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Research on Education for Sustainable Development: a national network at its first steps

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ABSTRACT
At the end of the United Nations Decade of Education for Sustainable Development (2005-2014) the Italian socio-economic situation urgently required new ideas and suggestions, highlighting the need for research in Education for Sustainable Development with more energy and incisiveness. As a result, a number of Italian actors considered that networking would be one strategic way of meeting these needs and decided to found a National Network on Education for Sustainable Development: WECC – Italia. The goal of the network is to develop new opportunities and new ways of learning. It also aims to affect policies and practices in such a way as to fill some current gaps (e.g. research-practice, institutions-citizens) and thus to address the complexity of a changing world. This chapter discusses some of the contributions this network can make to research on Education for Sustainable Development.

KEYWORDS
Community of practice, Education for Sustainable Development, Network, Research

INTRODUCTION
The increasing complexity of societies and problems faced at different levels (local and global) together with the uncertainty related to their solutions, urgently calls for new themes, spaces and approaches to research in different fields. Reflecting from the perspective of Education for Sustainable Development (ESD) it has become clear that achieving a sustainable world, especially from both a social and an environmental point of view, requires the promotion of knowledge, skills, abilities and attitudes to combat important and urgent issues, such as climate change, loss of biodiversity, desertification, hunger, poverty, injustice and disease. It is widely
agreed that effective learning in society needs to include various forms of diversity: different cultures, contexts (formal, non-formal and informal), disciplines (interdisciplinarity), methods (qualitative and quantitative) and subjects (researchers, teachers, students, decision-makers, citizens) (Wals et al., 2013; Glass et al., 2012). One way of achieving this integration of diversity is through cooperation between different subjects and overcoming the obsolete distinction of formal and informal education (Wals et al., 2013).

It is also suggested that there is an urgent need to promote networking at different geographic levels (local, regional and/or global) (Wals, 2009) and the establishment of communities of practice on ESD made up of different stakeholders (researchers, teachers, citizens, etc.) (Trez et al., 2011). Communities of practice as groups “of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger, 2011), could be seen as a promising way for promoting ESD teaching and learning strategies. Such communities allow interaction between their members in a variety of formats and encourage the co-construction of knowledge (Wenger et al., 2002; Hildreth and Kimble, 2004). Through this hybridity and synergy the development of new opportunities that enable transformative learning take place.

The International Implementation Scheme of the Decade of Education for Sustainable Development (DESD) recognises the importance and encourages the development of networks and communities of practice (2005-2014) (UNESCO, 2005). For example some goals listed are to:

- “Give an enhanced profile to the important role of education and learning in sustainable development;
- Facilitate networking, linkages, exchange and interaction among stakeholders in ESD;
- Provide an opportunity for refining and promoting the vision of and transition to sustainable development – through all forms of education, public awareness and training;
- foster an increased quality of teaching and learning in education for sustainable development”.

An overview of some of the existing networks in ESD discovered a multifaceted situation in relation to the structure and organisation of networks in different countries. These ranged from the local Manchester Environmental Education Network
managed voluntarily by teachers, to the worldwide UN supported Regional Centres of Expertise (RCE) Network of formal, non-formal and informal organisations working together and sharing common goals. The general goals of all networks include: to promote the importance of school development in the field of ESD (e.g. ENSI); to support the exchange of ideas, programs, research amongst educators and researchers; to enhance the professional skills of different groups and to promote interdisciplinary communication (e.g. Columbia Basin Environmental Education Network, European Educational Research Association, Environmental and Sustainability Research Network).

The majority of the networks pursue these goals through sharing resources, events and services, organising meetings and seminars, publishing and promoting academic publications and information (e.g. EnviroLink Network, Canadian Network for Environmental Education and Communication). Active participation in these communities of practice is also sustained through websites, newsletters, emails and other social networking forums (Trez et al., 2011). Very often the networks set up ad hoc committees and working groups for the fulfilment of specific tasks or to approach particular issues.

