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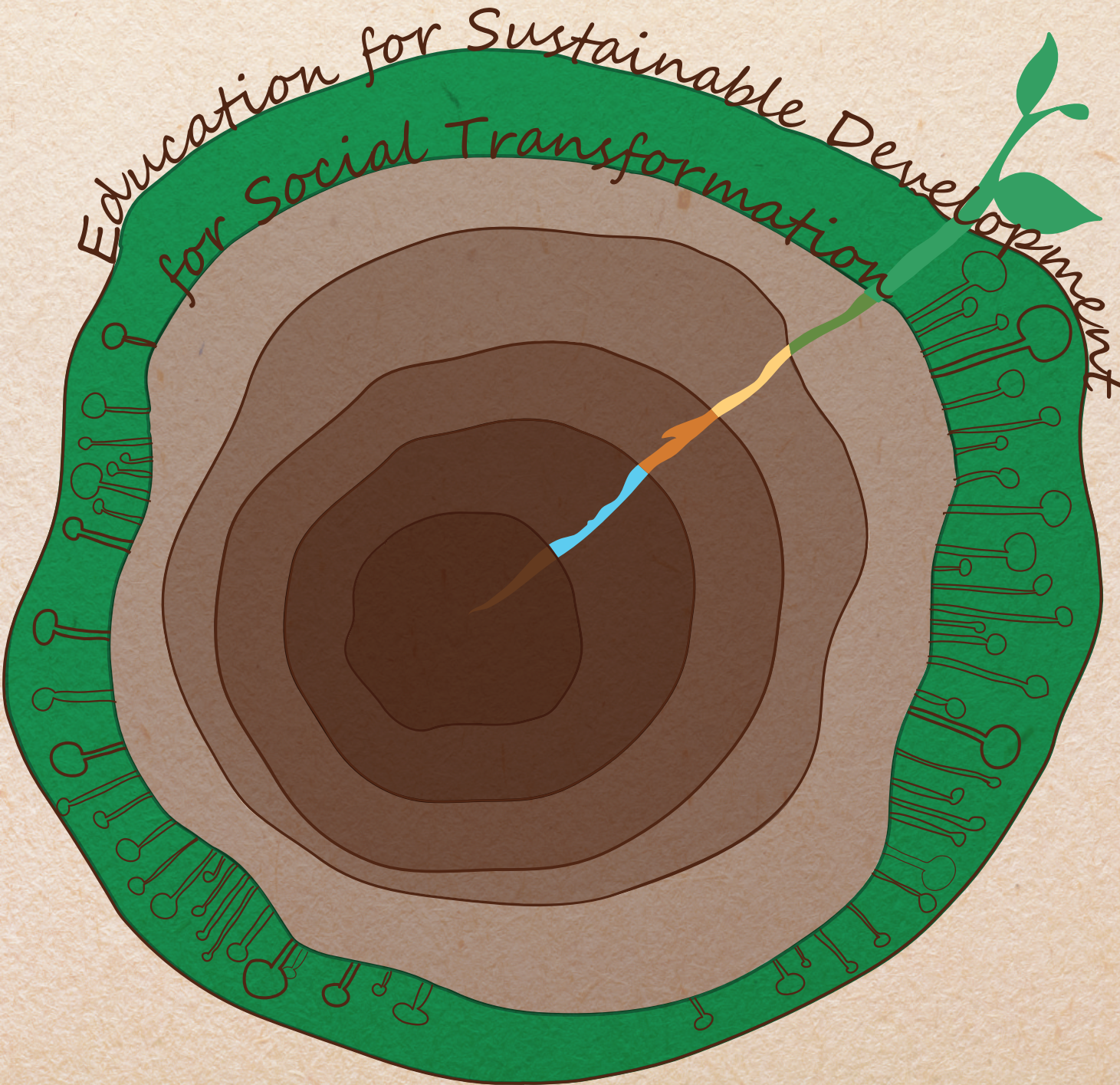
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Biodiversity Conservation and Restoration: Living in Harmony with Nature Tools for Teachers and Educators



Preface

The Ministry of Education and Training (MOET) of Viet Nam and UNESCO jointly produced this training series for teachers and educators on **Biodiversity Conservation and Restoration: Living in Harmony with Nature**. The set of courses comprises six individual components: i) Becoming Bioliterate: Living in Harmony with Nature; ii) Discovering Biodiversity: Taking Pride in Our Nature; iii) Benefits and Services of Biodiversity; iv) Threats and Risks to Biodiversity; v) Biodiversity Conservation and Bioliterate Competences; and, vi) Education for Sustainable Development for Social Transformation.

This course on *Education for Sustainable Development for Social Transformation* explains the connection between sustainable development, education and the successful implementation of national and international policies and initiatives on Sustainable Development, such as the Education for Sustainable Development Framework, Global Citizenship Education and the post-2015 Development Agenda. A particular focus is placed on Viet Nam's implementation of these

initiatives, including MOET's Action Plan to Implement the National Strategy on Natural Disaster Prevention, Control and Mitigation in the Education Sector in the 2011-2020 Period.

During the production of these courses, MOET and UNESCO received inputs from various national and international organizations and experts as well as from the schools that took part in the piloting of the courses.

Careful attention was paid to ensuring that the learning material is presented in a clear and comprehensive manner. Each component includes a section on activities that can be used in class or in an extracurricular setting to develop students' competences in these areas and engage them in a fun and creative way.

The courses promote creative thinking and a holistic approach to some of our planet's most pressing issues. A contribution to sustainable development will be made by encouraging students, families, schools and communities to be bioliterate.

MINISTRY OF EDUCATION AND TRAINING
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Introduction

Teachers have an important role in society. Teachers develop the minds and capacities of younger generations. Teachers can guide students to become good citizens, especially if students develop adequate values at home. The

combined efforts of parents, guardians and teachers are what can prepare knowledgeable and skilled individuals. It is important to ensure that these skills are complemented with values and attitudes that lead to desired behaviours that the society of tomorrow needs.



Viet Nam has defined policies towards sustainable development and requires the younger generations to learn behaviours at a young age that will allow them to become citizens who are capable of ensuring sustainable development. Policies on green growth and biodiversity conservation require an important change in people's behaviour so that everyone can contribute to sustainable development.

The country needs citizens who can make efficient use of natural resources, reduce greenhouse gas emissions, apply modern technologies and scientific research, cope with climate change, prioritize poverty reduction and drive economic growth in a sustainable manner. The formation of this kind of citizen should begin at a young age by encouraging students to adopt simple practices that develop throughout their lifetime. This course will provide you with some basic information on Education for Sustainable Development that can help you to guide students to understand and contribute to their community with the support of their parents and the school.

The course has been structured to provide inputs as follows:

Section 1: ESD - an enabler of Green Growth towards social transformation

1. ESD for the future we want:
 - ESD Basic concepts
 - ESD globally
 - ESD in Viet Nam

2. ESD for sustainable social transformation:

- From schools to parents
- From schools to communities
- Suggestions for enhancing participation
- Respect for diversity
- From schools to the wider society: media's role in delivering messages to society

Section 2: Educational activities

This section provides sample educational activities that teachers can use to design innovative and participatory learning opportunities for students.

The section also includes recommendations and examples of experiences that teachers can use to guide students in developing projects for community improvement.

Objectives

By the end of this course, you will be able to:

1. Understand the concept of Education for Sustainable Development and its implications globally and in Viet Nam.
2. Develop participatory teaching and learning methods involving schools, parents, other members of the community and the media to promote social transformation.
3. Develop activities for the classroom, home and community which reinforce the concepts presented in this course and produce changes in students, schools and community behaviours.

Section 1:
ESD – An enabler of Green Growth
towards social transformation



There are various ways in which different groups worldwide understand and define Education for Sustainable Development (ESD). Here we present ESD as an approach which encompasses various critical topics that together build the capacity of future citizens.

By the end of this section, you will be able to:

1. Enhance your understanding of Education for Sustainable Development at the international level and its application in Viet Nam.
2. Foster participation in schools, households and communities to promote ESD activities among all stakeholders.



ESD for the future we want

Basic concepts

Viet Nam is making significant efforts to improve the quality of education in addition to its coverage. This is also an international commitment. A major, global sustainable development agenda is being

defined to respond to the challenges of sustainability, including disaster risk reduction, climate change and biodiversity conservation.

Education is essential for sustainable development. Citizens of the world need to learn what sustainability is and how to achieve it.

In order to raise their capacity to deal with economic, social and environmental problems when they become adults, students need to learn to care about their communities and to know that they can contribute to implementing solutions.



Some issues requiring solutions are very localized to the country or even the community. But, nowadays, globalization also requires that citizens consider issues affecting the planet overall. One of these issues is climate change. It does not only affect Viet Nam, but the world over.

Therefore, Education for Sustainable Development requires that young students learn about Global Citizenship Education (GCE) that equips learners of all

ages with values, knowledge and skills that are based on respect for others, social justice, appreciating diversity, gender equality and environmental sustainability to make the world a better place for all.

"Education gives us a profound understanding that we are tied together as citizens of the global community and that our challenges are interconnected."

Ban Ki-moon, United Nations Secretary General

Global Citizenship Education promotes tolerance, peace and respect for diversity and empowers learners to engage in actions that help resolve global challenges, such as climate change mitigation and adaptation and disaster risk reduction. It encourages sustainable development and recognizes our responsibility to those who come after us, to the next generations.

ESD clearly contributes to the achievement of Global Citizenship Education by promoting the integration of holistic competences.

What do we mean by sustainable development?

Sustainable development is a vision that addresses issues related to population, animal and plant species, ecosystems, and natural resources. Sustainable development also addresses concerns such as the fight against poverty, gender equality, human rights, quality education for all, health, human security and intercultural dialogue. All of these areas and concerns are necessary components of a peaceful, just and resourceful world.

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Our Common Future (The Brundtland Report), United Nations World Commission on Environment and Development (1987).

The concept of sustainable development gained widespread recognition following the Brundtland Report from the United Nations World Commission on Environment and Development (WCED), in 1987. The definition challenges the traditional view of development as unlimited and emphasizes that in order to not compromise the needs of future generations we need to consider environmental, societal and economic limitations. Development cannot use natural resources as if they will never be exhausted.

What is Education for Sustainable Development?

The vision of ESD is of a world where every human being acquires the knowledge, skills, attitudes and values required for developing a sustainable future. The concept of ESD challenges the way we think about education today and encourages us to learn for change. It seeks to integrate the principles, values and practices of sustainable development into all aspects of education and learning in order to address the social, economic, cultural and environmental problems we face in the 21st century.



ESD should be mainstreamed in all components of education: legislation, policy, finance, curriculum, instruction, learning and assessment. It should also be integrated into all levels, from early childhood to higher education, and all areas, including formal, non-formal and informal education.



ESD calls for lifelong learning and recognizes the fact that the educational needs of people change throughout their lifetime. Through ESD, we foster peace, fight global warming, reduce inequality, and fight against the marginalization of women, girls and vulnerable populations, all of which can impede that development is sustainable. ESD enables citizens to face challenges of both the present and future. ESD believes strongly in respect for the Earth and life in all its diversity.

Many individuals and organizations around the world implement ESD: for example, a teacher introducing sustainability themes into primary education using participatory methods or a public health worker training people to draw water from clean sources are both contributing to education for sustainable development. There are many programmes that use an ESD approach to learning which is critical for achieving sustainability. Today, we need to ensure that ESD becomes a systemic and comprehensive approach, available to each and every individual.

What are the essential characteristics of ESD?

ESD has essential characteristics that can be implemented in many culturally appropriate forms. It is a global idea that needs to be adapted locally.

Education for Sustainable Development (ESD) is not a particular programme or project, and should not be considered as additional content or an extra subject that becomes a burden or add-on to the curriculum.

Rather, it is an umbrella term for many forms of education that already exist and new ones that remain to be created.

Education for Sustainable Development includes integrating key sustainable development competences into teaching and learning, especially those related to climate change mitigation and adaptation, disaster risk reduction, biodiversity conservation, poverty reduction, sustainable consumption and green growth. It also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action, in a comprehensive manner, for sustainable development. Consequently, Education for Sustainable Development promotes competences like critical thinking, problem solving, participation, imagining future scenarios and making decisions in a collaborative way.

A whole-school approach to ESD calls for sustainable development to be integrated throughout the formal sector curriculum in a holistic manner, rather than being taught on a standalone basis. This philosophy supports the notion that ESD is education **for** sustainable development rather than education **about** sustainable development.



Quiz 1

- 1. True or false:** ESD is a lifelong learning process where every human being acquires the knowledge, skills, attitudes and values required for using nature to meet their own needs.
- 2. Which of the following characteristics does NOT apply to ESD?**
 - a. ESD is a comprehensive approach mainstreamed in all components of education.
 - b. ESD is a global idea that cannot be locally adapted.
 - c. ESD promotes critical thinking.
 - d. ESD requires participatory teaching and learning methods.

Note: You can check the answers at the end of the course.

ESD globally

In its 57th meeting in December 2002, the United Nations General Assembly proclaimed the UN Decade of Education for Sustainable Development (DESD) 2005-2014 "emphasizing that education is an indispensable element for achieving sustainable development".

Education for Sustainable Development. UNESCO Bangkok. Resources on ESD retrieved from <http://www.unescobkk.org/education/esd/un-decade-of-esd/>

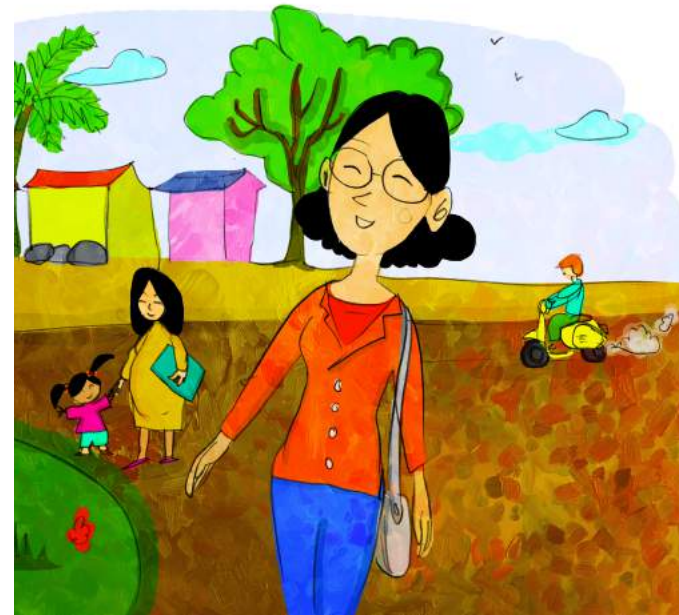


In 2009, a UNESCO World Conference on Education for Sustainable Development took place in Bonn, Germany, where climate change, disaster risk reduction and loss of biodiversity were selected as priorities to be addressed through ESD.

The UNESCO World Conference on Education for Sustainable Development, held in Japan in 2014 to review the achievements during the Decade,

led to ten key findings and trends that will guide ESD into the future. Those are:

- Education systems are addressing sustainability issues.
- Sustainable development agendas and education agendas are converging.
- Political leadership has proved instrumental.
- Multi-stakeholder partnerships are particularly effective.
- Local commitments are growing.
- Whole-institution approaches help practice ESD.
- ESD facilitates interactive, learner-driven pedagogies.
- ESD is being integrated into formal education.
- Non-formal and informal ESD is increasing.
- Technical and vocational education and training advances sustainable development.



As a follow-up to the Decade ending in 2014, a Global Action Programme (GAP) has been defined after a process of broad global consultation, which emphasizes five priority actions, namely to:

- Strengthen education in sustainable development policy and sustainable development in education policy.
- Transform learning and training environments.
- Build the capacity of educators and trainers.
- Empower and mobilize youth.
- Accelerate sustainable solutions at the local level.

