



STRATEGIC PARTNERSHIP PROJECT (KEY ACTION NO 2)

ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION (ACEAFNE) 2015-2017

METHODOLOGICAL GUIDE FOR FORMAL / NON-FORMAL ECOLOGICAL EDUCATION AND ENVIRONMENTAL PROJECTS

Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL

AND NON-FORMAL EDUCATION" (ACEAFNE)

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METHODOLOGICAL GUIDE FOR FORMAL / NON-FORMAL ECOLOGICAL EDUCATION AND ENVIRONMENTAL PROJECT

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"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

This intellectual output brings together the experience and the competencies of all participants from Czech Republic, England, Italy, Lithuania, Poland, Portugal, Romania and Sweden.

Teachers jointly elaborated projects for formal curriculum-integrated activities in different subjects and adapted and improved non-formal activities which were tested at school level.

Students, supported by teachers, designed/implemented environmental projects in order to solve the local environmental problems.

In this way this guide includes:

- practices of work with students: examples of learning activities integrated in the curriculum within various subjects (physics, chemistry, biology, foreign languages, ICT, geography, drawing,native language), examples of non-formal activities;
- innovative practices: learning experiences, innovative methods, strategies for active learning, methods of active learning;
- environmental projects elaborated and implemented by students with support from teachers;
- projects of formal/non-formal activities, elaborated and implemented by every country at their own school level.

Romania created the design of the product.

This product with instruments/resources jointly realized in cooperation, the exchange/completion of ideas, will ensure the success of the institution together with high quality teaching activities and within a European unitary approach of education for life-long learning and development.

The usage of the methodological guide will become common practice at the level of each school even after the project has been finalized. The guide will remain as an open source on the project site and on other Internet spaces where it was published in order to ensure access to a larger scale of users. The printed copy will be distributed locally/regionally in schools.

Project products will be uploaded on the EU Dissemination Platform and on eTwinning and will become open educational resources which can be used by persons/institutions interested in a new approach to environmental protection issues.

Each project partner hereby assumes full responsibility for the content and authenticity of the matter, facts and things set forth.

CONTENTS

FORMAL ACTIVITIES

Czech Republic	4
England	31
Italy	42
Lithuania	64
Poland	76
Portugal	92
Romania	114
Sweden	148

NON-FORMAL ACTIVITIES

Czech Republic	173
England	184
Italy	190
Lithuania	206
Poland	215
Portugal	227
Romania	253
Sweden	297

ENVIRONMENTAL PROJECTS

Czech Republic	289
Italy	293
Lithuania	298
Poland	302
Portugal	308
Romania	313
Sweden	331



CZECH REPUBLIC

FORMAL ACTIVITIES 1st International School of Ostrava



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL:	1 st International School of Ostrava
DATE	17/01/2017
TEACHER	Ivo Helebrant
CLASS	Grade 6
SUBJECT	Geography
CURRICULAR COVERAGE	 Landscape – natural and social environment The relatonship between nature and society – long-term sustainable life and development, the principles and fundamentals of natural and environmental protection
TOPIC OF THE LESSON	Virtual Water
TIME	45 minutes

OBJECTIVES

- Students explain the term "virtual water"
- Students compare how much water is used to produce different products
- Students identify impacts of production and consumption of products that are water intensive

TEACHING STRATEGIES

- facilitating more than teaching
- learn to learn approach

TEACHING METHOD

- brainstorming
- group work: card with information and putting cards into the order depending how much water they think is used to make the products
- class discussion
- class check
- personal journal

ACTIVITY DESCRIPTION

Lead-in (5 minutes)

Brainstorming (5 minutes)

Tell students that today you start with a new module called Water and that you will talk about water and how we use it. Put a big paper on the wall or on the board.

Begin with a class brainstorming about the topic "water".

What comes to your mind first if I say "water"? Ask one or two students to write down everything they hear from the students on a big paper. Do not comment students' ideas.

Main activity (25 minutes)

1/ Arranging the products in order (5 minutes)

To prepare students for the following activity, ask them: In your opinion, what is the

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connection between water and the products that we use? After a few students share their ideas, divide students into small groups. Tell them:

Each group will get a set of cut-out cards with different products. To make all these products, water is used in the process. Your task will be to put the cards in the order depending on how much water you think is used to make the products. The most water intensive products will be at one end, the least water intensive products at the other. You should consider all stages of production and all the inputs.

Then hand out the cut-out cards with the products (Worksheet No. 1).

2/ Class discussion (5 minutes)

After a few minutes, ask students the following questions. (Don't reveal the correct answers yet): Which of the products on the cards do you think needs the most water to be produced? Why? And which one do you think is the least water intensive? How much water (how many litres) do you think is used to produce some of the products?

Don't spend too much time discussing various products, as you will talk about the results later in the lesson.

3/ Mathematical tasks (5-10 minutes – depend if one uses the math task or not)

Tell students that now they will learn more about how much water is needed to produce those products. Each group will get a description of one of the products they have just discussed that includes a mathematical task (Worksheet No. 2). First, they read the information about the product in a group and then calculate how much water is needed to produce it. Distribute the tasks so that each group is working just with one. If you have enough time or if some groups are faster than the others, you can give them more than one task to read and solve.

In case you do not find the mathematical tasks appropriate for your students or you would need more time for them, have the students work with the texts only – they can read them without completing the task and can just share important information. After that, inform them about the amount of water needed for each of the products.

Note: While the groups are working on their tasks, draw a long line on the board and indicate the number of litres showing the correct answers from the tasks you gave them (not revealing yet which belongs to which product):

0 litres _10__ 30 _____1,600 ______ 3,000_____ 15,000 Litres

4/ Class check (5 minutes)

When all the groups finish, ask them to write the products from their tasks by the respective numbers on the line on the board. This way, they will check whether they have done the calculations correctly and at the same time everybody will see the order of the products according to their water intensity.

Key to mathematical tasks:

Rice: 2,300 / 0.67 = 3,432 litres = approx. 3,400 litres

Sugar: 175 / 0.11 = 1,590 litres

Tea: $2,400 / 0.26 \times 0.003 = 27.69$ litres = approx. 30 litres

Paper: $6,000 / 10 / 300 \times 0.005 \times 1,000 = 10$ litres

Cotton: $(3,600 / 0.35 / 0.9 + 30 + 140 + 190) \times 0.25 = 2,947 \text{ litres} = \text{approx. } 2,900 \text{ litres}$

At this point, add also the products from the cut-out cards (Worksheet No. 1) to compare how water intensive they are:

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product virtual water (in litres) bottled water (11) 9 an A4 sheet of paper 10 a potato 25 cup of tea (250 ml) 30 an egg 135 a glass of milk (200 ml) 200 sugar (1kg) 1,590 a cotton shirt 2,900 rice (1kg) 3,400 a pair of leather shoes 8,000 a pair of jeans 11,800

Source: Hoekstra, Chapagain 2008: 15,119; http://www.waterfootprint.org (retrieved. 9 Jan 2011)

Follow-up (10 minutes)

1/ Class discussion (5 minutes)

Summarize what you have talked about today regarding so-called "virtual water", the water that you can't see at first glance but is needed to produce a particular product. Stress that for some products, it can be quite difficult to calculate the virtual water, but at least it enables us to find out how much water is used to produce the products we buy. After that, choose some of those questions to start a discussion:

Why do you think that we talked about "virtual water" and compared various products? Why could it be important? What could be the effects of production and consumption of products that are water intensive? What is the impact on the people living in the areas of production, on the planet etc.? Is there anything that we can do to avoid the negative impacts? If yes, what can you think of?

Note: In case students come up with questions that you do not find answers for in the Infobox, inform them of other sources, e.g. www.waterfootprint.org or other English websites.

ACTIVITY ASSESSMENT

Personal journals (5 minutes)

Ask students to write into their journals: their definition of "virtual water" three important pieces of information that they are taking away from this lesson.

STUDENTS' IMPACT

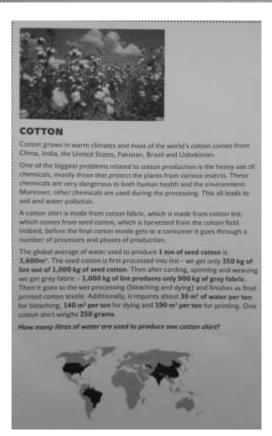
- Awareness of the impact of human actions on nature
- Enhancing of interest in participating in the environmental protection activities
- Active involvement during the curriculum integrated activitie
- Shaping active citizenship abilities and skills
- Refinement of the independent learning techniques through investigation, selection, presentation

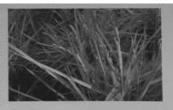
CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The lesson was very interactive, a big weight on the students' activity and engagement, real life connections and increasing of the awareness of the global environmental issues.

Materials to be used:

bottled water (11)	a cotton shirt
an A4 sheet of paper	rice (1kg)
a potato	a pair of leather shoes
a cup of tea (250 ml)	sugar (1kg)
an egg	a pair of jeans
a glass of milk (200 ml)	
bottled water (11)	a cotton shirt
an A4 sheet of paper	rice (1kg)
a potato	a pair of leather shoes
a cup of tea (250 ml)	sugar (1kg)
an egg	a pair of jeans
glass of milk (200 ml)	





RICE

Rice is the second-largest produced cereal in the world. Today, rice is grown on every continent except Antarctica, but the biggest producer is Asia, where 90% of the world's rice is produced and consumed. The world's top rice-producing countries are India, China, Indonesia, Thailand, Bangladesh and Vietnam.

Most rice is consumed in the same country where it is produced. Rice is also grown in Europe (the most in Spain and Italy) and about two-thirds of the rice consumed in the European Union is grown in Europe. Most EU imports come from Thailand, India and Pakistan.

Almost all of the world's rice is grown on small farms and planted by hand. Small farmers often have to sell their production at very low prices, which causes them problems.

In the shop, we buy so-called 'milled' rice in the form of white rice or broken rice. 'Paddy' rice (the rice as harvested from the field) consumes 2,300 litres of water per kg. One kilo of paddy rice produces 0.67 kg of milled rice on average.

How much water does 1kg of milled rice need?





SUCAR

Sugar can be produced from different plants, such as sugar cane or sugar beet. Nowadays, about 70% of the world's supply of sugar comes from sugar cane, which is mainly produced in tropical areas. There is no difference between the end products of beet and cane sugar, which are both called white (or refined) sugar; but sugar cane can also be processed into brown sugar (sometimes called raw sugar).

Top producers of sugar cane are Brazil and India. Brazil is also the world's biggest sugar exporter, followed by the European Union (where sugar beet is grown) and Australia.

Work on sugar cane plantations is hard and can also be dangerous. Workers use sharp machetes and sometimes they also work with hazardous chemicals. Often, the salaries for workers in the sugar cane sector are not enough for even basic needs. Over-irrigation and the burning of cane fields are also problems.

It takes about 175 litres of water to produce 1 kg of sugar cane. About 11% of the sugar cane is sugar, so that 1 kg of sugar cane gives 0.11 kg of sugar. How many litres of water is needed to produce 1 kg of refined sugar?





TEA

Tea is the second-most consumed drink in the world (after water) and is present in almost every culture. There are four main types of tea white, green, oolong and black. However, these all come from the same plant called Company of the same plant called Company.

Tea bushes grow in a tropical or subtropical climate. Tea is made from leaves of the tea bush. Tea plantations are usually located on a mountain slope and the higher the plantation is, the better the quality of the tea.

People working on tea plantations often have very low wages. Also, picking tealeaves is a very tiring task and usually the workers do not have any special work clothing or equipment.

The most important countries with tea plantations are China, India, Kenya and Sri Lanka, which are also the largest tea exporters.

To produce 1 kg of fresh tealeaves, we require 2,400 litres of water. One kg of fresh fealeaves gives 0.26 kg of made tea (black tea as we buy it in the shop). For a standard cup of tea (250 ml) we need 3 grams of black tea. How many litres of water are needed for one cup of tea (250 ml)?





PAPER

Most people know that trees are the main source for paper production, but other materials and plants are also used. Recycling is very important, too. However, the number of trees cut down and used to make paper is still high. Apart from cutting down trees, the chemicals used in paper production can also be very bad for the environment, especially when they get into water and soil.

We assume here that one A4-sheet of paper is the regular eighty-grams paper (80g/m²). One such sheet weighs 0.005 kg.

This paper is produced from wood. Consider a forest with transpiration (the process of water passing out from the leaves) of $6,000 \, m^3/ha$ every year. Suppose that the forest produces $10 \, m^3$ of wood per hectare per year. Finally, don't forget that $1 \, m^3$ of wood gives 0.3 ton of paper.

How many litres of water are used to produce one A4-sheet of paper?

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	1 st International School of Ostrava
DATE	17/01/2017
TEACHER	Ivo Helebrant
CLASS	Grade 6
SUBJECT	Geography
CURRICULAR COVERAGE	 Landscape – natural and social environment The relatonship between nature and society – long-term sustainable life and development, the principles and fundamentals of natural and environmental protection
TOPIC OF THE LESSON	Big Fish
TIME	45 minutes

OBJECTIVES

- Students explain the similarities between two particular global "water" problems (case study of Coca-Cola in Plachimada and Nile perch in Lake Victoria)
- Students find parallels to those problems in their context.
- Students analyze text critically.

TEACHING STRATEGIES

- facilitating more than teaching
- learn to learn approach

TEACHING METHOD

- creating stories
- pair work
- I.N.S.E.R.T.
- class discussion
- class check

ACTIVITY DESCRIPTION

Lead in (10 minutes)

1/ Creating stories together – Story A (5 minutes)

Write the following five words from story A on the board one under another: *Coca-cola, harvest, walking, water, villagers.*

Inform students that today they will work with two stories – with accounts that have happened in different parts of the world recently. The words on the board are from the first one. Have them guess:

How do you think that those words are connected?

What is the story going to be about?

Have them share several predictions and ask questions that will provoke further thinking about the story.

2/ Predicting in pairs – Story B (5 minutes)

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Write the key words from the second story on the board.

Big fish, Europe, lake, 250 million, chain

This time ask students to predict in pairs. Remind them that the story is real. After several minutes provide space for sharing of at least three different versions of the story.

Main activity (20 minutes)

1/ Reading (10 minutes)

Tell students that now they will read about what happened. To make the students work with the text actively and focus on it better, explain the following method (called I.N.S.E.R.T.)1, which they will be using. First, copy on the board the following table (or prepare it on a big paper before the lesson):

- $\sqrt{\text{(tick)}}$: information I've known before
- + (plus): new information
- (minus): information which I do not believe or have doubts about
- ? (question mark): I would like to know more about this

Make it clear to the students that they will underline four different pieces of information (e.g. a sentence or only a part of a sentence) according to the four symbols in the table. The symbol should be written next to the underlined information, in the space to the left of the text. Point out that the students have to use each symbol at least once.

If everything is clear, distribute the texts. Half of the students will be working with story A (Worksheet No. 1) and the other half with story B (Worksheet No. 2). If possible, distribute the text so students sitting next to each other will be working with different texts.

While students are reading, circulate and monitor them.

2/ Table into personal journals (5 minutes)

As soon as you see that most of the students have finished, ask each student to copy the following table in their journal:

 +	-	?

Their task is to write under each symbol the information they have underlined. However, they should not copy the exact words from the text but to write sentences using their own words. This procedure will help them to remember the information and consider it once more.

Give them a time limit of 3 minutes.

Follow-up (10 minutes)

1/ Similarities (5 minutes)

Students discuss in pairs and write into their journals in one minute as many similarities they can find between the two events.

What do the stories have in common?

Each pair says one thing that they have noted down. To make sure students will listen to

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each other, tell them not to repeat things that have been mentioned already.

2/Discussion (5 minutes):

Can you think of a similar situation from our country? If yes, what is it? Does the situation from the story remind you of something you have experienced?

Sources:

Coca-Colonization: About Multinational Corporations (not only) in Developing Countries. (The World in a Shopping Cart). Society For Fair Trade, 2008.

Fryer, G., Iles, T. D. The Cichlid Fishes of the Great Lakes of Africa. Edinburgh: Oliver & Boyd. 1972.

Joost Beuving, J. "Playing pool along the shores of Lake Victoria: Fishermen, careers and capital accumulation in the Ugandan Nile perch business". Africa 80 (2): 224–248. 2010.

Kaufman, L. "Catastrophic Change in Species-Rich Freshwater Ecosystems.", BioScience Vol. 42, No. 11, Stability and Change in the Tropics (Dec., 1992), pp. 846-858.

Witte, F. "Species extinction and concomitant ecological changes in Lake Victoria". Netherlands Journal of Zoology 42 (2-3): 214–232. 1992.

ACTIVITY ASSESSMENT

3/ Class summary (5 minutes)

Return to the key words on the board. Start with the story A and ask students what the connection between the words is. This way you will help students who read story B learn more about it. After that, have at least three students say what they wrote in their tables. Students usually find it difficult to use the symbol of minus, as this is not a usual way of reading – it is a critical approach to reading. Although the text talks about a real event, students have space to doubt the information and consider who wrote the text, why and which viewpoint is taken. Therefore, accept any answer they give you and do not comment it. Then repeat the same procedure with the story B

Show students Lake Victoria and Plachimada on the map.

STUDENTS' IMPACT *

- Awareness of the impact of human actions on nature
- Enhancing of interest in participating in the environmental protection activities
- Active involvement during the curriculum integrated activitie
- Shaping active citizenship abilities and skills
- Refinement of the independent learning techniques through investigation, selection, presentation
- Confidence in own capacity to communicate in the language of the project and refining of linguistic abilities

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The lesson was very interactive, a big weight on the students' activity and engagement, real life connections and increasing of the awareness of the global environmental issues. Creativity skills were highly supported.

Materials to be used:

Coca-Cola in Plachimada

People living in the village of Plachimada (India, Kerala state) started a war against the Coca-Cola corporation. They said that the corporation took water from them. They had a right to water (one of the basic human rights).

It is the year of 2003. There are Plachimada villagers sitting in front of the soft drink plant. They have been protesting in this way for a year – days and nights. They are waiting for change. 55-year old Mylama is leading today's protest. She says that they do not have much

water in their wells because the soft drink plant uses a lot of groundwater for producing soft drinks (Coca-Co-la). These soft drinks then travel to big towns where rich people buy them. Water from Mylama's well ends up on the tables of rich men. You need 10 litres of water to produce one litre of soft drink.

The soft drink plant was built in 2000 and very soon after that people from Plachimada noticed that it was more difficult to grow crops, which were often the only way for them to survive or earn money. It also changed

the life of many women, who now have to walk a longer distance for water. They use this water for enoking, drinking and hygiene. Another problem is the bad quality of water in the local wells. The water does not taste very good and looks white. This is caused by toxic mud produced in the plant.

At the end of 2003, after almost three years of protests, the court in Kerala state finally ordered the plant to stop using the underground water. In March 2004, the plant closed forever.

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At the end of 2003, after almost three years of protests, the court in Kerala state finally ordered the plant to stop using the underground water. In March 2004, the plant closed forever.

Big Fish in Lake Victoria

Lake Victoria is one of the African Great Lakes and it is the world's second largest freshwater lake (68,800 square kilometics). Most of the lake is in Uganda and Tanzania, a small part in Kenya. Before 1954, Lake Victoria was characterized by great blodiversity. There were over 500 species of fish.

In 1954, a new fish, the Nile perch, was introduced to the lake for commercial reasons. The Nile perch is one of the largest freshwater fish. It can be two metres long, weighing up to 200 kg. The average size is 123–137 cm. Since then, this exotic predator his negatively affected.

the ecosystem because it has caused several hundred species of fish to go estinct. The natural food chain in the lake has been destroyed.

The fish not only changed the ecosystem, but also the economy of the region and the life of more than 30 million people who depend on the lake. The Nile peoch is exported from Africa, mainly to Europe, Australia, and the USA, Large Tanzanian fisheries sell the fish to Europeans because the profit is high. At the same time, many Tanzanians go bungry. There are no more small lish in the lake for individual fisherman and the fishermen do

not have proper equipment for catching big fish. In Uganda, the Nile perch is the second biggest export after coffee. In 2006, the total value of Nile perch capparts from the take was estimated to be 250 million US dollars.



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not have proper equipment for catching big fish. In Uganda, the Nile perch is the second biggest export after coffee. In 2006, the total value of Nile perch exports from the lake was estimated to be 250 million US dollars.



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL:	1 st International School of Ostrava
DATE	15/02/2017
TEACHER	Ivo Helebrant
CLASS	Grade 6
SUBJECT	Geography
CURRICULAR COVERAGE	 Landscape – natural and social environment The relatonship between nature and society – long-term sustainable life and development, the principles and fundamentals of natural and environmental protection
TOPIC OF THE LESSON	Plastic Sea
TIME	90 minutes (2*45 minutes)

OBJECTIVES

- students suggest possible solutions to the problem of plastic waste in the sea and what they could do about it themselves
- students compare the effectiveness of suggested solutions on how to reduce the problem of plastic waste
- students create "Plastic Sea" as a symbol of the problem of plastic waste
- students evaluate their own work when creating the "Plastic Sea"

TEACHING STRATEGIES

- facilitating more than teaching
- learn to learn approach
- collaborative work

TEACHING METHOD

- creating "Plastic Sea" from waste
- group work
- Diamond
- class discussion
- personal diary consumption of waste
- class check

ACTIVITY DESCRIPTION

Lead in (20 minutes)

1/ Plastic Quiz (10 minutes)

Divide students into seven pairs or groups (this corresponds with the number of questions). If you have fewer than 14 students, make fewer groups and each group will deal with more questions at the same time. Each pair or group needs paper and pen to write down their answers:

In this lesson we will talk about plastics. We will begin with the "Plastic quiz", which contains seven questions.

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In case you are not sure about some of the answers, try to guess. Each pair or group gets one question and the task is to read it together and answer it. Each group should appoint "a secretary" who will write the answers down on a piece of paper. After one minute, I'll clap my hands and you will pass on your question to the group on your right. This will continue until all the groups have answered all the questions.

Then distribute the cut-out questions (Worksheet No. 1). Monitor the students while they are working in groups and clap your hands every minute to keep the activity dynamic.

2/ Check the answers together (10 minutes)

Before you tell them the correct answers (below), ask "secretaries" from at least three groups how they answered the questions. Do not comment on the answers at this point. As for the last question, elicit as many answers as possible from your students.story.

Main activity (50 minutes)

1/ Plastic waste in our class (10 minutes)

Ask students to put all plastic bags, bottles and other waste that they have (e.g. from their backpacks) or they can find in the classroom together with the waste that you brought in the middle of the classroom. To make it more symbolic, you can first make one "square metre" from ropes on the floor – students will put the waste inside.

Then have them guess:

How big do you think a pile of plastic bags and bottles from all the students at this school would be? From all the people in this town? From all the people in this country? How many plastic bags do we use in this class during one week?

Take a photo of the pile.

Tell them about their homework: "How much plastic do I use in one week?" research. Students will calculate and record how many plastic bottles and bags, etc., they use in one week. Remind them that they should also count what is used in their family – e.g. after shopping. To motivate students, we recommend that you, the teacher, also take part in this research.

2/ Photos of plastic waste in the sea (10 minutes)

Inform your students that they will now look at photos of plastic waste. Print out the photos before the lesson or project them on the wall. You can provide them with more info about the photo (e.g. where it is, how much waste there is).

Then ask them:

What is in your head now? What are your very first impressions? Are there any questions you would like to ask? What would you like to know? (ask one of the students to write the questions down on a paper so you can work with them later).

Note: You can find a lot of photos on www.google.com (Images): "plastic waste in the sea" Their task is to write under each symbol the information they have underlined. However, they should not copy the exact words from the text but to write sentences using their own words. This procedure will help them to remember the information and consider it once more.

Give them a time limit of 3 minutes.

3/ "Plastic Sea" (30 minutes)

Put a long piece of plastic material on the floor (if possible, transparent – e.g. a plastic material used for covering furniture before painting, alternatively you can use a large piece of cloth or paper), which will symbolize the sea. If you have more than 15 students, we recommend that you make two plastic seas. Start with the following instructions:

We have just seen photos from the sea, which is quite far from us. Therefore, now we will create a small sea in this classroom. It will be a special sea, the plastic sea – made of plastic bags, bottles or other similar materials. What do you think this sea would look like? What could live in such a sea? Use your imagination, draw your ideas on any plastic or other material available and then cut them out and stick them in the sea. You can work individually or in small groups. It is up to you. The creatures living in the "Plastic Sea" can be both invented and real-life.

4/ Class discussion (5 minutes)

The aim of this is to help students reflect on the previous creative activity and, more importantly, to try to imagine the impacts that water pollution and plastic waste has on the sea and on the living creatures in it:

What names would you give to the creatures in the sea? What do you think it is like to live in such a sea? What do you think the mood of this sea is? How could it feel?

Follow-up (20 minutes)

1/ Personal journal (5 minutes)

Students reflect their work first:

How was it for you to cooperate with others when creating the "Plastic Sea"? What would you do differently next time and why?

After that, return to the issue of plastic waste in the sea and stress that the amount of plastic waste in the sea is growing continuously and that it has become a global problem. Write the following questions on the board and give students a couple of minutes to answer them into their journals:

What can be done about the plastic waste in the sea? Is there something that we could do about it?

Then ask volunteers to share their ideas on how to solve the problem.

2/ Diamond activity (15 minutes)

Divide students into groups. The instructions are:

Now we will talk about what can be done about the plastic waste before it reaches the sea. What can we do with our plastic bags? Each group will get 9 different ideas how to reduce or solve this problem and the task is to think about each of them, discuss them and then rank them according to how efficient you think they are. For this, we will use the shape of diamond.

Draw the diamond on the board, each line represents one solution (place for one card):

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

(the most effective solution)	
(the least effective solution)	

Then hand out a set of cards to each group (Worksheet No. 2). After they have finished ask each group to present their diamond to the class. Ask questions about why they have decided to order the cards in this way. Provide space for additional questions from the class.

Note:

Optionally, you can copy the solutions from Worksheet No. 2 on the board and students copy them in their group and prepare their diamond on a paper.

Homework

Research "How much plastic do I use in one week?" Students calculate and record how many plastic bags, bottles, etc. they use in one week. (see Main Activity).

Correct answers - "Plastic quiz":

1/ Plastics are made from oil. The majority of synthetic

plastics are made from polythene, which is sourced from oil (petroleum). Shellac and the horns of animals were used as plastic materials before the first synthetic plastics were discovered.

- 2/ The world uses over 1.2 trillion plastic bags a year. That average is about 300 bags for each adult on the planet, or one million bags being used per minute.
- 3/ On average a person uses a plastic bag for 12 minutes before disposing. It then lasts in the environment for between 500 to 1000 years.
- 4/ Recycling is a term that refers to such processing used

materials (waste) that leads to its further use. Recycling enables saving of renewable and non-renewable resources and in some cases can reduce the effects on the environment.

5/ Most of the plastics, after being used, end up in the

oceans. The report "Plastic Debris in the World's Oceans", by international environmental group Greenpeace (2007), said at least 267 marine species are known to suffer from entanglement or ingestion of plastic debris. An estimated 1 million seabirds choke or get tangled in plastic nets or other rubbish every year. After a plastic bag has killed an animal, its body decomposes and the plastic is released back into the

environment where it can kill again.

6/ All of the countries have banned, or are moving towards banning, free plastic bags for customers in shops. Ireland took the lead in Europe by taxing plastic bags, reducing their consumption by 90%.