Not all the networks have been directly established by ESD practitioners but have resulted from initiatives of national and regional governments. Examples include the Australian Government-National Education for Sustainability Network and the California Regional Environmental Education Community. These networks are supported organisationally and economically and as a result are free to join.

The World Environmental Education Congress Network (WEEC Network) provides an interesting international experience. Starting in 2003, the World Environmental Education Congress (WEEC) has been organised every two years. The first Congress held in Espinho (Portugal) was followed by events in Rio de Janeiro (Brazil), Torino (Italy), Durban (South Africa), Montréal (Canada), Brisbane (Australia), and Marrakech (Morocco) with the most recent being in Goteborg (Sweden) in the summer of 2015. These events are an effective way at an international level to discuss key issues in ESD, to share ideas and experiences as well as promoting the growth, improvement and diffusion of ESD practices and research, and sustaining a global community of research and practice in this field. To support these goals in the time between the congresses the WEEC Network was started. The WEEC network is coordinated by the International WEEC Secretariat based in Torino (Italy) and has thousands of members worldwide. The aim of the network is to encourage
discussion amongst different actors involved in environmental education and sustainable development including universities, institutes and research centres, public institutions, non-governmental organisations, schools, parks, professional associations, mass media and companies.

Taking into account this international scenario, some specific traits of a network on ESD in a national context are discussed with a focus on the Italian experience.

In the mid 1990’s the National Environmental Information, Training and Education system (INFEA) was established in Italy to coordinate the planning and delivery of ESD. INFEA is based at the Ministry of the Environment with the cooperation of Regional Offices which disseminate information and provide training and education in the field of sustainability. This system was very active for the first 6-8 years, and focused mainly on formal education (primary and secondary schools) and on training of teachers and environmental educators. Over the last 5 to 7 years, however, it has run out of steam largely because of a complete halt in funding and the lack of political interest. Only a few regions have continued to support ESD initiatives. However, despite this situation, a multitude of ESD experiences have been developed in the school and extra-school contexts.

A further important weakness in the Italian context is a lack of transversal thinking. Transversality is a central concept in the UNESCO and UNECE visions (UNESCO, 2005; UNECE, 2005) where the crossing and the blurring of boundaries have become strategic goals for actors involved in ESD allowing the development of new forms of understanding and knowledge. This is a challenge in Italian society which is characterised by a strong tradition of disciplinary research in different fields. Add this to the lack of institutional support for ESD and of a specific political design, the deep crisis of the role of the school in Italian society and the critical Italian socio-economic situation, there is an obvious and urgent need for new ideas and approaches in all areas. In turn this highlights the need for more energetic and incisive research in this field.

Starting from these reflections a group of Italian ESD practitioners decided to turn these weaknesses into opportunities through the concept of networking. This seemed a good way to promote common and integrated action in a way that might catalyse the attention of politicians and institutions towards ESD. So in 2013, arising from these needs and from the international movements described above, the idea of an Italian network for ESD linked to WEEC (WEEC - Italia), began to take shape.
**WEEC – ITALIA: THE FIRST STEPS**

This new network aimed to develop new opportunities and new ways of learning and to foster reflection on the “Call of Marrakech”, a document elaborated at the WEEC Congress (VV.AA., 2013). The Call of Marrakech recommended action to:

“Reinforce the conciliation and the coordination among all concerned actors with a view to an improved synergy in the definition of strategies and the application of environmental education projects.

Establish networks of environmental education actors in order to facilitate the share of knowledge, know-how, experiences and good practices.

... Promote research and development in different areas of environmental education: learning methods, attitudes, values and environmentally respectful behaviours”.

WEEC-Italia has the goal of creating and sustaining the development of a virtuous and recursive cycle (from the international level to the national and then back to the international level) that can support research, debate, and sharing of experiences and hence the growth of a community of practice on ESD at a national level (Trez et al., 2011). In addition, the network has the ambitious aims of impacting on policies and practices, removing some current gaps (e.g. research-practice, institutions-citizens) and thus addressing the complexity of a changing world, allowing new ways of learning to take place.