The Declaration adopted during the World Conference invites governments of UNESCO Member States (meaning all the governments that are a member of UNESCO), to make further efforts to:

- Review the purposes and values that underpin education; assess the extent to which education policy and the curricula are achieving the goals of ESD; reinforce the integration of ESD into education, training and sustainable development policies, with a special attention paid to system-wide, holistic approaches and multi-stakeholder cooperation and partnerships between actors of the education sector, private sector, civil society and those working in the various

areas of sustainable development; and ensure the education, training and professional development of teachers and other educators to successfully integrate ESD into teaching and learning.

- Allocate and mobilise substantial resources to translate policies into actions, especially building necessary institutional capacities for both formal and non-formal education and learning at the national and sub-national levels along the five Priority Actions Areas of the Global Action Plan (mentioned previously).
- Reflect and strengthen ESD in the post-2015 agenda and its follow-up processes, ensuring that ESD is maintained as a target in education goals and is also integrated into Sustainable Development Goals (SDGs) as a cross-cutting theme.



What is the Post-2015 Development Agenda?

In 2000, the United Nations set the 8 Millennium Development Goals (MDGs). That form a blueprint agreed to by the international community and the world's leading development institutions, to be achieved by 2015.

The eight Millennium Development Goals are:



The MDGs have served as a global framework for collective action to reduce poverty and improve the lives of poor people. However, efforts should continue beyond 2015.

The post-2015 agenda is the new roadmap that is being developed to guide governments, civil society and other partners' efforts in achieving a new set of goals, identified as Sustainable Development Goals. The post-2015 agenda will determine a global course of action to end poverty, promote prosperity and well-being for all, protect the environment and address climate change.

The post-2015 education agenda must clearly recognize the importance of education for individual empowerment, national socio-economic development and human development. It establishes, as one of its thematic priorities, the need to strengthen education for sustainable development.

One of the main outcomes of the Rio+20 Conference was the agreement by Member States to launch a process to develop a set of Sustainable Development Goals (SDGs) which will build upon the MDGs and converge with the post-2015 development agenda.

Adapted from: <http://www.un.org/en/development/desa/millennium-development-goals.html>.

ESD in Viet Nam

In Viet Nam, the Prime Minister established the National Committee for the United Nations Decade of Education for Sustainable Development (2005-2014) to strengthen the partnership with UNESCO and act as the national advisory and research body on ESD strategies, policies and projects. This national ESD committee is a sub-committee of the National Council on Sustainable Development.

A National ESD Action Plan 2010-2014 was approved by Viet Nam's National Decade of Education for Sustainable Development Committee, composed of various ministries and institutes.

The Committee is the responsible body for overseeing the implementation of the National ESD Action Plan 2010-2014, which includes the following overarching objectives:

1. To promote educational reform, integrate sustainable development elements into educational strategies, policies, programmes and contents at all educational sub-sectors.
2. To continue educational reorientation (i.e., general and tertiary education) as well as non-formal education in a sustainable development manner.
3. To educate, increase awareness and understanding among students and communities on sustainable development and enhance capacity on the implementation of ESD.
4. To enhance training in order to develop human resources for the sake of the sustainable development of the country.

The Government of Viet Nam and all of the country's citizens have the great opportunity to continue working towards sustainability, as the broad international agenda for post-2015 and the Global Action Programme for ESD are developed and implemented and the country renews its commitment and Action Plan.



MOET's Action Plans related to ESD

In order to respond to major sustainability challenges and to establish a pathway to comply with the established national strategies, MOET defined two action plans that contribute to ESD as follows:

i) Action Plan to Implement the National Strategy on Natural Disaster Prevention, Control and Mitigation in the Education Sector in the 2011-2020 period:

Through this plan MOET contributes to the implementation of the decision of the Prime Minister on community awareness raising and community-based disaster risk management.

The plan includes commitments such as:

- 100 per cent staff and officers of education management agencies and managers of education establishments will be fully aware of natural disaster prevention, control and mitigation.
- 100 per cent of managers of education establishments are trained on natural disaster prevention, control and mitigation.
- Basic knowledge on natural disaster prevention, control and mitigation are integrated into education programmes and extra-curricular activities.
- Synergies with "Building a Learning Society" are established and actions undertaken with Continuing Education Centres and Community Learning Centres.
- 100 per cent of education establishments in hard-hit areas develop work plans to prevent, control and mitigate natural disasters.
- Coordination among ministries, sectors, localities and press organizations takes place to conduct regular, periodic advocacy programmes.

ii) Action Plan for Response to Climate Change in the Education Sector in the period 2011-2015:

This plan targets raising awareness and ability for different stakeholders in the education sector and community to respond to climate change.

The plan includes commitments such as:

- Awareness raising on climate change and response to climate change for different stakeholders in the education sector.
- Strengthening the capacity and skills and developing attitudes and behaviours of education managers, teachers, researchers and students on responding to climate change on a global, regional and national basis.
- Integrating content related to responding to climate change into curriculum at different learning levels.
- Establishing synergies with "Building a Learning Society" and undertaking actions with Continuing Education Centres and Community Learning Centres.
- Reviewing and assessing the conditions of existing schools in areas most vulnerable to the impacts of climate change.
- Identifying and learning from international experiences on responses to climate change.

Viet Nam New School Model and ESD

Viet Nam has prioritized the renovation of its education system and has developed a new model for primary education.

The Viet Nam New School Model (VNEN), with funding support from the Global Partnership for

Education (GPE), strengthens the quality of primary education and learning outcomes for students and fosters the practice of ESD skills and behaviours by:

- Innovating teaching and learning methods to be more participatory and student-centred,
- Nurturing innovative self-learning skills.

Established in 2002, the Global Partnership for Education is composed of developing countries, donor governments, international organizations, the private sector, teachers, and civil society/NGO groups.

The Global Partnership for Education is the only multilateral partnership devoted to getting all children into school for a quality education.

As a result, students have displayed increased self-confidence and critical thinking and have a more active role in learning. As described earlier, these are essential skills and learning methods for Education for Sustainable Development.

"My child is more self-confident and creative, has increased communication skills and is taking initiative," commented a parent at Doang Hoang Primary School, Dong Son District, one of the over 1,400 schools in Viet Nam following the Viet Nam Escuela Nueva (VNEN) Model.

The VNEN model changes the focus of the education system from transferring as much academic knowledge to students as possible through textbooks and lectures towards a more

student-centred, peer learning approach. This allows students to become more active and lessons to become less dominated by traditional teaching methods. In the VNEN model, students are more engaged in class with teachers serving as facilitators and parents and other community members becoming more involved in making learning relevant to their children's lives.

VNEN is a participatory model which promotes small group, peer-learning:

- Students are seated at tables in groups of about 5 to 7 and the teacher facilitates learning and group work. Students do not sit facing the teacher and are not lectured by the teacher. Instead, each table has a rotating student leader who helps initiate group discussions and group work. Students are motivated to take an active role.

VNEN encourages problem solving and lifelong learning skills:

- Students develop lifelong positive attitudes such as initiative, creativity, self-esteem, self-reliance, responsibility, social and communication skills, and self-confidence.

VNEN gives students more learning opportunities within the school and community:

- The school is open for community participation, with community corners and colourful walls to motivate the joint participation of students and parents in

school activities. Student councils have rotating elections so all students have the opportunity to lead.

VNEN involves teachers, parents and communities:

- There is frequent information-sharing and teachers work closely with parents and the community to create a more conducive learning environment. For example, schools develop community maps to help teachers and students know their school and surrounding community better.

ESD is mainstreamed throughout the VNEN model as they share the same:

- vision of developing responsible citizens;
- content, such as environmental education;
- peer-to-peer learning approach with the participation of the community in order to develop the attitudes, skill, and behaviours of future generations.

As with any renovation and modernization process, the VNEN model faces many challenges. Moving from traditional methods to new forms of doing things is always difficult. But Viet Nam has made the decision to renovate and, therefore, work to overcome these challenges.

ESD Initiative in Viet Nam

The ESD Initiative in Viet Nam is a unique partnership between MOET, UNESCO and the private sector that promotes sustainable opportunities for corporate social responsibility in which the private sector and other entities can contribute to society's development by supporting ESD activities. The ESD Initiative in Viet Nam integrates three areas, in line with the DESD priorities: climate change adaptation and mitigation, disaster risk reduction and biodiversity conservation.

In Viet Nam, the Initiative contributes to developing mutual support between schools

and their communities, linking formal, non-formal and informal education.

As it is critical that students are actively engaged in issues relevant to their locality as a part of their education, making their learning more pertinent and holistic through this approach encourages students to develop projects that include parents and engage and benefit the wider community. When involved, parents and the wider community raise their awareness on these same issues that students have studied, creating an enabling environment for the children to better apply what they learn at school in their homes and community.



Quiz 2

1. ESD...

- ... is not addressed in the post-2015 agenda yet.
- ... is of interest to students as well as to parents and community members.
- ... is included in the global agenda but only as part of non-formal and informal education.
- All of the above.

2. Are the following statements TRUE or FALSE?

- The Prime Minister of Viet Nam established a National ESD Committee.
- MOET has adopted an action plan on natural disasters and another one for responding to climate change.
- The Viet Nam New School Model is based on traditional teaching methods.

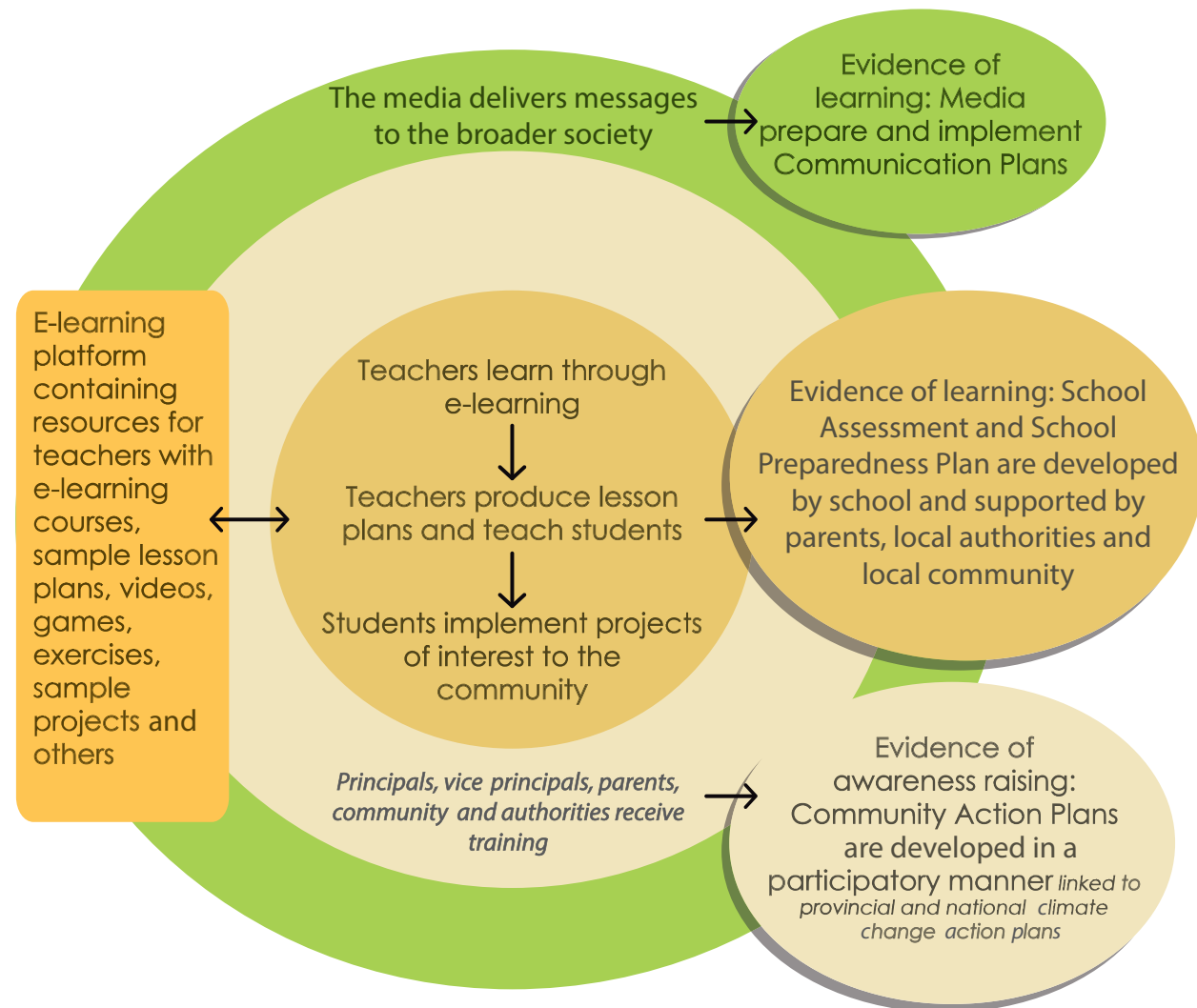
Note: You can check the answers at the end of the course.



With this multilevel cooperation and coordination in mind, the ESD Initiative has achieved three levels of implementation and impact:

- i) within the school;
- ii) within the community around the school; and,
- iii) within the wider society.

This relationship between schools, communities and the wider society in the Initiative is illustrated in the following graphic.



The relationship between teachers and students is at the centre of this multilevel framework for cooperation. The first circle represents the school. Within the first circle, the training of teachers is highlighted, emphasizing the use of e-learning as a method that can reach all teachers and allow them to study online or offline at their own pace.

Within this first circle, school principals lead their schools in a participatory manner with support of parents, the community and local authorities, to carry out an assessment of the risks and threats the school faces and to determine their own capacities to deal with those issues. Based on the

assessment outcomes, the schools will develop and implement preparedness plans.

The middle circle represents the cooperation and interaction between the school, parents, the community and local authorities. This circle represents the learning environment led by the community learning centers to raise the awareness of parents, communities, authorities and others, to better contribute to supporting and reinforcing what students learn at school and to become better organized to do so in a more systemic way through Community Action Plans.

The School Preparedness Plan (SPP) enables schools and communities to analyse risks in and around the school based on information resulting from the school assessment. More specifically, it assesses risks, hazards, vulnerabilities and capacities within the school-community and provides a framework for the development, implementation and monitoring of annual plans that contain actions to reduce risks. School Preparedness Plans support schools in becoming more environmentally sustainable, enabling them to adapt to the effects of climate change and to promote biodiversity conservation and education.

Awareness raising is enhanced through the participatory development of Community Action Plans and the support to the School Preparedness Plans with the broad objective of increasing capacity and reducing vulnerabilities, thus increasing resilience and reducing risk. The plans should be developed to address issues related to disasters, climate change and biodiversity conservation in a comprehensive manner and to link community activities to what students are learning in school and vice versa.

It should be noted that Community Action Plans are a great way for communities to work together to discuss their vision for the future and to analyse in which areas they can work together to enhance the learning environment for themselves and for students at school since schools are at the center of each community. CAPs can help communities implement organized actions towards energy saving, waste management, cleaning and keeping the environment clean, among other sustainable development areas.

The outer circle represents the transmission of ESD messages and activities to the broader society. In order to further promote the enabling environment for ESD and to raise awareness of the wider community on disaster risk reduction, climate change and biodiversity challenges, the media should be involved and receive information on these areas with a gender-sensitive focus, enhancing their capacities to report on these issues through the production and broadcasting of various media outputs. The media can also be supported in developing communication plans for their local media institutions.

Media communication plans create a framework for media professionals to assume their role as global educators and become more effective at informing the public on issues related to climate change mitigation and adaptation, disaster risk reduction and biodiversity conservation.

Community Action Plans (CAPs) are plans developed by the community in a participating manner to join efforts with local authorities to solve issues for which they can take responsibility.

The implementation of Community Action Plans should meet the real needs of the community and help solve the most pressing problems, especially relating to climate change mitigation and adaptation, disaster risk reduction and biodiversity conservation.

All individuals and families in the community, or even the whole village, town or commune, can act together to take the lead in the planning and implementation of community projects and activities that help resolve issues and challenges in a participatory manner.

ESD for sustainable social transformation

Viet Nam has undergone an intense transformation over the last two decades, experiencing accelerated economic growth. This growth also entails ongoing social transformation.