7/ It is estimated that there are an average of 46,000 pieces of plastic debris floating on or near the surface of every square mile of ocean. The largest floating "zone" in the world is found in the area of northern Pacific. It was created here due to the sea currents.

Sources (Plastic quiz):

United Nations Environment Programme: http://www.unep.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

org/regionalseas/marinelitter

Greenpeace International: http://www.greenpeace.org/international/campaigns/oceans/

ACTIVITY ASSESSMENT

3/ Class summary (5 minutes)

Collected questions. If you collected questions during the lesson, agree with students on the procedure that will follow (e.g. are there volunteers that will find the answers?).

STUDENTS' IMPACT*

- Awareness of the impact of human actions on nature
- Enhancing of interest in participating in the environmental protection activities
- Active involvement during the curriculum integrated activitie
- Shaping active citizenship abilities and skills
- Refinement of the independent learning techniques through investigation, selection, presentation
- Confidence in own capacity to communicate in the language of the project and refining of linguistic abilities

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The lesson was very interactive, a big weight on the students' activity and engagement, real life connections and increasing of the awareness of the global environmental issues.

Creativity skills and critical thinking were highly supported.

Students were surprised with the real outcomes of their research.

Materials to be used:

- Plastic quiz", cut-out slips Worksheet No. 1 (one set per class)
- Possible solutions (diamond method), cut out cards
- Worksheet No. 2 (one set per group)
- glue, scissors, paper, a long transparent piece of plastic to symbolize the sea (e.g. a plastic material used for covering furniture before painting) or a big piece of paper instead (or a rope, cloth)
- photos of plastic waste (printed or projected on the wall), e.g. use google search: "plastic waste in the Pacific Ocean"
- waste to create the "Plastic Sea" (preferably plastic bags and other plastic waste, if not available, you can also use other types of waste paper, textile etc.); you could ask students to collect the waste on their way to school or you can bring some yourself
- blank paper for questions (Main activity)
- students' personal journals

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Plastic Quiz

1. What is plastic made of?
How many plastic bags does one person use each year (on average)?
3. How long do we use one plastic bag before we throw it away (on average)?
4. What is recycling? Can we recycle plastic? If yes, how?
5. Where does most of the plastic end up if it is not recycled?
6. In which of these countries are plastic bags prohibited or soon to be prohibited? Bangladesh, Rwanda, Israel, Canada, Maharasthtra (in West India), Botswana, Kenya, South Africa, Taiwan, Singapore, Ireland, China
7. How many pieces of plastic waste are floating in one square kilometre of the ocean (on average)?

Diamond

Reuse (e.g. Plastic bags)! Use it again!	Reuse (e.g. Plastic bags)! Use it again!
Refuse! Say no (in a shop)!	Refuse! Say no (in a shop)!
Reduce! Use them less!	Reduce! Use them less!
Throw it away into a bin!	Throw it away into a bin!
Use it in a new way!	Use it in a new way!
Recycle it!	Recycle it!
Export to a different country!	Export to a different country!
Put it underground!	Put it underground!

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	1 st International School of Ostrava
DATE	
TEACHER	Mgr. Pavel Kunčar
CLASS	Grade 9
SUBJECT	Chemistry
CURRICULAR COVERAGE	Acid and bases
TOPIC OF THE LESSON	Acid rain effect
TIME	long term project

OBJECTIVES

- Discuss how engineers are working to prevent pollution and acid rain.
- Use an indicator to differentiate between acidic, basic and neutral solutions.
- Use their observations to describe the cause-effect relationship of acid rain.
- Observe and describe some of the harmful effects of acid rain on living and non-living items.

TEACHING STRATEGIES

- Indoor lab
- Process-Oriented Guided Inquiry Learning
- Teaching with data

TEACHING METHOD

- Class discussion
- Class discussions conducted by a student Problem solving
- Brainstorming

ACTIVITY DESCRIPTION

Students are given samples of acids (vinegar, citric acid solution) and neutral solution (tap water) and they observe the effect on different materials (egg shell, piece of a bone, leave, granite, apple, alu foil). The measure pH using pH meter and universal indicator of acid and water on the start and then during experiment.

ACTIVITY ASSESSMENT

Write down results from observation, explain what happened and what is the effect of low pH on living or non-living items.

STUDENTS' IMPACT

- Awareness of the impact of human actions on nature
- Enhancing of interest in participating in the environmental protection activities
- Refinement of the independent learning techniques through investigation, selection,

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

presentation

• Potential active involvement in local meetings with environmental agencies to the benefit of the community

- Very simple experiment to show a harmful impact of acid compounds to living and non-living items.
- You need to wait a little for vinegar to start a reaction but then is the observation clear.
- Student observing this changes have their own ideas what to add to the solutions to see the reaction (hair, another parts of plants, rubber....)
- Debate about the possible sources of pollution around.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	1 st International School of Ostrava
DATE	06-07/10/2016
TEACHER	Aggeliki Karsinou
CLASS	MYP2
SUBJECT	Mathematics
CURRICULAR COVERAGE	Ratio, percentage; direct and inverse proportion: Dividing a quantity in a given ratio, finding a constant of proportionality, setting up equations and graphing direct and inverse relationships
TOPIC OF THE LESSON	HOW MUCH WATER IS LOST WHEN A TAP IS LEFT DRIPPING?
TIME	180 minutes (4 teaching periods)

OBJECTIVES

- select appropriate mathematics when solving problems apply the selected mathematics successfully when solving problems
- solve problems correctly in both familiar and unfamiliar situations in a variety of contexts.
- describe patterns as relationships and/or general rules consistent with findings
- use appropriate forms of mathematical representation to present information
- select appropriate mathematical strategies when solving authentic real-life situations
- explain whether a solution makes sense in the context of the authentic real-life situation.

TEACHING STRATEGIES

- The math content will be taught.
- There will be several activities, investigations and project during which students will have chance to apply the knowledge on real-life situations.
- Class discussions during and after each assignment.
- Individual approach to students' work.
- Challenging tasks to advanced students.

TEACHING METHOD

- The students will be organized into 2-3 member groups.
- The tasks will be given to the groups and a class discussion will follow so everybody understands the given tasks.
- The students will complete the various tasks and if there are any problems then the teacher will provide additional help to the group.
- During the activity the students will reflect on their findings.
- At the end the students will present their results and with the teacher's guidance the groups will compare their findings.

ACTIVITY DESCRIPTION

- The students will leave a tap dripping for various time intervals (one minute, five minutes, fifteen minutes and a half an hour).
- They will gather the amount of water wasted and they will measure for each interval the corresponding volume.
- Then they will count the number of taps in the school building and they will try to count the whole amount of water which is wasted for each time interval.
- Then they will extend the project by generalizing their findings for the city of Ostrava. They will estimate the number of households based on population and they will take into consideration the number of taps per household as well so they can estimate the amount of wasted water in different time intervals.
- At the end they will research the water consumption per country so they can compare and see in which countries the amount of water wasted at school and at the city can make a difference.
- They will present their findings to their classmates and at the end they will design posters promoting reduction of water waste based on their math calculations.

ACTIVITY ASSESSMENT

- Various written tasks(Formative/Summative Assessment)
- Presentation(PowerPoint/short video)
- Posters

STUDENTS' IMPACT *

- Awareness of the impact of human actions on nature
- Developing green world preservation skills and habits
- Involvement in design and implementation of environmental projects in schools

- The students usually enjoy completing this activity because it is related to a real life problem and they can understand the usage of mathematics in analyzing and addressing global issues such as water waste.
- The students show strong interest in presenting their findings not only to their classmates but also to the school community. One of my students had the idea of writing about the activity at the school newspaper.
- As an extension later I would like to link this activity with the local community.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	1 st International School of Ostrava
DATE	26/01/2017
TEACHER	Petra Dinkovová
CLASS	12B
SUBJECT	English
CURRICULAR COVERAGE	Environmental issues
TOPIC OF THE LESSON	Sea pollution
TIME	45 minutes

OBJECTIVES

• To be able to design a flyer or a small catalogue based on Internet research

TEACHING STRATEGIES

Active learning, collaborative learning, discussion, interdisciplinary learning

TEACHING METHOD

Collaboration

ACTIVITY DESCRIPTION

Students are presented a series of pictures showing rubbish that has been washed up on beaches and shown a short documentary about the most bizarre things that have been found on beaches. This should initiate a debate about the amount of rubbish that ends up in the ocean and on the beaches every year and the impact it has on marine life. Following the discussion, students read a short text about Julie Church and her idea to turn old flip flops found in the ocean and on the beaches into works of art (everything up to this point was covered in the lesson preceding the project). Students then go online, visit Julie's company website www.ocean-sole.com and do a research on the history and philosophy of the company and the products it offers. Based on their research, students (in small groups) create a flyer/catalogue presenting Julie's project and the products her company sells. Students can choose to create a paper flyer/catalogue or a digital one using PowerPoint, etc. Once finished, the groups swap their fliers/catalogues and complete the two stars (= two positive comments about the flyer/catalogue) and a wish (= one comment on an area which needs improvement) sheet to provide feedback on their classmates' work.

ACTIVITY ASSESSMENT

Peer assessment through the 'two stars and a wish sheet'

STUDENTS' IMPACT

- Awareness of the impact of human actions on nature
- Enhancing of interest in participating in the environmental protection activities
- Refinement of the independent learning techniques through investigation, selection, presentation

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Most students seemed really engaged in the activity. They proudly showed off their artistic skills and created imaginative and captivating pieces of art to help raise awareness of the environmental issue. They co-operated well within their groups and showed a good grasp of IT skills. Also, students provided valuable feedback on their classmates' work.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	1 st International School of Ostrava
DATE	31/10/2016
TEACHER	Liana Barney
CLASS	10B
SUBJECT	English
CURRICULAR COVERAGE	Reading
TOPIC OF THE LESSON	Food miles, carbon footprint
TIME	45min

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To raise awareness about food miles and the effect they have on environment

TEACHING STRATEGIES

Critical thinking, cooperative learning, discussion strategies

TEACHING METHOD

Reading assignment, class discussion, class project,

ACTIVITY DESCRIPTION

Online carbon footprint calculation, food miles project

ACTIVITY ASSESSMENT

Based on the online calculation students came up with suggestions for minimalizing food miles

STUDENTS' IMPACT *

Awareness of the impact of human actions on nature

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students found the online activity fascinating and it made them think of the impact their actions have on the environment.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	1 st International School of Ostrava
DATE	06/12/2016
TEACHER	Tana Mickova
CLASS	11B
SUBJECT	Humanities Seminar
CURRICULAR COVERAGE	healthy lifestyle
TOPIC OF THE LESSON	Healthy snack
TIME	90 min

OBJECTIVES

To understand from what are different foods made

Distinguish what is healthy/unhealthy

TEACHING STRATEGIES

Individual work

TEACHING METHOD

Problem solving

ACTIVITY DESCRIPTION

Students write down what they like to eat, than they have to think about what is healthy and what is not, make a list of healthy things and list of unhealthy things.

Together with the teacher students discuss the healthy food, their task is to think about some healthy snack made from the healthy ingredients that they wrote down.

Students can prepare the snacks at home as a homework and enjoy them together in the next lesson.

ACTIVITY ASSESSMENT

Work in class

STUDENTS' IMPACT*

Think about hygiene, realise what is good to eat and why, think about possible allergies and the importance fo fresh heatlhy food.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students were interested and enjoyed the healthy snacks.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	1 st International School of Ostrava
DATE	14/12/2016
TEACHER	Táňa Micková
CLASS	13B
SUBJECT	Social Science Seminar
CURRICULAR COVERAGE	Sustainable Development Revision
TOPIC OF THE LESSON	Plastic bags
TIME	90 min

OBJECTIVES

To understand the theme of sustainable development, name the factors involved in global warming, name examples from everyday life how to improve the environment and analyse possibilities of prevention in environmental education

TEACHING STRATEGIES

Project based learning, group and individual work, text analysis

TEACHING METHOD

Pro-active behaviour and development of personal characteristics

ACTIVITY DESCRIPTION

Students read an article about usage of plastic bags in EU which are still given for free in some shops.

When reading the article, students should make notes about the facts that caught their attention.

Group work – students discuss their notes in groups and try to find a solution to a following question: "How are you going to concretely explain the situation of plastic bags overusage to the other school members?"

The aim of the lesson is that the students should come up with some ideas how to prevent the situation and think about possibility of recycling and repetitive usage of plastic bags.

Students in the groups have to design their own bag which will be from recycled materials and customers will be able to use many times.

ACTIVITY ASSESSMENT

Competition for the best bag

STUDENTS' IMPACT

Awareness of the problem and constructive problem solution

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students wre interested, they mainly like the part where they were designing their own bag.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	1 st International School of Ostrava
DATE	26/01/2017
TEACHER	Petra Dinkovová
CLASS	12B
SUBJECT	English
CURRICULAR COVERAGE	Environmental issues
TOPIC OF THE LESSON	Sea pollution
TIME	45 min

OBJECTIVES

To be able to design a flyer or a small catalogue based on Internet research

TEACHING STRATEGIES

Active learning, collaborative learning, discussion, interdisciplinary learning

TEACHING METHOD

Collaboration

ACTIVITY DESCRIPTION

Students are presented a series of pictures showing rubbish that has been washed up on beaches and shown a short documentary about the most bizarre things that have been found on beaches. This should initiate a debate about the amount of rubbish that ends up in the ocean and on the beaches every year and the impact it has on marine life. Following the discussion, students read a short text about Julie Church and her idea to turn old flip flops found in the ocean and on the beaches into works of art (everything up to this point was covered in the lesson preceding the project). Students then go online, visit Julie's company website www.ocean-sole.com and do a research on the history and philosophy of the company and the products it offers. Based on their research, students (in small groups) create a flyer/catalogue presenting Julie's project and the products her company sells. Students can choose to create a paper flyer/catalogue or a digital one using PowerPoint, etc. Once finished, the groups swap their fliers/catalogues and complete the two stars (= two positive comments about the flyer/catalogue) and a wish (= one comment on an area which needs improvement) sheet to provide feedback on their classmates' work.

ACTIVITY ASSESSMENT

Peer assessment through the 'two stars and a wish sheet'

STUDENTS' IMPACT

Awareness of the impact of human actions on nature

Enhancing of interest in participating in the environmental protection activities

Refinement of the independent learning techniques through investigation, selection, presentation

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Most students seemed really engaged in the activity. They proudly showed off their artistic skills and created imaginative and captivating pieces of art to help raise awareness of the environmental issue. They co-operated well within their groups and showed a good grasp of IT skills. Also, students provided valuable feedback on their classmates' work.



ENGLAND

FORMAL ACTIVITIES

Lanchester EP Primary School



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	David Mordue
CLASS	Year 4
SUBJECT	Geography (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	Geography
TOPIC OF THE LESSON	Identifying areas of the world covered by rainforests
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to use maps and atlases to locate areas of rainforest around the world.

TEACHING STRATEGIES

- Presentation
- Partner talk
- Independent work

TEACHING METHOD

Whole class

ACTIVITY DESCRIPTION

- Chn shown map of the world.
- Chn to name continents, oceans, countries etc that they recognize and feedback to the class.
- What is a rainforest? Run through PPT presentation which describes what a rainforest is.
- Where might rainforests be located on our world map? Chn to discuss in pairs then feedback ideas.
- Give chn list of countries which have rainforests.
- Task: Chn to use their atlas to locate countries on list and shade these in green on their blank world map. Chn to then create a key for their map.

ACTIVITY ASSESSMENT

• Good activity to start our 'Rainforests' topic.

STUDENTS' IMPACT

• Chn now have more knowledge of where rainforests are located around the world.

- Chn were engaged and interested in the topic.
- Chn completed their independent work well although will need to keep consolidating use
 of atlases.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	Peter Taylor
CLASS	Year 6
SUBJECT	Computing (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	Computing / Geography
TOPIC OF THE LESSON	Reseraching rainforests around the world
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to use internet to research facts about 3 different rainforests around the world.

TEACHING STRATEGIES

- Presentation
- Partner talk
- Independent work
- ICT use laptops

TEACHING METHOD

- Whole class
- Partner task

ACTIVITY DESCRIPTION

- What is a rainforest? Run through PPT presentation which describes what a rainforest is.
- Use maps and images to stimulate further.
- Explain task and demonstrate using the internet to find facts.
- Task: Chn to work in pairs on laptops to research facts and images about a rainforest and to put these into a word document. Chn to the present their research to the rest of the class.

ACTIVITY ASSESSMENT

- Great internet research some excellent facts found.
- Some very confident presentation at the end of the lesson.

STUDENTS' IMPACT

• Chn now with more knowledge of what rainforests are and chn also developed their internet research skills and confidence when presenting to an audience.

- Chn were very engaged.
- Chn love laptop based learning so behavior was excellent.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	Sarah Jackson
CLASS	Year 3
SUBJECT	Science (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	Science / Geography
TOPIC OF THE LESSON	Identifying layers of the rainforest
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to label an image of the rainforest with its different layers (canopy, emergent, floor etc).

TEACHING STRATEGIES

- Presentation
- Partner talk
- Independent work
- Video

TEACHING METHOD

- Whole class
- Independent task

ACTIVITY DESCRIPTION

- Run through PPT to show the layers of a rainforest.
- What might be found in each layer? Plants? Animals? Discuss in pairs then feedback.
- Show video clip at https://www.youtube.com/watch?v=-Ax6zlSzyNM to exemplify the layers in more detail.
- Task: Chn to work independently to label a rainforest image with its layers then to cut and stick images of different animals that can be found at each layer.

ACTIVITY ASSESSMENT

• Very good activity which deepened the chn's understanding of the structure of a rainforest.

STUDENTS' IMPACT

• Chn gained lots of key vocab linked to the topic.

- Chn were engaged in the topic.
- Chn completed task very carefully and enjoyed the activity.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	Aidan Stoker
CLASS	Year 5
SUBJECT	English (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	English (Reading) / Geography / Science
TOPIC OF THE LESSON	Reading comprehension
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to read text about 'Rainforests' and then answer questions using their reading comprehension skills

TEACHING STRATEGIES

- Presentation
- Partner talk
- Independent work
- Video

TEACHING METHOD

- Whole class
- Independent task

ACTIVITY DESCRIPTION

- Show video clip at https://www.youtube.com/watch?v=HiwgpA4ReEc to give chn a 'virtual field trip' to the rainforest.
- Discuss what we learnt from the video.
- Read 'Rainforests' text together.
- Highlight key vocab and use dictionaries to find definitions of tricky words.
- Demonstrate how to use the text to find answers to comprehension questions.
- Task: Chn to work independently to answer questions based on the text they have read.

ACTIVITY ASSESSMENT

• Good activity to develop reading skills as well as providing chn with lots of relevant information about our topic.

STUDENTS' IMPACT

• Important reading skills improved.

- Chn were engaged and well-behaved.
- Chn answered questions well although some chn struggled with inference type questions so needed extra support.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	Helen Startup
CLASS	Year 5
SUBJECT	Science (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	Science / Geography
TOPIC OF THE LESSON	Living things found in rainforests
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to create their own 'rainforest creature' with labels for how it is well-suited to its habitat

TEACHING STRATEGIES

- Presentation
- Partner talk
- Independent work
- Video

TEACHING METHOD

- Whole class
- Independent task

ACTIVITY DESCRIPTION

- What living things do we know about in the rainforest? Gather ideas and discuss.
- Show video clip at https://www.youtube.com/watch?v=DgU7gsBOhUI to show chn some living things in the rainforest in a fun video.
- Discuss what we learnt from the video.
- Run through PPT which describes several living things found in the rainforest.
- Demonstrate task.
- Task: Chn to work independently to create their own rainforest creature with labels to describe it.

ACTIVITY ASSESSMENT

• Great – chn loved this lesson!

STUDENTS' IMPACT

• More awareness of different animals found in the rainforest.

- Chn were very engaged particularly with video clip.
- Chn created some fantastic creatures.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	Sarah Jackson
CLASS	Year 3
SUBJECT	Science (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	Science / Geography
TOPIC OF THE LESSON	Food chains
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to create food chains using living things found in rainforest

TEACHING STRATEGIES

- Presentation
- Partner talk
- Independent work

TEACHING METHOD

- Whole class
- Independent task

ACTIVITY DESCRIPTION

- What living things do we know about in the rainforest? Gather ideas and discuss.
- Run through PPT which describes several living things found in the rainforest.
- What is a food chain? Discuss using PPT.
- Use website to drag and drop living things into a food chain.
- Demonstrate task.
- Task: Chn to work independently to create their own rainforest food chains using given creatures to cut and stick.

ACTIVITY ASSESSMENT

• A good lesson to revise food chains and also to give chn more information about the living things we find in a rainforest.

STUDENTS' IMPACT

• Greater knowledge of food chains and how to construct them.

- Chn enjoyed finding out about different living things in the rainforest and what they eat.
- Some chn required support with putting living things in the correct order in a food chain.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	Peter Taylor
CLASS	Year 6
SUBJECT	English (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	English / Geography
TOPIC OF THE LESSON	Persuasive writing
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to write a persuasive piece to persuade people to help stop deforestation of the rainforests

TEACHING STRATEGIES

- Presentation
- Example text
- Partner talk
- Independent work
- Video clip

TEACHING METHOD

- Whole class
- Independent task

ACTIVITY DESCRIPTION

- What dangers are there to rainforests? Discuss in pairs then feedback.
- Run through PPT which explains deforestation of the rainforests.
- Show video clip at https://www.youtube.com/watch?v=hllU9NEcJyg to show time lapse of deforestation of Amazon Rainforest.
- Discuss video in pairs then as a class.
- Mindmap ideas for 'AGAINST' deforestation.
- Read example text which is a persuasive piece against deforestation.
- Task: Chn to work independently to write a persuasive text against deforestation using what they have learnt this lesson.

ACTIVITY ASSESSMENT

• Excellent lesson to really show the chn the impact of deforestation

STUDENTS' IMPACT

• Greater knowledge of deforestation and also improved their persuasive writing skills.

- Chn found video clip very impactful some great discussion followed this.
- Some excellent pieces of persuasive writing.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	Helen Startup
CLASS	Year 2
SUBJECT	Science (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	Science / Geography
TOPIC OF THE LESSON	Sorting living thinsg into groups
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to sort living things into groups (mammals, birds, reptiles)

TEACHING STRATEGIES

- Presentation
- Example text
- Partner talk
- Partner work

TEACHING METHOD

- Whole class
- Partner task

ACTIVITY DESCRIPTION

- Recap previous learning What living things do we find in rainforests? Discuss and feedback.
- Run through PPT which explains groups with examples from the rainforest mammals, reptiles, birds.
- Play game Which group do I belong to?
- Demonstrate task by putting a living thing in each group.
- Task: Chn to work in pairs to cut and stick rainforest living things into the three groups.

ACTIVITY ASSESSMENT

• Great lesson which developed chn's knowledge of living things found in the rainforest as well as their understanding of animal groups.

STUDENTS' IMPACT

- Greater knowledge of living things.
- Key vocab e.g. mammals.

- Chn enjoyed lesson.
- Most chn worked well in pairs.
- Some pairs needed encouragement to work together.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	David Mordue
CLASS	Year 4
SUBJECT	Geography (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	Science / Geography
TOPIC OF THE LESSON	Effects of deforestation
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to write about the effects of deforestation on people, animals and plants in the rainforest

TEACHING STRATEGIES

- Presentation
- Partner talk
- Independent work

TEACHING METHOD

- Whole class
- Independent task

ACTIVITY DESCRIPTION

- Recap previous learning What do we know about rainforests?
- Run through PPT which explain what deforestation is.
- Use impactful images to further stimulate.
- Whole class discussion How do we feel about deforestation?
- Run through next part of PPT which explains impacts on people, animals and plants.
- Task: Chn to work independently to complete table to show effects of deforestation on people, animals and plants.

ACTIVITY ASSESSMENT

• Good lesson – chn are very engaged by this topic and felt very strongly about deforestation.

STUDENTS' IMPACT

• Definitely an impact on how chn think about the world around us.

- Chn enjoyed lesson and found it interesting.
- Generated lots of good discussion about deforestation.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Lanchester EP Primary School (England)
DATE	Spring Term 1 2016
TEACHER	Aidan Stoker
CLASS	Year 5
SUBJECT	DT (Life on Land: 15 ~ Rainforests)
CURRICULAR COVERAGE	DT / Geography
TOPIC OF THE LESSON	Where do we get coffee from?
TIME	1 hour (formal lesson)

OBJECTIVES

• Children to explain the process of how we get coffee in our shops from its source in the rainforests

TEACHING STRATEGIES

- Presentation
- Partner talk
- Independent work

TEACHING METHOD

- Whole class
- Independent task

ACTIVITY DESCRIPTION

- What foods might be grown in rainforests? Discuss and feedback.
- Give chn coffee jars to look at in pairs Where does it say the coffee is grown?
- Locate these places on our world map linked to rainforests.
- Run through PPT 'The Story of Coffee' and discuss.
- Link to our Fair Trade work Do the rainforest farmers get a fair deal?
- Task: Chn to write an explanation next to each image of each step in the process of growing and producing coffee, from the rainforests to our shops.

ACTIVITY ASSESSMENT

• Excellent – chn were able to explain the process well.

STUDENTS' IMPACT

- Lots of chn didn't realise that coffee comes from our rainforest areas.
- Opened up chn's understanding of how what we buy can be used for good in rainforests (Fair Trade link).

- Chn really enjoyed the lesson.
- Fair Trade knowledge allowed chn to gain a deeper understanding of the farming/growing issue in rainforests.

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)



ITALY

FORMAL ACTIVITIES IPS CABRINI - Taranto



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	1-2 class (secondary school)
SUBJECT	Science/ Graphic / Italian / English / German/ Informatic
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Digital stories about pollution
TIME	

OBJECTIVES

The main goal of this lesson is to develop oral competence in English /German

TEACHING STRATEGIES

As students can use different scenes and emotions, various grammar rules and vocabulary can be worked on in each story. At the same time, it improves students' creativity and team work, as it can be done in couples.

TEACHING METHOD

In this teaching method ideas about theoretical concepts and operational definitions are learnt in a manner which students find meaningful and enjoyable (and therefore memorable).

ACTIVITY DESCRIPTION

- Students have to create by themselves or in couple digital stories about pollution by using Plotagon: a program that lets you write a TV/movie screenplay and animate it.
- Students have to show every story created to the rest of the class: before listening to each story, just watching it, every couple could interpret the dialogues that the other students have created, in this way they could practise their English /German. This could be evaluated by the teacher through direct observation.
- All stories will be collected by the teacher in a PADLET.

ACTIVITY ASSESSMENT

STUDENTS' IMPACT*

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CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

As students can use different scenes and emotions, various grammar rules and vocabulary can be learnt during each story. At the same time, it improves students' creativity and team work, as it can be done in couples.

Students are more motivated to learn, because they give a personal contribution to the subject rather than being assigned to review a topic or read a textbook chapter.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	1-2 class (secondary school)
SUBJECT	Science/ Graphic /Geography / Italian / English / German /
	Informatic
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Environmental problems
TIME	

OBJECTIVES

Introduction of students to some of the main issues related to climate change.

Students focus on dictionary skills and pronunciation.

Focussing on the lexis in detail will help them to recognise and use these terms outside the classroom.

TEACHING STRATEGIES

This activity can be used as an icebreaker and as an introduction to a particular topic or as a means of developing communicative skills.