From the beginning, WECC-Italia has adopted an inclusive and wide interdisciplinary perspective linking contributions of researchers, scientific and cultural institutions, parks, non-governmental organisations, schools, companies and other stakeholders involved in ESD within different local communities.

From August 2013, people from different cultural and professional backgrounds interested in the network, took part of a series of meetings throughout Italy held in Milano, Bologna, Roma, Venezia, Genova and Bergamo. The aim of these meetings was to encourage wide participation in the network and to promote wider interest. From a methodological point of view the network takes a participative approach with the aim of sustaining the motivation of participants, their commitment and the development of a collaborative and relaxed environment for discussion.

So far the meetings have enabled the members of the network to:

- share a common vision of the state of ESD in Italy from different perspectives, as
the starting point for identifying and clarifying the mission of the Weec-Italia network;
• identify some key principles around which to elaborate a common “founding document” for the network;
• discuss an efficient way to organise the network giving form to the first initiatives.

DISCUSSION
Even if the formal establishment of the network is not yet complete and its work is still at an early stage, some results can be analysed.

To begin with, more than 150 people from different cultural and professional backgrounds attended the various meetings and demonstrated their interest in being part of the network. Not only this, but the expanded horizon from environment to sustainability and so from environmental education to education for sustainability has made it possible to bring new actors into the community, coming from different fields not involved before. The effects of this growth in the richness and complexity of the stakeholders is a significant one for research on ESD both from a methodological and a thematic perspective.

There is also a wide diversity of groups involved in the Weec-Italia network including public institutions (schools and universities), local administrations (regions and municipalities), non-governmental organisations, companies, educational and social farms, solidarity purchasing groups, green economists and individual practitioners. The participation of such a wide range of stakeholders enhances the possibility of the integration of ideas, approaches, methods and targets from different disciplines. This will potentially result in a greater degree of interdisciplinarity and emphasis on a life-long learning approach to ESD involving social and political dimensions. In this way, hybridised environments and new spaces for ESD research could emerge, embracing the importance of multiple voices, cultural and theoretical perspectives and more active community-based approaches.

Another important characteristic of Weec-Italia is its bottom-up approach. Other Italian networks on ESD developed in the past, including the INFEA system, and networks from other countries such as the Australian Government-National Education for Sustainability Network, were promoted and supported by public institutions. Weec-Italia is the opposite. It is a self-assembled network, developed from the needs and commitments of its members. This characteristic of the network could be considered a strength and a potential weakness.
To sustain current participation and encourage an even stronger involvement in WECC-Italia throughout Italy, a website has been set up to share ideas, comments and suggestions on the further work of the network. The site also holds documents and information related to the different network meetings (Vv.AA., 2014).

As described above, the first meetings of the network undertook a review of ESD in the country and as a result a new and a shared vision of ESD at an Italian level has been elaborated. Different issues emerged from this process, including:

- the weakness of research in ESD;
- the large gap between theory and methodology suggested by the research in ESD, and the practices that take place;
- many activities, especially in schools, are considered to be ESD but in reality, they aren’t. Because of a superficial view of ESD, it is often confused with nature or science education;
- a serious lack of training in ESD at the university level, both within undergraduate and post graduate courses;
- by contrast there has been a huge growth in first degrees, masters courses and academic networks on specific issues related to sustainable development. However, ESD fails to attract attention and interest at this level.

One of the first tasks of the network has been to elaborate a common founding document; something like an identity card. Such a document was considered fundamental in stating the goals of the network and clarifying its relationship to the international WEEC Network and at the same time making a statement of its national specificity. Many of those involved have emphasised that the document needed to be pro-active and to be put together using a participative process involving different groups of stakeholders. There was also agreement that the document had to be a useful tool for the building of a wide network and real process of growth and not a sterile list of enunciations. Within this debate, a number of critical positions emerged before the first draft of the founding document was produced and discussed. Such a participative approach needs time to develop and as a result the elaboration of the founding document is still in progress. Those involved in the network shared the idea that the way the process happens in producing the founding document is more important than the results.