There are many factors that impact social transformation: globalization, rapid economic development, impacts on the environment throughout the world, urbanization, the expansion of Information and Communication Technologies (ICTs), scientific and technological modernization, migration and social integration among many others. All of these issues pose challenges and

require that society as a whole works together to ensure that development is sustainable.

Since the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992, sustainable development has been understood as an internationally accepted key word concerning quality of life, the conservation of natural resources and a sense of commitment to future generations. Most societies today are becoming aware of how the many threats to sustainable development and biodiversity are increasing the risk of disasters and the effects of climate change.



Rio+20 is the abbreviated name for the United Nations Conference on Sustainable Development that took place in Rio de Janeiro, Brazil in June 2012. The Conference served as a historic opportunity to define pathways to a safer, more equitable, cleaner, greener and prosperous world for all.

During the conference, the UN brought together governments, international institutions, the private sector, NGOs and other stakeholders to agree on a range of smart measures towards sustainable development.

The main themes discussed were how to build a green economy to achieve sustainable development and lift people out of poverty (including providing support for developing countries that will allow them to find a green path for development) and improve international coordination for sustainable development.

Adapted from: What is Rio+20? retrieved from <http://www.uncsd2012.org/about.html>



RI0+20
United Nations Conference on
Sustainable Development

Scientific evidence has shown how Southeast Asian nations are prone to the effects of climate change. Viet Nam, in particular, is one of the countries most vulnerable to and affected by this phenomenon.

Education for Sustainable Development seeks to develop individual and collective capacity to make informed decisions now and in the future, and to act upon these decisions. ESD can contribute to ensuring that social transformation is aligned with the needs of sustainability. Why? Because ESD:

1. Is based on the principles and values that underlie sustainable development.
2. Deals with the well-being of all four dimensions of sustainability: environment, society, culture and economy.
3. Uses a variety of pedagogical techniques that promote participatory learning and higher order thinking skills.
4. Promotes lifelong learning.
5. Is locally relevant and culturally appropriate.
6. Is based on local needs, perceptions and conditions, but acknowledges that fulfilling local needs often has international effects and consequences and vice versa.
7. Engages formal, non-formal and informal education.
8. Accommodates the evolving nature of the concept of sustainability.

9. Addresses content, taking into account context, global issues and local priorities.
10. Builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, an adaptable workforce and a good quality of life.
11. Is interdisciplinary. No single discipline can claim ESD for itself: a diverse variety of disciplines contribute to ESD.
12. Develops creativity, critical thinking and problem solving skills.

While these characteristics are essential to ESD, they can be implemented in different contexts and by using different methods so that ESD programmes reflect the unique environmental, social, cultural and economic conditions of their locality.

The knowledge, skills and attitudes developed by each individual and the involvement of parents and other community members, including the media, ensures that the change is not only taking place at schools, but also at home, in the neighbourhood and at community and district level.

This implies a major change that will lead to a transformation of society, a society that will be more prepared for disasters, more resilient to climate change and that will take part in biodiversity conservation.



Quiz 3

1. The ESD Initiative in Viet Nam integrates the following three areas:

- a. ESD, green growth and social transformation
- b. disaster risk reduction, prevention and mitigation
- c. climate change adaptation and mitigation, disaster risk reduction and biodiversity conservation
- d. climate change adaptation and mitigation, disaster risk reduction and bioliteracy

2. Which of the following characteristics are applicable to the ESD Initiative in Viet Nam? Select all that apply.

- a. It links formal, non-formal and informal education
- b. It involves schools, parents, communities and the wider society
- c. The media are at the centre of this initiative
- d. A and B

3. True or false: The involvement of schools, parents, other community members and the media will enable a major change that leads to a transformation in society.

Note: You can check the answers at the end of the course.

The following sections contain recommendations to encourage participation among schools, families, communities and the wider society.

This section provides both general concepts and guidance for fostering this participation to promote inclusion among all stakeholders.

From schools to families

Getting parents involved in the learning process is very important to ensuring comprehensive education. In order to contribute to changing the attitudes of students, we need to reaffirm these learning outcomes and attitudes in school and at home.

Moreover, biodiversity conservation requires urgent action from all citizens, even young students. It requires all of us to act now to spread the message and involve as many people as possible in this process of change towards bioliteracy.

Schools, and especially teachers, have experience engaging parents to support the school.

There are several ways of involving parents and community members. Here we share some options you may take into account and adapt according to the specific characteristics of your school:

1. Activities in the school.
2. Activities in the home.
3. Activities with Parent Teacher Associations.



Guidance for teachers

The following three core principles and practices for teachers should be considered when designing activities to engage parents through school- or home-based activities.

Leadership: the ability to communicate and involve others

The teacher is at the core of the transformation process. It is necessary for teachers to understand the importance of becoming bioliterate and to be able to transmit this idea to students and parents, leading by example.

Flexibility: the capacity to adapt to the local context and cultural diversity

As a teacher, you need to be able to adapt activities to the specific context of your school and to the needs of your students and their families. Not all families have the same knowledge, education level, living standards or cultures and beliefs. Parents may be busy with work or obligations at home, so activities must be fun, varied and should not place an undue burden on families or require any obligatory amount of money.

Sensitivity: the ability to connect with others

Use your five senses – sight, touch, hearing, taste and smell – to experience biodiversity and how it is integral to your life. Try to transmit these feelings to your students, sharing personal experiences and inviting their families to take part in direct experiences. Sometimes it is not about what you say, but about your ability to make others be part of what you are saying. Try to connect with people using examples that can appeal to their emotions and sensitivity.

Activities in the school

The best way to involve parents is communicating with them. Communication between parents and the school cannot only take place when there is an issue with students; it is also important to communicate with families about the programmes and activities that are being developed at school. This is a two-way communication channel, so parents can also give their opinion, propose initiatives in accordance with the school activities and engage in school programmes. Educating students is not only a responsibility of the school but also of parents or guardians. Coordination between the family and the school helps to develop a comprehensive approach.

Inviting parents to visit projects and activities that students have been developing at school is, of course, relevant. Parents want to feel proud of their children and students benefit from positive feedback from parents. You can propose to your students to guide their parents and explain to them the activities they have been carrying out at school. Parents are happy to see what their children have been doing and proud of their ability to explain their learning process. At the same time, it is a way to introduce some basic concepts to parents, raise awareness about the importance of preserving



biodiversity among families and share ideas about how every individual can contribute to it.

Involving families as volunteers is another option for them to contribute to school activities. It also gives them the opportunity to work together with the students, teachers, school principals and staff. Special invitations to elders and grandparents can result in a relevant dialogue between generations, from which both can learn, and students can listen to practical stories of life experience.



Following are some recommended activities you can use or adapt to promote the engagement of parents and family members in school activities:

- Invite parents to school to see dioramas (or miniature models) of ecosystems developed by students.
- Organize an event such as the celebration of Biodiversity Day at school and host a student presentation. This can be a perfect opportunity to get families involved.
- Organize a contest, pairing students and parents, where they have to use their knowledge about biodiversity-related issues and come up with solutions to existing problems in their local environment.
- Invite parents and families to take part in planting trees in the school or developing a medicinal or vegetable garden.
- Send a brief questionnaire home with students to gather information on the knowledge, perspectives and behaviours of parents and families which can help you to plan better for joint activities.

Activities at home

Most of the activities proposed throughout this course can be developed at home or in their neighbourhood by students together with their families. For example, students can explore the biodiversity around their houses, their neighbourhood or community together with their parents and classmates. They could even take a day trip with their family to discover a natural area close to where they live.

Students could also start a little garden in the backyard or in the terrace of their house with the help of their parents. Recycling and reusing items by decorating them are also activities that can be carried out at home with parents.

When developing these activities, you can ask students to bring materials such as old magazines, boxes, bottles or other items that can be used as materials for crafts project or classroom exercises. As a teacher, you need to remind them to ask for permission from their parents to take those materials. They should not have to purchase new materials as the main purpose is to recycle and reuse.

You can propose to students some fun activities at home in which they consult their parents for guidance. For example, if students are identifying endangered species or factors that contribute to polluting our environment, studying medicinal plants and their uses, or writing about local consumption patterns, parents and neighbours can provide their inputs.

Activities with Parent Teacher Associations

Parent Teacher Associations are a great platform to introduce the work that you are doing with your students and to invite parents to be part of it. Through the association, parents are not only involved in the activities but can also propose their own ideas or events to be developed in a parallel manner or integrated into school events.

Through parents associations, school councils and committees, you can involve families in decision making (for example: in the development of a School Preparedness Plan) and engage them in awareness raising activities.

To successfully involve parents, consider that sometimes they do not participate more because they may not know how to get involved. Here, the teacher plays an important role. The following



section contains some examples of skills, methods and best practices to ensure the participation of parents and other community actors.

From schools to the community

Biodiversity loss is a global problem that affects us all. Finding a solution should be a common task that goes beyond the individual sphere and engages communities into common action.

Remember to enhance the focus of Education for Sustainable Development on green growth as a way to achieve ecological sustainability, promote the relationship between the schools and their communities, and reach out to society in order to ensure that there is a massive behavioural change generated through education.

Every citizen should become a bioliterate citizen and contribute to biodiversity conservation. Bringing together the efforts of different members of the community will allow us to achieve more solid and sustainable changes and may create opportunities to connect community members, share expertise and generate new ideas for projects or activities.

The school can involve community groups, community leaders, cultural and civic organizations, and colleges and universities in activities and environmental projects.

Here you have some ideas you can use or adapt when engaging members of the community:

Involving students and schools:

- Invite students from other grades or schools to visit your class. Get in touch with other schools and exchange experiences. Your students can exchange with others on projects and learn about biodiversity-related problems, ideas and solutions implemented in other places. Promoting the respectful exchange of views among students will build their capacity for dialogue.

Involving community groups and organizations:

- Get in touch with local clubs, organizations and institutions whose work is related to environmental issues, species conservation and other related areas and invite them to share their

knowledge with the class. It can be a good opportunity to generate synergies and come up with some further ideas.

Involving the general public:

- Open Days: you can invite community members and organizations to your school to visit the projects and activities that your students have been developing and hold a presentation or workshop.
- In coordination with education authorities and the school principal, organise an event in your Community Learning Centre (CLC) to raise awareness about specific issues you and your students want to address in the community.
- Teaching students to collect views and opinions on their work will be very beneficial and empowering.



Involve other members of the community not only in the implementation of the project, but also in the identification of environmental issues they want to address and in the decision making and planning of the projects. Some community groups or members might be better positioned to identify and provide solutions to a specific problem according to their role in the community.

Suggestions for enhancing participation

Following are examples of different practices which support an open, participatory approach within the classroom or in meetings with parents and community members. We include them here as a reference and as inspiration for teachers to be creative and apply or adapt whichever parts they consider useful to their specific situation.

Some of these ideas may be useful in the classroom or in meetings with parents and community members.

All of these methods can be adjusted to suit the needs of your group and modified to accommodate the number of participants, venue, time constraints and so on.

Example 1: Group discussion with specific topics or tasks

- Imagine you want to discuss with a group of parents how to best contribute to school projects and which activities should be included in school celebrations. One way of

enhancing participation among the group is to separate the main issue or tasks into smaller components which are then discussed face-to-face in small groups. In this example, one group could discuss possible ways for the group to contribute to school projects while the second group discusses activities to celebrate special days.



As the small groups develop solutions or actions to address their specific issue, they report back to the larger group through plenary sessions to gather viewpoints, recommendations and practical ideas from all participants. This process of small group discussion and larger consultation is repeated until consensus is reached.

Remember, it is also important to ensure that the discussion groups are composed of a diverse range of participants including community members, business owners and other private sector enterprises, authorities,

experts, and other individuals and organizations, depending on what you want to discuss. Keep in mind the importance of balancing the equal participation of women and men.

Example 2: Working groups

- Similarly, and especially helpful in larger groups, you can randomly select a number of participants to create a smaller working group. This working group will consult with everyone in the larger group and consider the different viewpoints of local experts or authorities through interviews and consultations.

Based on these discussions, the working group will provide informed recommendations for action to the larger group or suggest forming smaller subgroups to address more specific issues, as described in the previous method.

Example 3: Community expertise

- If you would like to guide your students to develop projects that benefit the community, for example, you may want to begin by gathering members of the community or local experts who could have a discussion and lead you to identify which activities are suitable for your students.

When coming together to identify solutions to local problems that can be considered by

students for their activities, it is important to ensure that the viewpoints of parents and community members are included in the process. It is also useful to obtain adequate guidance from experts who are knowledgeable about the issue.

One way to ensure this type of broad participation is to constitute a group or groups of parents, community members and other non-experts to raise questions and voice ideas to a panel of local experts and authorities. At the end of this process, the group will consolidate their findings and recommendations and use these inputs for future decision-making. This process guarantees that the school and community are in constant coordination.

Example 4: Focus group discussion

- Similarly, you can lead planned discussions among a small group of stakeholders, facilitated by a moderator. Often called focus groups, this method can be useful to promote discussion among the group, especially during initial planning stages or when generating ideas.

Focus groups require that small groups of stakeholders assemble and share their perspectives, ideas and values within the group. A moderator supports the process by asking leading questions to guide discussions and directing the group towards constructive progress. When utilized correctly, and when

carried out with a diverse group of participants, focus groups can be instrumental in providing different perspectives and experiences pertaining to gender, age and ethnicity.

Focus groups are flexible and adaptable to local contexts, while using minimal resources. However, focus groups lead only to brainstorming and discussion and are not effective in building consensus or making decisions.

For example, if you only want to collect ideas on how parents think they can support your work by assisting in activities, and if you want various parents to meet each other and learn about their past experience with school projects, this method can be very useful.

Example 5: Snowball discussion

- Another method for ensuring broad participation in a creative way combines elements from many of the previous methods in an innovative exercise. It facilitates collaboration and knowledge-sharing through dynamic networks of discussion. In this process, participants discuss a question or issue in small groups around real or imaginary coffee or tea tables. After each discussion, participants move to a new table and new discussion topic. Each table has a host who presents the topic and leads the discussion. Each host remains at their table and summarises the previous conversations to the new table members.

During this process, former conversations inform new ones, continually building upon the group's ideas with new perspectives. At the end of the process, each table's discussion is summarized by the corresponding host during a plenary session so that all groups benefit from the findings of every group and solutions are a product of the interaction between different actors and ideas.

Example 6: Vote for solutions

- In addition, and in order to promote the participation of all group members, after generating solutions or ideas through small group discussions, or any of the methods above, groups or individuals can post their queries or solutions for others to review. To make sure the process is participatory and generates new ideas, invite groups to display their proposed solutions and allow participants to contribute comments or concerns directly on the paper or board on which the solutions are displayed. You can also have participants vote on the solution(s) they like the most or on specific elements of solutions which they find important, by allowing them to mark these "votes" directly on the board through a check mark or other means.

In this way, you can consolidate different perspectives on proposed solutions that can later be used to enhance their efficacy.



Respect for diversity

As you promote participation of parents and community members, and even in your activities with students, it is important to ensure respect for biodiversity, meaning respect for different opinions and gender equality, meaning equal opportunities for boys and girls, men and women. Here we share further information that may help you in doing so.

What does diversity mean?

Diversity means that although people have things in common with each other, they are also different and unique in many ways. Diversity implies recognizing that we are all different and that we have to respect and value those differences.

Diversity can refer to race, ethnicity, gender, religion, sexual orientation, age, physical abilities, beliefs or socio-economic status. It also refers to different experiences, backgrounds and viewpoints.

The added value of diversity

Imagine if we all looked alike, wore the same clothing, did the same things and had the same interests and skills. How boring that would be! Diversity makes the world an interesting place, full of interesting people from whom we can learn many things.

For example, imagine you are developing your School Preparedness Plan and you gather together school staff, parents and other members of the community. Your school is in an area prone to typhoons and you are discussing the dangerous situations that might arise, as well as possible solutions. Some parents and community members may have some experience dealing with the effects of typhoons and might have different ideas and solutions. The goal of gathering it is not necessarily to find one single correct solution, as this may depend on the specific context, people's circumstances and other factors. The goal is to share experiences that will be helpful to identify lessons learned about what went wrong and what was done right.

