking the kids?" and one of the children said "Why not? We know stuff too" (Australia)

It is essential to change the social attitude against their ability to participate effectively (Brazil)

They noticed that the children in the logo were different from themselves; they knew there were many countries and many (different kinds of) people. They hoped that they could do the same thing (China)

Nous avons noté une prise de conscience prématurée de la part des enfants sur notre palète. Ce qui nous amène à espérer profondément que les enfants, citoyens de demain peuvent contribuer à changer positivement le monde (Côte d'Ivoire)

Until the implementation of this global project on the given subject I felt that pre-school children are not very aware of environmental protection, ecology and other sub-themes linked to ESD (Education for Sustainable Development). However, following the actual interviews with children and reading through the individual responses, I realised that the opposite is true. Children perceive information they hear, without it being the adults' intention, and the moment they receive a particular impulse they are able to use it. (Czech Republic)

Sometimes it took some minutes before we understood how logical a child is thinking …We have learned quite a lot …(Finland)

The children reasoned why the children on the logo are cleaning the earth/globe since it is "dirty" or/and "black." The children thought that black is dirty, and should erase. The reasoning of the children made us think whether we might use the word, 'black' as dirty or negative nuance, and embedded in the Japanese context (Japan)

There were almost no differences between the children's answers when we compared age and gender (Korea)

Los niños y niñas ya tenían sobre conocimientos previos que habían adquirido del tema de educación ambiental, la basura y el reciclaje, así puderion expresar sus cococimientos, en realidad es increíble lo que los niños pequeños logran aprender cuando se les motiva (Mexico)

The findings from the five Norwegian preschools do not support the assumption that environment concepts such as greenhouse effect and ozone depletion are beyond the intellectual capabilities of young children. While describing action in the picture, a five-year-old child says: *All the children are together to keep the earth clean. If you are blind and can't see the smoke, you can still smell it. Chimney-smoke is not good for the globe. Then ice melts on the globe.* The quotation implies a rather complex understanding of pollution and the greenhouse effect. Although it could be argued that the following dialogue has been influenced by the interviewer, this dialogue also supports a wider recognition of environmental awareness:

> Teacher: *"What do we need to make food?"* Child: *"An oven, a pan, something to stand on, cables and electricity. We can save electricity by turning off the light when we are not at home. Then we save money"*.
> Teacher: *"Do we save anything else?"* Child: *"We save the environment"*.
> (Norway)

En Panamá los niños y niñas que se entrevistaron tuvieron una excelente motivación respecto al tema, y el conjunto de las respuestas nos llevan a manifestar la siguiente Visión:
"Pintar el Planeta de color verde con la participación de todos los niños y niñas del mundo es conservar nuestro ambiente y mantener nuestras vidas saludable".

[In Panama, the interviewed children had an excellent motivation for the subject, and all the answers lead us to express the following vision:

'Painting the planet green with the participation of all children in the world to preserve our environment and to maintain our healthy lives']

…there are boys and girls that are cleaning earth because it is dirty from mud. Homeless people and gypsies make it dirty…(Slovakia)

A Swedish teacher who was interviewing children commented on the lack of ESD in her everyday practice. She said: *We need to talk more about these issues with the children.*

Discussion

Above all, the findings from this project indicate that young children under eight years are capable of joining in a discussion on environmental issues that nurtures hopefulness and is futures-focused. The result indicates that many children have a rich knowledge of earth and environment issues. They linked the image of the earth to maps, the moon, the sun, satellites, earthquake, volcano, desert, mines, etc They used the key words relating to environmental issues, such as clean, save, protection, waste, dirty, weather, storm, etc. They knew that this logo had links to plants, grass, trash, plastic bags, papers, etc.

For some ESD is really a tricky concept, not yet recognised or well known. Sustainable development is not a concept the children have heard before. Although the congress logo has proved to be interesting enough for many conversations, there have also been some problematic aspects. The logo has it's shortcomings due to the fact that parts of the earth does not show, and that only some nationalities are represented by the children. It is of great importance in a world project to take into consideration cultural appropriateness in terms of the choice of picture and questions.

