Reporting on implementation of the UNECE Strategy for ESD

(Additional information by: Greece)

(2011-2015)

The necessity of a new approach to social and economic development promoting sustainability requires, among others, to take concrete decisions regarding education. Greece has been working thoroughly towards the implementation of the third phase of the UNECE Strategy for ESD, in line with the endorsed work plan, despite the economic downturn that the country faces lately.

The Ministry of Education, following the needs of contemporary society, as well as the intrinsic needs of the student's population, has advanced in planning actions and applications for the integration of basic principles of sustainable development at all levels of education supported by a number of laws and Ministerial Decisions.

Specific provisions in the legislative framework promote the protection of the natural and human environment such as measures and policies at all education levels including the principles of Sustainable Development which are subject to the general education policy supporting the National SD Strategy.

The Greek education system is rather centralized. It is characterized by a top-down approach in policy and decision making but in case of ESD a more participative process has been used involving interested stakeholders. Taking into consideration the fact that limited financial resources have been foreseen for the implementation of the UNECE Strategy because of the economic crisis, the actions which were decided utilized the available human staff resources as well as E.U. funds.

During 2013-2014 the Greek school system underwent reforms. Some new curricula for compulsory (primary, junior high school) and post compulsory education(senior high school, vocational school) including ESD were introduced, as well as new teacher education programs. The main parameter of the proposed changes was the interdisciplinary approach based on the support of sustainable development and the transition to a green economy.

An important reform, the so called "New School", aims at "quality education for all" and places students at the center of policy design initiatives. It has been completed by a new initiative "The Social School" which focuses, among other things, on health promotion namely the fight against obesity in children and young people through sports and nutrition, the fight against alcohol and drugs as well as against racism.

Further legislative initiatives were undertaken in support of lifelong learning, quality education, social cohesion, environmental protection, and ICT's, as a basic tool in promoting sustainable development initiatives among the educational community.

• ESD in Curricula

Curricula are developed at central level by the Institute of Educational Policy and are implemented in schools all over the country. In the primary, secondary and vocational education curricula. Education for Sustainable Development does not constitute a separate subject but it is horizontally integrated in several subjects in a cross-curricular approach The Ministry of Education cooperates with the Institute of Education Policy, which is responsible for the development of curricula and

textbooks. Although, the integration of SD has reached a certain level, a lot of further work needs to be done.

Furthermore, the Institute of Educational Policy coordinates projects in the direction of competence-building like "Actions of implementation of the new curriculum of formal education on environment and ESD" which aimed at the diffusion of principles and values of ESD in order to achieve the greening of other curricula. The overall aim was to integrate the principles of ESD in curricula at all educational levels. Educational material was developed; seminars were programmed for the training of School Counselors, Principals and teachers, in over 200 schools. Moreover, sustainable development issues are integrated into curricula of primary and secondary education. Various chapters are included in textbooks such as "Green Housing", "Principles of Environmental Sciences", and "Nutrition". The aim is to make the students familiar with issues related to the natural and human environment. In Junior High School, in the subjects: "Technology" chapter of "Organization of Units of modern production", "Home Economics" chapter of "Ecology and Residence", "Geography" unit of "Economic activities of Europeans" students become aware of SD and the need to promote it in society.

Additionally, more actions were taken in order to promote the realization of an ESD plan in every school by 2015.

In 2011-2012, according to the Ministerial Decisions that define the Curricula for the first and the second class of Senior High School in the framework of the new subject "Project" students are asked to work in groups on "Environment and Sustainable Development", which is one of the proposed study areas.

In the framework of the "New Curricula" project, new guidelines were elaborated for the study area "Environment and ESD" in order to achieve the greening of the curricula where the teachers are guided to plan and implement ESD projects in their schools. The project has been implemented, for a pilot phase, in 188 schools all over the country in order to be tested and evaluated. According to the input it will be improved and will be introduced gradually in all schools. To support the above mentioned project, a training of trainers took place (trainers and school advisors) aiming at training afterwards all the teachers of the 188 above mentioned schools.