That is the added value of diversity. Different opinions and experiences enrich the debate and can bring different solutions that individually you might have not been able to imagine. Listening to others will help you think about situations that you may not be aware of, thereby helping you to become better informed and more prepared.

Let us think about another possible situation: imagine, for example, that you identify an issue in your school or community related to biodiversity conservation and want to design a project to address this issue. The more people you involve in the design and implementation of the project, the better. Involving more people implies sharing more points of view, some of

which you might not agree with and others which you might not have thought about before. Others may also propose different options on how to address the issue according to each person's knowledge and personal experience. Normally, ideas that are very different from ours make us feel uncomfortable. What is important is to listen to others and to understand what others think and why. This will help you to propose solutions that take what others think into account and, therefore, greatly enhance the effectiveness and relevance of your proposed solutions.

Now, let us imagine that you decide to design a project on your own and present it to the community to be implemented. People might have a different perspective on the issue that you are trying to address with your project. However, imposing your point of view will not help achieve the goal of the project: you need to listen to others to enrich your project and cover more possible solutions. Integrating others' ideas and creating synergies will improve your project, as the worth of the group's ideas is greater than that of the individual. You can increase the chance that the project is successfully implemented by enhancing the level of ownership and empowerment of all of those participating in the process.

In summary, diversity implies an openness to listening to other opinions and experiences and integrating other points of view to enrich your proposal or project.

Cultural diversity

Culture is the set of spiritual, material, intellectual and emotional features of a social group. These features include language, religion, family practices, buildings and architecture, oral traditions, social practices, arts, festive events, local knowledge and traditional crafts, among others. These features determine the way in which each person understands and interprets reality.

Understanding, appreciating and respecting these differences is essential for everyone's access and involvement in an activity.

Viet Nam, with 54 ethnic groups, is an example of cultural diversity. In order to foster an understanding of cultural differences among your students, we have included the following recommendations:

- Propose for your students to research the different ethnic minority groups in Viet Nam or in their area. They can do this in small groups.
- Encourage them to gather information about the housing, livelihoods, dress, languages and traditions of these groups.
- If there are students in your class that belong to an ethnic minority, invite them to share their opinions and customs.
- Ask students to seek out information from family members or other key community informants and contrast the different points of view.

- Students can then share their findings with the class.
- Make sure students show respect for things they may find very different to their own customs. Make sure they learn to value diversity.
- You and your students can create posters and show pictures that reflect their findings and conclusions.

Gender

Regardless of the age, ethnicity and other characteristics of your students, gender impacts and shapes a child's experience at school. Here you have some suggestions on how to include the gender approach:

- Create relations between students based on things that they have in common and not based on differences. For example, propose your students to describe the activities they do during the day in which they make use of water or electricity. Then, ask them to compare and see all the things they have in common.
- Make sure that you always provide examples that include women/girls and men/boys and that those examples do not contribute to perpetuate gender stereotypes, which means that the examples should show men and women doing activities, that are not traditionally assigned to each gender. For example, you can use an image of a man cooking or a woman fishing. Use materials, books and posters that reflect diversity: men and women of different ages and backgrounds

working together. Try to extrapolate this to reality when you work with parents and community members.

- When doing research, encourage children to ask questions to both men and women independently. They may have different knowledge and provide different ideas about the same issues.
- Try to balance participation. Sometimes some women are shy to raise their voice and give their opinion in a mixed space with their husbands and other members of the community present; in some situations men feel uncomfortable when being asked about cooking or how to take care of the children. Encourage both genders to participate and express themselves, reinforcing the idea that all opinions are equally valid and they can contribute to give a different point of view.
- When implementing activities, make sure that you assign tasks regardless of the gender. For example, you can ask a woman to coordinate a group of men and women who are going to change or fix the windows of the school.

From schools to the wider society: media's role in delivering messages to society

The media plays an important role in our daily lives. You may pick up a newspaper on your way to work in the morning, subscribe to your favourite magazine or browse the Internet. The media, however, is more than just headlines. The media delivers messages to society and has the power to shape the way we think and even act. They are also communicators and advocates for

new messages and movements in your school and community.

Think critically about the media you read or listen to, the messages you process each day and how these can be used as a tool to guide the discussions and actions of your community. For example, a news article about a typhoon approaching the coast can be a useful way to discuss the effects of storms on the local community.

Next time you open a newspaper or click on your favourite website, think about how the story you are reading can make an impact on your students and communities today. Consider how the media can shape your school and community's conversation about the environment around you.

Journalists can inform the public about important events and topics, but ultimately it is up to us to decide how we will process and act upon the information we receive from them. The media has the ability to deliver the news, but only we can act on these messages with concrete actions.

Today, with the potential of media as a means of influencing and transforming society, citizens must not only be bioliterate, but media literate as well. To be media literate, people need to have access to quality media content. To encourage media literacy, it is important for the education system to promote citizens' critical understanding of communication and of the importance of carefully selecting types of

information that are accurate, reliable and objective. With this in mind, it is easy to see how media literacy is an important part of lifelong learning.

Educators and students can also influence the messages the media delivers. As students, parents, schools and communities come together to take concrete action to change the way we treat our planet, the media becomes a powerful tool in transmitting this message and encouraging communities and the wider society to do something about it.

An example of how media can be a means to transform society is when the media prints or broadcasts stories about how we interact with our environment, reaching people and making them reflect on their behaviours.

The media has the power to amplify messages about disaster preparedness or biodiversity and make the public more knowledgeable and bioliterate. The message teachers share with their students in the classroom can become messages for everyone. The media, including local community radio, is the vehicle to deliver these important facts, stories and information to inspire action.

The media has the special ability to deliver these messages, but we have the capacity to take what we read or hear and transform it into actions towards promoting bioliteracy and harmony with nature in our homes, schools and communities. To use the media as a tool to reach society and

deliver our messages, we should consider contacting the local media in the community. The local media is sensitive to the environmental problems in your community and may be able to collaborate in delivering your messages. An agreement between the school and the local media can create joint projects in which children can have opportunities to write stories or messages and share them through the local radio or press.



Section 2:
Educational Activities



In the following section are various activities which can be used to reinforce the understanding and promotion of Education for Sustainable Development.

Teachers can select from the following activities the ones they would like to apply or adapt to their classroom and implement with their students, parents and community. It is important to remember that students and teachers can support social transformation by taking educational messages from the school, to the home and to the community. The activities should not be developed as additional content, but as a way to reinforce competences and behaviours, combining content from various subject areas.

The activities in this section are as follows:

- Activity 1: Respecting and celebrating diversity
- Activity 2: Developing projects in the interest of the community
- Activity 3: ESD Green Champions
- Activity 4: Communicating as a Young Journalist
- Activity 5: Saving energy
- Activity 6: Celebrating International Days
- Activity 7: Eco-Bingo

At the end of this section, you will be able to:

1. Develop activities to involve students, parents, the community and the media in the transformation of society to become bioliterate.

Activity 1: Respecting and celebrating diversity

Objective of the activity: to understand the value of diversity and the need to respect and celebrate our differences in the classroom, at home and in the community.

Description of the activity: In this activity, students will explore the diversity within their classroom by examining the similarities and differences between their classmates. Students will also learn how we can utilize our differences to create holistic, novel solutions to complex problems and how every individual can contribute in their own way.

Key messages for students:

Diversity, whether in nature or the classroom, should be respected and celebrated. Everyone is unique. By working together, we can accomplish so much more by combining all of our different ideas, perspectives, experiences and capabilities.

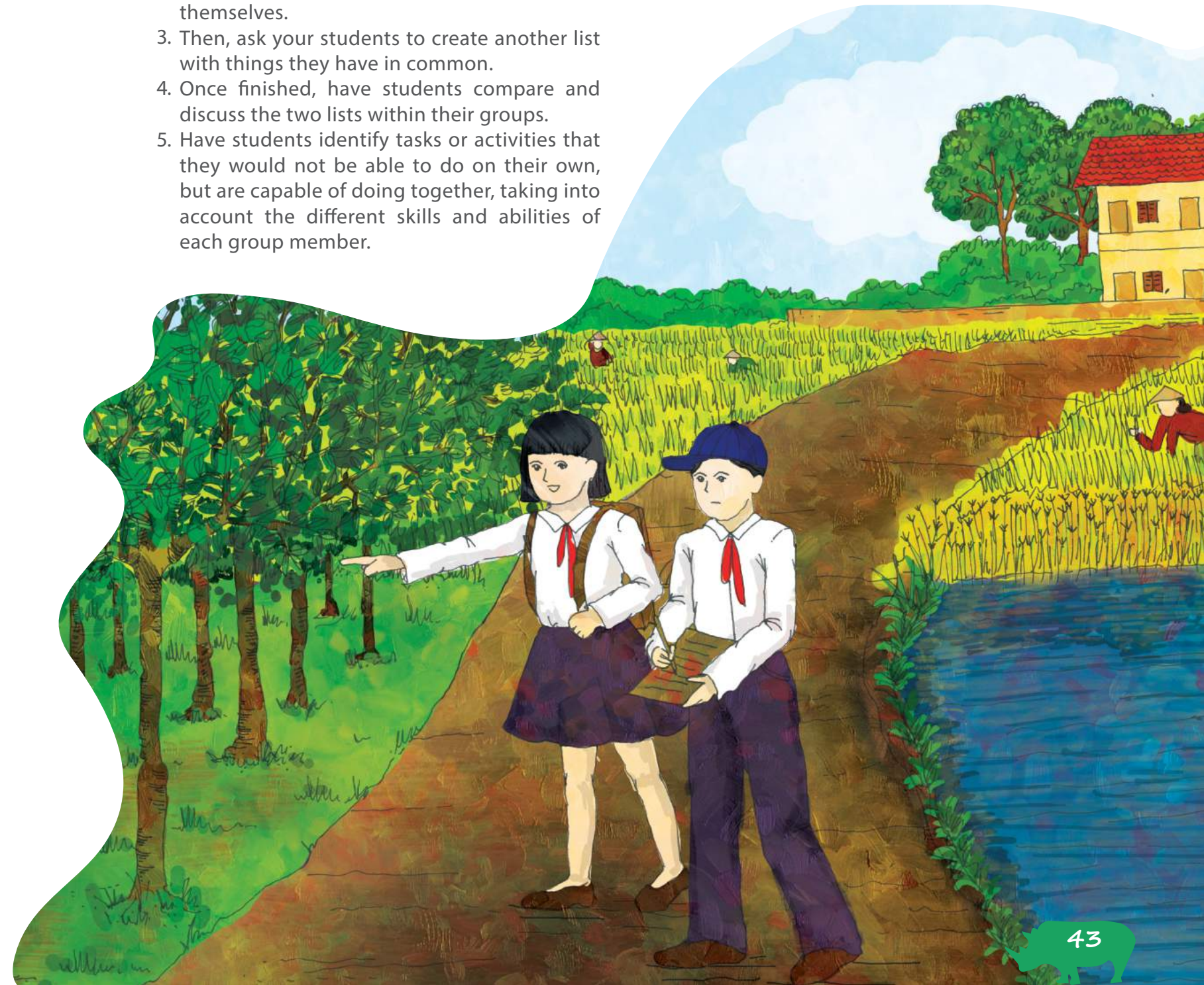
Materials needed:

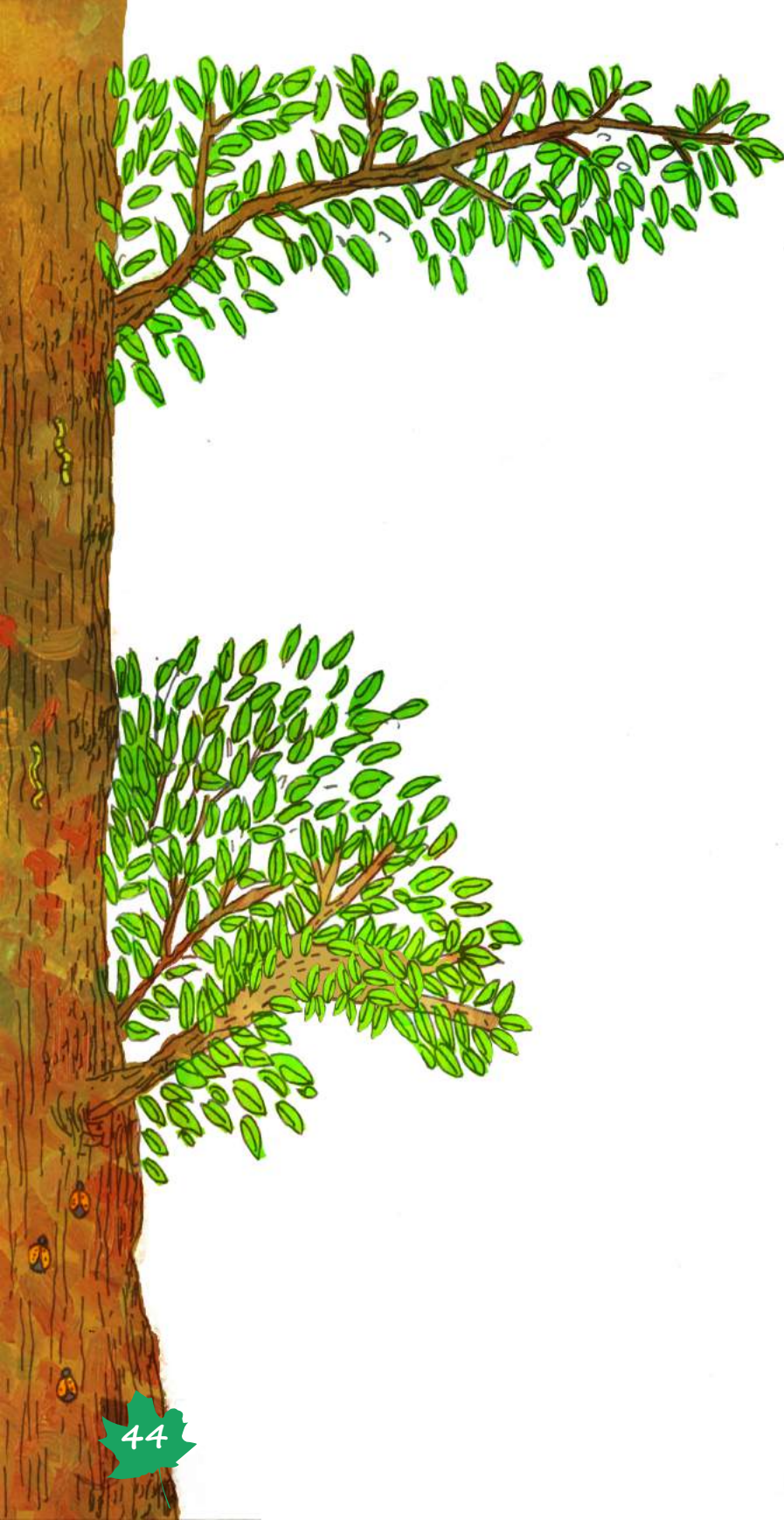
- Pens or pencils and paper.

Instructions for the implementation of the activity:

1. Divide your students into groups.

2. Ask your students to make a list of all the differences between their group mates and themselves.
3. Then, ask your students to create another list with things they have in common.
4. Once finished, have students compare and discuss the two lists within their groups.
5. Have students identify tasks or activities that they would not be able to do on their own, but are capable of doing together, taking into account the different skills and abilities of each group member.





Activity 2: Developing projects in the interest of the community

Objective of the activity: to strengthen the relationship between students and the community in a way that students can develop activities that benefit the community.

Description of the activity: Students, under the guidance of the school, develop projects to address environmental and biodiversity related issues in their locality (school, house and community) and to learn and develop the attitudes and behaviours needed to protect, preserve and respect nature as well as to enrich the biodiversity in their localities by implementing projects and involving others in the process. These projects will help to actively respond to climate change and to reduce the risk of disasters and biodiversity loss and to contribute to the enhancement of biodiversity in their schools and communities.