The Japanese report introduced the term ***MOTTAINAI***. The Nobel peace prize recipient, Ms. Wangari Muta Maathai of Kenya, has spread the Japanese word "*Mottainai*" as the key word for conserving environment throughout the world since she visited Japan in 2005. The Japanese word, "*Mottainai*" literally means "What a waste!" in English.

Some children in the Norwegian project objected to the picture, due to its animation of the Earth, quote: *The Earth is supposed to be up in space"*. Animation (definition: *to give life*) is a form of storytelling in which, instead of real photography (here: of the pollution on earth), still drawings or models are used to portray actions, either drawn or computer-generated. Animation presents a number of challenges for evaluating children's understanding of and critical responses to images.

Based on the results, it is possible to argue that ECEfS (Early Childhood Education for Sustainability) still is a fairly vague or abstract topic in many preschools. Why has early childhood education been so slow to engage with sustainability? Elliot and Davis (2009) and Siraj-Blatchford (2009) argue that any wider uptake has been due to a failure by state and federal governments to support the initiative. They have nevertheless identified some problems within the early childhood education profession itself:

> The mistaken belief that simply exposure to the environment may be sufficient to achieve education for sustainability.

> The assumption that environment concepts such as greenhouse effect and ozone depletion are beyond the intellectual capabilities of young children has served to inhibit curriculum development.

> Practitioners often assume that education for sustainable development would be about teaching children about impending tragedies, rather than something offered as an antidote to the "doom and gloom" with the potential of empowering children to actively support the development of more positive futures.

On the other hand, the chosen method in this project - to initiate talks with children around the OMEP Congress logo – has turned out well. Children and teachers liked this project which brought inspiring contents into their activities in the preschool. The children noticed that the children in the logo were different from themselves; they knew there were many countries and many (different kinds of) people. They also saw and explained the logo from their own life experience, and were able to link the logo to their own experience.

The result from this study indicate that children try to create meaning about the relationship between human behaviour and the environment and begin to think about the impact of human behaviour on the environment. For example, they said that people cannot live without the earth; "We should protect the earth, and grass, water the plants, or the earth would be black;"

ECEfS also includes working on the need for global collaboration and consideration for one another. The development of some Western societies indicates on the one hand an increasing individualization and on the other hand an increasing globalization. Social democratic traditions exist hand in hand with a neoliberal economic practice. This tension between individual freedom (individuality) and responsibility for others in the world (solidarity) is inevitably part of the moral life in preschool.

There are conflicts between North and South in that industrial countries will dump toxic waste in the developing countries; there is need for global collaboration of all races, ages, religious beliefs, gender and languages. As seen in the example demonstrated in the congress logo, children are willing to help clean the world of all filth, diseases, pollution, illiteracy and wars.

There is a need for a conscious choice, made by teachers, directing the pedagogical activities towards overall goals aligned with ESD. In order to reach these ambitions we need well educated teachers, prepared to make conscious decisions about the preschool programmes. Our results indicate a need for reforms within Teacher Education Programmes incorporating questions linked to education for sustainable development and to the importance of children's influence and participation.

A team of teachers working with ESD need to build their pedagogy based on the children's ideas, interests and thoughts, and it is also crucial that the teachers themselves have a curious and humble approach to their own work, what actions and what to offer in the everyday life in the preschools.

How can we support teachers to take on the task to reorient education within a broader political perspective towards sustainability?

How can we together with parents and other professionals develop an environment in which the children get truly involved and can make their own choices?

How can we give children the opportunity to acquire a caring attitude to nature, the environment and each other?

How can we engage children in research questions about learning for sustainable development in preschool setting?

Teachers play a decisive role for children's learning about sustainable development and to help them find the most appropriate solutions. But the children represent the future and it is

our obligation to empower them for the challenged future of the Earth.

A continued project

Some national reports came up with some suggestions for future projects. The Czech report asks us to consider to announce an artistic approach, where children could use different means of expressing themselves and to implement another project in the similar way, with other world wide problems and to cooperate with organisations that work with older children. There is a need for more empirical research on ESD; how ESD is developed and practiced in early childhood care and education practical sites. The Japanese report suggests a project to further develop the relationship between the project and practice: how the project could be heightening awareness of teachers/caregivers to carry out in their classroom. OMEP Sweden has written a proposal to the world assembly on a continuation of the OMEP World project.