More specifically, after the proposal of the Institute of Educational Policy for the new curricula, a new subject has been introduced of September 2013 in the first class for the Senior High School, called "Geology and natural resources management". IEP also elaborated for ESD an autonomous curriculum addressed to all levels of compulsory education, roadmaps for educators of all levels for SD, a dossier of training material and teacher training programs. They also trained School Counselors, School Principals and teachers for the implementation of the above mentioned programs.

Regarding the development of competences for educators, a number of activities were designed, such as the "Major Program of Training" for teachers in primary and secondary education, coordinated by the Institute of Educational Policy. This project has been running since 2011, and 8.000 teachers were trained at various prefectures of the country. Training material was developed covering major areas of ESD such as environmental education, arts in education, information and communication technologies, multiculturalism etc.

• Extra curricula activities

The Directorate of Professional Orientation and Educational Activities within the Ministry of Education, addresses every year a circular letter to primary and secondary schools around the country in which guidelines are drawn for activities concerning projects on environmental education, health promotion and culture with particular reference to the ESD. The aims and the content of the above mentioned activities are drawn by teachers-coordinators in every district. The Coordinators follow, support and evaluate the school projects. In the beginning of the school year, they inform teachers and school principals about the way to plan, organize and run an ESD project in their school. According to data 9.784 ESD projects were developed, with 19.024 teachers and 235.368 students. Additionally 439 seminars were organized for teachers as well as the local community. Environmental Education projects have been developed by schools such as energy, climate change, water, recycling, transport, tourism etc.

Moreover several Health Education projects have been implemented in schools on issues related to violence prevention, conflict management, racism, gender equality, gender relations, sexual abuse, internet violence, domestic violence etc.

• Centers for Environmental Education and Sustainability

The above mentioned activities are also supported by the 51 Centers of Environmental Education and Sustainability which coordinate national thematic networks for students, as well as for adults, such as "The Sustainable City: the city as a place for educating for SD" or "Turning used cooking oil into biodiesel: we all collect everyone benefits". These Centers are entities of the Ministry of Education, under the Regional Directorates of Education all over the country.

They are additionally working towards the implementation of ESD in primary and secondary schools. They promote the Ministry's policy for ESD in all levels of education, adopting the whole school approach from primary to upper secondary school. They are stuffed by teachers of Primary and Secondary Education and their work aims to student's education, teacher training, the production of educational material, the development of thematic networks and local and international cooperation. In the framework of international cooperation, they are organizing conferences, workshops on ESD etc.

The training projects these Centers are running aim at training teachers in order to implement projects related to ESD in their schools. During the last school year 82.805 students visited the CEES (48.017 from primary and 4.788 from secondary education), 379 seminars for 25799 teachers of primary and secondary education took place and 450 actions for the local communities were organized.

• Technical and Vocational Education and Training

Regarding Technical and Vocational Education and Training, students are taught subjects related to SD such as "Environment and Agriculture", "Rural Economy" etc. Teachers make their students aware of notions like Green Economy, New Technologies, and Energy Saving, giving special emphasis on skills related to green jobs.

In Vocational Senior High Schools, from 2012-2013 the "Special Thematic Activity" was introduced as an optional subject of the curricula for the second class of the mainstream school and the 3rd class of evening school. Students are asked, among other options, to study or undertake small-scale projects, to conduct research, to

implement entrepreneurship projects aiming at familiarization with real conditions and labor market challenges in the framework of SD.

Furthermore, through different subjects such as "Technology and Development", "Factors of production and development", "Agriculture technology and development".

Regarding the post compulsory education, the new Law (2013), provides the establishment of new sections integrating sustainable development objectives in their operation for the Vocational Senior High School. "Environment and Natural Recourses" with the following specialties: Technician of Management and Recycling and Technician of Pollution Control and Antipollution Facilities, "Sector Agriculture, Food Technology and Nutrition" with a new specialty: Technician of forestry and natural environmental management.