TEACHING METHOD

• A game strategy to facilitate action learning. In this teaching method ideas about theoretical concepts and operational definitions are faced in a manner that students find meaningful and enjoyable (and therefore memorable).

ACTIVITY DESCRIPTION

- Brainstorming about terms relating to environmental problems in mother language;
- Students have to find the right translation in different languages (German, English, ...) with the help of a dictionary on line (leo org, reverso,.....);
- recording them in a word stress table;
- One group of students will create a poster deviding the words in groups;
- One group will create a multilingual dictionary about environment;
- One group will create a KAHOOT quiz of the words to play with the other students.
- As homework they have to write sentences with the new words.

ACTIVITY ASSESSMENT

STUDENTS' IMPACT *

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CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

• to widen students understanding of lexis connected to climate change and environmental issues

Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

in different languages;

- to improve understanding of pronunciation information given in a dictionary;
- to take notes and retell information to others;
- to use the new expressions in and outside the classroom

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	4-5 class (secondary school)
SUBJECT	Business, Science, Geography, Chemistry, Social Studies,
	Informatic
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Industry and environment
TIME	

OBJECTIVES

-To learn about ecosystem and how both human and environmental factors affect the ecosystem;

- to learn specifically about the impact of industry on earth ecosystem;

TEACHING STRATEGIES

With group works students will research and learn about the impact of industry on earth ecosystem.

TEACHING METHOD

Group work: an effective method to motivate students, encourage active learning, and develop key critical-thinking, communication, and decision-making skills.

ACTIVITY DESCRIPTION

- STEP 1:

Introduction lesson on industry and manufacturing.

Class Warm-up; Presentation with background of industry and how things are made. Discussions and research in order to get student thinking about industrial processes and greenhouse effect, emissions/environmental concerns.

- STEP 2:

GROUP WORK

Group 1:

- Choose a manufactured product you use every day.
- Research the lifecycle of the product and include the following:
- a) What are the raw materials used in manufacturing this product and how do people get these raw materials?
- b) How are these materials made into the product? Where are the factories that make the product? What are the processes involved?
- c) What kinds of packaging are usually used for the product? How is the packaging produced?
- d) How is the product shipped to stores?

Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- e) How is the product disposed of after its use?
- f) Note any steps which may result in greenhouse gas emissions.

Group 2:

Choose a company that incorporates environmental responsible practices into their business. Provide a brief overview of the company and their business.

Describe these practices and how they help the environment.

Describe how do these practices help the company in costs, image, employee and customer satisfaction.

- STEP 3:

At the end students should make a presentations of their work using PADLET, PREZI, PPT, GLOGSTER or others.

ACTIVITY ASSESSMENT

STUDENTS' IMPACT

ullet

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students will be able:

- To gain an understanding of industry and how products are made.
- Specifically, how some product manufacturing results in environmental threats.
- To examine specific companies and how they are helping in alleviating the environmental impact of their business processes.
- To see how some of the positive processes instituted by businesses to help the environment also positively affects employees, customers and business costs.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	2 - 5 class (secondary school)
SUBJECT	Science, Informatic, Physics, graphic
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	RENEWABLE ENERGY
TIME	

OBJECTIVES

Test and improve students knowledge of renewable energy, advantages and disadvantages of various forms of renewable energy and how the energy works;

TEACHING STRATEGIES

with group works students will research and learn about renewable energies and create presentations to explain advantages and disadvantages of various forms of renewable energy and how the energy works

TEACHING METHOD

Group work: an effective method to motivate students, encourage active learning, and develop key critical-thinking, communication, and decision-making skills.

ACTIVITY DESCRIPTION

Brainstorming about renewable energy;

Group work: Students have to research the advantages and disadvantages of various forms of renewable energy and how the energy works;

Students have to produce a piece of promotional material using ITC (padlet, glogster, canva, prezi, ...) brochures, posters, leaflets or presentations to 'sell' a form of renewable energy. Promotional material should include a description of how the energy works, a list of its features and benefits and diagrams or illustrations.

ACTIVITY ASSESSMENT

STUDENTS' IMPACT

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CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Better understanding of the renewable energy and their importance for the environment; developing key critical thinking, communication, and decision-making skills.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	1-2 class (secondary school)
SUBJECT	Science/ Graphic / Geography / Italian / English / German
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Tree of engagements
TIME	

OBJECTIVES

- Students will take engagements that will change their impact on the environment;
- Recognize their role in taking care of earth;
- Invite their peers and family to make commitments to reduce negative environmental impacts;
- Discuss the importance of individual behaviours in reducing the negative effects of climate change.

TEACHING STRATEGIES

with group works students will learn about climate change, their role in taking care of earth and the importance of individual behaviour in reducing the negative effects of climate change.

TEACHING METHOD

Group work: an effective method to motivate students, encourage active learning, and develop key critical-thinking, communication and decision-making skills.

ACTIVITY DESCRIPTION

- 1) Students have to design together a tree without leaves to be displayed in a common area of school or to plant a tree in a pot;
- 2) students have to make leaves of green paper upon which they can write, they have to cut out leaves and punch a hole through the paper;
- 3) Each student have to take one leaf and write their own pledge on how they plan to fight climate change (turn light off,);
- 4) Students have to hang their leaves on the tree.

This activity can be made in different languages in order to learn environmental glossary.

ACTIVITY ASSESSMENT

STUDENTS' IMPACT *

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CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Better understanding of our environment; developing key critical-thinking, communication, and

Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

decision-making skills.

Students are more motivated to learn, because they have an active role in the subject rather than being assigned to review a topic or read a textbook chapter.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	2-5 class (secondary school)
SUBJECT	Science, Graphic, Informatic, Foreign languages, Italian
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Let's save our Planet
TIME	

OBJECTIVES

The present lesson plan is meant to make students aware of the environmental problems the world has nowadays, to make them reflect upon the fact that if we do not try to change things, the ecosystems are in absloute danger. So, by means of motivating activities and group work, children will learn some important aspects to take into consideration in order to "save the planet".

TEACHING STRATEGIES

with group works students will research and learn about the problems of our planet and design leaflets to explain people the problem and also to invite them to take actions to help our planet.

TEACHING METHOD

Group work: an effective method to motivate students, encourage active learning, and develop key critical-thinking, communication, and decision-making skills.

ACTIVITY DESCRIPTION

Climate change is a very big problem, but there are a lot of little things we can do to make a difference. How can we help? Let's find out!

TASK

You are green activists and you have to make people conscious of the environmental problems. You have to design leaflets to explain people the problem and also to invite them to take actions to help our planet.

PROCESS

Step 1

Make a list of the problems regarding environment, polltion, recycling and work out possible solutions

Find aids on Internet to illustrate your ideas regarding small actions to make the difference.

Step 2

Design your leaflet. It should include a title, a text with the main message and illustrations. All the leaflets should be realised in different languages (Italian, German /English).

Step 3

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Present your leaflet to your classmates.
ACTIVITY ASSESSMENT
STUDENTS' IMPACT *
•
CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:
better understanding of the importance of the environment; developing key critical thinking,
communication and decision-making skills.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	2-5 class (secondary school)
SUBJECT	Science, Geography, Chemistry, Informatic
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Sustainable development
TIME	

OBJECTIVES

- 1. What does sustainable development mean and how can we live more sustainably?
- a) Pollution water, air and land
- b) Over-use of natural resources

TEACHING STRATEGIES

with group works students will research and learn about the problems of our planet and design leaflets to explain people the problem and also to invite them to take actions to help our planet.

TEACHING METHOD

Group work: an effective method to motivate students, encourage active learning, develop key critical thinking, communication and decision-making skills.

ACTIVITY DESCRIPTION

STARTER ACTIVITY:

Show different environmental problems:

Water pollution, Air pollution, Traffic congestion, Landfill, Deforestation.

NEXT ACTIVITY:

Ask the children to think about how much water they and their family use in an average week in their homes and gardens.

They could produce a table showing the different uses: brushing teeth, cooking, watering garden. Each group have to think of a way they could reduce their water usage.

HOMEWORK:

Students have to measure the amount of water wasted if they leave the tap running when they are brushing their teeth.

ACTIVITY ASSESSMENT

STUDENTS' IMPACT*

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Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

better understanding of the importance of our daily action; developing key critical thinking, communication and decision-making skills.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	2-5 class (secondary school)
SUBJECT	science, graphic, informatic, foreign languages, italian
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Earth Day - Webquest
TIME	

OBJECTIVES

- Make students know that every year "The earth day event" is celebrated all over the world.
- Students will learn about the importance of "The earth day event";
- Students will work collaboratively with classmates to determine what makes a message powerful and what information about the environment is more important to share with the community
- Apply what they have learned by composing text and creating illustrations to convey messages related to the Earth Day
- Communicate and share their messages with classmates and with others in their community
- Create awareness and support among the students to protect the environment.

TEACHING STRATEGIES

with a webquest, students will research and learn about the Earth Day and create a padlet and a brochure that show news and information they find.

TEACHING METHOD

WEBQUEST

ACTIVITY DESCRIPTION

TASK

Think about it: what do you do to care and protect the Earth? How can you get your family and the community to help the planet?

You have to work in groups of four to research about the Earth Day

(http://www.earthdayitalia.org) and to create a leaflet describing the information you find! The goal of your leaflet is to teach your family and the community more about the Earth Day and what they can do to care our planet! Detailed instructions on what to include in your pamphlet are found in the process section.

PROCESS

Step 1: Spend a few minutes finding some general information on the Earth Day using the

Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

websites (http://www.earthdayitalia.org), www.earthday.it/, https://www.facebook.com/EarthDayIta/

What is the Earth Day?

When is it? Why is it important?

What do you think about it?

Step 2: Share and discuss your research with your group. Decide which group member will take the role of Historian, Environmentalist, Activist, and Publicist.

Step 3: Once you have decided who will fill each role, go more deeply with your research based on the specific instructions for each group member below.

Historian: Your job is to find out everything you can about the history of the Earth Day! Who started the Earth Day?

When and why?

What is its importance?

Where is it celebrated?

Environmentalist: Your job is to find out everything you can about recycling! What is recycling? Why should we recycle?

How do we recycle?

What kinds of things can we recycle?

Activist: Your job is to find 10 different things that you, your family, or your community can do to take better care of the earth! These can be small changes in daily habits that any individual can do.

Publicist: Your job is to find events that happen in honour of the Earth Day! Look for events happening in our community and across the nation.

Step 4: Work together with your group to create a brochure using Microsoft Publisher. It must include:

A creative and visually appealing title page.

A brief history of the Earth Day, what it is, and why it is important.

Information about recycling, how to do it, and why it is important.

Ten different things people can do to care our planet.

Five local and/or national events honouring the Earth Day.

Step 5: You and your group will translate your leaflet in English and German

Step 6: You and your group will present your leaflet to your class and at home to your families.

ACTIVITY ASSESSMENT

STUDENTS' IMPACT *

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Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The main skills that students learn from this project are a better understanding of the importance of the environment and that publishing their messages, whether it is through words or pictures, can accomplish something

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	1-2 class (secondary school)
SUBJECT	Science/ Graphic / Photography / Geography / Italian / English
	/ German
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Nature Calendar
TIME	

OBJECTIVES

Students will make a nature calendar with nature and landscape photography of the environment of Taranto, showing the months, holidays and other important events the season includes.

TEACHING STRATEGIES

with group works students will research and learn about the nature landscapes of Taranto and the most important events of the seasons

TEACHING METHOD

• Group work: an effective method to motivate students, encourage active learning, and develop key critical thinking, communication, and decision-making skills.

ACTIVITY DESCRIPTION

- Divide children into four groups and explain that each group will make the pages regarding the months of a season:
- Students will make their own grids, using the chart-making feature of a word processing program or a software program, such as Illustrator & InDesignPrint using the photos they take about the nature landscapes of Taranto;
- The description of the landscapes of each month will be done in different languages (Italian, English and German);
- Each group wil share their work with one another;
- Assemble the calendar pages;
- Print the calendar;
- Keep one calendar for the classroom and present the others to the office staff and/or another class.

Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

ACTI	VITY	ASSESSMENT

STUDENTS' IMPACT

ullet

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Better understanding of our environment; developing key critical thinking, communication and decision-making skills.

Students are more motivated to learn, because they have an active role in the subject rather than being assigned to review a topic or read a textbook chapter.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	1-2 class (secondary school)
SUBJECT	Science/ Graphic / Photography / Geography / Italian / English
	/ German / Informatic
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	"Pollution Bingo"
TIME	

OBJECTIVES

This game can help students to learn and review vocabulary words related to pollution; To match words and definitions related to pollution.

TEACHING STRATEGIES

This activity can be used as an icebreaker for new groups, as an introduction to a particular topic or as a means of developing communicative skills. It requires movement and communication with numerous others.

TEACHING METHOD

A game strategy to facilitate active learning. In this teaching method ideas about theoretical concepts and operational definitions are learnt in a manner which students find meaningful and enjoyable (and therefore memorable).

ACTIVITY DESCRIPTION

- The students make their own sheets in different languages by cutting out the squares and pasting them on cardboard or using ITC: Bingo Card Generator on line;
- play in groups of 5 with the created bingo cards in class;
- collect in a padlet all the bingo cards about pollution

ACTIVITY ASSESSMENT

STUDENTS' IMPACT *

•

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students are more motivated to learn, because they have an active role in the subject rather than being assigned to review a topic or read a textbook chapter.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	IPS CABRINI – Taranto
DATE	
TEACHER	
CLASS	1-2 class (secondary school)
SUBJECT	Math / Science/ Graphic / Photography / Geography /
	Informatic
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Statistics of recycling
	"Topic Stages of statistical research"
TIME	

OBJECTIVES

The subject is recycling in school community

- develop phases of a statistical survey, from design to data collection and from elaboration to final report.

Finally, the class will create a presentation to explain their community behaviour.

There are three main aims:

- 1) managing a survey;
- 2) communicating effectively the results;
- 3) thinking about recycling

TEACHING STRATEGIES

With group works students will learn how to manage a survey, how to communicate effectively the results and research and learn about recycling

TEACHING METHOD

Group work: an effective method to motivate students, encourage active learning, and develop key critical thinking, communication, and decision-making skills.

ACTIVITY DESCRIPTION

- 1) Students discuss in group about recycling
- 2) Each group dramatize a spot or create a slogan about "recycling"
- 3) Teacher explains how to create questionnaires;
- 4) Students produce questionnaires with Surveymonkey about recycling:
- 5) During the week students administer questionnaires to some classes in order to collect data;
- 6) Students analyze their information and build a database with Excel (Frequency, percentage, graphs, means and standard deviation)
- 7) Students produce a multimedia presentation with PPT or PREZI about their work;
- 8) At the end every group makes a speech/presentation about its topic in front of the teacher.

ACTIVITY ASSESSMENT

STUDENTS' IMPACT *

•

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Organise of group work;

Speak in public;

Define main groups of recycling;

Pronounce new words about recycling;

Analyse use and methods of Statistics and Mathematics for analysing a large amount of data;

Summarise outputs with a report;

use the language of Statistics and Mathematics to organize information;

Evaluate qualitative and quantitative information



















Earth Day(talia





LITHUANIA

FORMAL ACTIVITIES

Tauragės "Aušros" pagrindinė mokykla



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Rasa Dautarienė
CLASS	4
SUBJECT	Art and Crafts
CURRICULAR COVERAGE	Fruits and vegetables
TOPIC OF THE LESSON	Harvest time
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to show what did they make from fruits and vegetables

TEACHING STRATEGIES

discussion, active learning, praktical work, presentations,

TEACHING METHOD

class discussion conducted by teacher, brainstorming, work in pairs

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher tells about fruits and vegetables that we grow in our gardens. Students show what did they bring to school and disscuss about it.

MAIN BODY:

Teacher explains the task

Students makedifferent thing (use fruit and vegetables)

Students discuss in groups

SUMMARY:

All together disscuss about students' works and make exhibition

ACTIVITY ASSESSMENT

STUDENTS' IMPACT *

- -Developing green world preservation skills and habits.
- -Enhancing ideas and different technologies

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Vida Karbauskienė
CLASS	5
SUBJECT	Art
CURRICULAR COVERAGE	Saving Nature
TOPIC OF THE LESSON	Painting on a Stone
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to show their paintings on stones

TEACHING STRATEGIES

discussion, praktical work, presentations,

TEACHING METHOD

class discussion conducted by teacher, brainstorming, individual work

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher tells about nature problems, that people don't save trees and use too much paper MAIN BODY:

Teacher explains the task

Students work individually

Students discuss in groups aboutpainting on a stone; differences between painting on paper and a stone

SUMMARY:

All together disscuss about students' works and make exhibition

ACTIVITY ASSESSMENT

STUDENTS' IMPACT

- -Developing green world preservation skills and habits.
- -Enhancing ideas and different technologies

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Aida Vaičiūnienė
CLASS	7
SUBJECT	Biology
CURRICULAR COVERAGE	Biodiversity and causes of its loss
TOPIC OF THE LESSON	Forests
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to tell about plants that live in forests; they will know why forests are important for people and animals

TEACHING STRATEGIES

discussion, active learning, presentations

TEACHING METHOD

class discussion conducted by teacher, brainstorming, group work

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher asks students what do they know about forests

MAIN BODY:

Teacher explains definition of forest and tells what do forests consist of; why do we have to save forest; why are they useful;

Students present their ideas

Students discuss in groups

SUMMARY:

Teacher summarises all information and gives students a review activity "What have you learned today?".

ACTIVITY ASSESSMENT

Homework (excercises in student book)

STUDENTS' IMPACT

- Understanding the role of project proposals in project management.
- -Developing green world preservation skills and habits.
- -Enhancing ideas about environmental protection activities.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Aida Vaičiūnienė
CLASS	8
SUBJECT	Biology
CURRICULAR COVERAGE	Animals
TOPIC OF THE LESSON	Our pets
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to tell about pets that they have or would like to have; what important thingsthey should know

TEACHING STRATEGIES

discussion, active learning, presentations, watching movie

TEACHING METHOD

class discussion conducted by teacher and guest of the lesson, brainstorming

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher presents the guest who will tell about animals, care about them. They remind students that 4th October is World Animal Day

MAIN BODY:

Guest of the lesson (naturalist) tells students about World Animal Day

Guest of the lesson tells students about different pets

Students watch short movies

Students discuss in groups and with naturalist

SUMMARY:

Teacher summarises all information and gives students a review activity "What have you learned today?".

ACTIVITY ASSESSMENT

Homework (excercises in student book)

STUDENTS' IMPACT

- Understanding the role of project proposals in project management.
- -Developing understanding about animals
- -Enhancing ideas

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Aida Vaičiūnienė/ Daiva Kvietkuvienė
CLASS	6
SUBJECT	Biology/English
CURRICULAR COVERAGE	Biodiversity and causes of its loss
TOPIC OF THE LESSON	Passport of the tree?
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to tell about plants tipe, age, heigh, why it is useful

TEACHING STRATEGIES

discussion, active learning, working in groups, presentations

TEACHING METHOD

class discussion conducted by teacher, brainstorming, group work, practical work

ACTIVITY DESCRIPTION

INTRODUCTION:

Teachers give tasks for each group

MAIN BODY:

Using their knowledge students try to decide tree's age, height, tipe

Students draw the seed of the tree

Students discuss in groups and answer to extra questions about trees

SUMMARY:

Teacher summarises all information and gives students a review activity "What have you learned today?".

ACTIVITY ASSESSMENT

Homework (excercises in student book)

STUDENTS' IMPACT *

- Understanding the role of project proposals in project management.
- -Developing green world preservation skills and habits.
- -Enhancing ideas about environmental protection activities.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Aida Vaičiūnienė
CLASS	8
SUBJECT	Civil Safety
CURRICULAR COVERAGE	Health
TOPIC OF THE LESSON	Washing Liquids and Aerosols
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to tell about what problems do aerosols and wasing liquides make for human's health and environment

TEACHING STRATEGIES

discussion, active learning, research

TEACHING METHOD

class discussion conducted by teacher, brainstorming, group work

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher asks students what do they know about washing liquides and aerosols, why do we need them

MAIN BODY:

Teacher explains definition of aerosols and wasing liquides, tells how muc people use them in everydays life

Students do researh to decide how dangerous these things are for breathing, for skin, for plants

Students discuss in groups and present their ideas

SUMMARY:

Teacher summarises all information and gives students a review activity "What have you learned today?".

ACTIVITY ASSESSMENT

Homework (excercises in student book)

STUDENTS' IMPACT

- Understanding the role of project proposals in project management.
- -Developing green world preservation skills and habits.
- -Enhancing ideas about environmental protection activities.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Daiva Kvietkuvienė
CLASS	8
SUBJECT	English
CURRICULAR COVERAGE	Animals
TOPIC OF THE LESSON	Endangered Animals
TIME	45 minutes

OBJECTIVES

After the lesson students will know more about endangered animals, reasons and what people should do for to stop this

TEACHING STRATEGIES

discussion, active learning, presentations

TEACHING METHOD

class discussion conducted by teacher, brainstorming,

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher tells about some species of animals that are endangered and people are responsible for it.

MAIN BODY:

Using their prepared presentations students tell about endangered animals

After presentation each student answers to the questions (classmates prepare these questions)

Students discuss about reasons (why these animals are endangered) and ways how to save them

SUMMARY:

Teacher summarises all information and gives students a review activity "What have you learned today?".

ACTIVITY ASSESSMENT

Homework (excercises in student book)

STUDENTS' IMPACT

- Understanding the role of project proposals in project management.
- -Developing green world preservation skills and habits.
- -Enhancing ideas about environmental protection activities.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Rasa Raudonienė
CLASS	2
SUBJECT	Science
CURRICULAR COVERAGE	Biodiversity and causes of its loss
TOPIC OF THE LESSON	Trees
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to tell about parts of a tree, why a tree is usefull for people and animals

TEACHING STRATEGIES

discussion, active learning, cooperative learning

TEACHING METHOD

class discussion conducted by teacher, brainstorming, group work, analysis

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher asks students what do they know about trees and invite to go to the school park MAIN BODY:

Teacher explains definition of a treet and tells what does a tree consist of; why do we have to save trees; why are they useful;

Students present their ideas, check if all trees have parts that teacher mentioned Students discuss in groups: what kind of life would be if we didn't have trees SUMMARY:

Teacher summarises all information and gives students a review activity "What have you learned today?".

ACTIVITY ASSESSMENT

Homework (excercises in student book)

STUDENTS' IMPACT

- Understanding the role of project proposals in project management.
- -Developing green world preservation skills and habits.
- -Enhancing ideas about environmental protection activities.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Rasa Raudonienė
CLASS	2
SUBJECT	Science
CURRICULAR COVERAGE	Biodiversity and causes of its loss
TOPIC OF THE LESSON	Water Pollution
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to tell about changes of water after we put washing liquid in it and why do we have to save clean water

TEACHING STRATEGIES

discussion, active learning, cooperative learning, research

TEACHING METHOD

class discussion conducted by teacher, brainstorming, group work, analysis

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher asks students what do they know about polluted water, how people pollute water MAIN BODY:

Teacher explains definition of polluted water, tells the ways how it becomes polluted Students present their ideas, disscuss all together, talk about their experience

Students do research: put different wasing liquids to water and disscuss about changes of the water.

All together disscuss about consequences of such water (die fish, water animals and plants, people cannot drink such water)

SUMMARY:

Teacher summarises all information and gives students a review activity "What have you learned today?".

ACTIVITY ASSESSMENT

Homework (excercises in student book)

STUDENTS' IMPACT

- Understanding the role of project proposals in project management.
- -Developing green world preservation skills and habits.
- -Enhancing ideas about environmental protection activities.
- students gained new skills connected with debate and formulate of own opinions;

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Tauragės "Aušros" pagrindinė mokykla
DATE	
TEACHER	Vida Karbauskienė
CLASS	7
SUBJECT	Technology
CURRICULAR COVERAGE	Saving Nature
TOPIC OF THE LESSON	Vase
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to show their vases

TEACHING STRATEGIES

discussion, praktical work, presentations,

TEACHING METHOD

class discussion conducted by teacher, brainstorming, individual work

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher tells about nature problems, that people don't save trees and use too much paper for many things. Instead of thowing paper to rubbish or recycling bin we can use it to make nice things.

MAIN BODY:

Teacher explains the task

Students work individually

SUMMARY:

All together disscuss about students' works and make exhibition

ACTIVITY ASSESSMENT

STUDENTS' IMPACT*

- -Developing green world preservation skills and habits.
- -Enhancing ideas and different technologies

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)





POLAND

FORMAL ACTIVITIES

I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	
TEACHER	Joanna Hubert
CLASS	1
SUBJECT	Biology
CURRICULAR COVERAGE	Biodiversity and causes of its loss
TOPIC OF THE LESSON	What are natural resources?
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to define a natural resource. Students will be able to identify the main natural recourses present on Earth.

TEACHING STRATEGIES

discussion, active learning, cooperative learning

TEACHING METHOD

class discussion conducted by teacher, brainstorming, group work

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher asks students what are natural resources and encourage them to make educated guesses.

MAIN BODY:

Teacher explains definition of natural resources and differences between renewable and non-renewable resources (use a poster).

Students work in small groups. Each group thinks about results of resource depletion and shows how important alternative energy resources are for the environment and human. Each group presents its opinion to a class.

SUMMARY:

Teacher summarises all information and gives students a review activity "What have you learned today?".

ACTIVITY ASSESSMENT

Homework (excercises in student book)

STUDENTS' IMPACT

- -Awareness of the impact of human actions on nature.
- -Developing green world preservation skills and habits.
- -Enhancing of interest in participating in the environmental protection activities.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	
TEACHER	Joanna Hubert
CLASS	1
SUBJECT	Biology
CURRICULAR COVERAGE	Biodiversity and causes of its loss
TOPIC OF THE LESSON	Different types of environmental conservation in Poland
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to point out different types of environmental conservation in Poland. Students will be able to characterise main national parks in Poland and show why are they important to nature.

TEACHING STRATEGIES

active learning, cooperative learning

TEACHING METHOD

group project, class discussion conducted by teacher, brainstorming,

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher asks students what types of environmental conservation they know.

Teacher explain what are national parks and nature reserves.

MAIN BODY:

Students work in pairs. Each pair reads information in student book about one national park in Poland (chosen by teacher). They take notes about geographical location, fauna and flora.

Each group presents their work to a class- shows the location of national park on the map and describes why it is important for nature.

SUMMARY:

To sum up the lesson teacher asks students short questions about each national park.

ACTIVITY ASSESSMENT

Homework: Compare types of environmental preservation in Poland and in Europe. Find information on the internet and other available sources.

STUDENTS' IMPACT

- Awareness of the impact of human actions on nature.
- Developing green world preservation skills and habits.
- Enhancing of interest in participating in the environmental protection activities.
- Refinement of the independent learning techniques through investigation, selection, presentation

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	
TEACHER	Joanna Hubert
CLASS	1
SUBJECT	Biology
CURRICULAR COVERAGE	Biodiversity and causes of its loss
TOPIC OF THE LESSON	How is biodiversity related to the biosphere?
TIME	45 minutes

OBJECTIVES

After the lesson students will be able to:

- identify human-caused species loss as one of the major current threats to biodiversity.
- explain how the disappearance of one species affects other species.

TEACHING STRATEGIES

active learning, cooperative learning

TEACHING METHOD

group project, class discussion conducted by teacher, video, brainstorm, analysis of data

ACTIVITY DESCRIPTION

INTRODUCTION:

Teacher explains what biodiversity means and asks students why is biodiversity important to keep balance in nature (brainstorm - students give some ideas).