The next step in developing knowledge about sustainable development and younger children could then be to further engage children in research questions about learning for sustainable development in pre-school setting. An interesting initiative as this one – getting involved in a world wide project – can enrich, improve and broaden horizon of knowledge of teachers and children in their care.

The OMEP World Project on ESD will continue with more child interviews and a proposed continuation of the OMEP ESD World Project - *ESD in practice* will be discussed during the World Assembly.

The aim of *Part Two - ESD in practice* would be to implement Education for Sustainable Development together with the children in early childhood education practices. This can be done in their daily lives, as a theme or as separate projects. The project would also help us to collect information and to further understand young children's thoughts, comments and understanding of ESD. Part two will be guided and steered around the six R:s, drawn from the Brundtland report Our Common Future (1987) and with OMEP initiated explanations:

Reduce   -   we can do more with less
Reuse   -   make more use of old things
Recycle   -   use again by someone else
Rethink   -   people value other things
Redistribute   - resources can be spread
Restructure   - new sustainable systems

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Attachment 1-4: Statistics

1. Number of children interviewed: all together 9 142 from 28 countries

Europe	IN TOTAL	1-2 years girls/boys	3 years girls/boys	4 years girls/boys	5 years girls/boys	6 years girls/boys	7 years girls/boys	8 years girls/boys
Bulgaria	900	-	60	199	232	178	220	31
Czech rep.	519	-	-	-	-	-	-	-
Finland	49	-		9\11		13\8	4\4	-
France	650	-	46/32	87/62	68/73	117/165	-	-
Ireland	57	-	8\1	2\5	15/24	0/2	-	-
Norway	-	-	-	-	-	-	-	-
Poland	334	-	-	-	116/25	113/80	-	-
Slovakia	246	1\3	5\8	16/26	57/55	42/33	-	-
Sweden	46	1\1	0/3	7\13	7\9	3\1	-	1/0
Turkey	244	-	8\5	9\11	18/30	46/53	18/16	9\21
TOTAL	3045							

Empty squares signify that children were interviewed in the certain category but report does not say the number.

The hyphen signifies that no children in the certain category were interviewed (or the data are not available at all).

Africa	IN TOTAL	1-2 years girls/boys	3 years girls/boys	4 years girls/boys	5 years girls/boys	6 years girls/boys	7 years girls/boys	8 years girls/boys
Benin	-	-	-	-	-	-	-	-
Cameroon	2900	-	-	-	-	-	-	-
Democratic rep. of Congo	14	-	1\2	2\1	3/0	0/2	0/2	1/0
Ivory Coast	765	-	3\4	24/20	49/51	102/133	177/202	-
Nigeria	48	-	1\1	3\1	3\2	5\4	12\7	4\5
TOTAL	3727							

Asia Pacific	IN TOTAL	1-2 years girls/boys	3 years girls/boys	4 years girls/boys	5 years girls/boys	6 years girls/boys	7 years girls/boys	8 years girls/boys
Australia	-	-	-	-	-	-	-	-
China	303	5\1	35/34	33/40	61/59	10\25	-	-
Japan	122			12/11	35/23 (+25)	8/7	1/0	-
Korea	279	12/12	18/30	49/43	30/31	27/27	-	-
New Zealand	36	-	-	-	-	-	-	-
Singapur	44		1/2	1/3	4/10	6/10	0/2	1/4
TOTAL	784							

Latin America	IN TOTAL	1-2 years girls/boys	3 years girls/boys	4 years girls/boys	5 years girls/boys	6 years girls/boys	7 years girls/boys	8 years girls/boys
Brazil	122	2\3	6\5	18/30	16/15	4\6	5\3	3\6
Mexico	53	-	-	-	-	-	-	-
Nicaragua	19	-	2/0	2\2	6\5	0/2	-	-
Panama	1000	-	-	-	-	-	-	-
Uruguay	185	6\6	9\16	31/30	21\12	10\10	2\5	12/13
TOTAL	1379							

North America	IN TOTAL	1-2 years girls/boys	3 years girls/boys	4 years girls/boys	5 years girls/boys	6 years girls/boys	7 years girls/boys	8 years girls/boys
Canada	43	-	-	-				
USA	164	2\1	14\10	24/21	19/18	19/27	2\3	2\2
TOTAL	207							