The new subject so called "Project", gives the students of the 1st class the possibility to work in groups, to develop activities and initiatives in supporting ESD and be aware of the importance of the transition to a green economy.

A new initiative of the Ministry of Education "The "Apprenticeship" started to be implemented in 2013, for graduates of Vocational Upper Secondary Schools in order to improve employability and connect technical secondary education with the labor market.

• UNESCO Associated Schools Project"

The Directorate of International Relations in Education, of the Ministry of Education, coordinates the so called "UNESCO Associated Schools Project" (ASPnet). The majority of the Greek ASP net schools develops projects related to ESD thematic guidelines through a whole school approach. The activities undertaken help to equip students with the necessary skills and social competences making use of the educational material produced by UNESCO (platform, on line course, games). They also run projects and develop synergies with UNESCO Chairs and other stakeholders (academics, centers of research).

Seminars, workshops, webinars as well as other meetings have been organized for the teachers - coordinators.

• Higher Education

At the level of Higher Education, there have been some important developments. The majority of the Greek Universities have introduced SD-related themes in their curricula. Most of them are running Environmental and ESD related courses at post graduate level. Some of them have established the "whole institution approach".

In that direction, the rectors of Greek Universities at their 67th Conference have adopted a "Charter for Sustainability", largely based on the UNECE Strategy and introduces many elements of the UNECE documents on indicators, competences etc to the higher education practices.

There are three UNESCO Chairs related to ESD:

- a) UNESCO Chair on ICT's in ESD (University of Crete)
- b) UNESCO Chair on Disaster Risk reduction 9National Observatory of Athens)
- c) UNESCO Chair on "Management and Education for Sustainable Development in the Mediterranean" (University of Athens)

• Lifelong Learning

The General Secretariat for Lifelong Learning, the responsible body for the reorientation of TVET in supporting SD and the transition to a green economy, operates the Schools of Professional Training and the Public Institutes of Professional Training.

The participation of the Schools of Professional Training in programs related to Sustainable Development and the Green Economy is optional, as they are implemented through the programs announced annually from the corresponding sector.

In the Public Institutes of Professional Training various specialties operate. A lack of laboratories was reported. The cooperation between PIPT and SPT is not facilitated by the existing regulations.

Challenges to be faced: increasing and maintaining the number of students, modernization of the laboratories, cooperation with enterprises and teacher training. Some of the above mentioned schools and institutes are running projects for ESD as extra curricula activities such as "The Sustainable School".

In March 2014 IEP introduced to the Ministry of Education the new curricula for the Vocational School. Changes include the interdisciplinary approach based on the support of sustainable development and the transition to a green economy.

• Youth (5.1)

➤ "Non-formal education manual on volunteerism for secondary education teachers & pupils: A non-formal education manual on volunteerism for secondary education teachers, entitled "Teaching" volunteering was created. This manual was the result of the General Secretariat's for Youth initiative to introduce a non-formal learning tool on volunteering into the standard educational system. Its aim is to assist teachers in familiarizing pupils with the notion, the values and the challenges of volunteering in an attractive and apprehensive way, based on the principles of non-formal and experiential learning. The manual consists of two distinct parts. The first part, titled "Volunteering and Volunteers", contains general information about volunteering, the volunteers (motives, types etc) and the value of non-formal learning. The second part, titled "Planning a voluntary action & box of ideas", gives concrete information on how to organize a voluntary activity together with the pupils and which projects, websites or other opportunities they can benefit from, to this end. The manual is filled with volunteers' stories and photos as well as instructions for suggested non-formal learning games and activities that could be implemented by the teacher inside the classroom, in order to help pupils learn more about volunteering. The suggestions of the manual can be implemented in the framework of a variety of classes, such as, for example, environmental, aesthetic and health education. «"Teaching" volunteering» was reproduced in 5.000 copies and was distributed in secondary schools.