MAIN BODY:

Students work in pairs. They analyse the data about numbers of species on Earth. Then students decide which kingdom is the richest.

Students watch short video about Great Barrier Reef and Amazon Rainforest. After the video they discuss the roles of these ecosystems and the dangers to their biodiversity. SUMMARY:

Students decide what people should do to keep biodiversity safe and why it is important. They write the ideas on the blackboard.

ACTIVITY ASSESSMENT

Homework: excercises in student book. Teacher reminds about a short test during the next lesson (biodiversity and its preservation and role).

STUDENTS' IMPACT

- Awareness of the impact of human actions on nature.
- Developing green world preservation skills and habits.
- Enhancing of interest in participating in the environmental protection activities.
- Refinement of the independent learning techniques through investigation, selection, presentation

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	
TEACHER	Anna Matuszewska
CLASS	12
SUBJECT	Sustainable development and Human Development Index
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	
TIME	45 minutes

OBJECTIVES

- better understanding of disproportion in wealthy of countries around the world
- better understanding of causes of these differences
- introduction of Human Development Index
- better understanding of importance of sustainable development approaches
- enhanced understanding of Sustainable Development Goals nr 1 No Poverty

TEACHING STRATEGIES

Presentation Methods

- Lecture (teacher-student)

Activating Methods

- Co-operation (teacher-student, student-resources)
- solving problems independently (student-resources)
- considering (student-student, student-resources)

TEACHING METHOD

- lecture
- brainstorming searching for data HDI and preparation of comparison source working
- carrying out discussion about lowest

ACTIVITY DESCRIPTION

- students take part in the lecture about Sustainable Development Goal nr 1 and introduction of Human Development Index
- students are divided into groups, they are searching for HDI data in a given areas
- analysis of results on a forum of class
- discussion about the role of every human in fighting poverty
- questions and answers

ACTIVITY ASSESSMENT

STUDENTS' IMPACT *

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students are engaged into research, they discuss negative aspects of poverty around world, they

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

propose solutions to solve different issues.

The lesson increases awareness of students in creation of positive political environment to help fight poverty.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	
TEACHER	Anna Matuszewska
CLASS	12
SUBJECT	Initiatives and inventions of helping developing countries
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	
TIME	45 minutes

OBJECTIVES

- better understanding of disproportion in wealthy of countries around the world
- better understanding of causes of these differences
- better understanding of importance of sustainable development approaches
- better understanding of role of initiatives to help developing countries
- enhanced understanding of Sustainable Development Goals nr 1 No Poverty

TEACHING STRATEGIES

Presentation Methods

- Lecture (teacher-student)

Activating Methods

- Co-operation (teacher-student, student-resources)
- solving problems independently (student-resources)
- considering (student-student, student-resources)

TEACHING METHOD

- lecture
- brainstorming searching for different programs which helps developing countries (ex. Fair Trade, Lifestraw)
- carrying out discussion about role of those initiatives in achieving goal nr 1
- group work how to provide nationally appropriate social protection systems

ACTIVITY DESCRIPTION

- subject is a continuation of previous one
- students are divided into groups, they are searching for different initiative that helps developing countries

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- analysis of results on a forum of class
- discussion about the role of different inventions to help fighting poverty
- students are divided into groups and they are working on social protection systems
- questions and answers

ACTIVITY ASSESSMENT

STUDENTS' IMPACT*

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students are engaged into research about initiatives that helping developing countries. Afterwards they are proposing social protection systems to solve different issues.

The lesson increases awareness of students in creation of positive political environment (local and international) to help fight poverty.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	
TEACHER	Anna Matuszewska
CLASS	12
SUBJECT	International law of protecting nature
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	
TIME	45 minutes

OBJECTIVES

- better understanding of climate changes
- better understanding of role of implementation of Paris Agreement to achieve sustainable development approaches
- enhanced understanding of Sustainable Development Goals nr 13 Climate Change

TEACHING STRATEGIES

Presentation Methods

- Lecture (teacher-student)

Activating Methods

- Co-operation (teacher-student, student-resources)
- solving problems independently (student-resources)
- considering (student-student, student-resources)

TEACHING METHOD

- lecture about Paris Agreement
- brainstorming searching for data about natural disasters and its causes
- carrying out discussion about role of integration climate change measures into national policies, strategies and planning

ACTIVITY DESCRIPTION

- students take part in the lecture about Sustainable Development Goal nr 13
- students are divided into groups, they are searching for different data about natural disasters
- analysis of results
- discussion about the role of integration climate change measures into national policies, strategies

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

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- questions and answers

ACTIVITY ASSESSMENT

STUDENTS' IMPACT

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students are engaged into research natural disasters. Afterwards they are proposing what international law can be provided to reduce climate change.

The lesson increases awareness of students in creation of positive political environment (local and international) to help fight climate change.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	March 2017
TEACHER	Jagoda Wąsik
CLASS	3a, 3b
SUBJECT	English
CURRICULAR COVERAGE	Nature
TOPIC OF THE LESSON	The ozone layer, sustainable development and greenhouse
	effect – reading and vocabulary
TIME	45 minutes

OBJECTIVES

Teaching new vocabulary,

Raising the students' awareness of environmental problems,

Explaining phenomena to students,

Improving reading skills.

TEACHING STRATEGIES

Reading.

Using paper or electronic dictionaries or glossaries,

Taeching,

TEACHING METHOD

Coursebooks, dictonaries, the internet.

ACTIVITY DESCRIPTION

The teacher ask questions about the most common environmental problem.

Students participate in the discussion,

Students read the text and fill in the gaps using the vocabulary given, they use dictionaries or ask the teacher is necessary.

ACTIVITY ASSESSMENT

The activity allowes the students to gain knowledge about the most dangerous environmental phenomena.

It teaches the new vocabulary in context.

STUDENTS' IMPACT

- -Awareness of the impact of human actions on nature
- -Developing green world preservation skills and habits
- -Enhancing of interest in participating in the environmental protection activities
- -Stimulating the desire for lifelong formal, non-formal and informal learning in order to prevent early school leaving and dropout

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

It is hoped that students would participate eagerly.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	March 2017
TEACHER	Jagoda Wąsik
CLASS	3a, 3b
SUBJECT	English
CURRICULAR COVERAGE	Nature
TOPIC OF THE LESSON	Organising an environmental campaign against consumerism – speaking
TIME	45 minutes

OBJECTIVES

Revising the nature vocabulary items,

Raising the students' awareness of environmental problems,

Explaining phenomena to students,

Improving speaking skills.

TEACHING STRATEGIES

Discussion.

Using paper or electronic dictionaries or glossaries,

Taeching and explainig

TEACHING METHOD

Flashcards, coursebooks, dictonaries, the internet.

ACTIVITY DESCRIPTION

The teacher ask questions about consumerism and its impact on the environment.

Students participate in the discussion, they choose the best poster for their campaign and justify their choices.

Students answer the questions connected with consumerism and the environment.

They discusse the the usefulness of similar campaigns.

ACTIVITY ASSESSMENT

The activity allowes the students to gain knowledge about consumerism and its impact on the environment.

It teaches the expressing opinions and develops speaking skills.

STUDENTS' IMPACT

- -Awareness of the impact of human actions on nature
- -Developing green world preservation skills and habits
- -Enhancing of interest in participating in the environmental protection activities
- -Stimulating the desire for lifelong formal, non-formal and informal learning in order to prevent early school leaving and dropout

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- Shaping active citizenship abilities and skills
- -Initiative and volunteering spirit

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

It is hoped that students would participate eagerly.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	
TEACHER	Bartłomiej Kopaczyński
CLASS	2a Geography higher level
SUBJECT	Geography
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Causes of global climate change
TIME	45 minutes

OBJECTIVES

To state/list and then discuss the causes of global climate change and

TEACHING STRATEGIES

Cooperative and collaborative learning; critical thinking;

TEACHING METHOD

classroom debate:

ACTIVITY DESCRIPTION

The group of 16 students was divided into 2 groups: human causes and essentially natural (environmental), then after one week preparation (background reading, preparing arguments) the debate started in the classroom; both sides presents the crucial pros for their side; then came suggestions from opposite group; then we came to the conclusions (more human than natural) and summary;

ACTIVITY ASSESSMENT

The task was fully realised and gave expected results;

STUDENTS' IMPACT

Growth of environmental awareness; awareness of the impact of human actions on nature; students gained new skills connected with debate and formulate of own opinions;

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

As always during the group work, were few people who worked hard and few who were only observers; generally most of the students were actively involved;

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie
DATE	25.11.2017
TEACHER	Bartłomiej Kopaczyński
CLASS	2a Geography higher level
SUBJECT	Geography
CURRICULAR COVERAGE	
TOPIC OF THE LESSON	Water cycle
TIME	45 minutes

OBJECTIVES

Description of watercycle and and examination of some of global factors limiting access to fresh water and possible consequences;

TEACHING STRATEGIES

Based on case studies from global to regional scale (Africa);

TEACHING METHOD

Video (Water changes everything - https://www.youtube.com/watch?v=BCHhwxvQqxg) and discussion:

ACTIVITY DESCRIPTION

Introduction to the elements of water cycle, description of areas of water scarcity, then with the help of short video we identified main problems with access to fresh water in Africa; we discussed the consequences of danger situation of girls and women in african countries (especially Sahel region);

ACTIVITY ASSESSMENT

The task was partially realised - the topic was to broad. Next time the focus should be narrowed. Although the topic was partially realised, the results achieved were satisfied and stimulate students to thinking about problem of our local water shortages;

STUDENTS' IMPACT *

Growth of environmental awareness; awareness of the impact of human actions on nature; broadening student's perspective

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The interest of students was high, although the problem must be exemplified more on local scale, it is then more important;

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)





PORTUGAL FORMAL ACTIVITIES



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	December 2015
TEACHER	Cristina Silva
CLASS	12 th F
SUBJECT	Interior/Exterior Design
CURRICULAR COVERAGE	Exhibition Design
TOPIC OF THE LESSON	Christmas Decorations
TIME	20 lessons of 45 minutes each

OBJECTIVES

• Projecting and creating Christmas decorations for different spaces/areas at school using reflector recycled material.

TEACHING STRATEGIES

- Study cases teacher presentation and demonstration;
- Students show their own critical and creative point of view throughout the project;
- Study visit.

TEACHING METHOD

- Teacher supervises the projects;
- Design method:
 - Researching;
 - Planning;
 - Projecting;
 - Executing

ACTIVITY DESCRIPTION

- Class is divided into working groups;
- Allocation of spaces to be intervened;
- Study of the spaces to be intervened;
- Study of the recycled material appropriated for each project and space;
- Developing a project bearing in mind all the aforementioned criteria;
- Selection and gathering of the recycled materials;
- Projects developing;
- Testing the projects at the allocated spaces;
- Installation of the Christmas Crib, the Christmas Trees and other decorations done with the reflector recycled material.

ACTIVITY ASSESSMENT

- Observation grid
- Rubrics assessment

STUDENT IMPACT*:

- Awareness of the impact of human actions on nature;
- Developing green world preservation skills and habits;
- Developing of project management skills;

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- Intensification of an entrepreneurial spirit;
- Developing entrepreneurial abilities such as: persuasion, responsibility, interpersonal abilities and leadership among others.

- This activity went on very well with all the students motivated and embraced in the project and that caused a great impact at school.
- The school got an honorable mention for the "Angel" project from the Barreiro Town Hall in the Christmas Contest that takes place every December in our municipality.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	September 2016
TEACHER	Cristina Ramalho
CLASS	Year 11 (Classes B, D and E)
SUBJECT	English
CURRICULAR COVERAGE	The world around us
TOPIC OF THE LESSON	Environmental problems
TIME	2 x 90 min

OBJECTIVES

Students will be able to:

- Analyse a film as a text.
- Define the most common environmental problems.
- Identify the causes and consequences of the most common environmental problems.
- Extend their understanding of vocabulary connected to environmental issues.
- Develop research and teamwork skills.
- Design a poster to express knowledge in a creative and engaging way.

TEACHING STRATEGIES

- Film
- Use of technology
- Cooperative learning

TEACHING METHOD

Use of different social forms

ACTIVITY DESCRIPTION

- Students watch the film "The Simpsons Movie", which deals mainly with water pollution.
- The teacher checks students' understanding of the film content through a worksheet containing 6 different types of exercises (Multiple Choice: genre, setting and topic; filling in a table: characters; ordering sentences: plot; matching: cultural references and allusions; identifying who said a few memorable quotes from the film; filling in a diagram with environmental problems).
- Students are given a set of cards containing the most important/common environmental problems and their definitions. In pairs, they are asked to match each environmental problem with their definition. Correction and systematisation follow.
- Students are split into small groups of 3/4 members. Each group is assigned a different environmental problem. In 15 minutes they have to research and select information about the causes and consequences of their environmental problem.
- The spokesperson from each group reports back.
- Systematization follows.
- Students are reorganised in other groups of 3/4 members. They are asked to choose one of the environmental problems dealt with in class and create an awareness poster. A time limit is set

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for designing their posters.

- The teacher revises briefly the key points of well-structured and appealing poster.
- Each group presents their poster to the class and explains the choices made for constructive feedback. Students should use that feedback to revise and improve their work as homework assignment.
- Follow-up activity: The best posters will be printed and displayed in the school library to raise awareness of environmental problems within the school community.

ACTIVITY ASSESSMENT

Feedback from students' answers/involvement/participation

Assessment criteria for students' posters:

- Message (content/power)
- Use of Graphics/pictures
- Visual clarity and appeal
- Originality
- Grammar/Spelling

STUDENTS' IMPACT

- Awareness of the impact of human actions on nature
- Development of green world preservation skills and habits
- Enhancement of the level of interest in participating in the environmental protection activities
- Refinement of the independent learning techniques through investigation, selection, presentation
- Development of digital competencies

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students were highly engaged in the classroom activities; however, a few groups could have put more effort into the design of their posters as they had the chance to improve them as homework assignment.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	December 2016
TEACHER	Cristina Ramalho
CLASS	12.°A/B
SUBJECT	English
CURRICULAR COVERAGE	Global inequality
TOPIC OF THE LESSON	Food waste
TIME	90 min

OBJECTIVES

Students will be able to:

- Develop understanding of the impact of food loss and food waste on global culture and the environment
- Distinguish food loss from food waste
- Identify the causes and consequences of food loss and food waste
- List tips/strategies to reduce the amount of wasted food
- Scan a text to locate desired information and gather information in order to fulfil a specific task
- Develop teamwork and digital skills
- Produce a short video

TEACHING STRATEGIES

- Use of different types of text (video/article)
- Cooperative Learning
- Discussions
- Integrating technology

TEACHING METHOD

- First part: teacher-centred
- Second part: student-centred

ACTIVITY DESCRIPTION

- 1. Students are asked which words they associate waste with. Then they are asked to think of the kind of waste they and their families produce the most.
- 2. Using the fact that food is definitely one of the words students commonly associate waste with, as well as being one the things they probably waste the most, a class discussion about the concepts of food loss, food waste and "foodprint" is held. Systematization follows.
- 3. Students are asked how much food they waste per week, why they waste it and if they ever think about the food they waste as they throw it in the trash or leave it on their plate.
- 3. Watching and holding a class discussion about the video "Why are we wasting so much food?", which can be found at https://www.youtube.com/watch?v=Jbo1ZpJBcVE (What's the message of the video? Why does Tristram Stuart argue that food waste is a global scandal? Which reasons lie behind food waste? Who's responsible for it? What are the consequences? What is the viewer urged to do? How does the video and its message make you feel? Why?). Systematization of the

results of the class discussion.

- 4. In pairs, students go through the text "4 Surprising Reasons to Measure and Reduce Food Loss and Waste" by Brian Lipinski Brian Lipinski available at http://www.wri.org/blog/2016/06/4-surprising-reasons-measure-and-reduce-food-loss-and-waste in order to fill in a table with the benefits of reducing food loss and waste and the ways to make those benefits become a reality. Correction follows.
- 5. Students are divided into small groups of 3/4. Working in groups, they discuss how they and their families could reduce wasted food. Each group is supposed to come up with a list of 6 tips.
- 6. The spokesperson of each group reports back. Systematization follows.
- 7. In groups, students are asked to think of the most common ingredients used at their homes and the most common leftovers, to discuss how those leftovers could be reused, that is to say, to create/suggest a healthy recipe which would include those leftovers.
- 8. Each group presents their recipe to the rest of the class (the whole procedure: ingredients needed and how it is cooked).
- 9. Students express their opinions on their peers' recipes. Feedback can be used to improve them.
- 10. As follow-up work students are challenged to cook their recipes and make a video on it during the Christmas break. The video should be 3/5 minutes long and include 3 stages: preparation, production and plating.
- 11. A lesson at the beginning of the second term will be assigned for students to present their videos. Students will also be encouraged to share them on their social media.

ACTIVITY ASSESSMENT

- Informal assessment (direct observation)
- Criteria to assess students' videos:
 - Creativity and originality
 - Content relevance
 - Organisation
 - Use of the English language (appropriate vocabulary; correct structures)
 - Technical aspects

STUDENTS' IMPACT

- Awareness of the impact of human actions on nature
- Development of green world preservation skills and habits
- Enhancement of active citizenship abilities and skills
- Improvement of digital competencies

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students were highly engaged in all classroom activities. The videos created by students even exceeded the teacher's expectations.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	April 2016		
TEACHER	Paula Neves		
CLASS	Year 8 (Classes A and E)		
SUBJECT	Physics and Chemistry		
CURRICULAR COVERAGE	Sound and Waves		
TOPIC OF THE LESSON	Musical instruments		
TIME	3X45minutes (planning and execution) 1X90 minutes		
	(Presentation and assessment)		

OBJECTIVES

Students will be able to:

- Consolidate and demonstrate the knowledge learnt in the previous lessons within the topic "Sound and Waves".
- Demonstrate that recycling and reusing materials are beneficial to a sustainable environment.
- Design and create musical instruments from recycled material.
- Make an instrument that vibrates and makes sound.
- Know the families of musical instruments and their characteristics (Percussion, String and Wind).
- Recognise different instruments by their shapes and their sounds.
- Develop teamwork skills.
- Develop manual dexterity skills
- Develop a taste for music.
- Improve presentation skills.

TEACHING STRATEGIES

Cooperative learning

TEACHING METHOD

- Teacher- centred only at the beginning
- Mostly student-centred: group work

ACTIVITY DESCRIPTION

- The class is divided into groups of 4 elements each. There shouldn't be more than 5 groups working simultaneously.
- The teacher shows various instruments made from recycled materials, explains how they were produced and the materials needed. Students are told that their musical instruments must produce sound.
- As a group, students choose the type of instrument they're going to make. They register in a grid provided by the teacher the type of instrument chosen, the materials they're going to need and the names of the students that were assigned the responsibility of bringing to class the

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materials to create their musical instrument. The grid is handed in to the teacher.

- In groups, students design, make and test their musical instrument.
- The teacher assists students while they're creating their musical instrument.
- Students present their musical instrument to the class and play it.
- Students assess the instruments made by the other groups.

ACTIVITY ASSESSMENT

While creating the musical instruments, students were assessed according to the following criteria:

- Compliance with the class rules
- Compliance with safety standards
- Handling materials
- Contribution to the classroom cleanness and storage of materials
- Responsibility: punctuality; meeting the deadlines; bringing the material needed to class
- Behaviour: respect and cordiality towards the other group members and all the other groups
- Participation: involvement in the assignment

After having created their musical instrument, students was assessed bearing in mind:

- The final output: its appearance, fragility and sound produced
- The presentation of the instrument to the class

Finally, as group, students' assessed the musical instruments created by the other groups.

STUDENTS' IMPACT *

- Awareness of the impact of human actions on nature
- Development of green world preservation skills and habits
- Enhancement of the interest in participating in the environmental protection activities
- Development of entrepreneurial abilities (persuasion, responsibility, interpersonal abilities, leadership, etc.)
- Improvement of active citizenship abilities and skills
- Optimization of interpersonal and social relationships
- Valorisation of student potential
- Refinement of the independent learning techniques through investigation, selection, presentation
- Development of the observation spirit and that of civic conscience
- Stimulating the desire for lifelong formal, non-formal and informal learning in order to prevent early school leaving and dropout

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

This activity aroused great interest among the students from the very beginning. They were so engaged in the activity that whenever the bell rang, they didn't want to leave the classroom, in other words, they wanted to go on working on their musical instrument. Their behaviour was excellent and the instruments created clearly surpassed the teacher's expectations.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	3^{rd} Term – 18^{th} , 2	21 st , 26 th and 28 th April 2016
TEACHER	Maria Fernanda C. Martins	
CLASS	10 th E	
SUBJECT	Drawing A	
CURRICULAR COVERAGE	Materials	Mitigating means, Infographics
	Procedures	Testing and techniques
	Sintax	The areas of the plastic language
	Form	Form studies, Drawing and Plans, Colour,
		Space and Volume
TOPIC OF THE LESSON	Figurative or imaginary landscape on Climate Campaign – Pro	
	a Sustainable Environment	
TIME	Two periods of 135 minutes in the third term	

OBJECTIVES

- Using drawing and the representation means as instruments of knowledge and questioning;
- Controlling, knowing and using the different senses and uses that the graphic recording can assume;
- Developing and controlling the structural concepts of the visual communication and of the plastic language;
- Understanding the articulation between the perception and the representation of the visible world.

TEACHING STRATEGIES

- Theoretical-practical classes relating the syllabus and the suggested topic in the lesson plan;
- Study cases;
- Previous visualization of pictures and video watching about Man's climate actions in the local environment and the consequent problems such as global warming;
- Teaching resources of didactic material.

TEACHING METHOD

- Observation of the associated concepts to the suggested theme;
- Watching videos related to environment sustainability, as the example of "Earth Song" by Michael Jackson.

ACTIVITY DESCRIPTION

• Creating a figurative or imaginary landscape that warns people about climate problems, environmental threats and global warming.

ACTIVITY ASSESSMENT

- Direct observation
- Assessment rubrics

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STUDENTS' IMPACT

- Awareness of the impact of human actions on nature;
- Developing green world preservation skills and habits;
- Enhancing interest in participating in environmental protection activities;
- Involvement in the design and implementation of environmental projects in schools;
- Shaping active citizenship abilities and skills;
- Valorization of student potential;
- Refinement of the independent learning techniques through investigation, selection, presentation;
- Stimulating the desire for lifelong formal, non-formal and informal learning in order to prevent early school leaving and dropout.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

• Students showed commitment, enthusiasm and creativity while performing the activity.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	October 2016
TEACHER	Cristina Ramalho
CLASS	Year 11 (Classes B, D and E)
SUBJECT	English
CURRICULAR COVERAGE	The world around us
TOPIC OF THE LESSON	Renewable and non-renewable sources of energy
TIME	90 min

OBJECTIVES

Students will be able to:

- List fossil fuels and renewable energy resources
- Identify the advantages and disadvantages of fossil fuels and renewable energy resources
- Explain basic facts about various renewable energy sources
- Improve their research, teamwork, decision-making skills

TEACHING STRATEGIES

- Game
- Video
- Use of technology
- Cooperative Learning

TEACHING METHOD

- Teacher-centred
- Student-centred (Group work)

ACTIVITY DESCRIPTION

- Playing the PowerPoint game "What's behind the box?" Pictures of fossil fuels and renewable sources of energy are placed behind boxes. One box at a time is removed until the entire picture is uncovered. Students try to guess the picture all along the way.
- Having students say what the pictures have in common (they are all sources of energy). Asking students to split them into 2 different groups and give them a heading and explain their choice. Systematization follows.
- Playing twice the video https://www.youtube.com/watch?v=0rt9d_0nlwI. Students fill in a diagram with information about fossil fuels (definition, formation, main advantage, main disadvantages, types and their pros and cons). Correction follows.
- Brainstorming ways to reduce the excessive use of fossil fuels and its impact on the environment.
- Brainstorming the advantages of using renewable energy resources over fossil fuels.
- Dividing the class into groups of four. Having each group research a different renewable energy source on the Net bearing in mind the following topics: definition, examples,

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advantages, disadvantages and the top countries using it. A time limit is set for students to conduct their research. The teacher assists students while completing their task.

• Having each group share their findings with the class.

ACTIVITY ASSESSMENT

- Direct observation of students' engagement in the classroom activities.
- Level of student engagement in the group work.
- Students' presentations: Research/ Content of Presentation/Communication (Clarity/Style)

STUDENTS' IMPACT *

- Awareness of the impact of human actions on nature
- Development of green world preservation skills and habits
- Refinement of the independent learning techniques through investigation, selection, presentation

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The students proved to be highly involved in all activities. All groups managed to make their research on the renewable energy source assigned to them within the time limit and to share their findings with the class, probably because they're already used to performing this type of activity.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	14/03/2016
TEACHER	Sílvia do Rosário Zuzarte Machado
CLASS	Year 10
SUBJECT	Mathematics
CURRICULAR COVERAGE	Curriculum of year 10: Sampling techniques/data analysis techniques
TOPIC OF THE LESSON	Environmental awareness
TIME	90+90+90 minutes

OBJECTIVES

- Inferring, from a representative sample, the level of environmental awareness of 12th graders at Escola Secundária de Casquilhos.
- Understanding the difference between population and sample.
- Recognising several methods of sample selection and being able to choose the appropriate sampling method for the given situation.
- Analysing statistical data and drawing conclusions.
- Calculating the average and observing its limitations.
- Developing some competencies like autonomy, collaboration and the use of digital tools.

TEACHING STRATEGIES

- The teacher presents the task that the students have to carry out, explaining what they are intended to develop.
- The teacher forms groups using "Team Up". The following students' characteristics are taken into account so that heterogeneous groups can be formed: digital skills, English skills and performance in Mathematics.

TEACHING METHOD

• The teacher takes an active role in the presentation of the work that students will undertake. After that, the teacher assumes the role of moderator and counselor.

ACTIVITY DESCRIPTION

- After the formation of groups, there will be a brainstorming on "environmental awareness", using the Popplet, to find out students' perceptions on this subject matter.
- The teacher shares on the Drive of the class a document with Internet sites where the students, at home, can find out more about the subject.
- Still at home, each group will be responsible for creating at least ten questions that, in their opinion, will help them to understand the level of environmental awareness of their colleagues of year 12.
- The teacher will also provide a video that explains several methods of sample selection for students to watch at home.
- The selection of the questions will be made through a pool on Tricider which will contain the proposals of each group (10 questions). As a class, students will decide the method of

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sample selection they will use in the questionnaire.

- After the selection of questions, each group will be responsible for putting a set of questions in a Google form.
- A Shortner link on bit.ly for 12th graders to answer the guiz will be created.
- The process of collecting the answers to the questionnaires will be made in the classroom of every class of year 12. The students answer the questionnaire through their mobile devices by being providing the link to the shortened questionnaire. Each group will be responsible for a set of classes.
- Once the data is collected, they will be analysed and conclusions will be drawn. For some answers the average can be calculated. Each group will be responsible for analysing a set of specific answers. The final results will be presented through a Popplet, which will be created collaboratively by the whole class group.

ACTIVITY ASSESSMENT

• The teacher assesses each student individually through his/her contribution to the group work and his/her knowledge on the subject and on the involved mathematical concepts. The group will be assessed by their group-working skills and the final product created.