2. Number of interviewing adults: all together 641 (mostly female)

Europe	WOMAN	MAN	TOTAL
Bulgaria	-	-	40+30+50
Czech rep.	-	-	45
Finland	-	-	not available
France	35	1	36
Ireland	7	-	7
Norway	-	-	not available
Poland	28	-	28
Slovakia	17	-	17
Sweden	11	-	11
Turkey	3	1	4
TOTAL	101	2	268

Africa	WOMAN	MAN	TOTAL
Benin	-	-	not available
Cameroon	-	-	15?
Democratic rep. of Congo	-	-	not available
Ivory Coast	3	4	7
Nigeria	6	1	7
TOTAL	9	5	29

Asia Pacific	WOMAN	MAN	TOTAL
Australia	-	-	not available
China	44	5	49
Japan	-	-	17
Korea	18	-	18
New Zealand	7	-	7
Singapur	11	1	12
TOTAL	80	6	103

Latin America	WOMAN	MAN	TOTAL
Brazil	-	-	not available
Mexico	-	-	not available
Nicaragua	4	-	4
Panama	-	-	200
Uruguay	12	6	18
TOTAL	16	6	222

North America	WOMAN	MAN	TOTAL
Canada	1	-	1
USA	14	4	18
TOTAL	15	4	19

3. Number of institutions: all together 385

Europe	PRE-SCHOOL	SCHOOL	OTHERS	Total
Bulgaria	4	1	-	5
Czech rep.	44	-	-	44
Finland	2	1	-	3
France	11	8	1	20
Ireland	3	2	2	7
Norway	5	-	-	5
Poland	11	-	-	11
Slovakia	17	-	-	17
Sweden	5	-	-	5
Turkey	5	2	households	7+
TOTAL	107	14	3	124

√ signifies that the certain institution was involved but the report does not mention the number, the hyphen signifies that the certain institution was not involved in the research.

Africa	PRE-SCHOOL	SCHOOL	OTHERS	Total
Benin				not available
Cameroon				not available
Democratic rep. of Congo	1	-	-	1
Ivory Coast	12	30	3	45
Nigeria	1	4	1 (home)	6
TOTAL	14	34	4	52

Asia Pacific	PRE-SCHOOL	SCHOOL	OTHERS	Total
Australia		-		3
China	50	-	-	50
Japan	7	-	1	8
Korea	6	-	-	6
New Zealand	6	-	-	6
Singapur	12	1	-	13
TOTAL	81	1	1	86

Latin America	PRE-SCHOOL	SCHOOL	OTHERS	Total
Brazil	8	1	2	11
Mexico	√	√	√	not available
Nicaragua	1	-	rural children at home	1+
Panama	√	√	-	not available
Uruguay	22	26	57	105
TOTAL	31	27	59	117

North America	PRE-SCHOOL	SCHOOL	OTHERS	Total
Canada				1
USA	3	1	1	5
TOTAL	3	1	1	6

4. Number of Cities/Regions: all together 241

Europe	CITIES	REGIONS	Not specified
Bulgaria	1	1	-
Czech rep.	-	7	-
Finland	1	1	-
France	3	3	-
Ireland	7	1	-
Norway	2	2	-
Poland	4	1	-
Slovakia	17	7	-
Sweden	-	-	4
Turkey	3	2	-
TOTAL	38	25	4

Not specified – the report does not say if the number indicates city or region.

Africa	CITIES	REGIONS	Not specified
Benin			not available
Cameroon			not available
Democratic rep. of Congo	1	1	-
Ivory Coast	-	-	19
Nigeria	-	3	-
TOTAL	1	4	19

Asia Pacific	CITIES	REGIONS	Not specified
Australia	1	1	-
China	-	10	-
Japan	8	-	-
Korea	2	-	-
New Zealand	2	-	-
Singapur	1	1	-
TOTAL	14	12	-

Latin America	CITIES	REGIONS	Not specified
Brazil	-	-	11
Mexico	-	-	-
Nicaragua	-	-	2
Panama	-	-	not available
Uruguay	-	-	105
TOTAL			118

North America	CITIES	REGIONS	Not specified
Canada	1	1	-
USA	2	2	-
TOTAL	3	3	