> A documentary on volunteerism addressed mainly to secondary education pupils and youth in general, titled "Act Positevely was produced. The documentary presents volunteering in five consecutive sections that correspond to five key-words that lead to the definition of the notion of volunteering: a) (in)equality, b) selflessness, c) consciousness, d) collectivity e) responsibility,(f) volunteering. Each section presents a definition of a key word followed by a relative live voluntary action. The documentary contains also interviews of volunteers, voluntary organizations and persons who benefit from volunteering. Furthermore it includes clear reference to the European Voluntary Service project. The documentary was created so as to serve as a tool for awareness raising and sensitization of pupils on volunteering, destined to be used by teachers in schools on the one hand while at the same time being addressed to the general population. It was reproduced in 5.000 copies, each of which includes also a version with subtitles for persons with disabilities that was distributed to secondary education schools. Its duration was adjusted to half an hour so as to be able to be broadcast in the classroom during a typical school-timetable hour (45 min), while leaving time for further discussion between the pupils and the teacher.

➤ "Pupils' Initiatives Support Project"

The General Secretariat for Youth launched a project called "Pupils' Initiatives Support Project – Pupils in Action", in February 2012.

The project was addressed to groups of pupils of junior high (gymnasium) and high (lyceum) school (students from 13 to 18 years old) together with their school teachers, and it was meant to financially support their initiatives for action taken in the framework of the broader educational agenda. These actions are taken on a voluntary basis promoting thus the chances for collective action that can bring about changes within the school building or even outside of it. The project provided for four thematic pillars: (a) environmental awareness and protection, (b) health, (c) social issues and (d) entrepreneurship and innovation. The actions that received funding via the project were for example: creating botanical gardens in the school yards, participating in reforestations, replacing school equipment such as lamps with ecological ones and in general switching the school equipment to more ecological alternatives, painting all over the school walls (frescos made by the students), organizing non-formal education games with subjects such as "combating discrimination" or "how to build up your own enterprise" within the school, provided that in all cases students took an active part in the project and in the end, they presented the results to the whole school community (parents, teachers, other students). With this project, apart from promoting collective action and volunteering within the school community, the goal was to make pupils try and combine this action to the benefit of the whole school community and thus bring about visible changes in their everyday lives.

The project was addressed only to schools that belong to particular municipalities that are either underdeveloped, or face more social problems or are simply remote from the mainland and large urban centers."

Non-formal education (Indicator 2.5 /Sub-indicator 2.5.1)

Regarding the cooperation between governmental departments and agencies, the Ministry of Education cooperates closely with among others, the Ministry of the

Environment, Energy and Climate Change, the Ministry of Culture and the General Secretariat of Gender Equality. The above mentioned Ministries participate in the National Committee for ESD.

An interesting ESD related activity run by the Ministry of Culture and Tourism, which could be considered as a Good Practice is the implementation of educational projects in archeological sites, museums and monuments. The Directorate of Museums, Exhibitions and Educational Programs, in the framework of youth awareness regarding issues on the protection of cultural heritage and the natural environment, elaborates and implements educational programs in archaeological sites and museums. The acquaintance and familiarization of the youth with the above issues contributes to the reinforcement of a wider education and political upbringing. Based on the above, the Directorate General of Antiquities and Cultural Heritage of the Hellenic Ministry of Culture, along with its regional offices, initiated a communication action throughout the country entitled "Environment and Culture". In this framework, a number of events are being organized, aiming at the awareness of the citizens towards the protection of the cultural and natural heritage, the youth awareness of the bonds between the cultural heritage and the natural environment, the promotion of the environment as a means of inspiration and creativity and at the reinforcement of the belief that cultural issues go hand in hand with the sustainable management of natural resources. This campaign aims also at raising awareness at the local level.

Furthermore, the Directorate of Museums, Exhibitions and Educational Programs is planning to coordinate the project "Green Cultural Routes", which was pivotally realized in May 2012 (in conjunction with the events for the celebration of the International Museums' Day). The three-day activities which are being planned will take place in three municipalities.