STUDENTS' IMPACT

- Perfecting digital competencies.
- Refinement of the independent learning techniques through investigation, selection, presentation.
- Development of the observation spirit and that of civic conscience.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

• Students are expected to engage in the activity and to develop their assignment with commitment and quality.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	May 2016
TEACHER	Cristina Silva
CLASS	11.°F
SUBJECT	Fashion Design
CURRICULAR COVERAGE	New Materials
TOPIC OF THE LESSON	Panel "Urban Narratives"
TIME	30 lessons (45m)

OBJECTIVES

- To create a wall panel of recycled material about our town's most emblematic symbols
- To raise students' awareness of the potential value of recyclable materials
- To improve student attitudes toward recycling

TEACHING STRATEGIES

- Study cases teacher presentation and demonstration
- Students show their own critical and creative point of view throughout the project

TEACHING METHOD

- Project-based
- Student-centred
- Design method:
 - Researching;
 - Planning;
 - Projecting;
 - Executing.

ACTIVITY DESCRIPTION

- Discussing the symbols/places/features that best represent our town, Barreiro (e.g. the river)
- Dividing the class into working groups: pairs
- Distributing the places to be photographed
- Making drawings from the photos
- Creating the composition with the drawings
- Transferring the composition to the canvas
- Cutting the tissues bearing in mind the drawing
- Gluing the tissues and the lines that represent the river and the sky
- Sewing all the pieces together

ACTIVITY ASSESSMENT

• Assessment rubric (Elements of design; creativity/originality; effort; craftsmanship; group cooperation)

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STUDENTS' IMPACT

- Valorisation of student potential
- Developing green world preservation skills and habits
- Involvement in design and implementation of environmental projects in schools
- Development of project management skills
- Intensification of entrepreneurial spirit
- Development of entrepreneurial abilities (persuasion, responsibility, interpersonal abilities, leadership, etc.)

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

All students were highly motivated while performing the activity, having created a very good panel that definitely represents our town's most emblematic symbols. It was exhibited at AMAC at the end of the school year within the 7th Art Collective Initiative organised by the Visual Arts Department of our Federation of Schools; therefore, we can state that this activity had a great impact on the school/local community.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	November 2016
TEACHER	Cristina Ramalho
CLASS	Year 11 (classes B, D and E)
SUBJECT	English
CURRICULAR COVERAGE	The world around us
TOPIC OF THE LESSON	Alternative lifestyles: vegetarianism
TIME	2 x 90 min

OBJECTIVES

Students will be able to:

- Recognize the impact that our lifestyle has had on the environment.
- Identify the pros and cons of vegetarianism;
- Expand vocabulary related to vegetarianism.
- State an opinion about the topic.
- Improve their research, teamwork, decision-making skills.
- Create a whiteboard animation.
- Use audio-visual language to express opinions and share knowledge in a creative way.

TEACHING STRATEGIES

- Use of different types of text (pictures/video)
- Game
- Cooperative learning
- Integrating technology

TEACHING METHOD

First part of the lesson: teacher-centred

Second part of the lesson: student-centred (project-based)

ACTIVITY DESCRIPTION

- Students are shown some pictures of famous people that are widely known for being vegetarians. They are asked to identify those celebrities and say what they have in common. First they are likely to say fame and money, but in end they'll recognise that they all have adhered to a vegetarian diet.
- The teacher checks if any of the students is vegetarian or if they know someone that has become one. They are invited to share their story with the class (how long they've been vegetarians and why).
- Students are invited to play a kahoot game on vegetarianism in order to find out how much they know about the topic.
- The game questions are used to go through the definition of vegetarianism, the different categories of vegetarians and the most common benefits/drawbacks of a vegetarian diet. Systematisation follows.

- The class watches the video "Graham Hill: Why I'm a weekday vegetarian" available at https://www.youtube.com/watch?v=aUJD3sGppUo.
- Questions are asked to check students' understanding of the video content (e.g. When did Ted start to consider becoming a vegetarian? Has he become a true vegetarian? Which reasons does he point out for going on a vegetarian diet? Why is it difficult for people to opt for a vegetarian diet? Which solution has he found not to further damage the environment without giving up his favourite foods? Would you be willing to do the same? Why?, etc.).
- The class is divided into small groups of 3/4 students each. They are challenged to create a whiteboard video animation with Sparkol VideoScribe on the pros and cons of vegetarianism.
- The teacher explains how VideoScribe works as some students might not be familiar with the software.
- In groups the students research about the topic on the Net.
 - They create their animations which should include:
 - the definition of vegetarianism
 - reasons for becoming a vegetarian
 - types of vegetarians
 - the cons of vegetarianism
 - the pros of vegetarianism
 - their opinion on the topic
- The teacher assists students while creating their whiteboard animations.
- All videos are shown to the entire class. Students are expected to express their opinions on their peers' videos. Students are supposed to use their peers' feedback to improve the videos.

ACTIVITY ASSESSMENT

- Direct observation of students' engagement in the classroom activities.
- Assessment criteria for students' whiteboard animations:
 - Content relevance
 - Accuracy in the selection of information
 - Organization and coherence of ideas
 - Appropriate vocabulary
 - Correct structures, spelling and punctuation
 - Creativity and originality

STUDENTS' IMPACT ^{*}

- Awareness of the impact of human actions on nature
- Development of digital competencies
- Refinement of the independent learning techniques through investigation, selection, presentation

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students participated in all tasks with a high level of commitment. As for Sparkol VideoScribe, students had no problems in working with the software and did manage to create quite interesting whiteboard animations.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

DATE	May 2016
TEACHER	Cristina Silva
CLASS	10.° F
SUBJECT	Fashion design
CURRICULAR COVERAGE	Cutting and garment assembly
TOPIC OF THE LESSON	Wedding dresses/Domestic Violence
TIME	20 lessons (45min)

OBJECTIVES

- Projecting and creating wedding dresses made of recycled materials;
- Developing students' competencies in designing, pattern and garment cutting, assembling and finishing of garments;
- Fostering environmental awareness in helping students realise the importance of recycling:
- Raising awareness of domestic violence.

TEACHING STRATEGIES

- Study cases teacher presentation and demonstration;
- Students show their own critical and creative point of view throughout the project

TEACHING METHOD

- Project-based
- Student-centred
- Design method:
 - Researching;
 - Planning;
 - Projecting;
 - Executing.

ACTIVITY DESCRIPTION

- The class is divided into working groups: pairs
- Listing the available recycled material
- Researching about the characteristics of the available and appropriate recycled material for project
- Making a sketch of the dresses, veils and bouquets
- Selecting and collecting the appropriate recycled material for each project.
- Executing the project: cutting, assembling and finishing the dresses/veils/bouquets
- Trying out the dresses and veils
- Dressing the mannequins with the dresses, veils and bouquets

ACTIVITY ASSESSMENT

Assessment rubric (Elements of design; creativity/originality; effort; craftsmanship; functionality;

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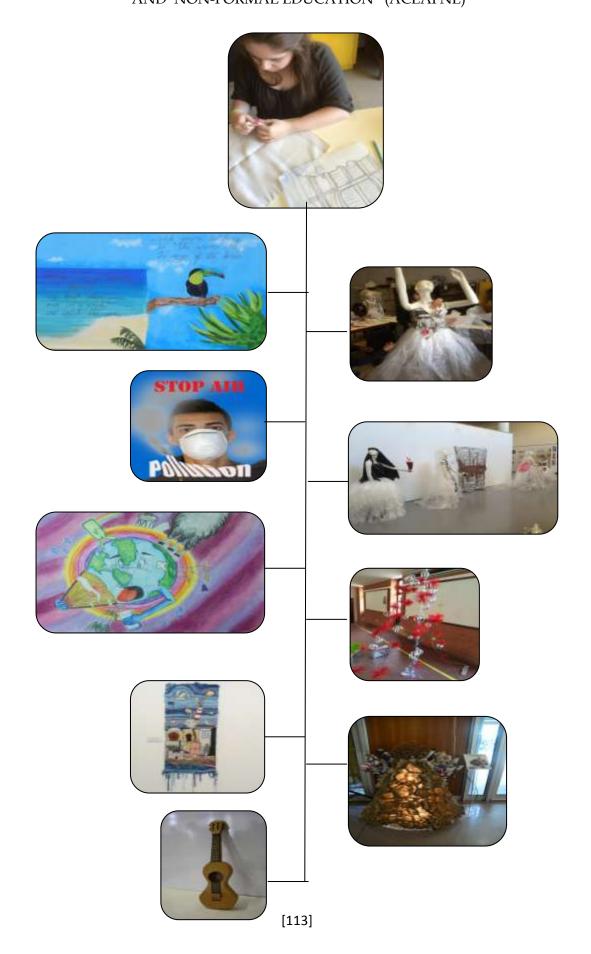
Group cooperation/Attitude)

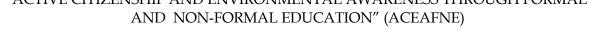
STUDENTS' IMPACT *

- Awareness of the impact of human actions on nature
- Developing green world preservation skills and habits
- Valorization of student potential
- Development of project management skills
- Intensification of entrepreneurial spirit
- Development of entrepreneurial abilities (persuasion, responsibility, interpersonal abilities, leadership etc.)

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The activity was successfully carried out and had a great impact on the local community. Students were highly engaged in the activity and managed to create excellent outputs, which were exhibited at AMAC within the 7th Art Collective Initiative organised by the Visual Arts Department of our Federation of Schools.







ROMANIA

FORMAL ACTIVITIES

National College "Ienachita Vacarescu"



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	30.01.2017
TEACHER	CÎRSTEA SILVIA
CLASS	11 th A
SUBJECT	French
CURRICULAR COVERAGE	Language and communication
TOPIC OF THE LESSON	Raising students' awareness towards water consumption/ Developing a message to raise other people's awareness, using IT methods
TIME	3 classes of 50 minutes

OBJECTIVES

- to realize there is a problem related to water consumption
- to introduce the problem of providing drinkable water in schools in Africa
- -to develop project management skills
- -to create a poster related to water consumption using templates offered by the site www.storybird.com

TEACHING STRATEGIES

- -realizing environmental problems through an attractive activity (watching a video which shows an ingenious idea of how to provide drinkable water in schools in Africa)
- -using IT methods in the teaching-learning process and in the individual or creative group activities

TEACHING METHODS

- -brainstorming
- -problem solving
- -learning how to use computers
- -case study
- -creative use of the acquired notions

ACTIVITY DESCRIPTION

The activity was carried on throughout 3 sessions of 50 minutes each. During these sessions, I succeeded in raising the students' awareness towards water consumption. The students created posters using IT methods provided by the site www.storybird.com, which is a site whose focus is on making people aware of the existing problems concerning water consumption.

ACTIVITY ASSESSMENT

- -fill in of the questionnaire
- -posters' assessment

STUDENTS' IMPACT

- -Awareness of the impact of human actions on nature
- -Enhancement of entrepreneurial skills

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- -Initiative and volunteering skills
- -Developing green world preservation skills and habits
- -Availability to cooperate with students from other countries
- -Refining digital competencies
- -Shaping active citizenship abilities and skills
- -Involvement in design and implementation of environmental projects in schools
- -Valorisation of student potential

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, MOTIVATION, ACTIVITY:

- -The activity was interactive; the students were active and solved the taskscorrectly. The students seemed willing to change their attitude towards responsible water consumption.
- -The students were very creative and worked in teams or individually in order to create posters that would raise other people's awareness towards water consumption

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	29.09.2016
TEACHER	SĂVESCU CORNELIA
CLASS	8 th A
SUBJECT	Biology
CURRICULAR COVERAGE	Plants and Animals From Different Environments
TOPIC OF THE LESSON	Study of living organisms in different environments
TIME	50 minutes

OBJECTIVES

Students will learn methods to study the biotic and abiotic factors in different aspects of life, tools used for the evaluation of environmental parameters and how they could do this by using such tools and recyclable materials.

TEACHING STRATEGIES

Learning strategies were based on multiple intelligence approach, practical applications, groupwork to produce various tools, discovery of the utility of these instruments. Assessment strategies were based on self- and peer evaluation/feedback, students cooperated to solve the tasks.

TEACHING METHODS

Conversation, explanation, brainstorming, discovery, problem solving, modeling, integrated learning content.

ACTIVITY DESCRIPTION

- The students were invited to choose a post-it note with one idea / word representative of various aspects of life. Then they were asked to express their opinions on the steps required to investigate environmental factors.
- They were given two types of cards: some showed instruments / tools that use different parameters to analyseenvironmental aspects and others showed ecological parameters describing measurable ones. Having these as basis, students established the correlating factors between them and displayed them around the classroom.
- Work continued with the Power Point presentation of methods and instruments used to study various aspects of life both in terms of abiotic and biotic factors. Following this presentation, teacher-student groups established the accuracy of the work performed previously, which also meant that feed-back was offered.
- Students were divided into 7 groups, each group receiving information, instructions and materials necessary to design a study tool, using mainly recycled materials. The 7 groups were given a compass, an anemometer, a hydrometric surprise, an entomological net, a Secchi disk. Upon completion of each task, each group had designed their instrument, they explained its usefulness and colleagues demonstrated how it worked.
- Peer appreciation of the activity of each group was conducted at the end of the lesson. The assessment of the students work addressed a few questions from the Kahoot app and

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specific words using the lesson theme "integratedlearning content"were introduced.

ACTIVITY ASSESSMENT

The students answered a few questions in Kahoot app and found specific words using the lesson theme "integrated learningcontent".

STUDENTS' IMPACT

Awareness of the impact of human actions on nature.

Increase of participation in environmental protection activities

Intensifying entrepreneurship

Active involvement in curricular activities

Unlocking of students' potential..

Development of entrepreneurial skills (persuasion, responsibility, interpersonal skills, leadership).

Development of the spirit of observation and civic awareness.

Chiseling techniques of independent learning through investigation, selection, presentation, problematization and problem solving

Optimization of interpersonal and social relationships.

Enhancing tolerance and mutual acceptance.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The students showed interest in the topic under discussion, they participated actively, collaborated in implementing their work results and in performing practical activities.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	11.03.2016
TEACHER	ERCULESCU LAURA
CLASS	5 th A
SUBJECT	Mathematics
CURRICULAR COVERAGE	Mathematics and science
TOPIC OF THE LESSON	Percentage calculus – the protection of the environment and of
	the energetical resources
TIME	45 minutes

OBJECTIVES

- To learn how to calculate percentages and how to form a fraction from a natural number
- To correctly apply the mathematical calculus to everyday problems
- To be able to identify ways of reducing the irrational consumption of energy
- To become aware of the responsibility towards the protection of the environment

TEACHING STRATEGIES

- Active participation in the lesson
- Mixture of traditional and modern teaching methods

TEACHING METHOD

- Group work
- Presentation and problematization
- Video presentations
- Debates

ACTIVITY DESCRIPTION

Prior to this activity, the students were taught the lesson "How to form a fraction from a natural number, percentage calculus". The week before the activity, the students had been divided in teams of six and they had as homework to look up information related to the sources and resources of energy and ways of reducing the consumption of energy. All the data that they had collected, were processed by the student teams so as to find out, through mathematical calculus and percentage, how much energy is irrationally used and how much of it can be saved. Therefore, at the beginning of the activity, all the teams had these materials prepared. Each team had a video presentation, posters and objects made from recycled goods. The presentations contained mathematical data, calculus solved by the students or taken from specialized studies. The presentations were interactive, the 'presenters' were answering their colleagues questions related to the subject.

ACTIVITY ASSESSMENT

- The assessment was carried out through written and oral questionnaires

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STUDENTS' IMPACT

- Awareness of the impact of human actions on nature
- Developing green world preservation skills and habits
- Enhancement of interest in participating in the environmental protection activities
- Development of the observation spirit and that of civic conscience
- Initiative and volunteering spirit
- Valorisation of student potential
- Refinement of the independent learning techniques through investigation, selection, presentation
- Stimulating the desire for lifelong formal, non-formal and informal learning in order to prevent early school leaving and dropout

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

- The activity benefited from the students' appreciation, they realized how important it is to protect the natural sources of energy and the surrounding environment
- They got acquainted with the practical use of the mathematical calculus in their everyday life
- The students were creative and willing to participate in trans- curricular activities

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	3.11.2016
TEACHER	CATANĂ DANIELA
CLASS	8 th A
SUBJECT	Mathematics
CURRICULAR COVERAGE	Mathematics and science
TOPIC OF THE LESSON	Energy and the Global Goals for Sustainable Development
TIME	2 hours

OBJECTIVES

To understand that energy is vital for the quality of life for all people, everywhere.

To identify actions students can take to make their lifestyle more sustainable

To use the notion of percentage when estimating the efficiency of alternative ways of energy production.

TEACHING STRATEGIES

Presentation

Debate

Learning through discovery

TEACHING METHOD

Group work

Learning using IT methods

Presentation

Gallery tour

ACTIVITY DESCRIPTION

(5min) Ice breaker

The students are informed that they are going to watch a video on the importance of energy nowadays, about how fortunate they are because they can make use of the energy without any restraints and are asked to think about what they could do in order to help the less fortunate ones to benefit from it in order to make their work easier and to improve their personal way of living. (45min) Teaching-learning activity

The students write on different post-its which are the fields/activities in which they use/need energy. In groups of 5, they debate on these fields/activities, and then they share their conclusions with the rest of the class.

After the debate, they watch a video

 $\frac{https://www.youtube.com/watch?v=Ik5PfVcDqNE\&index=15\&list=PLHvu7XCqeua48Q8KqNST}{VGsvf0O-JB0y9}$

What is new according to this video? That over 13 billion people do not have electrical energy or energy for heating.

How many of us think daily that we can save energy or that we can use alternative ways of generating energy?

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Solar plants? Wind powered plants? Thermal water power? Bioenergy?

Have you heard of towns which produce thermic energy with the help of thermal waters from Romania? The students are divided in groups of 5. Each group looks for the normal functional parameters of the thermic power plants that function on other types of fuels, other than gas or electrical energy.

Two groups look into solar central heating: which is the amount of money invested, how much water can be heated throughout the three summer months. How much would a consumer pay if he heated the same amount of water using energy produced by central heating on gas? How long will it take to write off the expenditure?

Two other groups look into the advantages of using a central heating on thermal water on a 6-month-period (October-March). Are there any advantages of using such a central heating compared to using one on natural gas ?(savings, pollution)

The other groups look into the advantages of central heating that uses sawdust. Which are the costs of using it on a 6-month-period during winter compared to the ones for a gas central heating? (in order to help and improve their work, the teacher can offer some statistics from a consumer of natural gas or the students have brought this information from the data taken out from the energy bill)

(50min) Project presentation

After taking down all the data, the students present the results.

The same groups produce a short video on the things they have learnt from this activity, using IT methods (PLATAGON)

The script of the video includes a dialogue intended to show the importance of energy saving, the advantages and the benefits on the environment, the way in which each group of students has dealt with the mathematical calculus, the diagrams produced at the end of the documentation process. The videos is watched by the other students who also assess them by offering smiley faces.

ACTIVITY ASSESSMENT

Feed-back questionnaire

Student-student evaluation: they offer smiley faces after watching the videos.

STUDENTS' IMPACT*

Perfecting digital competencies

Development of project management skills

Refinement of the independent learning techniques through investigation, selection, presentation

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The students were very interested in the discussion and they seemed willing to have more activities like this one.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	26 th November
TEACHER	MARCU POPESCU MĂDĂLINA
CLASS	8 th A
SUBJECT	Problems of the planet
CURRICULAR COVERAGE	Making suggestions
TOPIC OF THE LESSON	Ecology, expressing cause and effect
TIME	50 minutes

OBJECTIVES

At the end of the lesson the students will be able to:

- Identify the problems The Earth faces today
- Identify various causes of the problems The Earth faces today
- Identify some solutions to the problems The Earth faces today
- Write a short presentation of one of the environmental issues, which they present to the class stating where it occurs, what has caused it and what can be done to lessen its negative impact

TEACHING STRATEGIES

- Active learning
- Collaborative/ Cooperative learning
- Critical thinking
- Discussion strategies
- Interdisciplinary teaching
- Problem based learning
- Writing assignments

TEACHING METHOD

- Picture presentation by the teacher
- Recitation of poem by teacher
- Debate
- Class discussion
- Case study
- Problem solving
- Making suggestion
- Text analysis

ACTIVITY DESCRIPTION

The teacher recites a poem while the students listen to it, trying to decode the meaning of the teacher's sayings as they have to give a title to it. Students come up with various titles and the teacher insists on the correlation between the title and the key words of the poem. Then, the

teacher asks students to open their course-books at page 78 where they find some pictures and try to identify which three pictures could be chosen to represent the content of the poem. Students give their opinions and debate on why one is better suited than another. So, the teacher asks them to identify what issue is represented in each picture and elicit on the possible cause of every possible effects on the planet and life in general. The students work in groups- there will be 6 groups, one for each picture- and name a spokesperson to summarize their views. The teacher plays the recorder and they hear a presentation about causes and effects of the problems of the Earth. Students choose the right word to complete some gapped sentences and correct their initial choices. Then the teacher proposes the silent reading of an article on pollution and its effects, which has a number of 5 gaps in the form of subtitles. While reading, the students fit the sentences to the right gaps. The new words are explained and practiced further in individual sentences during the class. In the article, students indentify sentences, phrases and paragraphs that contain the sequence: Problem-Cause-Effect and write under each: one expression / specific connectors/ grammar structures preferred. Then, using the new notions, they build similar sentences/phrases on the same pattern. The teacher assigns as homework to write a detailed presentation of one problem they consider to be at a soaring scale in their country, following the structure: Problem-Cause-Effect which after being presented to the class to be uploaded in Storybird or Canva programs on a given link.

ACTIVITY ASSESSMENT

The teacher assigns as homework to write a detailed presentation of one problem they consider to be at a soaring scale in their country, following the structure: Problem-Cause-Effect which after being presented to the class will be uploaded in Storybird or Canva programs on a given link.

STUDENTS' IMPACT *

- It generates awareness on the main issues of the planet
- Students become more responsible and act towards preservation and conservation, rather than towards excessive consumerism
- It enhances awareness of the impact of human actions on nature
- It generates active involvement during the curriculum integrated activities

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

- Students participated actively in the development of the lesson
- Students were interested in uploading their work after they have orally presented them to the whole class

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	24 november 2016
TEACHER	STATE GABRIEL
CLASS	9 th D
SUBJECT	Environmental pollution; types of pollution
CURRICULAR COVERAGE	Mathematics and science
TOPIC OF THE LESSON	Types of environmental pollution
TIME	50 minutes

OBJECTIVES

- 1. To get students to know about the types of environmental pollution
- 2. To get students to understand the ways in which the economic activities lead to environmental pollution;
- 3. To raise students awareness of the ways in which peoples'daily habits lead to environmental pollution and methods of its reduction

TEACHING STRATEGIES

- Presentation;
- Conversation;
- Investigation
- Inquiry -guided learning

TEACHING METHOD

- Computer based teaching
- Shaping a new world

ACTIVITY DESCRIPTION

At the beginning of the activity web tools are used in order to get students to identify the main types of environmental pollution as well as to get students to understand the risks they pose on people'health and on global climate. The students are asked to make a brief presentation of the environmental problems they know about in their county and then they are informed about the web resouces that they will use in order to find out more details. At this point the students are given a 10 minutes' self-study activity in order to research a particulat type of pollution, at the end of which the students will present their conclusions and will come up with possible solutions to reduce the pollution's effects.

In the 2nd half of the class the students use the IT Plotagon pack in order to generate debates on pollution topics among virtual characters , after they have firstly created the characters, the scene,and the script following the stages – cause, effects, possible solutions and expected results on the topic of pollution. Thus, the students have made use of their creativity in choosing an outfit and charecters'physical features as well as in making up a specific dialogue on the chosen topic

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but correspoding to their age.

ACTIVITY ASSESSMENT

The students are asked to orally express their opinion on the lesson in general and issues tackeled in particular, as well as on the progress and achievements made throughout the class. The assessment questionnaire is distributed.

STUDENTS' IMPACT

- Awareness of the impact of human actions on nature
- Enhancing interest in participating in the environmental protection activities
- Active involvement in local meetings with environmental agencies to the benefit of the community
- Involvement in design and implementation of environmental projects in schools
- Perfecting digital competencies
- Intensification of entreprenorial spirit
- Development of the observation spirit and that of civic conscience.
- Shaping active citizenship abilities and skills.
- Initiative and volunteering spirit
- Availability to cooperate with students from other countries
- Optimization of interpersonal and social relationships
- Valorization of student potential
- Refinement of the independent learning techniques through investigation, selection, presentation

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Follwing the analysis of the questionaires I have come to the conclusion that the students have appreciated the use of computers in the class , especially that of the Plotagon pack . Moreover, the methods used have been considered to be good and very good and the objectives have been fully achieved. They have appreciated the use of web tools with the aim of acquiring new useful information for everyone's daily life.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	29 th September 2016
TEACHER	LEONTESCU GEORGIANA
CLASS	10 th G
SUBJECT	CHEMISTRY- Water and earth, sacred elements-study pollutants "
CURRICULAR COVERAGE	Science
TOPIC OF THE LESSON	Identification of soil and water pollutants
TIME	50 minutes

OBJECTIVES

At the end of the class the students will be able to:

General

- Demonstrate the ability to investigate reality
- Demonstrate competent functional processing, systematization, restructuring and use knowledge into practice
- Develop critical thinking
- Demonstrate the capacity of self-organization

Specific:

- Identify factors of chemical and biological pollution, of water and soil pollution and prevention methods
- Learn the methods by taking air and soil samples

TEACHING STRATEGIES

- investigation
- explanation

TEACHING METHOD

- graphic modelling
- experiment
- guided discovery

ACTIVITY DESCRIPTION

Ampelius has written about the elements of the world: "... the fire from which sky was born, the water from which seas and oceans were born, the air from which winds and storms were born and the earth which shaped the world ..."

The Five Elements or the Chinese theory of the Five Elements - Qigong, the elements of Feng Shui, the five essential elements of life, or simply The Five Elements of Nature - have aroused much curiosity and interest in the Orient .

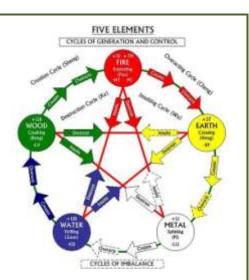
The Chinese theory about the five elements, the first of this kind, dates back to the IInd milenium BC and appeared in a small treatise, transcending the most ancient of the Chinese philosophy: Hong Fan.

The five elements are: water, fire, wood, metal and earth.

They match the first five numbers: 1-2-3-4-5

Water and soil are two of the four sacred elements:water, air, earth and fire

Water, an essential element of nature is found where life exists and it is the most widespread on Earth. Fresh water is a finite resource, essential for human existence, for agriculture and industry. Without fresh water and in its absence a lasting development could not be possible. Water had a very important role in the appearance of life on Earth:



- the productivity of plants and animals depend on water;
- it is in all animals and plants , all organisms exchanges with the environment are made through water
- it helps and adjusts chemical processes in the cell, diffusion of nutrients in cells, digestion, absorbtion, circulation and nutrition of cells.
- water is necessary in photosynthesis;
- it adjusts body heat by evaporation at the surface

The importance of water for human life stays in the fact that humans can survive 40 days without food but only 4 days without water.



CONSTITUTION AND CHEMICAL COMPOSITION OF SOIL

The soils are made up of four main constituents which are in the 3 states of matter: solid, liquid, gas

- I.- Mineral consituents-45%
- II. Organic constituents-5%;
- III.- Liquid constituents (Water -25%)
- IV. -Air, 25%
 - The solid matter is 50% soil. In this percentage, 90% is formed by mineral components and only 10% by organic matter
 - The liquid and gaseous components are in the soil pores.