Key messages for students:

1. Young people are an important part of the community.
2. Communities face challenges, such as climate change and biodiversity loss, that require community members to take joint action.
3. Students can contribute to their community through school projects.

Materials needed:

- Ideally, students should have access to cameras in order to record the activities. Other, specific

materials will depend on the type of project to be implemented.

Instructions for the implementation of the activity:

In order to implement a project, students have to develop a project plan. This plan should be as detailed as possible, indicating steps, specific work assignments, resources, materials and tools that need to be prepared. While preparing the projects, students can combine and integrate other subject areas, such as mathematics when considering the budget or Vietnamese language while developing communication messages, to enhance the learning outcomes of the activity.

The instructions provided below are written as guidance for the teacher. You can adapt the information in the instructions to share with students according to their grade level.

Step 1: Project identification

Identifying the problem

The first step is to identify an environmental or biodiversity-related issue or problem in your school or community to which the school can contribute solutions.

For that purpose, you have to take into account the specific context of the locality in order to detect emerging environmental or biodiversity-related issues that could be practical for students and interesting for the community.

In order to identify the issue or problem, you can engage community members and other local

actors. You may use the recommendations and methods for enhancing participation shared in the previous section.

Imagine that one of the main problems identified by the community is that there is too much waste. This is a real problem in your area. You can see plastic bags and cans in the streets or in the gardens. Maybe some people in your area are already complaining about the dirt and waste and would be interested in contributing to solve the problem.

Proposing solutions

After identifying a problem, students will discuss possible solutions and how the school can contribute to improving the situation. You can divide the class into 3-4 groups to develop proposals for one project idea per group. The best project idea selected by the whole group will be implemented. As a teacher, your role is to guide them and help them select issues that are appropriate for their age and abilities so they can contribute to finding a solution. Take into account that more than one solution might be possible and that you may decide that your class is able to implement more than one project or activity or invite other classes to join the initiative.

You can also consider the possibility of inviting parents, community members or an expert from a university, NGO or government institution, to discuss the solution to the problem with your students, especially to ensure that the possible solution is technically correct and feasible.

Continuing with our example, there are multiple solutions that can contribute to reducing waste such as:

- starting a recycling programme,
- raising awareness on the importance of properly disposing of waste,
- reducing the use of plastic bags or plastic containers,
- coming up with ideas to reuse items instead of producing more waste.

In order to choose the student project that will be implemented, we need to consider the feasibility and sustainability of the project.



Criteria for defining projects

If the project was developed using all the following criteria, the marking scale of the project can be a 100-point scale.

No.	Criteria	Points
1.	The project idea is creative and has resulted from group discussions among students.	10
2.	The project is adapted to the context and suitable for students' age and capacity.	20
3.	The project has the potential to engage the entire school.	10
4.	The solution is effective, meaning it will be successful in producing a desired or intended result, and is efficient, meaning it will achieve results using of available resources rationally.	20
5.	The project benefits the community and can have a multiplying effect.	20
6.	The project and results are sustainable, meaning the actions and the effects can continue once the project is finished.	20
Total		100

The **feasibility** of the project refers to the capacity to implement the project with the available resources and to the effectiveness and efficiency of the solution chosen.

The **sustainability** refers to the continuity and maintenance of the effects of the project once it is finished and the possibility of multiplying these effects in the future.

Below is a helpful chart which provides sample criteria for selecting projects.

Step 2: Project development

Once the problem has been identified and the solutions proposed have been verified by someone who is experienced with the issue, you will guide the students to prepare the detailed plan for the project or activity.

The plan will include the following:

- Expected results
- Activities
- Timeline
- Responsibilities
- Resources and budget.

Expected results

Defining an expected result is to describe and record concrete, visible and measurable change you expect to happen as an effect of the implementation of the activity. In other words, it indicates how a specific situation is expected to be different from the current situation. For this reason, it should articulate what will be different rather than what will be done. Write the expected results in the past tense so you can closely see what will have happened by the end of the project or activity.

Results are the benefits or effects of completed activities or projects. Remember to focus on the changes expected rather than on the activities to be carried out when formulating expected results.

For example, the expected result can be: "The use of plastic bags in the commune will have been reduced." This is a project that can contribute to reducing waste and can be implemented with minimal resources and its activities can be continued after the end of the project itself.

When defining expected results, you must keep in mind that you will need to provide evidence that the desired change occurred. For that you need to have baseline information before starting. In the case of the project on waste, especially plastic bags, we can, for example, take photos of a river, lake or road near a market so we can document the amount of existing waste before we begin the project to campaign against waste and the use of plastic bags.

After the activities, we will take photos of the exact same location to show how the community has cleaned the place and kept it clean as a result of the campaign carried out by students. You may also want to ask some questions to people at the market about the use of plastic bags and about their awareness of the damage they cause to nature.

After the activities of the project are carried out, you will ask the same questions and compare the answers. Before the project you may find people did not have facts related to the harmfulness of plastic left in the environment, but after the activities a large percentage of these same people should have changed their responses and indicate they are now aware and are recycling and not polluting.

Activities

Activities are actions or steps to be taken to reach the expected results. For example, the project may include the following activities:

1. Develop a message that explains why the use of plastic bags should be reduced, the damage their use can cause to nature if disposed of improperly and the number of years it takes for plastic bags to biodegrade.
2. Carry out simple interviews with the project target population (such as people at the market) to show their level of awareness before and after the project activities.

3. Obtain permission from the school principal and local authorities to go to the market to speak to people.
4. Select a local river, park or other area to take photographs and document pollution caused by plastic bags.
5. Prepare a visual aid, such as a poster with the photographs and a strong message.
6. Visit the market and carry out a campaign advocating the use of reusable bags as an alternative.
7. Visit the local community radio station and share your message and experiences.
8. Motivate community members to clean up the area that you photographed.
9. Take photographs after cleaning up and adjust your poster with the “before” and “after” photographs.

Timeline

It is very important to determine the duration of the project and establish a timeline during which the activities will take place in order to ensure it is compatible with students’ timetables and exam dates and with the seasonal calendar, for example, in the case of projects related to crops, local agriculture or projects that require favourable weather. These activities should be used to reinforce learning outcomes in students related to subject areas such as communication, math, language and others, and should focus on life skills and changing behaviours.

If the activities take place during the exam period, it may interfere with students’ academic performance and it is very likely that these activities will not be given the required attention. The time that students dedicate to the project activities should be carefully planned with the teacher. Students in one class can take turns participating in the implementation of the project.

Responsibilities

This refers to the need for establishing which activities or parts of activities will be carried out by whom. For example, who will obtain the permission from the school principal and the local authorities? Which students will speak at the market?

An important factor to ensure the success of the project is raising awareness and involving others in the school and community. Only if we are able to engage others will we achieve the goals of the project and sustain the results once the project is finished.

You should also consider the different roles of boys and girls, in order to not perpetuate gender stereotypes of the duties that are assigned to different individuals. At the same time, make sure that people with disabilities are given responsibilities according to their capacities, knowledge and expertise.

Resources and budget

To facilitate the implementation of activities, it is crucial to define which resources are required. This task involves the assignment of available school or community resources in an effective way and the search for additional external resources, if needed.

For each activity, the team will determine which resources are necessary for implementation. These do not only include financial support but also labour, technical expertise, equipment, supplies and others. Within this list of resources, it is important to determine which kind of specialized assistance is needed from experts, volunteers, parents, institutions or universities, and other groups.

Step 3: Implementation

The projects are implemented within the school and surrounding community. If there is any activity outside the school, obtaining permission from the school principal and parents is necessary. You may also need to ask the local authorities for permission, depending on the activity.

In our example of reducing the use of plastic bags in the community, one activity could take place in the main square of the commune to raise awareness among community members on the importance of minimizing the use of plastic bags and the benefits of using reusable bags instead. To carry out this activity, students would need their parents’ permission and also authorization from the local authorities to develop the activity in a public space and display communications materials.

Step 4: Monitoring and sustainability

Each project should be closely monitored to ensure that the activities developed are contributing to achieving the expected results. In this regard, it is recommended that regular group meetings are held among the project team and supporting teachers to monitor and review the implementation process and to discuss any difficulties that might arise.

It is also advisable to take notes, photographs or even video to provide a record of the development of activities for communication and monitoring purposes.

For example, if the community is motivated to clean up an area polluted by plastic bags that was initially photographed, taking photographs before and after the clean up is very important. Comparing the evidence of the before and the after is extremely useful.

All of these measures allow you and your students to review the effects of the activities, draw upon lessons learned from the experience and re-orient or modify the project according to the results achieved.

While the project has a defined implementation period, it is necessary to ensure its sustainability in order to maintain the results throughout the school year and in the future.

Examples of community projects in the Red River Delta Biosphere Reserve

In the following section are some examples of projects that can provide teachers with ideas to guide students to implement projects. These examples should serve as a reference and should be adapted to the realities of the school and community.

Schools can and should provide opportunities to develop students’ sense of belonging in their community to enhance their citizenship values. Schools should also foster the bond between parents and the surrounding community. This will promote a better understanding by parents and the community of specific citizen behaviours, life skills and competences that

students develop in school and will support the creation of an enabling environment for students' education to be reinforced. A concrete example is when students learn about saving energy in school but when they go home or are in their community they do not see the adults adopt such behaviour, maybe even demonstrating opposite, negative behaviours.

Teachers and school principals can hold meetings with parents and community members to jointly determine the challenges the community is facing and how students can become involved. The following are five examples of activities carried out by five schools, shared here for teachers to use as a reference. Many schools have similar experiences and can share them with others through their websites.

In the Red River Delta Biosphere Reserve, located in Northern Viet Nam, students, parents and community members collectively took action to respond to climate change challenges in their locality and to advocate for environmental awareness and practices, through mainstreaming Education for Sustainable Development in school and extra-curricular activities.

Students increased their knowledge on challenges linked to Education for Sustainable Development such as climate change, biodiversity loss and other environmental issues by developing and implementing projects in the following areas:

- Addressing the challenges caused by the widespread burning of agricultural waste by

producing environmentally friendly fertilizer from discarded rice straw;

- Planting and caring for trees with the support of families and the community to generate a change in attitudes towards conserving and protecting nature;
- Producing an organic vegetable garden in the school to raise awareness of the importance of using natural fertilizers instead of chemical fertilizers;
- Campaigning to reduce, reuse and recycle plastic bags in the locality, especially in the market;
- Implementing sawdust bedding in family-scale livestock farms to absorb animal waste and reduce pollution in the area.

Some of these projects were implemented by primary schools and others by lower secondary and upper secondary schools. Depending on the conditions of the school, the projects can be adapted to different levels and ages. Support from parents, the community, NGOs, unions, specialized institutions, universities, experts and volunteers is very important to ensuring the success of projects by adapting and aligning them to students' capacities.

To learn more about these exciting activities and their positive results, look at the following examples.

Using bio-base on family-scale farms: sawdust bedding by Giao Thuy Upper Secondary School (Ngo Dong Township, Giao Thuy District, Nam Dinh Province)

Students have contributed to raising the profile of sustainable farming in Giao Thuy

by demonstrating how the use of sawdust bedding can successfully reduce the negative impact of family-scale farming on the environment. To do this, the project team, made up of 10 students, followed a three-step process to implement the sawdust bedding project on two family-scale farms.



The students: i) mixed sawdust with organic waste (mainly from rice farms), ii) stored the mix in a warm environment for two days and iii) distributed the mix around livestock pens. The sawdust bedding mixture produced the desired effect, reducing the need for cleaning the pens which, in turn, reduced the risk of disease and the amount of contaminated run-off usually created during the cleaning process. A local expert and officer at the Giao Thuy Agricultural Extension Centre trained students on how to produce the sawdust bedding mixture and helped them source materials for the project. The expert described the student-led project as "a practical approach to educating students about environmental

protection which has raised their awareness of local environmental pollution."

To raise awareness in the community about the positive results of the sawdust bedding initiative, students directly reported to and discussed with the Giao Thuy Agricultural Extension Centre and the Giao Thuy Veterinary Medicine Centre (two centres under the administration of the Giao Thuy District Agriculture Department). They also made announcements over the school speaker system and designed and distributed 300 flyers to local farmers and broadcast messages over Giao Thuy district radio. The campaign produced numerous requests from community members for students to help them apply sawdust bedding on more family-scale farms in the area. The project also received attention from members of neighbouring commune Giao Lac who visited the projects to observe and copy the technique.

Reduce, reuse and recycle campaign by Giao Thien Lower-Secondary School (Hamlet 24, Giao Thien Township, Giao Thuy District, Nam Dinh Province)

Students conducted a campaign in the commune market to raise community awareness of the harmfulness of plastic waste: this has been a real and lasting contribution to their community by changing the attitudes and behaviours of local people through a campaign which has drawn attention to the devastating impact of plastic bag waste on the local environment. Students began by collecting evidence of plastic bag waste through community surveys,



interviews and field visits to badly affected areas. The results were analysed by students and teachers, showing that the use of plastic bags is widespread, with the majority of people admitting to burning or throwing plastic bags into rivers, lakes, roads or other unofficial dumping sites.

To combat this problem and to draw attention to the issue, students raised community awareness through regular broadcasts over Giao Thien radio, ensuring the campaign's wide reach and impact across the commune. The campaign also targeted one of the root causes of plastic bag waste, the Giao Thien market. With the support of a local pagoda, which helped the students gain permission to use the busiest area of the market to publicize their message, the team conducted presentations and question and answer (Q&A) sessions to encourage shoppers to bring their own bags instead of using plastic bags from the market.

The sessions were well-attended and benefited from the positive participation of market-goers. A parent and village leader at the Giao Thien Market noted, *"before the training I just accepted that waste and pollution were a part of daily living, but after the training and having seen the students working, we have realized the harmfulness of waste. I now understand more and want to persuade people in the community to work together to reduce the amount of waste discharged into the environment."*

Adults are not the only perpetrators of plastic bag waste in the area so the project team also conducted awareness raising at school by taking advantage of the monthly flag saluting hour to spread the "reduce, reuse and recycle" message to the wider student body and to encourage them to promote the cause at home and in the community.

In addition to this campaign, students, with support from teachers and the school management board, held a competition for the whole school (900 students) during which several groups designed products that the community could use as alternatives to plastic bags. More than 100 designs were entered, the most creative of which were displayed in the office of the Ho Chi Minh Young Pioneer Organization. The competition was successful in spreading the "reduce, reuse, recycle" message around the school and the community.

The campaign contributed to changing the way local residents think about waste management, which can be observed in the change in their

behaviour and in the visible reduction of garbage discharged into the environment.

Tree planting and environmental corners at Giao An Primary School (Giao An Township, Giao Thuy District, Nam Dinh Province)

Primary school students learned about the importance of protecting and restoring the environment through a project that took them out of the classroom and into nature. Students, with assistance from parents, community members and teachers, planted trees in and around the school and built 'green corners' in their classrooms. Every classroom now has a corner dedicated to raising awareness for environmental protection. Each corner has potted plants, a poster about environmental conservation and a daily comment box made from recycled material.

Students, with the help of parents and community members, transformed the school grounds by planting royal poinciana trees and plants which have provided more shade for students to play under, a shield against dust from the nearby road and a more attractive learning environment as well as protection against storms. A student in the project team stated that "our district is near the coastline, so we have to plant a lot of trees to protect us from the strong winds and storms." The devastating impact of these storms was felt in April when many of the saplings planted by students were destroyed by a tropical cyclone accompanied by cold rain.



Despite this set-back, teachers and community members showed their commitment and passion for the project by donating replacement trees to the school.

Teachers, community members and mass organizations invested their own money and time to ensure that the students could continue the project. Two members of the local community donated three attractive bonsai trees worth 35 million VND (1,650 USD) which were placed at the entrance of the school. In addition to replanting the lost trees, the school management board and teachers are trying to expand the project by seeking permission from local authorities to allow the students to plant more trees along a river bank near the school.

To raise awareness of the community and student body, regular announcements about the project were made over the local radio station and during the school flag saluting hour. The project has

demonstrated the importance of linking schools to their communities in order to build Viet Nam's resilience to the risks and threats posed by climate change, disasters and biodiversity loss.