According to data given from stakeholders who participated in the project, 2000 citizens took part in the 17 educational programs. Many children participated in the 9 activities addressed to families. Totally 94 activities were organized (tours, hiking, horseback trekking, lectures, art workshops, musical events, exhibitions, plantings). The aims, the approaches, the results of the project were announced in conferences in which an important number of teachers participated.

From 2014 the project will run on a regular basis. More stakeholders will be called to take part in this important endeavor which underlines the contribution of museums to the sustainable management of nature through ESD.

Additionally, the Natural History Museum of the Lesvos Petrified Forest, has adopted a whole-institution approach and integrates SD issues into its educational programs (sub-indicator 2.3.1). These programs are addressed to students from early childhood education to upper secondary education.

Furthermore, in cooperation with the University of Aegean, they organize training sessions for teachers of primary and secondary education, on the Petrified Forest (protected Natural Monument) and on Lesvos Island which is characterized as European Geopark.

• NGO's and other stakeholders

Many NGO's run projects for the implementation of ESD, offering training seminars to teachers of primary and secondary education.

Apart from the formal education delivered by State Institutions, Greece has a long tradition of non-formal and informal education schemes. Several of the non-formal ones, are well integrated in formal education and cover all priority areas, sometimes obtaining also the transversal interlinkages suggested by ESD.

The educational programme, entitled "The Gift of Rain", is run by the MEdIES Educational Network of MIO-ECSDE and GWP-Med and is supported by the Campaign "Mission Water", which includes several interventions. The programme carried out voluntarily but available in schools of all levels and types of 26 Islands of the Cyclades and Dodecanese of the Aegean Archipelago, for ESD focusing on water issues, promoting rainwater harvesting and non-conventional water resources.

The great innovation of this programme is its synergetic and multifaceted nature, which allows for a combination of many UNECE Strategy priority components. The programme brings together the local municipalities and the relevant local or prefectural services of the Ministries of Education, of Environment and Culture.

These authorities approve the plans prepared by GWP-Med, either for the repair of traditional water reservoirs (cisterns, etc) or for the construction of new ones, using sustainable approaches, "State of the Art" techniques and materials. This provides the needed and "green environment" elements of a whole school approach. These constructions (rainwater harvesting systems) are implemented, either within the schools, or in their vicinity and could be approached, visited and understood very well by teachers, students and their families. Their construction is accompanied by a series of educational and local community activities enlarging the scope of the approach. The project includes training courses, provided by specialized staff of the MEdIES, for the teachers of the Islands to enhance their competences and is complemented by well-prepared material posters and educational kit.

Furthermore, the programme has an important TVET component. The local technicians, mainly plumbers, electricians but also engineers are trained by specialized technical trainers including staff from the companies that provide the material for the constructions and/or restorations. In this way, jobs are created or enhanced, while green technologies and green economy are promoted at local level.

Finally, to further stimulate interest and participation, awards were established for school groups and individual students for creation of video, poster and paintings/artworks. A multidisciplinary Award Committee included well known personalities and experts and the award ceremony will take place in Athens, in May 2014, combined with an exhibition of all works submitted and awarded, not only by the working teams and their teachers, but also by representatives of all participating schools and representatives of local authorities of the islands. This ensures great satisfaction and commitment of all participants of the project.

Another very systematic contribution on ESD in the country including TVET is made by the Hellenic Marine Protection Association (HELMEPA) which was founded more than 20 years ago by the Greek shipping industry and seafarers. Apart from very comprehensive trainings they offer for crews in the field of ship safety and protection of the marine environment, providing relevant certificates, recognized internationally, it has an extended program approved by the Ministry of Education through which, in the period 2012 – 2013, 192 kindergartens and elementary schools participated, from 13 Periferies of the country, including 401 educators and 5889 students. The corresponding numbers for the 2013 -2014 year are 192 schools, 444 educators and 6535 students. HELMEPA supports also a network of approximately 1500 secondary school and college students "Nautiloi" active on voluntary basis on ESD activities, including lectures and surveys organized by them for primary schools.