These solid and fluid components are intertwined, influencing each other and providing the necessary environment for living things and growing plants on earth.

The optimum pH for most vegetables is between 6.3 to 7.4, but some tolerate better a more acidic or more alkaline pH: beans, cabbage, cauliflower, broccoli, onions, garlic, asparagus grow in a more alkaline soil with a pH of 6.5 - 8, but potatoes, tomatoes, peppers, melons, zucchini behave well in a more acidic soil with a pH of 5.5 - 6.8

Carrots and parsley prefer a pH of 6-8, the eggplant, spinach, watercress a pH of 5.5 to 6.5. Plants that need acid soil are: hydrangeas, rododendronii, azaleas, camellias, anthurium, begonia, cyclamen, gloxinias, primroses. Tree shrubs that prefer acid soil are: blueberry, strawberry, blackberry, and some fruit trees: apple, cherry, peach.

Observe the changes

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Anemones, gladiolus, daffodils, hyacinths, tulips prefer slightly alkaline soils or neutral. The organic matter that decomposes in soil (crop residues), rainfall, irrigation (reduced amounts of N, P and K - elements that maintain a neutral soil) ultimately contribute to the formation of acidic soil.

In order to balance an acidic soil, it is recommended to incorporate, wood ash (7-10 kg per 100 of these be added va mended because pe it

square	e meters) and bone meal (10-20 kg per 100 square meters). The disadvantage
variar	its is that, because they are washed away by rain and irrigation, they need to
period	lically to the soil. Over a long period of time, the compost soil is most recommendately
it ball	ances its pH naturally and gradually.
	dure- polluted water analysis
Group	o 1- chloride ion identification
-	Take a sample of polluted water (2ml)
-	Add potasium cromate and 2 ml AgNO3
-	Observe the changes
-	Note the change of
	color
-	Write the chemical
	equation
Gr	oup 2- mercuric ion identification
-	Take a sample of polluted water (2ml)
-	Add 2 ml NaOH
-	Observe the changes
-	Note the change of
	color
-	Write the chemical
	equation
Gr	oup 3 – identification of sulfate ion
-	Take a sample of polluted water (2ml)
-	Add 2 ml BaCl2
-	Observe the changes
-	Note the change of
	color
-	Write the chemical
	equation
Gr	oup 4- iodine identification
-	Take a sample of polluted water (2ml)
-	Add 2 ml AgNO3
-	Observe the changes
-	Note the change of
	color
-	Write the chemical
	equation
Gr	oup 5- identification of phenols
-	Take a sample of polluted water (2ml)
-	Add 2 ml FeCl3

Strategic Partnership Project (Key action no 2)

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- Not	e the change of
colo	or
- Wri	te the chemical
equa	ation
•	- carbonyl compound identification
	e a sample of polluted water (2ml)
	12 ml NaOH
	erve the changes
	e the change of
	or
	te the chemical
	ation
equi	Procedure- soil pH analysis
Group 1 soil	
-	quired: glass slide with soil, glass rod, Berzelius glass, funnel, Erlenmeyer glass, tube,
	r, napkin,2 strips of pH paper, spatula, filter paper
	Take with the spatula a sample of soil, put it in the Berzelius glass and stir with the
_	t it 1 minute to separate and filter it in the Erlenmeyer glass. Put the pH strips in the
	note the pH
-	
	quired: glass slide with soil, glass rod, Berzelius glass, funnel, Erlenmeyer glass, tube,
	r, napkin,2 strips of pH paper, spatula, filter paper
	Take with the spatula a sample of soil, put it in the Berzelius glass and stir with the
-	t it 1 minute to separate and filter it in the Erlenmeyer glass.
-	strips in the solution and note the
-	
	quired: glass slide with soil, glass rod, Berzelius glass, funnel, Erlenmeyer glass, tube,
	r , napkin,2 strips of pH paper , spatula, filter paper
	Take with the spatula a sample of soil, put it in the Berzelius glass and stir with the
-	t it 1 minute to separate and filter it in the Erlenmeyer glass.
-	strips in the solution and note the
pH	
	quired: glass slide with soil, glass rod, Berzelius glass, funnel, Erlenmeyer glass, tube,
	r, napkin,2 strips of pH paper, spatula, filter paper
	Take with the spatula a sample of soil, put it in the Berzelius glass and stir with the
_	t it 1 minute to separate and filter it in the Erlenmeyer glass.
	trips in the solution and note the
pH	
	quired: glass slide with soil, glass rod, Berzelius glass, funnel, Erlenmeyer glass, tube,
	r, napkin,2 strips of pH paper, spatula, filter paper
	Take with the spatula a sample of soil, put it in the Berzelius glass and stir with the
-	t it 1 minute to separate and filter it in the Erlenmeyer glass.
-	strips in the solution and note the
pH	

Group 6-soil
Materials required: glass slide with soil, glass rod, Berzelius glass, funnel, Erlenmeyer glass,
tube, distiled water, napkin,2 strips of pH paper, spatula, filter paper
Procedure: Take with the spatula a sample of soil, put it in the Berzelius glass and stir with the
glass rod. Let it 1 minute to separate and filter it in the Erlenmeyer glass.
Put the pH strips in the solution and note the
pH

ACTIVITY ASSESSMENT

Results of the experimental activity, conclusions of both pupils and assistants
ASSESSMENT ACTIVITY/Please mark what fits best with your opinion:

	Matghin	
Do you consider this		
activity useful for		
yourself?		
Appreciate the		
organization of the		
activity you've taken		
part in		
How do you rate the		
teachers who		
proposed activity?		

STUDENTS' IMPACT *

- Awareness of the impact human activities on nature.
- Active involvement in curricular activities
- Perfecting digital competencies
- Shaping active citizenship abilities and skills
- Confidence in own capacity to communicate in the language of the project and refining of linguistic abilities
- Availability to cooperate with students from other countries
- Improved interpersonal and social relationships.
- Refinement of the independent learning techniques through investigation, selection, presentation
- Development of entreprenorial abilities(persuation, responsability, interpersonal abilities, leadership
- Valorization of student potential

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

- Special interest for investigation
- Students are communicative, respectful, attentive, civilized in answers, they demonstrate an active-participative attitude

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	18.01.2017
TEACHER	RAFIRA ANCA MIHAELA
CLASS	8 th A
SUBJECT	ICT (Information and Communications Technology)
CURRICULAR COVERAGE	Graphic elaboration type according to specification data
TOPIC OF THE LESSON	A poster on herbs / plants - benefits and properties
TIME	120 minutes

OBJECTIVES

At the end of the class the students will be able to:

- Design IT items meant to develop their inventivity and creativity using CANVA
- Advertise their final product on a Padlet at their disposal; https://padlet.com/rafira1982/plante
- Demonstrate awareness in making use of herbs/plants as well as in showing solid knowledge about the role of herbs/plants in people's lives
- Express resposibility for nature and life in general in order to maintain the natural balance

TEACHING STRATEGIES

- mixed strategies
- heuristic strategies

TEACHING METHOD

- Presentation using technical devices
- Conversation
- Brainstorming
- Inquiry –guided learning

ACTIVITY DESCRIPTION

The class takes place in the IT laboratory, because it cannot be held without technical devices such as videoprojector and computers connected to the network

All 34 students in the class are expected to be present at this activity. The students are informed that they will make a poster using Canva taking into consideration not only the requirements of its creation but also the information and pictures that have to be included. The posters will then be posted on https://padlet.com/rafira1982/plante in order to be accessed by every member of the class.

Each student has picked one of the herbs/plants from the following list:

- 1. hip
- 2. fennel
- 3. artichoke
- 4. common celandine
- 5. lentil
- 6. chicory

- 7. chanterelle
- 8. St.John'wort
- 9. Shepherd's thyme
- 10. Garden/meadow sage
- 11. basil
- 12. caraway
- 13. ment
- 14. cinnamon
- 15. ginger
- 16. elderly tree
- 17. sea buckthorn
- 18. blueberry
- 19. gooseberry/currant
- 20. strawberry
- 21. anason
- 22. camomile
- 23. clove
- 24. aloe vera
- 25. officinal rosemary
- 26. popler buds
- 27. pine buds
- 28. echinaceea
- 29. lavander
- 30. lime
- 31. blue cap
- 32. milfoil
- 33. motherwort
- 34. horse pipe

At the end of the activity the students will present their own poster and will insist on the new information acquired about the benefits and use of herbs/plants and products that are derived from them.

ACTIVITY ASSESSMENT

1. How do	1. How do you appreciate the ctivity in terms of meeting your expectations and necessities?						
	Weak	Less	Average	Good	Very	Excelent	
		weak			Good		
Nb.	-	-	-	2	16	16	
answers							
Percentage	-	-	-	6%	47%	47%	
Based on the	Based on the percentage I consider that the activity was well received by the students.						

Based on the percentage I consider that the topic was enjoyed by the students.

	2. How much have you enjoyed this activity?					
	Weak	Less	Average	Good	Very	Excelent
		weak			Good	
Nb.	-	-	-	2	19	13
answers						
Percentage	-	-	-	6%	56%	38%

	3. Do you know more about the environment after this activity?				
	Yes	No			
Nb.	33	1			
answers					
Percentage	97%	3%			

Based on the percentage I consider that the students have understood the stages of making a poster and the filled in information.

4. Would you be interested in finding out more information about the local environmental problems after this activity?

	Yes,	Yes,	A little	Not	•	
	very much	why not		at all		
Nb.	8	22	4	_		
answers						
Percentage	23%	65%	12%	_		

Based on the percentage credited to the last question and after looking into the results of the questionaires I noticed mainly the students involved in the project expressed the strong wish of finding out more about the benefits and properties of herbs/plantsand their use in our daily life.

5. Hoe do you appreciate the teaching method used today?

	er men de jeu uppresime me teuening memer useu teuenj.					
	Weak	Less	Average	Good	Very	Excelent
		weak			Good	
Nb.	-	-	1	8	11	14
answers						
Percentage	-	-	3%	24%	32%	41%

Based on the percentage, I consider that the teaching methods and the topic itself were well chosen.

6. Ai recomanda activitatea altor colegi din clasa/scoala ta?

	Yes	No	With			
			adjustments			
Nb.	28	1	5			
answers						
Percentage	82%	3%	15%	·	·	

Depending on the percentage obtained for the sixth question, I believe that the following activities should be carried out with those selected for the Erasmus + program.

STUDENTS' IMPACT *

- Valorization of student potential
- Development of entreprenorial abilities(persuasion, responsability, interpersonal abilities, leadership etc)
- Refinement of the independent learning techniques through investigation, selection, presentation
- Development of the observation spirit and that of civic conscience
- Shaping active citizenship abilities and skills
- Awareness of the impact of human actions on nature
- Developing green world preservation skills and habits
- Involvement in design and implementation of environmental projects in schools

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- Active involvement during the curriculum integrated activities
- Perfecting digital competencies
- Enhancement of interest in participating in the environmental protection activities

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

In conclusion, I would like to mention that some of these students have shown a real interest in this activity and have come up with proposals for more such activities either on other topics or in a different location, outdoors for instance. The students are open to new approaches and some have even nominated themselves to take up the lead in some herbs collecting activities or to make up a portfolio in which to include the existing herbs and plants within the unpolluted areas of our county.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	06.06.2016
TEACHER	ZEPIŞI SIMONA VALINDA
CLASS	7 th A
SUBJECT	Mathematics-Circle application practice
CURRICULAR COVERAGE	Mathematics and Science
TOPIC OF THE LESSON	The relative positions of a line to a circle, tangent at a point outside the circle
TIME	60 minutes

OBJECTIVES

At the end of the class the students will be able to:

- Calculate some segments'lenghts and measure some angles using appropriate methods in geometrical configurations that contain a circle
- Infer some of the circle's and common polygons' properties using geometrical representations and the already acquired knowledge
- Decode the information provided in practical problems with reference to circle and common polygons
- Understand the importance of the three Rs (*Reduce/Reuse /Recycle*)
- Foster the concept of sustainable education
- Raise the degree of students' resposibility for the planet's protection
- Become aware of the importance of responsible consumption for the environment protection

TEACHING STRATEGIES

Analogous strategies

Heuristic strategies

TEACHING METHOD

- Heuristic conversation, Investigation, Inquiry –guided learning, mathematical shaping

ACTIVITY DESCRIPTION

- * Preparatory home assignment: the students are divided into groups of four. They will stick three tangential triangles, two by two. They will bring 3 plastic bottles (PETs), water-colour, scissors, lighter, glue, pot earth, decorative plants..
- *The global UNESCO objective is presented.

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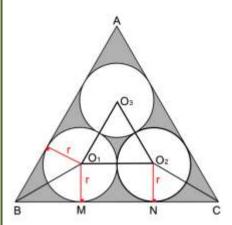
*The students will watch the material:

http://www.youtube.com/watch?v=o86_ORGJ-SU

*The students will be asked how they can reduce, reuse or recycle paper, plastic(PETs, CDs). Tasks:

- Task 1: Draw a triangle which should contain the three discs. Cut out that triangle. How should the triangle be drawn so that its surface will be a minimum size?
- Task 2: Draw and cut out this triangle. Measure the radius of the disc. How can we find out the side of the triangle? Which will be the surface of the remaining cardboard after they cut out the triangles.

On the black/white board the teacher draws a similar figure (an equilateral triangle circumscribed to the three tangential –two by two-circles).



The students measure the length of the triangle line depending on the CD's radius, the triangle's surface and the lost cardboard's surface after the cutting up (to be considered $\sqrt{3} \cong 1,73$ şi $\pi \cong 3,14$).

Task 3: The students will cut up the bottom of 2/3 or1/2 bottles and slightly burn the margins with a lighter in order to give a more artistic shape to it. The remaining bottles will be coloured in water-colour and every bottle will be fixed to the middle of a CD. The bottles will then be filled up with pot earth by the students who will plant the decorative flowers afterwards. Ponder:

• How will the classroom benefit from these floral arrangements? How can we expand the lifespan of these mini-gardens? How can we encourage the collection of such rejected, yet

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recyclable materials? What can we do about non-recyclable materials?

• Did you know that?

https://www.youtube.com/watch?v=rHj5IAvcWfw

• The students will learn about the existence of SIGUREC recycling stations in Ploiesti, Baneasa etc.

Follow up assignment:

- 1) Solve the same Maths problem for four CDs and a square.
- 2)After watching the following materials:
- https://www.youtube.com/watch?v=i_PNKRquNY0
- https://www.youtube.com/watch?v=XLnwo2oO9Wg

make up a list: 'WHAT TO DO AT HOME EVERY DAY', in order to protect the environment.

- 3) Make a similar floral arrangement using four CDs.
- 4) Present other 2 or 3 ideas /solutions to reuse cardboard and plastic.
- 5) Conceive a slogan for responsible consumption.

ACTIVITY ASSESSMENT

Direct observation

Marking the students that performed well during the class

Keeping an assessment diary on storybird.com

STUDENTS' IMPACT

- Awareness of the impact of human actions on nature
- Development of the observation spirit and that of civic conscience
- Valorization of student potential
- Refinement of the independent learning techniques through investigation, selection, presentation
- Stirring interest for reducing/reusing/recycling
- Stirring interest for mathematics by making use of practical approaches

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The students have shown interest for their knowledge about development of responsible consumption, about the three Rs.

They enjoyed the approach of a mathematical-geometrical problem from such a practical point of view.

They concentrated on the tasks and gotactively involved in solving them.

They worked in teams, actively listened to the teacher and co-workers and showed consideration and tolerance for the opinion of others.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	20.12.2016
TEACHER	DIACONU DIANA ELENA
CLASS	10 th G
SUBJECT	ICT (Information and Communications Technology)
CURRICULAR COVERAGE	Technologies
TOPIC OF THE LESSON	Register computing in support of graphical monitoring of soil pollution
TIME	50 minutes

OBJECTIVES

Basic application and

basic concepts of Excel application

teaching strategies

TEACHING STRATEGIES

- -Principle of active and conscious participation of students in learning;
- -Principle of accessibility of knowledge and skills;
- -Principle of reverse connection;

TEACHING METHOD

- -exercise
- -explanation
- team work
- -observation
- -discussion

ACTIVITY DESCRIPTION

- 1. Warmer (3 minutes)/ Calling the roll
- -Preparing the teaching material and computer equipment check;
- 2. Introduction (2 minutes)

Announcing the title and objectives of the lesson;

Students are asked to move so that they can work in groups of two students to conduct various activities on the spreadsheets.

3. Revision of knowledge (10 minutes)

The teacher asks questions of the basics of the Microsoft Office Excel, such as:

-How do you open a Microsoft Office Excel application?

Start-> All Programs->Microsoft Office-> Microsoft Office Excel

-What is the extension of a file in Microsoft Office Excel?

Answer:the extension is Microsoft Office Excel este .xlsx

-How do you create a new EXCEL file??

File-> New-> uncompleted work register

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-How do you save a file in Excel?

File-> Save-> choose location-> click Save

4. Lesson (30 minutes)

The theme for the achievement charts in Excel, as proposed to the students, is human pollution of the soil.

In the workbook, each student will rename spreadsheets as follows: Soil Pollution, Drawing, Pollutants.

Soil pollution in the spreadsheet will link named Soil pollution to the second spreadsheet, drawing the title in cell A1. The teamswill discuss and the students will write a few words about the unintended consequences of soil pollution on people in cell A3.

Drawing spreadsheet will include a drawing inserted in each student's folder, done in Paint. Pollutants spreadsheet will contain the name of a pollutant, a descriptive text with the data collected from the National Statistics Institute and a 2D column chart on that particular pollutant. After submitting their completed applications, students will receive questions from colleagues and they will offer their answers.

- 5. Making operational knowledge (ensuring the reverse connection) (4 minutes)
- Students highlight the applications made;
- Students report mistakes and make comments;
- The teacher appreciates students' work and rewards the students according to the quality of their applications;
- 6. Ensure cosolidation (1 minute)
- -The next task is suggested as homework:

Construct an application in order to improve class performance taking into account the comments within the assessment.

ACTIVITY ASSESSMENT

Assessing the fairness of solving applications,

Marking the work done by students

STUDENTS' IMPACT

Awareness of the impact on students concerning the impact of human actions on nature. Improving digital skills.

Unlocking the potential of students.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students following the teacher's explanations carefully, and acquiring notions about Microsoft Office Excel in order to create spreadsheets.

Students work in teams of two students who design spreadsheets on environmental issues.

Students use their digital skills and creativity to design spreadsheets.

Following completion of records, each group of students will present them to the class

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	24 th November 2016
TEACHER	BOBU RALUCA
CLASS	10 th E
SUBJECT	English
CURRICULAR COVERAGE	Lessons about the environment
TOPIC OF THE LESSON	Global Goals Stories
TIME	50 minutes

OBJECTIVES

By the end of the lesson the students will be able to:

- Understand 5 of the 17 Global Goals
- Use the information about the 5 Global Goals correctly and sustain their points of view
- Use Storybird to create their own stories about the 5 Global Goals that they have studied

TEACHING STRATEGIES

- Pair work
- Group work

TEACHING METHOD

The teacher has used brainstorming, Presentation, Practice, Production methods

ACTIVITY DESCRIPTION

The teacher began the lesson by using the brainstorming method to elicit answers from the students regarding the Global Goals. The students then watched short videoclips presenting the Global Goals and stressing on the 5 Global Goals (Clean Water and Sanitation, Responsible Consumption, Life on Land, Life below water and Renewable energy.) While watching the students were asked to write on a Post-it the information that they found to be very important for the others to know. After watching, the students came to the blackboard and they stuck their answers in a spidergram already drawn. Then the teacher presented the IT tool storybird.com and played a tutorial. The students received each a set of pictures and they had to create a short story online using Storybird.com and then to post their work on the teacher's padlet.

ACTIVITY ASSESSMENT

The assessment of the activity was done by creating a padlet where the students placed a link to their story and there they could all see their work and read each other's stories.

STUDENTS' IMPACT

Awareness of the impact of human actions on nature.

Developing green world preservation skills and habits

Perfecting digital competencies

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CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The students were very interested in the subject of the lesson and the fact that the English lesson was blended with IT made it a success among the students.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	21- 31 March 2016
TEACHER	DINU CAMELIA-MONICA
CLASS	11 th B
SUBJECT	Counseling
CURRICULAR COVERAGE	Counseling
TOPIC OF THE LESSON	Be a smart consumer!
TIME	2 hours

OBJECTIVES

To educate young people for a healthy lifestyle

TEACHING STRATEGIES

- Practical activities in groups
- Information theory via Internet
- Debate in class (draw conclusions)

TEACHING METHOD

- Diary/ PPT
- investigation
- conversation
- debate

ACTIVITY DESCRIPTION

Students receive the following tasks working groups:

- Group 1: Diary on daily spending (for three days)
- Group 2: Diary on daily nutrition (3 days)
- Group 3: "Shopping! 3 days to record important information from the labels of food bought in the family.
- Group 4: To draw up a list of food additives considered dangerous and of hazardous packaging.
- Group 5: Presentation: balanced nutrition effects on the body. Poster of the food pyramid.
- Group 6: balanced consumption and environmental impact. TED film about recycling. Final Product: Smart Consumer Guide (The Smart Shoppers Guide)

ACTIVITY ASSESSMENT

Questionnaire evaluating the work

STUDENTS' IMPACT

* Developing skills and a healthy lifestyle, they become aware of each individual's actions in order to have a better life and a healthier environment.

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CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The activity is useful, attractive, the lesson involves all students, stimulates interest in a sustainable education and students' abilities to communicate and work in teams. The lesson also develops research skills, involves them in formal and informal activities, provides information and educates them in the spirit of European citizenship.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	"Ienachita Vacarescu" National College
DATE	31.01.2017
TEACHER	VLAD CĂTĂLINA ESTERA
CLASS	10 th D
SUBJECT	ICT (Information and Communications Technology)
CURRICULAR COVERAGE	Tehnologies
TOPIC OF THE LESSON	Creating Charts Using Microsoft Excel
TIME	45 minutes

OBJECTIVES

Cognitive objectives:

O1: to define the concept of chart

O2: to learn the main elements that define a chart (title, legend, axes)

Affective objectives:

O3: to present the advantages of graphical representations of data.

Psychomotor objectives

O4: to represent numerical data in a spreadsheet with charts

TEACHING STRATEGIES

Didactic principles:

To ensure gradual performance progress

Reverse connection

Participative and active learning

TEACHING METHOD

- Oral communication methods: face-to-face conversation, individual conversation, explanation,
- Methods based on action: the practical exercise, discovery learning and self-directed heuristic conversation

ACTIVITY DESCRIPTION

Warmer (2 min) – Students' presence is checked and whether conditions are ensured together with the useful didactic material for the lesson.

Updating prior learning (7 min) - the teacher asks these questions:

- 1. What are the functions of Excel?
- 2. What is the general form of an Excel function?
- 3. What arguments can a function have?
- 4. What are the most used functions? Describe these functions.

The teacher observes that the students responded to the questions. (Updating knowledge will be achieved using the cluster method)

The teacher presents the theme of the lesson and states the objectives (1 min). The teacher announces the title of the lesson, operational objectives and working mode.

Communicating new knowledge (15 min) The teacher plays the chart definition and emphasizes the advantage represented by graphical representations. Using the projector, the teacher presents

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practical steps and createsa chart describing each stage.

Creating charts

The diagrams are graphical representations of numerical information. A diagram creates a visual representation of data and the relationships between these data, allowing users to easily compare models.

To create a chart, the following steps are needed:

- 1. Select the cells that contain the data you want to represent graphically.
- 2. From the Insert -> Chart choose the category and type of chart. It activates Chart tab and tabs Instruments Design, Layout, and Format that will guide you step by step in creating the chart / graph.
- -it contains Menu design tools that can:
- -modify diagrams; select data series; switch row / column; chart styles, choose the diagram position;

The menu contains aspects to:

- Tags: Title, Title axes, legend, display values, display table;
- The Format menu to change the layout diagram tool: color background and values, borders, effects, size.

Changing values

Values in a graph are related to the worksheet in which the data were input. One can change any data in a cell of the reference chart and the chart is updated and immediately reflects the change. Fixing, retention and transfer concepts taught through applications (20 min):

Students receive a worksheet that shows measurements made by specialized machines in measuring dust emissions within 1 hour in Targoviste and are required to make a diagram to exemplify the level of emissions at different points in time and then to exemplify different types charts. (ANNEX 2)

The teacher monitors:

- Performance of work tasks and checking their correctness;
- Students' ability to solve the set tasks and helps where appropriate;
- Student performance throughout the lesson.

ACTIVITY ASSESSMENT

Questions are addressed:

- What is a chart?
- What are helpful diagrams?
- What are the steps to create a chart?
- If we change the data, do we have to create a new chart?

A final questionnaire and memo were applied

STUDENTS' IMPACT *

- Awareness of the impact on students on he impact of human actions on nature.
- Improving digital skills.
- Develop skills for preserving a green world.
- Boosting participation in environmental protection activities

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Raising the awareness of high school students on the theme chosen

Involving pupils consciously and responsibly in carrying out the activity

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)





SWEDEN

FORMAL ACTIVITIES

Sundsvall's Gymnasium Västermalm



CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	9/9 - 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	From the central content of the course,
	Basic concepts in the area of sustainable development.
	Ecosystem structure, dynamics and sustainability and
	the importance of biodiversity.
	* The instrument of a sociaty to roal and goals at local, regional, national and international level related to
	environmental and energy issues.
	* Energy and resource use in connection with food, accommodation, transportation and other consumption.
	* How the impact of different policy options carried out,
	for example, on the basis of safety, gender issues or
	ethical reasoning.
	Practical case studies
TOPIC OF THE LESSON	The concept of sustainable development in three dimensions
TIME	One lesson, 70 minutes

OBJECTIVES

The student describe different conditions and opportunities in the environmental and energy-issues to achieve sustainable development. The student use concepts of sustainable development, ecosystems, recycling, environmental threats and challenges, instruments, sources of energy and energy transformations and resource use.

The student discusses and values the consequences of different courses of action from an individual, natural, and social perspective, and gives examples of arguments on the scientific and ethical basis and on the basis of gender.

TEACHING STRATEGIES

To help students become familiar with the concepts of social, ecological and economic dimensions.

TEACHING METHOD

Watching a film.

Discuss the movie in group and with the "4 corners model" get students to take a position and give arguments for it.

ACTIVITY DESCRIPTION

Present, or have students read up on the concept of sustainable development.

View a film about the production of goods in the third world. "The hidden price of your mobile" from 2009 on electronics, "We deal who pays?" From 2003 on garment production are two

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examples. "Who sews your clothes" (2007) from the UR, documentary film "Bananas" and "chocolate dark side" are other examples. It is of course important to note who is behind the film, and any interests that may be at the filmmakers.

What examples do you see in the film on sustainable / unsustainable development in the

- Ecological dimension?
- Social dimension?
- Economic dimension?

After the film:

Are there conflicts between the three dimensions? Which?

Think through first individually, then discuss in groups:

Must these conflicts exist, or it is possible to combine sustainable development in all its dimensions?

What is the role of different groups to achieve sustainable development in the different dimensions?

Consumers? The companies? Decision-makers in different countries? Other groups? U.N? *The discussion can be carried out according to the "4 Corners model"*.

Those who believe that consumers have an important role (perhaps even the most important) to have sustainable development stands in a corner, they who believe that it is companies stand in another corner, the decision-makers in a third, the UN or other proposed in the fourth corner.