The principal commented that some students told the teachers that their parents were surprised by their knowledge on the environment and one parent even said that their daughter sounded like an expert on the television. The principal added: "I was very emotional when I heard this; it is amazing to have such young children showing older generations the right path".

Composting organic waste to produce natural fertilizer by Giao Lac Lower-Secondary School
(Giao Lac Township, Giao Thuy District, Nam Dinh Province)

The atmospheric pollution caused by the widespread burning of agricultural waste is a major environmental challenge faced by many communities in the Red River Delta and throughout Viet Nam. Students chose to tackle this issue by offering a viable and sustainable alternative to farmers who engage in this practice and, in doing so, have increased communities' awareness on the issue.

Students decided to turn what has traditionally been seen by farmers as waste into a rich and abundant fertilizer by turning the organic waste left over from rice harvesting into natural fertilizer through composting. This has not only served to combat the issue of atmospheric



pollution but has also offered an alternative to using chemical fertilizers, which are commonly applied by local farmers and are known to have negative health and environmental impacts.

Before setting about this task, the project team went on a fact-finding mission which involved interviewing 36 community members to learn about the types of fertilizers used by local farmers, the harmful effects of chemical fertilizers on people and the environment, the level of awareness of local people on the benefits of composting, and how to handle organic waste. Using what they learned, students, with the

support of teachers, community members and experts, underwent a five step process to complete the composting.

They: i) collected organic waste, ii) conducted research to find the best and most appropriate probiotics for composting, iii) mixed probiotics with the waste, iv) piled the mix in a sun-exposed area and covered it with sheets of plastic to achieve a temperature of 40-50 °C for incubation and, v) regularly monitored the compost, turning it when needed. Parents and the community provided vital assistance throughout, helping students with the process of collecting organic waste.

The Director of the Giao Thien Mushroom Cooperative has been producing organic fertilizer for 15 years and agreed to provide his expertise to the students. He provided valuable technical guidance throughout the project, helping to supply students with materials and probiotics and achieve the necessary incubation temperature. The Director has shown great enthusiasm towards this form of education and said that "this method of environmental education is very good, not only for students, but also for parents and village members because it has made everyone interested. When we went to the school to help the students, there were so many people wanting to watch us work." According to him, "The initiative should be replicated in every province. Students of every age, even kindergarten, can make a difference. Nobody is too young to understand and care about the environment."

Students conducted a comprehensive campaign to spread their message as far as possible by broadcasting project activities over the local radio station, publicizing the project in Community Learning Centres (CLCs), creating a school billboard on sustainable farming, distributing a brochure around the community on the harmful effects of burning agricultural waste and using the flag saluting hour to raise student awareness on the negative impacts of unsustainable agriculture on the environment.

The project has produced a multitude of benefits for both students and the community by giving students a practical learning experience on the importance of environmental protection while empowering them to contribute to their community's sustainable future.

Local farmers have raised their awareness on the negative impacts of their unsustainable farming practices and have been provided with a viable alternative to using chemical fertilizers on their crops.

The students' long-term goal would be to sell their natural fertilizer to local farmers. An expert from the Asian Coastal Resources Institute-Foundation (CORIN), who has been helping the local community in order to build profitable enterprises, is ready to assist students to make their project commercially viable. This is a way of generating vocational education and future opportunities for students.

A member of the community who supported the project, states that the project has "made me aware of the benefits of composting and I will apply this method at home to utilize waste straw and produce compost for taking care of my trees".

Two grandparents of school children said they found that this composted fertilizer has better effects on plants than chemical fertilizer. "I have quite a large field of rice and I will use this composting method to produce fertilizer for my family's field."

One of the parents, a local commune's radio broadcaster, read an article written by a student on the organic waste composting project to share the experience with the community.

Organic vegetable garden by Giao Thien A Primary School (Hamlet 22, Giao Thien Township, Giao Thuy District, Nam Dinh Province)

Many students from Giao Thien A Primary School are aware of the impact of the widespread use of chemical fertilizers on farms, which has polluted waterways and contaminated produce, damaging the environment and the health and well-being of local people. To tackle this problem, students decided to develop their own organic vegetable garden to show their parents and community just how easy and beneficial sustainable farming can be.

Students showed great enthusiasm when planting their organic vegetable garden and were actively involved in preparing the soil,



planting seeds and maintaining the garden. The garden has been planted in the central courtyard of the school to increase the visibility of the project and to stimulate interest from the whole student body. A local expert used his experience in small-scale farming to help students produce natural fertilizer for the garden. Given the age of the students (10-11 years old), support from the expert, teachers and 10 parents proved particularly important during the early stages of the project. For example, they helped move fertile soil, often from their own homes, to the school garden and helped students plough and prepare vegetable rows. Community participation was vital for both the students and adults who enjoyed being actively involved in their children's learning experience. They also learned to have a greater appreciation for organic farming and environmental best practices.

One parent commented that "although I had heard of organic farming I had never taken it seriously, but now, having seen the kids working in their garden and producing great looking vegetables without using pesticides, I can see the real benefit of this method."

Students were able to harvest their fresh produce and take it home for cooking, which gave students great satisfaction and helped to further promote their message at home and in the wider community.

In addition to promoting the practice of organic farming in the community, the project team implemented an effective awareness raising campaign at school by distributing posters about the need for planting organic vegetables and by using the flag saluting hour to regularly update the student body on project activities and urge them to participate in the maintenance of the garden. The campaign was successful as many students became actively involved in supporting the project team in the daily maintenance of the garden and, as a result, became aware of the benefits of organic farming and the negative impacts of using chemical fertilizers to grow vegetables.

Moving forward, the school principal hopes that next year there will be a chance for Giao Thien A Primary School to team up with Giao Lac Secondary School: "We would like to use the natural fertilizer made by Giao Lac Secondary School to grow our organic vegetables."

Students demonstrated a solid understanding of the purpose and significance of acting sustainably and showed great enjoyment from learning in and from nature. Students also made posters to raise awareness on the need for planting clean and organic vegetables.

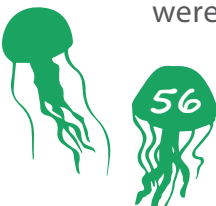
One of the teachers commented that "Students were very enthusiastic throughout the project. The leader of the group has been early to school most days to tend to the garden and has been motivating her friends to weed and water the vegetables every day."

Examples of school improvement projects with parents and community members

There are many good practices for involving parents and communities to support schools. Schools benefit from the contributions of Parent Associations and when parents, communities and even private businesses are aware of the well-structured plans of the schools, especially when it comes to the safety of students, their willingness to contribute greatly increases.

The following brief reports highlight some of the contributions of parents and school neighbours located in communes in Thua Thien-Hue Province, led by the Provincial Department of Education and Training (DOET). You can use these examples to elaborate upon your own projects and involve parents and the community in your area.

The contributions described below resulted from joint efforts between schools, parents and



communities in which they completed school assessments and developed preparedness plans in a participatory manner. This allowed for the easy identification of specific areas needing support. Having a clear plan makes it easier for the Parent Association to prioritize the allocation of funds, efforts and other contributions.

Huong Vinh Primary School

At Huong Vinh School, the Parent Association supported the school to repair broken windows after a storm, upgrade the drainage system, collect waste and plant trees. Parents working as construction workers donated their time and provided materials to make grates out of metal bars, which are used to block fragments and waste swept along by water from getting into the drainage system. As a next step, the Association fixed doors and windows that were damaged by termites.

Another example of contributions from parents and other community members to the school is the establishment of a Youth Union Day that takes place on the 25th and 26th of March and brings together school and university students, parents and a number of associations at the district level. Activities for such an event include:

- A student competition on knowledge and understanding of biodiversity and climate change, organized by parents.
- A music performance using songs related to the environment and nature.



- An art exhibition in which students explain their drawings to other students.
- A fashion show with clothing and accessories made from environmentally friendly materials.
- A presentation (a PowerPoint presentation or a video clip) on the impact of climate change, disasters and biodiversity loss.

This kind of event mobilizes not only students and their parents, but also other members of the community including university students and the Viet Nam Farmers' Union. Everybody learns, everybody gains!

During an event to celebrate safer and more resilient schools and communities, an electrician and parent whose daughter attends Huong Vinh Primary School provided an example of how parents can contribute to improving their school's response to climate change, disasters and biodiversity-related issues. After learning about these issues, he became an active member in the Community Action Plan development team in his community in order to raise

awareness about the negative effects posed by climate change, biodiversity loss and disasters. According to him, community members now know how to better manage waste and some households are even carrying out a recycling programme for organic and paper waste. This is not only leading to income generation and money saving, but also to further promoting environmental awareness and prompting a positive change in the community.

Huong Long Primary School



At Huong Long Primary School, the school assessment identified the need to ensure safer management of the gas tanks used for cooking in order to prevent any possible accidents. The school purchased new gas tanks that have been placed outside the cooking areas and far from the students' resting room. The school also purchased new fire extinguishers and provided training on firefighting to teachers and students. Parents

were involved in building exit doors for students' resting rooms as they recognized the need for the doors to work well in case of fire.

Parents also contributed to the improvement of their local school by donating trees and supporting the planting process. Some parents even visited the school to help with the maintenance of the garden, to take care of the trees and give advice on how to take care of small plants.

Thanh Toan Primary School



At Thanh Toan Primary School, there was no demarcation between the road in front of the school and the river. This posed a risk during flooding and in the event of other disasters. The commune, parents, the Youth Union, Women's Union and Farmers' Union contributed to solving this problem by donating trees and helping to plant them along the road.

A waste reduction and energy saving plan was implemented at the school with contributions from

local authorities and other members of the commune. In addition, staff from the firefighting department visited the school in order to monitor the anti-fire system and provide training for teachers and students. Based on their recommendations, the school changed the light bulbs accordingly to ensure energy saving.

Phu Mau Primary School



At Phu Mau Primary School, the Parents Association decided to prioritize the construction of a bicycle parking area. They also contributed to replacing glass windows that were destroyed during the last storm season and repairing the roof of the current parking area.

The communal police department provided information about the anti-fire system and raised awareness about the need of being well-equipped in case of fire. They also discussed the risks and activities that could cause a fire such as burning leftover straw in the field. Together with the school, they developed alternatives such as

motivating the community to turn the leftover straw into compost.

The school also established a medicinal herb garden with science students from the fourth and fifth grades. This garden does not imply any cost for the school as the local community contributed their knowledge and donated the required financial resources. Parents and community members contributed to the projects by clearing an unused swath of land on the school grounds in preparation for the planting of the garden.

Quang Loi Primary School



At Quang Loi Primary School parents and community members worked together to repair a damaged fence around the school. Parents, siblings and neighbours also helped clean up unnecessary vegetation on the school grounds, creating more safe spaces for students to play during recess. The community, with support from local authorities, filled in a large hole in the schoolyard that, during the rainy season, filled with water, posing a risk to students and making the area unusable to them.

Activity 3: ESD Green Champions

Objective of the activity: to assess and address areas for improving and greening your school.

Description of the activity: To better understand how ESD can contribute to greening schools, teachers and students can work together to develop a checklist to identify how the school is implementing Education for Sustainable Development. Based on the results of the assessment, teachers and students will be able to make recommendations to enhance the capacity of the school towards sustainability.

Key messages for students:

1. Students can and should help their schools be better prepared for sustainable development.

Materials needed:

- ESD Green Champions checklist.

Instructions for the implementation of the activity:

1. Divide students into pairs or small groups, depending on the size of the class.
2. The goal of the activity is for students to understand the importance of each of the elements contained in the checklist. The application of the checklist helps students support their school by identifying areas and ideas for improvement. Take the time to go over each of the elements with students and explain their importance for the sustainability of the school.
3. Each group of students will take turns walking

around the school using the checklist. The application of the checklist helps students support their school. In order to complete the checklist, students will have to talk with teachers, staff, other students and school authorities. This exercise can be completed during school hours or at a time decided by the teacher or administration.

4. After completing the walk, ask students to return to the classroom and compare their responses with the other groups or pairs of students.
5. Consolidate the answers of all the students to make sure everyone agrees on what was found, taking the time to mediate discussions to ensure all groups' observations are included in the consolidated results.
6. Using the results from the checklists, ask students to develop a list of proposed actions or activities to be developed to address the issues observed during the walk.
7. Following this activity and/or the implementation of the activities or actions decided upon by the group (and in coordination with the school principal, teachers, students, parents and community members), support students in organizing a small celebratory event to deliver a recognition, prize or certificate to the ESD Green Champions that participated in the school walk and implementation of activities.

The ESD Green Champions checklist can be used as a reference to be adapted and developed to produce your own checklist for students to better understand ESD and its concrete application in the school's environment and life.

ESD GREEN CHAMPIONS CHECKLIST

No.	Indicator	Yes	No	Comments or observations
1.	The school uses reused, repurposed or recycled materials whenever possible.			
2.	Recycling bins are placed in key locations in the school.			
3.	The school promotes water saving.			
4.	The school promotes and practices reducing the use of energy and electricity			
5.	School buildings and surroundings provide a pleasant environment to learn.			
6.	The school promotes attitudes of care and responsibility for nature and students engage in activities to live in harmony with nature			
7.	Schools help students learn how to care adequately for animals			
8.	School and community projects are developed by students.			
9.	Students have the opportunity to participate in decisions about the use of some of the school resources such as trees, plants and others.			
10.	Teachers understand what ESD is and what should be done to promote its practice in the school.			

11.	Actions to minimize the risks in and around the school are undertaken.			
12.	The community is invited to contribute to make the school and its surroundings cleaner, greener and more beautiful.			
13.	Teachers create lessons and activities using ESD.			
14.	Teaching and learning materials on ESD are available.			
15.	The school has the possibility to share its experiences with other schools and with members of the community.			
16.	The school has a garden or vegetable patch.			
17.	An inventory of school and surrounding natural resources is kept.			
18.	The school promotes minimizing food waste.			
19.	Students are taught to recycle.			
20.	Awareness raising messages and materials are located around the school.			
21.	The school uses recycled paper.			
22.	The school purchases eco-friendly and recyclable products.			
23.	The school replaces incandescent bulbs with compact fluorescent or energy-saving bulbs.			

Adapted from: http://www.unescogreenschools.org/user_document/front/images_files/ESD-Green%20School%20Indicators.pdf and <http://unesdoc.unesco.org/images/0019/001908/190898e.pdf>



Activity 4: Communicating as a Young Journalist

Objective of the activity: to strengthen communication competences through the sharing of messages on sustainable development with families and the community with the support of the media. It will enhance students' overall capacity to relate and communicate with others.

Description of the activity: This activity encourages students to become young journalists so they can use the power of the media to spread messages and projects on environmental issues and to raise awareness about the importance of becoming bioliterate as a means to trigger behavioural changes in their peers and communities.



Key messages for students:

1. It is necessary to spread messages to many people so everyone can respect and care for nature.
2. Students can contribute to the well-being of the community by communicating important messages for everyone to be aware of.

Materials needed:

- Pens and paper
- Camera for documentation purposes, if available

Instructions for the implementation of the activity:

Begin the activity by motivating your students to imagine that they are young journalists and that they will develop messages to share at home, with their neighbours and with community members to encourage them to become bioliterate citizens.

Let your students know that in order to become a young journalist, there are several questions that need to be taken into consideration. Share the following questions with your students:

- Why do students want to become young journalists?
- Why do you want to communicate?
- What do you want to communicate?
- Who do you want to address your message to?
- Through what medium do you want to communicate?
- Where do you want to communicate?
- When do you want to communicate?
- How do you want to communicate?

Explain to students that you will guide them through each of these questions that will help them to build their communication plan to develop their media skills and strengthen their ability to transmit important messages about bioliteracy in their schools, households and communities.

Suggestions for answers:

1. Why do students want to become young journalists?

The purpose of becoming a young journalist

Students should learn how to contribute to the well-being of their community. They can learn that a very important way to contribute is through communication. You can ask them if their parents or other family members watch television, listen to the radio or read the newspaper. Discuss with them if, after listening to the news or watching a programme, they discuss with each other about what they heard or saw. You can lead students to conclude that the media generates opinions in people and that if the message to be bioliterate can reach the families and community, it may be a way to help them to learn.