Progress has also been made on the organisational structure of the network. During the plenary discussions at the initial meetings, different ideas on the structure and the scientific organisation of the network emerged. Consequently, the different
stakeholders shared the idea that an efficient way of working required the identification of priority themes and issues to discuss, together with the formation of working groups to consider these. As a result, the following groups have been set up (VVAA., 2014):

- formal education; with focus on all types and levels of schools and teachers, especially looking at the strengths and weaknesses of their involvement in ESD;
- informal education; has the aim of considering the multiplicity of languages and communication tools useful for a common strategy on ESD;
- participative approaches; has the aim of working on the development of participative and bottom up strategies to prevent conflicts and to support sustainable management;
- professional competences; aims to deal with the lack of training and professional acknowledgment of people involved in ESD at a national level;
- public administrations; has a focus on the promotion of ESD within the public administration, reinforcing the politics for sustainability and their efforts towards the management of a National System for ESD (such as INFEA system, for instance);
- university and sustainability; approached the role of higher education and supported a debate in the academic world, both as a research and educational institution and a fundamental part of civil society, from an ESD perspective.

**CONCLUSION**

Despite the fact that the WECC-Italia network and working groups are only at the start of their work, they have already managed to draw attention to ESD, offered support to practitioners and promoted new research within the Italian national context. As a result of the website and other information and communication technologies (ICTs), others interested in the network have begun to share experiences and discuss and develop partnerships. Research projects have also been promoted. For example the “University and Sustainability” group is undertaking a survey of university teachers and students to identify their ideas, practices and needs related to ESD in the context of higher education. All the activities undertaken so far by the network (specific activities, research and other initiatives), should be seen as catalysts for a virtuous process that contributes to reinforcing the visibility and the role of the network in affecting research, policies and practices on ESD in the Italian context. In spite of these positive signs, some critical aspects need to be highlighted:

(a) the slow development of the network formalisation. This is related to the challenges of managing a voluntary network that has little financial support;
(b) the name “WECC – Italia”. This was given to the network through a participative
process and this has contributed to a reduced speed of the progress. In addition, there has not been complete unanimity about the name. For some it is useful as it emphasises the relationship with an international network of practitioners centred around the WEEC Congresses, while for other this name represents a limit, hindering the involvement of people not committed to the WEEC approach; c) any network on ESD has to move coherently with its mission by being sustainable and more thought has to be given to this process. The sustainability of WEEC – Italia can be considered strategic for its development.

Wenger et al. (2002) propose seven principles that should constitute the ways of thinking, visions or directions to underpin the sustainability of any community of practice. These include: 1) Design for evolution; 2) Open a dialogue between inside and outside perspectives; 3) Invite different levels of participation; 4) Develop both public and private community spaces; 5) Focus on value; 6) Combine familiarity and excitement; and 7) Create a rhythm for the community.

Some of these are particularly relevant for WEEC-Italia at its current stage of development including:

- The dynamic nature of the network is the key to its evolution. Therefore it should be seen and thought of as a structure that evolves and not as fixed and rigid one;
- Different levels of participation have been foreseen but there is a need to encourage more people to participate in the community and especially in stimulating the commitment of less active members;
- The rhythm for the development involves respecting the unique character of each community of practice and the need to be managed with attention, finding the right time (for thinking and for action, for instance) at each stage of the community's development.

Together with these principles, the strong motivation of people involved, the support for active participation given by ICTs and the existence of different working groups, all give an interesting perspective on network sustainability, even if it is probably too early to understand if they are sufficient to give form to a truly sustainable network.

Even if this experience is only the beginning of an exploration of new global/local relationships, it has already engaged in the challenge related to the construction of learning for sustainability, emerging through an increased permeability between
disciplines, cultures, institutions and sectors. With this in mind the WEEC-Italia network will go on, with the awareness that there is not a defined course, a specific road to go along, because “...a path is made by walking” (Poem by Antonio Machado).

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