The teacher benefits word to one and in the four groups formed. In the first round you get not argue, just listen actively to the causes that different students indicates that the example believes that consumers have the most important role for sustainable development.

In a second round, one can allow the argument between students and question or challenge arguments.

(The task comes from teacher-mentoring to "Environmental and energy knowledge" by Karin Pleijel and Hakan Pleijel, 2012)

ACTIVITY ASSESSMENT

Knowledge and understanding.

Self-examination and self-knowledge.

To argue their case.

Communication.

STUDENTS' IMPACT*

Awareness of the impact of human actions on nature.

Developing green world preservation skills and habits.

Development the observation spirit and that of civic conscience.

Shaping active citizenship abilities and skills.

Enhancing the degree of tolerance and mutual acceptance.

Valorization of student potential.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students may find it hard to take a position in the four-corner exercise, but there were good discussions and they listened to each other well. The concept of sustainable development gets deeper meaning when they were connected with the movie.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	12/9- 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	 From the central content of the course, * Basic concepts in the area of sustainable development. * Environmental threats and challenges where consequences of lifestyle and needs are reflected by, for example, uses ecological footprint. * Natural and by-human-made cycles and the organization of cycles. * The instrument of a sociaty to roal and goals at local, regional, national and international level related to environmental and energy issues. * Energy and resource use in connection with food, accommodation, transportation and other consumption. * Production of fuels and energy transformations
	including distribution, purification and waste solutions.
TOPIC OF THE LESSON	Waste - a resource and an environmental problem. Sort your garbage right!
TIME	The students get one lesson (70 min) to prepare and search for facts and then work at home.

OBJECTIVES

The student describes the different conditions and opportunities in environmental- and energy-issues to achieve sustainable development. In the describtion the student use concepts in sustainable development, ecosystems, recycling, environmental-threats and challenges, instruments to control, sources of energy, transformations of energy and resource use.

TEACHING STRATEGIES

Present the task.

Give examples for resources.

The students work with the task individual.

TEACHING METHOD

Teacher talks and describe the task.

Group discussions.

ACTIVITY DESCRIPTION

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The students were given a task and write about it individually.

What should you do with the following waste if you live in Sundsvall?

Promotional brochures, plastic bags, shampoo bottles made of plastic, fluorescent lights, TVs, caviar tubes, juice packs of paper, porcelain, bottles of old paint-cans in metal, mineral spirits that you cleaned brushes with, car-batteries, refrigerators, broken garden furniture in plastic, sewage pipes made of PVC -plastic, broken shovel of metal, packaging styrofoam.

Write a paper to answer the questions and search information with help from your family, material from municipal, environmental magazines, environmental associations, Internet pages etc.

To get higher marks, you should also report what then happens with the waste, and why it should be taken care of in that way.

ACTIVITY ASSESSMENT

Knowledge and understanding.

Communicating in writing.

Information retrieval and source criticism.

STUDENTS' IMPACT ^{*}

Awareness of the impact of human actions on nature.

Developing green world preservation skills and habits Enhancing of interest in participating in the environmental protection activities.

Active involvement in local meetings with environmental agencies to the benefit of the community.

Development the observation spirit and that of civic conscience.

Shaping active citizenship abilities and skills.

Initiative and volunteering spirit.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students were interested and active in order to find information. Many had taken help from home and had used many sources. The students discussed issues concerning waste management a lot with each other.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	20/9-2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	 From the central content of the course, * Basic concepts in the area of sustainable development. * Ecosystem structure, dynamics and sustainability and the importance of biodiversity. * Natural ecological systems as inspiration for technological development, such as artificial photosynthesis. * Natural and by-human-made cycles and the organization of cycles.
TOPIC OF THE LESSON	Model tests. What happens to the fish gills in acidified water?
TIME	One lesson, 90 minutes

OBJECTIVES

The student use concepts of sustainable development, ecosystems, recycling, environmental threats and challenges, instruments, sources of energy and energy transformations and resource use. The student identify and define problem areas in the environment and energy, and propose and compare various alternatives on the basis of chemical and physical calculations and reasoning. The student present their ideas and results with the concepts from the current area and show presentation-skills adapted to the purpose and context.

The student plan and implement own studies, choosing between various methods of implementation and justify their choice and draw conclusions from studies using one or a few scientific theories and models.

When the work is done the students evaluates the own and others' work and give suggestions on how the work can be improved.

When the student consults with the supervisor he or she believes in their own ability and the requirements of the situation.

TEACHING STRATEGIES

With the help of the lab, students should understand why acidification has harmed wildlife in thousands of lakes and streams tens of thousands of kilometers. The low pH values and higher concentrations of aluminum cause damage to sensitive species of fish and other fauna. Furthermore, they should understand that the salt balanceis affected to animals that breathe with gills. Impact on osmoregulation (salt and water balance) is the factor that is often mentioned as the most important physiological effects on acidification.

TEACHING METHOD

The teacher goes through instructions to the lab. Students do lab and then write a report where they discuss the results.

ACTIVITY DESCRIPTION

Before a lake is acidified, the soil around the lake has become acidified first. When soil becomes acidificated aluminum ions in the soil "agile" and will be transported to the lake, which then has an increased content of aluminum ions.

In this model experiment, let's see what happens to the fish gills in highly acidic water. Gills of freshwater-fish have both the function to take up oxygen dissolved in the water, and to take up salts.

We have two lakes: a model with acidified water, with aluminumions, and one with acidified water without aluminumions. In reality, there are aluminumions in all acidic lakes, the more aluminumions, the more acidic the lake is.

Equipment:

2 cups 100 mL

2 pieces of dialysis tubing, about 8 cm long

cotton twine

BTB solution

Sodium-hydrogen-carbonate-solution, bicarbonate-solution. Saturated!

Aluminum-nitrate-solution with conc. 0.1 mol/dm³

Acetic-acid -solution with conc. 0.1 mol/dm³

Performance:

1. Wet the two pieces of dialysis tubing. Also soak the cotton string.

Tie carefully one end of the each tube with the string.

(Dialysis Tubing is fish "gills")

- 2. Take 60-70 ml of the sodium-bicarbonate-solution in a beaker and add a few drops of BTB. (the bicarbonate-solution is the fish's "blood")
- 3. Fill the tubes, approximately 5 cm height, with bicarbonate. Then tie the tube with cotton string. Check for leaks and then flush them tap water. You now have two "gills" with "blood".
- 4. Place about 50 ml of diluted acetic acid, in one beaker and approximately 50 ml of the aluminum-nitrate-solution in the second beaker. Put a few drops of BTB to each of the beakers. You now have two "acidified lakes" in one of them there are aluminumions, and in the other there is no aluminumions.
- 5. Place the "gills" in separate "lake" and watch what happened after about 5-8 minutes.
- 6. Consider and draw conclusions.
- 7. Write a lab report

ACTIVITY ASSESSMENT

Practical trials to achieve greater understanding of the environmental problem of acidification. The report shows understanding and connection between the trial and the larger problem.

STUDENTS' IMPACT

Awareness of the impact of human actions on nature.

Enhancing of interest in participating in the environmental protection activities.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The students like to experiment and in their reports, you could see that they had drawn conclusions

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that because the surface of the fish's gills have a higher pH than the surrounding water, a precipitation of aluminum hydroxide occur. Which means that the fish secrete a mucus to reduce the coating. The consequence is, however, that oxygen uptake impaired and that the ability to regulate the salinity decreases.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	26-30/9 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	From the central content of the course, * Practical case studies. * The energy principle, energy quality and efficiency as well as physical and chemical calculations and reasoning. Natural ecological systems as inspiration for technological development, such as artificial photosynthesis.
TOPIC OF THE LESSON	Determination of alkalinity
TIME	One lesson 90 minutes

OBJECTIVES

The student plan and implement own studies, choosing between various methods of implementation and justify their choice and draw conclusions from studies using one or a few scientific theories and models.

When the work is done the student evaluate his own and others' work and give suggestions on how the work can be improved.

When the student consults with the teacher he believes in their own ability and the requirements of the situation.

TEACHING STRATEGIES

The teacher goes through the theory of alkalinity.

Instructions for the lab are read together, students may ask questions.

The students determine alkalinity for some different lakes by titration.

TEACHING METHOD

Prepare the lab.

Talk about the theory.

Allow students to experiment and help when needed.

The student's write reports.

ACTIVITY DESCRIPTION

Alkalinity is a measure of the water's ability to neutralize acids, i.e. the ability to withstand the addition of hydrogen ions, without pH change significantly. The alkalinity is one of the most important parameters to measure when doing a water study.

A lake that have been acidified to a pH of about 5.4 to the additional supply of acidifying substances very quickly experience a lowering of the pH to about 4.4. The lake has then become 10 times more acidic.

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When the lake acidified so dramatically, new buffer system entering, which prevents further lowering of the pH. For determining the water alkalinity water titrates with a weak solution of hydrochloric acid to a pH value of 5.4. The pH is indicated by the pH-meter or an indicator. Here we use a SBV indicator.

Determine the alkalinity in the water samples from several different lakes.

Material: Burette, vollpipett (50 cm3), bottles of water samples from several different lakes, glass sinter funnel, device for the removal of CO2 from the air as shown in the picture (can be replaced with tube of nitrogen), indicator SBV (bromocresol green and methyl red), HCI carefully known conc (about 0.02 mol / dm3).

- 1. Start the gas flow.
- 2. Pipette 50.0 ml sample and add 3 drops of SBV indicator.
- 3. Add hydrochloric acid to cover from green to gray with a very weak tone of red.
- 4. Titrate 50.0 ml of deionized water in the same way as the sample, this is called the blank). (Need not be performed on the sample alkalinity exceeding 0.2 mmol / dm3l) Calculate the alkalinity (A) as follows

$$A = \frac{C (a - b)}{V}$$

A = the alkalinity (HCO 3 mmol / dm3) C = the hydrochloric acid concentration (mmol / dm3)

a = the volume of hydrochloric acid consumed during titration of the sample (cm3)

b = blank value = consumed volume of hydrochloric acid for the titration of deionized water (cm3)

V = volume of the sample (cm3)

The results indicated that HCO3- mmol / dm3 with two significant digits.

ACTIVITY ASSESSMENT

Knowledge and understanding.

Practical, laboratory, skills.

STUDENTS' IMPACT

Awareness of the impact of human actions on nature

Refinement of the independent learning techniques through investigation, selection, presentation

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Interested students who think it is instructive to work practically with materials from the local area.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	10/10- 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	From the central content of the course,
	 Energy and resource efficiency through, for example, metrology, materials and other technical solutions. The energy principle, energy quality and efficiency as well as physical and chemical calculations and reasoning. Practical case studies.
TOPIC OF THE LESSON	Calculation problem
TIME	One lesson, 70 minutes

OBJECTIVES

The student describe different conditions and opportunities in the environmental and energy-issues to achieve sustainable development. The student use concepts of sustainable development, ecosystems, recycling, environmental threats and challenges, instruments, sources of energy and energy transformations and resource use.

The student identify and define problem areas in the environment and energy, and propose and compare various alternatives on the basis of chemical and physical calculations and reasoning. During the work, the student develops new questions and test them.

The student plan and implement own studies, choosing between various methods of implementation and justify their choice and draw conclusions from studies using one or a few scientific theories and models.

TEACHING STRATEGIES

Interactive, individual and in groups.

TEACHING METHOD

Teacher led, read the task, showed some examples and maked sure everyone could do the math required.

The students worked with the task individually and then had group discussions.

ACTIVITY DESCRIPTION

Stig and Kerstin Botvidsson living in a villa with their three children. They heat both the villa and the hot tap water with electricity. Now they have decided to lower their energy costs while doing something for the environment.

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A) They start thinking about switching to low-flow showerheads because the family showers so much. A standard showerhead gives about 12 liters of water per minute, while a low-flow provides 6-9 liters/minute.

There are 5 people in the house and all of them showers every day.

The number of minutes that they showers will vary but Stig is quite annoyed at how long the three teenagers is in the shower and a couple of them showers quite often several times a day.

It takes 4.19 kJ to heat 1 kg of water 1 degree.

The incoming water temperature is 8°C and they usually showering in water that is 37 to 42°C.

How much energy will they save by switching to low-flow shower heads?

With how much will they lower the costs of electric energy by switching to low-flow shower heads?

Electricity price with VAT and tax is about 1.18 SEK/kWh. Electricity transmission fee is included.

They also save up some water. The cost of water is 18.5 SEK/m3. How big was the savings?

B) A normal house consumes about 15,000 kWh per year for heating.

A lowering of the internal temperature by one degree gives energy savings of 5%. They decide to purchase "Småland heating" that is wool socks for the whole family, and lower the indoor temperature by 2° C.

How much energy will they save? How great was their saving in money?

C) If you always use the timer to the car-heater gives big savings.

The mainheater has power 500W and the car-heater has the effect 800W. How big will the savings per day be if you have the heaters switched on only 2 hours instead of 10h (as it tends to be quite often for Stig and Kerstin)? How much energy will you save on a whole winter season? How much money will they save?

ACTIVITY ASSESSMENT

Knowledge and participation in discussions.

STUDENTS' IMPACT

Awareness of the impact of human actions on nature

Developing green world preservation skills and habits.

Enhancing of interest in participating in the environmental protection activities

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Good lesson where math skills used to achieve greater understanding of energy efficiency.

Students began to think about what actions you could do at home to save electricity, reduce wastes with water, etc.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	28/10 - 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	From the central content of the course, * Environmental threats and challenges where consequences of lifestyle and needs are reflected by, for example, uses ecological footprint. * Basic concepts in the area of sustainable development. * Natural ecological systems as inspiration for technological development, such as artificial photosynthesis. * Natural and by-human-made cycles and the organization of cycles. * Environment-related tools for control and evaluation, such as life cycle analysis, environmental certification, eco-labeling and green certificates. * Renewable and non-renewable energy sources and their origin and usability. * Energy and resource use in connection with food, accommodation, transportation and other consumption. * Production of fuels and energy transformations including distribution, purification and waste solutions. * Energy and resource efficiency through, for example, metrology, materials and other technical solutions. * How the impact of different policy options carried out, for example, on the basis of safety, gender issues or ethical reasoning. * Practical case studies.
TOPIC OF THE LESSON	Our lifestyle - a threat to the environment
TIME	2 lessons (90 minutes) and work at home

OBJECTIVES

The student discusses and values the consequences of different courses of action from an individual, natural, and social perspective, and gives examples of arguments on the scientific and ethical basis and on the basis of gender.

The student present their ideas and results with the concepts from the current area and show presentation-skills adapted to the purpose and context.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

The student plan and implement own studies, choosing between various methods of implementation and justify their choice and draw conclusions from studies using one or a few scientific theories and models.

During the work, the student develops new questions and test them.

The student identify and define problem areas in the environment and energy, and propose and compare various alternatives on the basis of chemical and physical calculations and reasoning. The student describe different conditions and opportunities in the environmental and energy-issues to achieve sustainable development. The student use concepts of sustainable development, ecosystems, recycling, environmental threats and challenges, instruments, sources of energy and energy transformations and resource use.

TEACHING STRATEGIES

Present the task.

Give examples about how the students can get information, what questions to ask at home etc. The students work with the task individual.

TEACHING METHOD

Teacher talks and describe the task.

Group discussions followed by individual work.

ACTIVITY DESCRIPTION

The students write an essay.

The lifestyle of the developed countries by over-consumption of energy, raw materials and other resources is a threat to many ecosystems and organisms and also against mankind's long-term survival on this planet. We must do something before it goes wrong.

Your task is to look at how your family lives today and think about what changes you can make to benefit the environment. You must also look ahead and discuss how you can live in an environmentally friendly way in 10-15 years. Please take the help of your parents when you look at how your family lives today.

Write down your observations, thoughts, and visions for the future.......

Consider This: What is easiest to change? What is the most difficult and why?

What changes would have the greatest impact? - Locally? - Globally?

Discuss travel, energy use in the household, purchasing, consumption patterns, eating habits, garbage disposal, etc...

If only one person changes their way of life, the environmental gain is not as great, but if many people do the same thing the environmental gain larger. Consider therefore how you in different ways can influence others to do as you / you do.

ACTIVITY ASSESSMENT

Knowledge and understanding.

Self-examination and self-knowledge.

Communicating in writing an essay.

Information retrieval and source criticism.

STUDENTS' IMPACT

Awareness of the impact of human actions on nature

Developing green world preservation skills and habits

Enhancing of interest in participating in the environmental protection activities

Active involvement in local meetings with environmental agencies to the benefit of the community

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Development the observation spirit and that of civic conscience

Shaping active citizenship abilities and skills

Valorization of student potential

Refinement of the independent learning techniques through investigation, selection, presentation

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Students felt that the task was instructive and they have become more aware of the importance of lifestyle. They have gained more understanding for example, why not have it so warm inside that is why it is good not to waste water, etc. They have also told that their parents have become more aware about their lifestyle. Parents also thanked the teacher for the students' work and enlightenment!

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	11/11 - 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	From the central content of the course, * Basic concepts in the area of sustainable development. * Environmental threats and challenges where consequences of lifestyle and needs are reflected by, for example, uses ecological footprint. * Natural and by-human-made cycles and the organization of cycles. * The instrument of a sociaty to roal and goals at local, regional, national and international level related to environmental and energy issues. * Environment-related tools for control and evaluation, such as life cycle analysis, environmental certification, eco-labeling and green certificates. * Energy and resource use in connection with food, accommodation, transportation and other consumption. * How the impact of different policy options carried out, for example, on the basis of safety, gender issues or ethical reasoning.
TOPIC OF THE LESSON	Think first - then shop!
TIME	Two lessons (70 minutes) and work at home

OBJECTIVES

The student describe the different conditions and opportunities in environmental- and energy-issues to achieve sustainable development. In the describtion the student use concepts in sustainable development, ecosystems, recycling, environmental-threats and challenges, instruments to control, sources of energy, transformations of energy and resource use. The student present their ideas and results with concepts from the current area and show presentation skills.

The student discusses and evaluate consequences of different courses of action from an individual, natural, and social perspective, and gives examples of arguments on the scientific and ethical basis and on the basis of gender.

The student identify and define problemareas about environment and energy, they propose and compare different options.

TEACHING STRATEGIES

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Present the task.

Discussions about the task.

Presentation of some ecolabelling and green certificates.

The students work with the task individual.

TEACHING METHOD

Teacher talks and describe the task.

Group discussions and individual work.

ACTIVITY DESCRIPTION

If you think before you buy products you can reduce the burden on the environment. There are also other questions to ask, such as "exploited child labor?" and "can those who produce the goods live on the wages they get?" which can be very important when talking about sustainable development.

Task: Which issues do you think you should ask yourself (before making these purchases) if you want to act as "sustainable" as possible?

Clothing, fruit, paint, car, furniture, bread, toys, drilling machine, laundry detergent + three optional items.

ACTIVITY ASSESSMENT

Knowledge and understanding.

Self-examination and self-knowledge.

Communicating in writing.

Information retrieval and source criticism.

STUDENTS' IMPACT

Awareness of the impact of human actions on nature

Developing green world preservation skills and habits

Perfecting digital competencies

Development the observation spirit and that of civic conscience

Shaping active citizenship abilities and skills

Refinement of the independent learning techniques through investigation, selection, presentation

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

The students learned a lot about how products are made and they became more critical of purchasing, pricing and working conditions. There was much discussion of consumption and sustainable development.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	25/11 - 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	From the central content of the course,
	 * Basic concepts in the area of sustainable development. * Ecosystem structure, dynamics and sustainability and the importance of biodiversity. * Environmental threats and challenges where consequences of lifestyle and needs are reflected by, for example, uses ecological footprint. * How the impact of different policy options carried out, for example, on the basis of safety, gender issues or ethical reasoning. * Practical case studies.
TOPIC OF THE LESSON	A dicussion about how much the wolf we should have in
	Sweden.
TIME	One lesson, 90 minutes

OBJECTIVES

The aim is to give the students insight into international agreements on conservation of habitats and species that Sweden has signed and what the consequences are for the policies in wildlife management issues we have in Sweden.

It also aims to give the students a better understanding of what is required for give species a favorable conservation status.

The student discusses and values the consequences of different courses of action from an individual, natural, and social perspective, and gives examples of arguments on the scientific and ethical basis and on the basis of gender.

TEACHING STRATEGIES

A lesson with information, search for facts and discussions.

TEACHING METHOD

The teacher goes through some important directives and concepts.

The students then read articles and watch statistics.

When everyone feels prepared the students discuss while the teacher controls the debate.

ACTIVITY DESCRIPTION

The teacher talks about the EU:s directive of Species and Habitats.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

(Council Directive 92/43 / EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora)

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31992L0043:SV:HTML

The habitats directive indicates which species and habitats should be protected in the EU. What these are is jointly determined by the EU member states. The directive included over 1000 species, of which about 150 are in Sweden. Of the 231 habitats we have 88. The directive was introduced in 1992 but took effect in Sweden since we joined the EU in 1995.

The teacher talks about the concept of favorable-conservation-status.

Each memberstate has the obligation to ensure that all these species and habitat types have so-called favorable conservation status, which means that the range, area, population trends and other qualities is available and can be maintained (SFS 1998: 1252 and SFS 2007: 845)

And also the Bern-Convention (Convention on the Conservation of European Wildlife and Natural Habitats) of 1979 that aims to conserve wildlife and enclosures where animals with different needs for protection are included. The annexes can be found both bears, wolverines, wolves and lynx.

Then the students reads articles from the organization "Our predators" of licensed hunting of wolves and they read statistics from hunting wild animals. Viltskadecenter - SLU. http://www.viltskadecenter.se/index.php?option=com_content&task=view&id=30&Itemid=46

Then we discuss. One must try to steer the discussion so it is about how much wolf we should have in Sweden, not whether we should have a wolf at all.

ACTIVITY ASSESSMENT

Knowledge and understanding.

Express their opinion and argue for it

Learn to debate

STUDENTS' IMPACT*

Awareness of the impact of human actions on nature

Developing green world preservation skills and habits

Enhancing of interest in participating in the environmental protection activities

Active involvement in local meetings with environmental agencies to the benefit of the community Active involvement during the curriculum integrated activitie

Development the observation spirit and that of civic conscience

Shaping active citizenship abilities and skills

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Fun lesson where the students were very involved.

Many people have opinions about the hunting of wolves in Sweden, and with more facts came also a greater understanding.

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL	Sundsvall's Gymnasium Västermalm
DATE	12/12 - 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	From the central content of the course,
	* Basic concepts in the area of sustainable development.
	 Natural ecological systems as inspiration for technological development, such as artificial photosynthesis. The instrument of a sociaty to roal and goals at local, regional, national and international level related to environmental and energy issues. Energy and resource use in connection with food, accommodation, transportation and other consumption. Energy and resource efficiency through, for example, metrology, materials and other technical solutions.
TOPIC OF THE LESSON	Learn from nature's solutions
TIME	One lesson, 90 minutes

OBJECTIVES

The student describe different conditions and opportunities in the environmental and energy-issues to achieve sustainable development. The student use concepts of sustainable development, ecosystems, recycling, environmental threats and challenges, instruments, sources of energy and energy transformations and resource use.

The student identify and define problem areas in the environment and energy, and propose and compare various alternatives on the basis of chemical and physical calculations and reasoning. During the work, the student develops new questions and test them.

The student discusses and values the consequences of different courses of action from an individual, natural, and social perspective, and gives examples of arguments on the scientific and ethical basis and on the basis of gender.

The student present their ideas and results with the concepts from the current area and show presentation-skills adapted to the purpose and context.

When the work is done evaluating the student's own and others' work and give suggestions on how the work can be improved.

TEACHING STRATEGIES

The teacher presents the task.

The student's uses the textbook and the Internet, search for information.

The student discusses the given questions in smaller groups.

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The teacher ends with a joint discussion.

TEACHING METHOD

Present the task.

Give students the links and page references.

Make sure that the students will find information and that the discussions will start in the groups. Summarize the various proposals from the joint discussion.

ACTIVITY DESCRIPTION

The activity comes from the tutorial to the textbook "Environmental and energy knowledge" by Karin and Håkan Pleijel (2012), but has been modified.

Over billions of years, nature has carved out "technical" energy-saving solutions with excellent functional and environmentally friendly materials. By designing smart greenhouses we can allow cultivation in arid areas by using demineralized water. The method has been partially imitated from the method that the beetle "Namibian fogbasking" uses to survive in areas of extreme drought.

Can we have the advantage of being inspired by nature in more areas?

Students will learn about biomimicry in the course book and read about some examples.

Then they will see a Tedtalk where the British architect Michael Pawlyn talks about biomimetics and including greenhouse inspired by the beetle above:

http://www.ted.com/talks/michael_pawlyn_using_nature_s_genius_in_architecture.html

Students will read on the website "Inhabitat", a website for modern and sustainable architecture. They are told to search and read about such as "the Sahara Forest Project" or "Seawater greenhouse" for projects that use seawater in greenhouses. http://inhabitat.com/

And to learn about the house in Zimbabwe that are air conditioned which terminated thank: http://inhabitat.com/building-modelled-on-termites-eastgate-centre-in-zimbabwe/

They are also recommend this page on a glue for the body, resembling the mussel: http://www.sciencedaily.com/releases/2010/01/100122102845.htm

Then they, in small groups, discuss:

Can you see other areas where we can learn from nature in order to:

- Get the most energy from solar cells?
- Protect us from floods?
- Conserve energy use in transport?
- Develop new materials, perhaps especially those that can replace plastic based on fossil oil?

At the end of the lesson, the group's report their discussion to the whole class.

ACTIVITY ASSESSMENT

The task is to instill hope and show that there is a wide range of solutions that can give us a sustainable development.

Students also get better knowledge in English as the film and web pages are in English.

STUDENTS' IMPACT

Developing green world preservation skills and habits

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Enhancing of interest in participating in the environmental protection activities

Perfecting digital competencies

Shaping active citizenship abilities and skills

Initiative and volunteering spirit

Confidence in own capacity to communicate in the language of the project and refining of linguistic abilities

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Interested and involved!

CURRICULUM INTEGRATED ACTIVITY LESSON PLAN

SCHOOL DATE	Sundsvall's Gymnasium Västermalm 16/12 - 2016
TEACHER	Mr Göran Wågström
CLASS	NA15 (the second year at the natural science program)
SUBJECT	Environmental and energy knowledge
CURRICULAR COVERAGE	From the central content of the course, * Basic concepts in the area of sustainable development. * Environmental threats and challenges where consequences of lifestyle and needs are reflected by, for example, uses ecological footprint. * Natural and by-human-made cycles and the organization of cycles. * Practical case studies.
TOPIC OF THE LESSON	Making a poster about the harmful particles in the air
TIME	One lesson, 90 minutes

OBJECTIVES

The student describe different conditions and opportunities in the environmental and energy-issues to achieve sustainable development. The student use concepts of sustainable development, ecosystems, recycling, environmental threats and challenges, instruments, sources of energy and energy transformations and resource use.

The student plan and implement own studies, choosing between various methods of implementation and justify their choice and draw conclusions from studies using one or a few scientific theories and models.

The student present their ideas and results with the concepts from the current area and show presentation-skills adapted to the purpose and context.

TEACHING STRATEGIES

The teacher tells some facts about particles in the air and then the students search for facts and presents them in informative items.

TEACHING METHOD

Students work in groups and create a poster in PowerPoint.