The overall purpose of using the media is to spread messages and reach out to society in order to educate people on environmental issues, climate change responses, disaster risk reduction and biodiversity conservation.



2. What do we want to communicate?

Selecting the message

To select the messages that we want to communicate, we have to think about what we expect to achieve in the people that we reach out to. Do we want them to learn how to save energy, save water or recycle? Do we want them to care for nature? Based on this, we decide what is the most relevant and necessary information to communicate.

The first step is to observe and evaluate the local environment, identifying topics related to disaster risk reduction, climate change adaptation and mitigation, and biodiversity conservation that can be addressed or discussed through community participation. This means that we identify the main issues in the community that need everyone's attention.

Students should investigate and compare relevant information from different sources. They can conduct interviews with neighbours or key experts or they can invite them to the school to have a brief session to discuss the problems that require people in the community to change their behaviour so that the problem or issue can be solved. Students can also complete surveys and questionnaires to obtain this information, or search in the local newspaper.

The next step is to identify possible solutions and discuss their effectiveness. Students can develop a chart with pros and cons to develop and

propose a solution. As a result of this process, a message that is objective and verifiable will be developed.

3. Who do we want to communicate with?

Adapting the message to the audience

In designing the message, students should identify the target audience in order to adapt the message and to choose the best way to reach and communicate with them. Have students ask themselves: who needs to be informed? Do we want to reach a certain area or group within the community? Or do we want to reach the youth? Do we want to take the message to all of the schools in the community? Who needs to hear our message in order to learn how to care for nature?

Students will learn from the teacher that audiences can be varied and that it is important to respect the diversity within a community. For example, teachers should explain to students that a message for farmers may not be the same message as for people who work in the public service sector, as their interests and concerns may be different. Even within the school, a message for first graders will most likely not be communicated in the same message for high school students due to the age difference.

The methods and messages needed to reach different audiences vary as students communicate with their peers, their parents or the community in

general in different ways. Each target group has its own interests, language and media preference.

It is possible that the target group selected is the wider community or society. In this case, it is important to be specific about the message while still being clear so it can reach a broad audience.

4. Through what medium should we deliver our message?

Selecting the media

Once the target audience has been selected, the next step is for students to identify the most appropriate media to reach their audience. This can include print media such as posters, school bulletins and others, school and local radio, television and social media.

Have students discuss if the audience they are targeting reads newspapers or magazines, watches television, listens to the radio, participates in social media and so on.

For example, to reach other students in the school we could think about the following options:

- Developing an internal newsletter.
- Posting on school information boards.
- Updating student-written news items and contents on the school's website. A specialized page for students' writings can be used for this purpose.
- Encouraging students to post their media outputs on social networks to better inform peers.

It is very important to ensure that the information provided is accurate, updated and objective.

If the target audience is the community, students could broadcast on local radio stations. The school could work with communal authorities (for example, the Communal Division of Information and Culture) to have the messages written by students broadcasted on communal radio.

Timing should also be taken into account. For example, if we want to reach students through radio broadcasting, we have to ensure that the timing is suitable so students are not in class and they are able to listen to the radio programme. If the young journalists are raising awareness about precautions to be taken during floods, they should reinforce this when the rainy season begins, so more people pay more attention and the message has the greatest potential impact.

5. How do we want to deliver our message?

How do we communicate in an effective manner?

Having selected the audience and communication media, students should use the appropriate journalistic format and style. Below are some suggestions on how students can convey their messages accurately and effectively:

- Messages should be short, simple, easy-to-remember, complete and attractive.

For example, "A clean environment is a healthy environment. Do not litter!"

- Use appropriate language adapted to each audience.
- Express feelings and thoughts in a clear way.
- Limit written stories to around ¼ of a page for sharing online or around the school and community.
- Make sure that photographs, pictures or illustrations are appropriate.
- Keep videos and broadcasts brief and clear.
- Include music or narration suitable to radio programming and the message.

Communications presented in the form of a story can benefit from the following recommendations to ensure that the stories are emotive and engaging:

- Communicating real-life stories that students have witnessed, using descriptive words, is a very effective communication tool.
- Students can write their feelings and opinions when describing events or occurrences they have witnessed. They can also do this for peers or others that they interview.
- Use friendly and easy-to-understand language to ensure the messages are clear among all students.
- Share conclusions and solutions at the end of each story.
- When drafting these stories, remember that the news item should start with the most important information, which should be followed by background or supplementary information.

For other media such as radio, print media or social media, your students should:

- Choose classmates who can be good storytellers or news anchors.
- Insert interviews when telling a story. For example, when you are narrating about how some members of the community took action to clean an area, you can include an interview with one of the community members so he/she can explain directly how they feel about what they are doing and how it will contribute to making the community a better place.
- Choose suitable and relevant images.
- Use music and sound effects to make radio products vivid, convincing and engaging.

You can encourage students to organize a communication event to reinforce their messages and complement media communications. Here you have some examples:

- Organize a contest, a drawing exhibition or a workshop to create products from recycled materials.
- Organize extracurricular activities and encourage students to express themselves through plays, fashion shows and art performances.
- Encourage students to give brief presentations on ESD during the weekly flag salutation gatherings at school and in meetings with parents.



Activity 5: Saving Energy

Objective of the activity: to enhance students' understanding of and ability to become more energy efficient.

Description of the activity: This activity reinforces practical habits for energy saving and the role students have in promoting the responsible energy consumption of others. Simple actions can do a lot to reduce energy consumption, especially when they are communicated and shared throughout the classroom, school, home and community.

Key messages for students:

1. Energy saving is a responsibility of everyone, as our current energy sources are not unlimited.
2. Saving energy is a habit that requires discipline.

Materials needed:

- Energy saving habit chart

Instructions for the implementation of the activity:

Explain to students that there are many ways to reduce home energy consumption through simple energy-saving habits. This process begins with your students becoming aware of their daily energy use.

Step 1:

This activity can be carried out both in the classroom and at home.

1. You will begin by introducing your students to the notion of energy and the need to become aware of our daily energy consumption to save energy. In the box to the right is a brief text to help you explain this to your students.
2. After explaining the notion of energy and the reasons to save energy to your students, ask them to identify how many electronics and appliances use energy in their home. The goal is for students to understand what energy is and that it is used for many different things at home.
3. You will then invite students to use the table on page 70 to assess their household's energy saving habits. Encourage them to involve their family members in conducting this assessment study with them.

About 90 per cent of the energy we use comes from burning fossil fuels such as oil, coal and natural gas. Fossil fuels are made from dead plants and animals that lived long ago and have been buried for millions of year. Large amounts of fossil fuels are being brought to the Earth's surface all the time and are then burned as fuel. Burning fossil fuels is likely to make the Earth warmer and change the weather in many parts of the world. Besides, fossil fuels are non-renewable sources of energy. This means that once burned, these sources of energy become exhausted and people are unable to reuse them or rely on energy sources such as coal to create energy. We need to use less energy to make sure these natural resources do not disappear in the future.

Note: The table on the following page can be adapted to be used as a questionnaire for students to assess their home's energy consumption habits by asking questions to family members. Make sure you use your students' ideas to make the list as complete as possible!



Energy saving habit chart			
Energy saving habit	Often	Sometimes	Never
I turn off lights when no one is in the room.			
I unplug appliances that are not being used.			
I turn off the TV, computer or radio when no one is using it.			
I do not set heaters to very high temperatures.			
I put on a sweater or sweatshirt when I am cold instead of using a heater.			
I turn the rice cooker on 30 minutes before eating instead of having it on all the time.			
I turn off the tap when I brush my teeth.			
I bathe very quickly.			
I walk or ride my bike when possible.			
I help recycle cans, newspaper, glass and plastic.			

Adapted from: http://www.unesco.org/education/educprog/stp/pdf_files/sourcebook/module4.pdf and http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Venice/pdf/special_events/bozza_scheda_DOW_14_1.0.pdf

Step 2:

Based on the results from the assessment study help your students to develop an “Energy Saving Action Campaign” in which the focus of the messages is on energy saving measures.

One example is to create posters, infographics (graphic visual representations), and other visual materials that contain messages students want to

convey to their family members. The visuals created by the students will be displayed in the house where electrical appliances are (e.g. on the side of the television, next to the switch for the lights, on the refrigerator and so on).

Step 3:

After a few weeks, students will conduct a second assessment in order to assess the effects of the

messages that were displayed in the house. Students should use the same table to conduct this second study and compare these results with their first assessment.

Activity 6: Celebrating International Days on Sustainable Development/Biodiversity

Objective of the activity: to raise awareness about the beauty and value of the Earth’s biodiversity by celebrating International and World Days.

Description of the activity: This activity aims to provide you with information on different ways to celebrate special days with your students so they can understand the importance of appreciating the beauty of the Earth and why it is so important to protect it. Invitations to participate should also be warmly extended to parents, members of the community and even the local media.

Key messages for students:

1. Celebrations of the values of our Earth take place in many countries around the world.
2. Celebrating special days reminds us of our responsibilities and raises awareness among people.

Materials needed:

- World and International Day information chart

Instructions for the implementation of the activity:

This activity is divided into three steps:

- Step 1 is to create a calendar highlighting International Days that promote biodiversity issues in schools.

- Step 2 is to create infographics to communicate the importance of biodiversity to students and other audiences.
- Step 3 is for students to engage the community by organizing celebrations to commemorate the different International Days at school.

Step 1: Create a calendar

1. Introduce the activity by explaining to your students:

- The importance of the Earth’s biodiversity to humans and all forms of life.
- The purpose of International and World Days.

2. Ask your students to prepare a calendar highlighting the following International Days that promote biodiversity issues in schools:

- 3 March – World Wildlife Day
- 21 March – International Day of Forests and the Tree
- 22 March – World Water Day
- 22 April – International Mother Earth Day
- 8 June – World Oceans Day
- 17 June – World Day to Combat Desertification and Drought
- 11 December – International Mountain Day

3. Encourage your students to create a beautiful calendar to illustrate the theme conveyed by each International Day. For example, for the International Day of Forests and the Tree students can paste real leaves on the calendar. Remember to tell students not to harm living plants or trees, but to only use leaves that have already fallen to the ground.



4. Once the calendar is finalized, put it up on a wall in your classroom and make sure it can be seen by all your students.

Step 2: Create infographics (graphic visual representations)

1. Divide students into groups and assign each group a specific task:
 - One group will be tasked with gathering information and data on each International Day and its relation to biodiversity.
 - One group will be tasked with creating visuals in order to make the infographics more attractive. The visuals need to be in line with the theme conveyed by each International Day.
 - One group will be tasked with developing key messages in line with the theme conveyed by each International Day.
2. Encourage students to create different infographics with different information, visuals and key messages. Remind students to remember the importance of targeting and adapting these messages and materials to various audiences
3. These infographics can be shared at home, in public spaces around the community and with the local media in order to enrich their reporting about international days and other celebrations.

Step 3: Organize celebrations to commemorate the different International Days at school

1. Divide students into groups and assign each group a specific task:

- One group will be in charge of displaying the infographics around the school.
 - One group will be in charge of decorating the school according to the theme of the specific International Day. For example, leaves that have fallen from trees can be sewn or tied in a way that it can be used as a garland to hang.
2. You and your students can create activities in line with specific International Days. Using the calendar, you will be able to plan and manage your time to prepare for each activity and celebration.
 3. As you start planning each activity, you will decide with your students how to involve parents, teachers, other students and community members in the activities and celebrations of the International Day. Also, you can consider informing and inviting journalists from the local media to report on your celebrations and activities.
 4. The following chart presents examples of activities that could be done during each International Day.



World and International Day Information Chart

	Name of the International Day	Date	Facts	Suggested activities
1.	World Wildlife Day	3 March	The United Nations established this international day in 2013 to celebrate and raise awareness about Earth's wild fauna and flora and the many threats to their survival. Viet Nam's biodiversity is among the richest in the world. According to the World Wide Fund for Nature, there are more than 300 known species of mammals, 800 birds and 700 freshwater fish in Viet Nam. But as many as one out of every ten of these species may be at risk of extinction.	<p>Investigate Viet Nam's wealth of biodiversity</p> <ul style="list-style-type: none"> • Based on your school location (e.g. near the coastline, near a forest, near a river etc.), organize a field trip with your students to an outdoor area so they can observe Viet Nam's rich biodiversity, if possible. • Ask students to collect evidence of flora and fauna around their home or school, but make sure that they do not harm or damage nature. They can take pictures and draw or write down what they have observed. • Once you return to school, ask students to create factsheets with the evidence they have been collecting and ask them to conduct some research in order to enrich their factsheets. • Once the factsheets are completed you can hang them in the classroom for students to view.
2.	International Day of Forests and the Tree	21 March	According to the United Nations, forests are home to more than 2,000 different indigenous cultures. That is 1.6 billion people! More than 4 out of every 5	<p>Why trees and forests matter</p> <ul style="list-style-type: none"> • Ask students to research the effects of deforestation in the world, in Viet Nam or in their local area. • Initiate a discussion on the topic of forests.

World and International Day Information Chart

			land-based species also call forests their home. Forests give us priceless benefits, such as providing oxygen and protecting watersheds that supply 75 per cent of the world's freshwater. Yet despite these benefits, forests are struggling to survive. Global deforestation continues at a rate of 130,000 square kilometres per year, according to the United Nations. That is more than four times the total area of Ho Chi Minh City!	<ul style="list-style-type: none"> • Facilitate the discussion by making students understand the benefits provided by trees and the role of forests in maintaining life on Earth. • Encourage students to share what they learned during the discussion with other classmates, parents or neighbours to raise their awareness of the importance of forests and trees.
3.	World Water Day	22 March	World Water Day has been commemorated each year on 22 March since 1993 around different themes such as "Water and culture", "Water for cities", "Clean water for a healthy world" and "Water cooperation". Each year, a different United Nations agency takes the lead role in organizing the theme.	<p>The importance of water conservation</p> <ul style="list-style-type: none"> • Encourage students to research the theme of this year's World Water Day. • Organize a water conservation campaign in line with the year's theme. The campaign should raise students' and teachers' awareness on the importance of water conservation for their school and community so they can convey the message to their family and the wider community. • You can also invite parents and community members to take part in the campaign.

World and International Day Information Chart

4.	International Mother Earth Day (Earth Day)	22 April	According to the United Nations, over a billion people in 190 countries participate in taking action on Earth Day every year. This is a day to focus on the unique environmental challenges of our time, facing every citizen around the world. Earth Day is commemorated with many large events, from sports matches to concerts to collective energy conservation actions. Every year on April 22, over a billion people in 190 countries take action for Earth Day. In 2014, Earth Day was celebrated in Viet Nam using the theme of "Non-littering day", featuring photo contests, races, exhibitions and public events.	<p>The Earth Day talent show</p> <ul style="list-style-type: none"> • Organize a talent show with your students around the topic of Earth Day. This could entail: <ul style="list-style-type: none"> - Singing performances - Acting performances - Drawing performances • You can encourage students to carry out these performances for other students in the school.
5.	International Day for Biological Diversity	22 May	A global decline in biodiversity is largely the result of human activity including natural habitat destruction, over-harvesting and pollution. The day was proclaimed by the United Nations General Assembly to mark the date of adoption of the International Convention of Biological Diversity on 22 May 1992.	<p>The biodiversity booklet</p> <ul style="list-style-type: none"> • Ask students to conduct research on vulnerable, endangered, critically endangered and extinct species in Viet Nam or invite an expert to speak to your students. • Based on the results, students will then create a booklet that includes factsheets, photos and illustrations of each of those species.

World and International Day Information Chart

6.	World Oceans Day	8 June	<p>Viet Nam has a coastline that stretches over 3,200 kilometres. That distance is equal to the distance from Ha Noi to Ho Chi Minh City and back again! Not only is Viet Nam famous for its long coastline, but also for its many islands. The world famous Ha Long Bay alone has 1,969 islands and islets, almost half of which have been named. World Ocean Day is celebrated by a different theme each year, such as "Together we have the power to protect the ocean", "Youth, the next wave of change", and "Healthy oceans, healthy planet".</p> <p>Oceans have a special meaning not just to Viet Nam, but to the world. World Ocean Day has been celebrated by the United Nations since the 1992 Rio Earth Summit.</p>	<p>Water theatre</p> <ul style="list-style-type: none"> • Organize a play with your students around the topic of oceans. • Divide students into groups. Ask each group to come up with their own scenario for the play based on the year's theme. • Encourage students to create their own costumes in order to improve their creative and artistic skills. • Make sure that each scenario has a strong message that students can convey to those around them. • After a group performs, take a few minutes to create a short discussion between the ones who performed and the audience in order for the performers to share their insights about the play and why they chose this specific scenario.
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World and International Day Information Chart

7.	World Day to Combat Desertification and Drought	17 June	<p>According to the United Nations, about 25 per cent of the Earth is desertified and each year about 12 million more hectares are lost to land degradation. More than 9 million hectares in Viet Nam have been classified as degraded, according to reports of the United Nations Convention to Combat Desertification. Desertification is a process whereby trees and plants that bind and support the health of topsoil are removed, caused by human activity as well as climate variations. Desertification has been described as one of the greatest challenges facing mankind, affecting more than one billion people.</p>	<p>Drawing contest</p> <ul style="list-style-type: none"> • Organize a drawing contest with your students around the topic of "Combating Desertification and Drought". • Students will divide an A0-sized paper into two sections. • On the left side, students will draw an image representing the characteristics of a landscape affected by desertification and drought. On the right side, students will imagine how the same landscape would look if actions are done to combat desertification and drought.
8.	International Mountain Day	11 Dec	<p>Mountains, high plateaus and hills cover an amazing 75 per cent of Viet Nam. The mountainous regions of Viet Nam contain a truly vast richness of biodiversity, with discoveries of new species still occurring. Around the world, 27 per cent of the Earth's surface is mountains, providing millions of people</p>	<p>No mountain high enough</p> <ul style="list-style-type: none"> • Guide your students to discuss how mountains are part of Viet Nam's pride as one of the most biologically diverse countries on the planet. • Divide students into groups for them to create a list of the biodiversity of Viet Nam's different mountainous areas, from plants to



World and International Day Information Chart

			with freshwater, food, and energy resources, according to the United Nations.	<p>butterflies to unique and recently discovered mammal species. They can look on the Internet or in the library or receive a presentation from a local expert.</p> <ul style="list-style-type: none"> • Each student can create a drawing or write a story about the threats to Viet Nam's mountain biodiversity, from deforestation to mining and poaching. • Students can present their drawings and stories in front of the classroom. • You can encourage students to organize an art gallery or exhibition to present their products.
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Adapted from: <http://www.un.org/en/events/wildlifeday/>; <http://www.un.org/en/events/forestsday/>; <http://www.unwater.org/worldwaterday/>; <http://www.un.org/en/events/motherearthday/>; <http://www.un.org/en/events/biodiversityday/>; <http://www.un.org/en/events/oceansday/>; <http://www.un.org/en/events/desertificationday/resources.shtml>; <http://www.un.org/en/events/indigenousday/>; <http://www.un.org/en/events/mountainday/>

Activity 7: Eco-Bingo

Objective of the activity: to raise awareness, in a fun and engaging way, on values and facts of natural resources and heritage in Viet Nam.

Description of the activity:

The activity consists of:

- Identifying a series of images with messages. A card will be developed with each image and message.
- Producing a board for each participant. These boards are made of hard paper or cardboard, or even just a piece of paper. Each board will contain 15 images with messages taken from the 48 total messages. Each board will be different

from the other, so no two boards will have exactly the same messages.

- Students will then play a bingo game in which someone calls out the messages and players mark these on their boards until a participant marks all messages on his/her board.

This eco-bingo activity can be used or adapted for students of all ages to know more about their natural resources and heritage. The activity can be used in the classroom as is, or modified to suit the needs of your curriculum and grade and level of your students.

Key messages for students:

1. There are many interesting facts about nature,

- especially about nature in Viet Nam.
2. Students can learn facts in a fun way.

Materials needed:

- Paper to print or draw the eco-bingo board and cards on
- Coloured pencils, paint or pictures from old magazines to produce the drawings for the eco-bingo cards

Instructions for the implementation of the activity:

Step 1: Preparing for the game

1. Guide students to identify a series of images with messages: for example, the image of a langur (monkey) with the message "We need to protect the langur".
2. Motivate students to produce cards for each image and message. Normally, 48 cards and messages should be enough, although, depending on the size of the group taking part in the activity, it may be less.
3. Help students produce the boards. If you plan to have 30 participants, for example, you should make 30 different boards. These boards are made of hard paper or cardboard, or even just a piece of paper. Each board contains a grid of 4x4 boxes. Each board will contain 15 images with messages taken from the 48 total messages. One box will remain blank. Each board will be different from the others, so no two boards will have exactly the same messages. At least one or two images will be different.
4. Collect beans, paperclips, buttons or other items that can be used by the participants to mark the images of their board. Each partici-

part will need 15 pieces as they should have enough to put one on each image.

Step 2: Playing the game

1. One person will be designated as the facilitator of the activity.
2. The facilitator will hold the 48 environmental message cards.
3. Each participant will receive one board with 16 boxes, out of which 15 contain messages and one will not be marked.
4. Each participant will also receive 15 pieces (of beans, paperclips, buttons or other items) to mark their board when the board contains one of the messages that has been called out.
5. When participants are ready, the facilitator will call one message at a time. The message will be read aloud twice and the card shown for all participants to see.
6. As each message is called, participants will mark the corresponding message by placing a bean, paperclip, button or other item on the image if it is present on their board.
7. Once a participant is able to mark all 15 messages on their board, the participant will say aloud, "ECO BINGO!"
8. The facilitator will verify that the messages the participant marked were already called and, if so, the participant will be declared the winner.
9. The game can continue in order to have second and third place winners, if desired.

Following are some examples of eco-bingo boards and images with messages for you to use as a reference when implementing this activity with your students.





ECO-BINGO



 I BIKE TO WORK	 MIGRATORY BIRDS REST IN VIET NAM'S MANGROVES	 I BLEND WITH MY ENVIRONMENT	 I ONLY USE THE LIGHT I NEED
 I DO NOT OVERFISH	 NATURE IS BEAUTIFUL	 IT IS IMPORTANT TO UNDERSTAND THE FOOD CHAIN	 VIET NAM IS STILL DISCOVERING NEW FROG SPECIES
 UNIQUE GECKO SPECIES CAN BE FOUND IN VIET NAM	 KEEP PONDS CLEAN	FREE SPACE	 I CHERISH THE LOTUS FLOWER
 I LOVE NATURE	 ENJOY A CLEAN AND HEALTHY OCEAN	 HA LONG BAY HAS TWO UNIQUE SPECIES OF PARROTS	 BEES ARE IMPORTANT FOR LIFE




ECO-BINGO







 I HELP CLOSE THE OZONE HOLE	 FORESTS CLEAN OUR AIR	 PRESERVE THE COUNTRYSIDE	 VIET NAM WETLANDS ARE A NURSERY FOR AQUATIC SPECIES
 I HELP SAVE THE ENDANGERED LANGUR	 SAFE FISHING METHODS SAVE OCTOPUSES	 TAKE CARE OF PUBLIC SPACES	 I REDUCE PETROL USE
 I REDUCE, REUSE, RECYCLE	 I RESPECT MARINE LIFE	FREE SPACE	 I SAVE THE TREES
 I HELP MITIGATE GLOBAL WARMING	 I THROW RUBBISH IN THE BIN	 I HELP STOP POACHING	 VIET NAM HAS 11 SPECIES OF SWALLOWS AND MARTINS

ECO-BINGO



 VIET NAM'S TURTLES ARE ENDANGERED BY HUNTING	 TREES GIVE US SHADE	 I LOVE WATERFALLS	 PROMOTE THE USE OF SOLAR POWER
 I HELP REDUCE CARBON EMISSIONS	 I USE RECYCLED PAPER	 I DO NOT WASTE WATER	 I EXPLORE THE WILDERNESS WITH RESPECT
 CRABS ARE IMPORTANT FOR FISHERMENS' LIVELIHOODS AND MUST BE PROTECTED	 RED RIVER DELTA HOSTS THE UNIQUE BLACK-FACED SPOONBILL	FREE  SPACE	 165 HECTARES OF CORAL IN CU LAU CHAM ISLANDS
 THE SARUS CRANE HAS BEEN RESTORED IN VIET NAM	 PHONG NHA-KE-BANG IS HOME TO 113 MAMMALS	 HA LONG BAY HAS 1,600 ISLANDS AND ISLETS	 550 MILLION YEARS OF HERITAGE AT VIET NAM'S GEOPARK



 I BIKE TO WORK	 MIGRATORY BIRDS REST IN VIET NAM'S MANGROVES	 I BLEND WITH MY ENVIRONMENT	 I ONLY USE THE LIGHT I NEED	 I HELP CLOSE THE OZONE HOLE	 FORESTS CLEAN OUR AIR
 I DO NOT OVERFISH	 NATURE IS BEAUTIFUL	 IT IS IMPORTANT TO UNDERSTAND THE FOOD CHAIN	 VIET NAM IS STILL DISCOVERING NEW FROG SPECIES	 I HELP SAVE THE ENDANGERED LANGUR	 SAFE FISHING METHODS SAVE OCTOPUSES
 UNIQUE GECKO SPECIES CAN BE FOUND IN VIET NAM	 KEEP PONDS CLEAN	 I HELP STOP AIR POLLUTION	 I CHERISH THE LOTUS FLOWER	 I REDUCE, REUSE, RECYCLE	 I RESPECT MARINE LIFE
 I LOVE NATURE	 ENJOY A CLEAN AND HEALTHY OCEAN	 HA LONG BAY HAS TWO UNIQUE SPECIES OF PARROTS	 BEES ARE IMPORTANT FOR LIFE	 I HELP MITIGATE GLOBAL WARMING	 I THROW RUBBISH IN THE BIN



Course review

Viet Nam is making significant efforts to improve the coverage and quality of education, integrating the concept of Education for Sustainable Development.

ESD should not be considered as an extra subject to add on to the curriculum, but an umbrella term for many forms of education that already exist and new ones that remain to be created. ESD promotes efforts to rethink educational programmes and systems, both methods and contents, which are currently implemented in unsustainable societies.

ESD is also an international commitment. A major, global sustainable development agenda is being defined to respond to the challenges of sustainability, including disaster risk reduction, climate change and biodiversity conservation.

In Viet Nam, a National ESD Action Plan 2010-2014 was approved by Viet Nam's National Decade of Education for Sustainable Development Committee and MOET has defined two action plans that contribute to ESD on Natural Disaster Prevention, Control and Mitigation and for Responding to Climate Change.

ESD also requires participatory teaching and learning methods that motivate and empower learners to change their behaviour and take action, in a comprehensive manner, for sustainable development.

To assure participation we need to recognize and respect our differences in background, gender, ethnicity, race and age and take into account everyone's opinion and experience as an added value.

The knowledge, skills and attitudes developed by each individual and the involvement of parents and other community members, including the media, ensures that the change is not only taking place at schools, but also at home, in the neighbourhood and at the community and district level.

Reaching the three levels of implementation and impact - schools, the community around the school and the wider society - will imply a major change that leads to a transformation of the society: a society that will be more prepared for disaster risk mitigation, more resilient to climate change and that will take part in biodiversity conservation in compliance with its responsibilities as a bioliterate society.

Answer Keys



Quiz 1

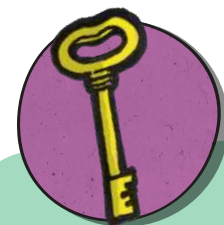
1. True or false: ESD is a lifelong learning process where every human being acquires the knowledge, skills, attitudes and values required for using nature to meet their own needs.

False.

ESD is not only about meeting people's needs, but doing so in a sustainable manner so we do not compromise future generations' development. The vision of ESD is of a world where every human being acquires the knowledge, skills, attitudes and values required for developing a sustainable future.

2. Which of the following characteristics does NOT apply to ESD?

- a. ESD is a comprehensive approach mainstreamed in all components of education.
- b. ESD is a global idea that cannot be locally adapted.**
- c. ESD promotes critical thinking.
- d. ESD requires participatory teaching and learning methods.



Quiz 2

1. ESD...

- a. ... is not addressed in the post-2015 agenda yet.
- b. ... is of interest to students as well as to parents and community members.**
- c. ... is included in the global agenda but only as part of non-formal and informal education.
- d. All of the above.

2. Are the following statements TRUE or FALSE?

- a. The Prime Minister of Viet Nam established a National ESD Committee. **True**
- b. MOET has adopted an action plan on natural disasters and another one for responding to climate change. **True**
- c. The Viet Nam New School Model is based on traditional teaching methods. **False**



Quiz 3

1. **The ESD Initiative in Viet Nam integrates the following three areas:**

- a. ESD, green growth and social transformation
- b. disaster risk reduction, prevention and mitigation
- c. climate change adaptation and mitigation, disaster risk reduction and biodiversity conservation**
- d. climate change adaptation and mitigation, disaster risk reduction and bioliteracy

2. **Which of the following characteristics are applicable to the ESD Initiative in Viet Nam?**

Select all that apply.

- a. It links formal, non-formal and informal education**
- b. It involves schools, parents, communities and the wider society**
- c. The media are at the centre of this initiative
- d. A and B

3. **True or false:** The involvement of schools, parents, other community members and the media will enable a major change that leads to a transformation in society. **True**

Glossary

Community Action Plans are plans developed by the community that meet the needs of the community and are, ultimately, implemented by the community. The implementation of Community Action Plans should meet the real needs of the community and help solve the most pressing problems, especially relating to climate change mitigation and adaptation, disaster risk reduction and biodiversity conservation.

Diversity means that although people have things in common with each other, they are also different and unique in many ways. Diversity implies recognizing that we are all different and that we have to respect those differences. Diversity can refer to race, ethnicity, gender, religion, sexual orientation, age, physical abilities, beliefs or socio-economic status. It also refers to different experiences, backgrounds and viewpoints.

Education for Sustainable Development is a global vision where every human being acquires the knowledge, skills, attitudes and values required for developing a sustainable future. The concept of ESD challenges the way we think about education today and encourages us to learn for change. It seeks to integrate the principles, values and practices of sustainable development into all aspects of education and learning in order to address the social, economic, cultural and environmental problems we face in the 21st century.

Gender refers to the social roles that men and women have in a determined place and time and the responsibilities and opportunities associated with women and men, as well as the power relations between them. Gender alludes to the cultural, social, economic, political conditions, values and behaviours attributed to men and women.

Global Citizenship Education promotes tolerance, peace and respect for diversity and empowers learners to engage in actions that help resolve global challenges, such as climate change adaptation and disaster risk reduction. It also encourages sustainable development and recognizes our responsibility to those who come after us.

Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

School Preparedness Plans enable schools and communities to analyse risks in and around the school based on information resulting from the School Assessment. More specifically, it assesses risks, hazards, vulnerabilities and capacities within the school-community and provides a framework for the development, implementation and monitoring of annual plans that contain actions to reduce risks. School Preparedness Plans support schools in becoming more environmentally sustainable, enabling them to adapt to the effects of climate change and to promote biodiversity conservation and education.

The United Nations Decade of Education for Sustainable Development aimed to integrate the principles and practices of sustainable development into all aspects of educational learning and to encourage changes in knowledge, skills, values and attitudes with the vision of enabling a more sustainable and just society for all.

The Viet Nam New School model is a participatory model that strengthens the quality of primary education and learning outcomes for students and fosters the practice of ESD skills and behaviours by: i) innovating teaching and learning methods to be more participatory and student-centred, and ii) nurturing innovative self-learning skills.

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	Viet Nam’s National Decade of Education for Sustainable Development Committee	National ESD Action Plan 2010-2014

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