ACTIVITY DESCRIPTION

We are working with the Swedish environmental objective "fresh air" which means that the air should be so clean that people's health, animals, plants and cultural values are not damaged. To reach this goal and be able to breathe fresh air it is specified how high levels of various pollutants that maximum shall be. These are mainly sulfur dioxide, particulate matter, soot, nitrogen oxides and ozone.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Particles in the air are the most dangerous air pollution to our health so the students get to seek facts from the textbook and other sources. Then they put together an informative poster of what the particles are, where they come from and how they are harmful.

ACTIVITY ASSESSMENT

Knowledge and understanding.

Information retrieval and source criticism.

Communicating in an informative poster – to make information attractive, easy to understand and true.

STUDENTS' IMPACT *

Awareness of the impact of human actions on nature..

Developing green world preservation skills and habits.

Enhancing of interest in participating in the environmental protection activities.

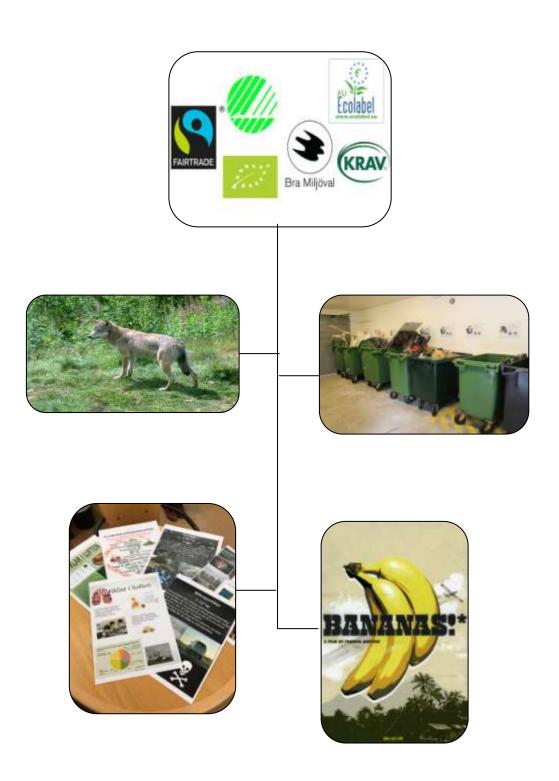
Involvement in design and implementation of environmental projects in schools.

Perfecting digital competencies.

CONCLUSIONS AS TO THE STUDENTS' BEHAVIOUR, INTEREST, ACTIVITY:

Active students who thought it was fun to design posters.

Educational.





CZECH REPUBLIC

NON - FORMAL ACTIVITIES 1st International School of Ostrava



NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

(Non-class activity)

NAME AND SURNAME (of the organiser)	Dagmar Blahetová, 1 st International School of Ostrava
NAME OF THE ACTIVITY	A Postcard for Earth
DATE	22.4.2016
AIM OF THE ACTIVITY	Students should realize what they can do for Earth protection.
TARGET GROUP	students from classes: whole school was involved, classes 6-13
INDIRECT BENEFICIARY	hopefully the Earth one day©
ACTIVITY DESCRIPTION	Each student wrote on a special green paper of the size of postcard a message to Earth where he wrote what he can do himself to contribute to environmental protection. Before, there was a discussion about possible things that they can do.
STUDENT IMPACT:	Students realized what they can personally do for the Environment
ACTIVITY PRODUCTS	: All the cards were put together as one huge Postcard for the Earth that was sent to UN to Vienna and joined with other postcards from all over the world.
ACTIVITY ASSESSMENT	The activity is easy to organize, you need just the papers. Students were interested in it.
CONCLUSIONS	The students' behaviour and interest: Students were interested, mostly the younger students.
	The students' activity: Writing the postcard.

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

(Non-class activity)

NAME AND SURNAME (of the organiser)	Dagmar Blahetová, 1 st International School of Ostrava
NAME OF THE ACTIVITY	Emission of pollutants
DATE	whole school year
AIM OF THE ACTIVITY	Students should realize how the heating of houses influence the pollutions that it produces
TARGET GROUP	students from classes 11A and 11B (can be any class of secondary school)
INDIRECT BENEFICIARY	people living in Ostrava region
ACTIVITY DESCRIPTION	The students learn about different possibilities how to heat the house and how the fuel influences the air pollution in the surroundings. The air pollution is a big problem in our region. After that, students create leaflets with info about fuels and their impact. After, they visit households of the most polluted areas of the city and distribute to them the leaflets. This should make people aware of their heating habits and they should realize how they can change the air pollution in their neighbourhood.
STUDENT IMPACT:	Students realized how the fuel can change the air pollution
ACTIVITY PRODUCTS	Leaflets
ACTIVITY ASSESSMENT	The activity is really beneficial for the improvement of air pollution, people get usually influenced if students talk to them.

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

	Strengths: It has a real-life impact.
	Weaknesses: It is quite time consuming to organize everything, students must either do it in their free time or
	they miss the school.
CONCLUSIONS	The students' behaviour and interest: Students were interested as it showed them a real-life impact.
	The students' activity: Making the leaflets, visiting the households.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

(Non-class activity)

NAME AND SURNAME (of the organiser)	Dagmar Blahetová, 1 st International School of Ostrava
NAME OF THE ACTIVITY	BOOk BOX
DATE	whole school year
AIM OF THE ACTIVITY	Students should realize that things can be used more than once and serve the good purpose
TARGET GROUP	can be any class of secondary school)
INDIRECT BENEFICIARY	people living in Ostrava region
ACTIVITY DESCRIPTION	Students create boxes with books and put them in different public places. Each person going around can take any of the used books but has to replace it with a new book from his household.
STUDENT IMPACT:	Students realized how old books can be saved and they do the activity to improve life in the community.
ACTIVITY PRODUCTS	Book Boxes
ACTIVITY ASSESSMENT	The activity is really beneficial for the improvement of our living space and raising awareness on sustainability. Strengths: It has a real-life impact. Weaknesses: It is quite time consuming to organize everything, students must either do it in their free time or they miss the school.

Strategic Partnership Project (Key action no 2)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

CONCLUSIONS	The students' behaviour and interest: Students were interested as it showed them a real-life impact.
	The students' activity: Making the boxes, maintaining the boxes.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

(Non-class activity)

NAME AND SURNAME (of the organiser)	Dagmar Blahetová, 1 st International School of Ostrava
NAME OF THE ACTIVITY	Waste-sorting competition
DATE	whole school year
AIM OF THE ACTIVITY	Students are more aware of sorting the rubbish. (even though we have bins for sorting the rubbish in all classrooms, not all the students do it)
TARGET GROUP	students from all classes participate
INDIRECT BENEFICIARY	Hopefully, it will be beneficial for the planet in the future
ACTIVITY DESCRIPTION	Each classroom has 3 rubbish bins for sorting the rubbish, PAPER, PLASTIC and MIX. They are aware that there is a sorting competition going on. Every week of the chosen months, previously selected couples of students check all classrooms and they write down, how the waste is sorted, they use a scale from 3 to 0. The checking students ate changed after one week. At the end of the month, the scores are taken and the winner is announced.
STUDENT IMPACT:	Students realize the necessity of sorting the rubbish.
ACTIVITY PRODUCTS	rubbish well sorted in all classrooms
ACTIVITY ASSESSMENT	The activity is really beneficial for the improvement of sorting habits of students.

	Strengths: It has a real-life impact. Weaknesses: It does not have really have any. You just must be sure before the activity starts that all classrooms have 3 rubbish bins for sorting.
CONCLUSIONS	The students' behaviour and interest: Some students were interested, some less, generally they started sorting more.
	The students' activity: Sorting the rubbish The students' results: Sorted rubbish in the classrooms.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Dagmar Blahetová, 1 st International School of Ostrava
NAME OF THE ACTIVITY	Visit to OZO-waste sorting company
DATE	30.5.2017, can be done any time during school year, it is a few hours activity
AIM OF THE ACTIVITY	Students are more aware of sorting the rubbish. They learn what happens with the rubbish at sorting plant and they are more aware of the amount of rubbish we produce. Hopefully, it will make them limit their own waste
TARGET GROUP	students from all classes participate
INDIRECT BENEFICIARY	Hopefully, it will be beneficial for the planet in the future
ACTIVITY DESCRIPTION	Students together with at least one teacher visit the waste sorting plant, they learn there about the amount of waste produced in their city and how the waste is liquidated. The also learned about decomposition time of different materials. At the end, they are asked to propose an ideal solution to waste liquidation in an imaginary city.
STUDENT IMPACT:	Students realize the amount of rubbish produced by our society.
ACTIVITY PRODUCTS	no products, just gained knowledge
ACTIVITY ASSESSMENT	The activity is really beneficial for increasing of awareness about the rubbish that we produce

	Strengths: It has a real-life impact. Weaknesses: The plant can smell, so it might be unpleasant for some people.
CONCLUSIONS	The students' behaviour and interest: Some students were interested, some less, generally they started to be more aware of the rubbish they produce. The students' activity: Visit to the sorting plant.

















GREAT BRITAIN

NON - FORMAL ACTIVITIES

Lanchester EP Primary School



NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	David Mordue
NAME OF THE ACTIVITY	Using a virtual reality app to bring the topic to life
DATE	Spring Term 1 2016
AIM OF THE ACTIVITY	To use a VR app
TARGET GROUP	Y2
INDIRECT BENEFICIARY	Wider school community
ACTIVITY DESCRIPTION	Chn to use 'ZooKazam' VR app in iPads to see a rainforest image 'come to life' from the page
STUDENT IMPACT:	Chn loved the app and it gave a real 'WOW' factor
ACTIVITY PRODUCTS	Photos taken and uploaded to school Twitter feed
ACTIVITY ASSESSMENT	An activity with a 'WOW' factor
CONCLUSIONS	The students' behaviour and interest: Excellent
	The students' activity: All chn enagged The students' results: Photos uplaced to Twitter

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	David Mordue
NAME OF THE ACTIVITY	Performing a 'rainforest' themed song
DATE	Spring Term 1 2016
AIM OF THE ACTIVITY	To perform a song linked to the topic
TARGET GROUP	Y3
INDIRECT BENEFICIARY	Wider school community
ACTIVITY DESCRIPTION	Chn to learn words to rainforest song (https://www.youtube.com/watch?v=BQ3ToUoW1ak) and to perfrom using instruments
STUDENT IMPACT:	Chn greatly enjoyed learning and perfroming the song
ACTIVITY PRODUCTS	A song which was performed in a whole-school assembly
ACTIVITY ASSESSMENT	A very enjoyable activity
CONCLUSIONS	The students' behaviour and interest: Good The students' activity: Most chn participated fully The students' results: Song performed in assembly very confidently

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	David Mordue
NAME OF THE ACTIVITY	Performing a 'rainforest' themed role play
DATE	Spring Term 1 2016
AIM OF THE ACTIVITY	To perform a role-play
TARGET GROUP	Y4
INDIRECT BENEFICIARY	Wider school community
ACTIVITY DESCRIPTION	Drama activity to show how animals are being affected by deforestation
STUDENT IMPACT:	Chn loved acting in role as different animals
ACTIVITY PRODUCTS	A role play which was performed in a whol-school assembly
ACTIVITY ASSESSMENT	A very enjoyable activity with a great 'end product'
CONCLUSIONS	The students' behaviour and interest: Good The students' activity: Most chn participated fully The students' results: Role play performed in assembly confidently

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	David Mordue
NAME OF THE ACTIVITY	Creating a piece of art work for display
DATE	Spring Term 1 2016
AIM OF THE ACTIVITY	To create a 'whole class' piece of art work for whole school display
TARGET GROUP	Y5
INDIRECT BENEFICIARY	Wider school community
ACTIVITY DESCRIPTION	Art activity to demonstrate the colour and vibrancy of the rainforest
STUDENT IMPACT:	Chn enjoyed the art / painting activity
ACTIVITY PRODUCTS	A display was created for one of our school corridors
ACTIVITY ASSESSMENT	A very nice activity with an eye-catching display as an end product
CONCLUSIONS	The students' behaviour and interest: Very good
	The students' activity: All chn contributed to the whole class art work
	The students' results: Art work on display in one of our corridors

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	David Mordue
NAME OF THE ACTIVITY	Whole class debate
DATE	Spring Term 1 2016
AIM OF THE ACTIVITY	To engage in a whole class debate about the pros and cons of deforestation
TARGET GROUP	Y6
INDIRECT BENEFICIARY	Wider school community
ACTIVITY DESCRIPTION	Debate
STUDENT IMPACT:	Chn enjoyed debating and feel passionately about the subject matter
ACTIVITY PRODUCTS	Parts of the debate where videod and uploaded to our Twitter feed and our Y6 blog on the school website
ACTIVITY ASSESSMENT	Fantastic discussion generated
CONCLUSIONS	The students' behaviour and interest: Good
	The students' activity: Most chn participated fully
	The students' results: Debate videod and uploaded to social media (in line with school social media policy



ITALY

NON - FORMAL ACTIVITIES IPS CABRINI - Taranto



"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME	Anna Locantore
(of the organiser)	IPS CABRINI Taranto - ITALY
NAME OF THE ACTIVITY	Water Quality
DATE	December 2016
AIM OF THE ACTIVITY	The students will determine water quality from biological and chemical test results.
TARGET GROUP	Students from classes IV and V
INDIRECT BENEFICIARY	Local community
ACTIVITY DESCRIPTION	 Make students ready to sample by reviewing test procedures; Accompany students to the pre-determined sampling site. Follow the instructions to take the temperature of the water in degrees Celsius. Use a water sampler or a bucket to obtain a representative water sample. Perform chemical tests for dissolved oxygen, pH, Nitrate-Nitrogen, Phosphate, Total Alkalinity and Turbidity: Follow Dissolved Oxygen test procedure to determine dissolved oxygen concentration of the water sample. Follow pH test procedure to determine pH of water sample. Follow Nitrate-Nitrogen test procedure to determine nitrate-nitrogen concentration of the sample. Follow Phosphate test procedure to determine phosphate concentration.

	 Follow Total Alkalinity test procedure to determine the alkalinity of the water sample. Follow Turbidity procedure to determine turbidity of the water sample. Record test results and observations for each site on a data sheet. Analyze data to determine water quality. At the end students have to collect all data and results
STUDENT IMPACT *:	 with photos/video of the different steps in a Padlet. Students will be able to set up a monitoring program. Students will be able to choose an appropriate
	 sampling site and collect samples. Students will be able to follow instructions to perform biological and chemical analyses of the samples. Students will be able to use their understanding of the test results to analyze data and determine water quality. Students will be able to present data and draw a conclusion.
ACTIVITY PRODUCTS	 Record test results and observations for each site on a data sheet. Analyze data to determine water quality. Make a video about work At the end students have to collect all data and results of the different steps in a Padlet.
COMMENTS ON THE ACTIVITY	An effective method to motivate students, encourage active learning, and develop key critical thinking, communication, and decision-making skills.
	Strengths: Students are more motivated to learn, because they have an active role.
	Weaknesses: I did not see any weakness.
ACTIVITY ASSESSMENT	The activity was generally successful.
CONCLUSIONS REGARDING	The students' behaviour and interest:
	Unlike traditional classroom situations where students may compete with one another or remain uninvolved or unmotivated and where the instruction is highly structured, in

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

experiential learning situations

students are more motivated to learn, because they have an active role in the subject rather than being assigned to review a topic or read a textbook chapter.

The students' activity:

- Record test results and observations for each site on a data sheet.
- Analyze data to determine water quality.
- Make a video about work
- At the end students have to collect all data and results of the different steps in a Padlet.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME	Anna Locantore
(of the organiser)	IPS CABRINI Taranto - ITALY
NAME OF THE ACTIVITY	DOLPHIN WATCHING
DATE	Spring
AIM OF THE ACTIVITY	Students should:
	- Learn about dolphins, their behaviour and their habitats;
	- Understand what has led to the endangerment of dolphins
	and how they can help change the course to prevent
	extinction;
	- Extend their knowledge of how scientists conduct research.
TARGET GROUP	Students from classes IV and V
INDIRECT BENEFICIARY	Coastal ecosystems and marine life.
ACTIVITY DESCRIPTION	First Step: Field Trip Lesson with "JONIAN DOLPHIN CONSERVATION" whose task is to preserve and protect the dolphins hosted in the Gulf of Taranto in the Ionian Sea.
	This lesson provide a range of opportunities to learn about dolphins:
	- Behaviour: what they eat, how they travel, intelligence
	- Habitat: their environment, endangerment, extinction concerns
	- Communication: echolocation (how they "speak to each

	other") and connections to sonar
	·
	- Exploring field research methods used by marine researchers to gather data.
	This field trip is also a way to introduce students to coastal ecosystems, the diversity of marine life and discoveries that will awe and amaze them.
	Second step: Students bring the experience back to their classroom with:
	In-class discussion and student debates.
	Class presentation to school of learned outcomes.
G * * * * * * * * * * * * * * * * * * *	Students realized what they can do for the ecosystem and
STUDENT IMPACT*:	marine life.
ACTIVITY PRODUCTS	Realization of a presentation of this field trip experience (with ppt, Prezi, Glogster, Padlet or other) to share with other students.
COMMENTS ON THE ACTIVITY	It's a very interesting activity and students are more motivated to learn, because they have an active role.
	Strongths
	Strengths:
	the diversity of marine life and discoveries will amaze them.
	Weaknesses:
	The success of this field trip lesson depends also from the weather condition.
ACTIVITY ASSESSMENT	
	The activity was generally successful.
GONGLUGIONG	The students' behaviour and interest:
CONCLUSIONS REGARDING	

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Unlike traditional classroom situations where students may compete with one another or remain uninvolved or unmotivated and where the instruction is highly structured, in experiential learning situations

students are more motivated to learn, because they have an active role in the subject rather than being assigned to review a topic or read a textbook chapter.

The students' activity:

Creation of a presentation about the field trip experience to share with other students

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of	Anna Locantore
the organiser)	IPS CABRINI Taranto - ITALY
NAME OF THE ACTIVITY	Field Trip lesson in an agricultural farm: "Where does
	our food come from"
DATE	January 2017
AIM OF THE ACTIVITY	Our food is increasingly coming from outside, throwing us into a global economy where food production does not always respect the strictest environmental standards. The aim of this lesson is to make students more aware of the global relationships we now have and their necessity to
	become careful consumers. Students will develop a sense of respect for the fragility of our environment, and the need for them to be advocates for government laws regarding pollution, pesticide and waste
	disposal reduction. Students will explore the process of growing/raising, packaging, and transporting food.
TARGET GROUP	Students from classes III, IV and V
INDIRECT BENEFICIARY	Our Earth
ACTIVITY DESCRIPTION	Visit of an agricultural farm in order to find out: - where our fruits and vegetables come from; - Discover the benefits of eating local products. - Show students how fragile the food supply is. - show students how we depend on our natural environment to provide our nutritional needs. Before the visit: - students have to make a list of ingredients for the meals they have eaten. - Try to discover if and how these ingredients are produced

	in the forms devoired thei-it
	in the farm during the visit. Follow up:
	Bring the experience back to classroom with: In-class discussion and student debates about advantages/disadvantages of: - eating local foods,
	- using pesticides,
	- small farms vs. factory farms,
	- growing your own food.
	Research the steps that food takes to reach our dinner tables: Production, Processing, Transportation. Homework: Write a creative narrative telling the life story of one type of food with STORYBIRD https://storybird.com
STUDENT IMPACT*:	Students will develop a sense of respect for the fragility of our environment, and the need for them to be advocates for government laws regarding pollution, pesticide and waste disposal reduction.
ACTIVITY PRODUCTS	Realization of a padlet of this field trip experience to share with other students.
COMMENTS ON THE	COMMENTS ON THE ACTIVITY:
ACTIVITY	Experiential learning: teacher and students are engaged in direct experience and focused reflection in order to increase knowledge, develop skills and clarify values.
	Strengths:
	Students are more motivated to learn, because they have an active role.
	Weaknesses:
	Field Trip Transportation Cost
ACTIVITY ASSESSMENT	This activity was generally successful.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

CONCLUSIONS REGARDING

The students' behaviour and interest:

Unlike traditional classroom situations where students may compete with one another or remain uninvolved or unmotivated and where the instruction is highly structured, in experiential learning situations

students are more motivated to learn, because they have an active role in the subject rather than being assigned to review a topic or read a textbook chapter.

The students' activity:

Creation of a Padlet about the field trip experience to share with other students

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME	Anna Locantore
(of the organiser)	IPS CABRINI Taranto - ITALY
NAME OF THE	MARINE WEEK
ACTIVITY	
DATE	Spring
AIM OF THE ACTIVITY	Organization of a "Marine Week" in Taranto. An event that aims to increase awareness of our marine environment. In this week students have the opportunity to learn about the benefits that our coast, our sea and their bountiful resources bring to our town.
TARGET GROUP	Students from classes III, IV and V
INDIRECT BENEFICIARY	Our Earth
ACTIVITY	<u>First steps</u> of this activity will be the organization of:
DESCRIPTION	- special excursions and special events to celebrate the week;
	- arrange a beach clean-up day;
	- Arrange a drawing, photographic or painting competition with a coastal or marine theme.
	- Arrange a water sport competition. Sporting activities that are environmentally friendly (such as swimming, surfing or canoeing)
	Second step:
	Each class will explore different aspects of the marine environment:
	For example:

	- people and their relationship with the sea.
	- Ecotourism and the Sea (they will explore the ways in
	which ecotourism can benefit coastal communities)
	- Fish for the Future (they will describe the fishing
	regulations and the way that it impacts on fishers and
	coastal communities).
	- our Coast for Life (they will show how coastal resources can
	provide our city with a rich source of social and economic
	wealth.
	- Typical seafood meals.
	<u>Last step:</u>
	Students of each class will create a poster with Canva and information booklet or a Padlet, which elucidate the theme they explored.
	At the end they will illustrate the products to students of other classes.
STUDENT IMPACT*:	Students realized what they can personally do for the marine environment
ACTIVITY PRODUCTS	Realization of a presentation of this field trip experience (with ppt, Prezi, Glogster, Padlet or other) to share with other students.
COMMENTS ON THE ACTIVITY	Experiential learning: teacher and students are engaged in direct experience and focused reflection in order to increase knowledge, develop skills and clarify values.
	Strengths:
	Students are more motivated to learn, because they have an active role.
	Weaknesses:
	I think this activity has no weakness.
ACTIVITY ASSESSMENT	This activity was generally successful.
CONCLUSIONS	The students' behaviour and interest:

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

REGARDING	Unlike traditional classroom situations where students may compete with one another or remain uninvolved or unmotivated and where the instruction is highly structured, in experiential learning situations students are more motivated to learn, because they have an active role in the subject rather than being assigned to review
	a topic or read a textbook chapter.

The students' activity:

Students of each class will create a poster with Canva and information booklet or a Padlet, which illustrated all the week activities.

At the end they will illustrate the products to students of other classes.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME	Anna Locantore
(of the organiser)	IPS CABRINI Taranto - ITALY
NAME OF THE ACTIVITY	Mural about our town: "problems or resources"
DATE	September 2016
AIM OF THE ACTIVITY	Environmental education through Mural painting activities as to enhance secondary school students' knowledge and awareness on environment.
TARGET GROUP	School activity for all classes
INDIRECT BENEFICIARY	Our Earth
ACTIVITY DESCRIPTION	 Brainstorming about the Theme (keeping a list on the board),; Students must select a theme for their mural; the class decide as a whole which ideas to use; Decide on the mural's size; Students have to research and print imagery, words, and symbols for the mural. Through researching, planning, design, and execution, students engage in the collaborative process from beginning to end.
STUDENT IMPACT*:	Students become aware about the local environment.

ACTIVITY PRODUCTS	Mural in each class;
	Video of the class murals.
COMMENTS ON THE ACTIVITY	Experiential learning: teacher and students are engaged in direct experience and focused reflection in order to increase knowledge, develop skills and clarify values.
	Strengths:
	Students are more motivated to learn, because they have an active role.
	Weaknesses:
	For this lesson we need art materials.
ACTIVITY ASSESSMENT	This activity was generally successful.
CONCLUSIONS	The students' behaviour and interest:
REGARDING	Unlike traditional classroom situations where students may compete with one another or remain uninvolved or unmotivated and where the instruction is highly structured, in experiential learning situations
	students are more motivated to learn, because they have an active role in the subject rather than being assigned to review a topic or read a textbook chapter.
	The students' activity:
	- Students of each class work collaboratively to convey a unifying theme in a mural;
	- Students brainstorm, plan, research and gather imagery and texts that reflect the theme;
	- Students work collaboratively to execute the mural;
	- students learn about problems and resources of our town.





LITHUANIA

NON - FORMAL ACTIVITIES

Tauragės "Aušros" pagrindinė mokykla



NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN (non-class activity)

NAME AND SURNAME (of the organiser)	Loreta Kivilienė and Vida Karbauskienė
NAME OF THE ACTIVITY	"Christmas Light is coming to us"
DATE	09.12.2016
AIM OF THE ACTIVITY	to save nature and environment; to decorate the school
TARGET GROUP	all students
INDIRECT BENEFICIARY	To know more about traditions, give ideas how things for recycling to make useful
ACTIVITY DESCRIPTION	Students made Christmas Trees and different decorations using things for recycling. They decorated all classrooms and school. After that students(6 from each class) had to answer the questions related with environment and Christmas.
STUDENT IMPACT*:	Awareness of the impact of human actions on nature. Developing knowledge about Christmas and Nature Enhancing of interest in participating in the environmental protection activities.
ACTIVITY PRODUCTS	Decorations, Christmas Trees; school documents, pictures http://tauragesausra.lt
ACTIVITY ASSESSMENT	The activity was highly assessed by participants;
CONCLUSIONS	The students' behaviour and interest:. well and satisfied; Strengths: students are exited to take part in such kind of

activities; they enjoy competitions;
Weaknesses: not all students were active;

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN (non-class activity)

NAME AND SURNAME (of the organiser)	Aida Vaičiūnienė
NAME OF THE ACTIVITY	"What do you know about protected places in Lithuania"
DATE	29.11.2016
AIM OF THE ACTIVITY	to know more about birds and animals that live in our district
TARGET GROUP	Students from 8 th class
INDIRECT BENEFICIARY	To take care about our nature
ACTIVITY DESCRIPTION	Students had meeting with people from Pagramantis Regional Park and had discussion with them and competition together with students from other schools
STUDENT IMPACT*:	Awareness of the impact of human actions on nature. Developing understanding about interesting and protected places Enhancing of interest in participating in the environmental protection activities.
ACTIVITY PRODUCTS	School documents; pictures , http://tauragesausra.lt
ACTIVITY ASSESSMENT	The activity was highly assessed by participants;
CONCLUSIONS	The students' behaviour and interest: well and satisfied; Strengths: students are exited to take part in the activities that are organised not at school; they enjoy competitions; Weaknesses: some video presentations were poor quality;

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN (non-class activity)

NAME AND SURNAME (of the organiser)	Rasa Dautarienė
NAME OF THE ACTIVITY	In the Farm
DATE	11.11.2016
AIM OF THE ACTIVITY	to know more about birds and animals that live in our farms
TARGET GROUP	Students from 4 th class
INDIRECT BENEFICIARY	to develop knowledge about farm birds and animals
ACTIVITY DESCRIPTION	Students visited the farm where the owner told why we have to take care about animal and birds and what kinds of them live in our farms.
STUDENT IMPACT:	Awareness of the impact of human actions on nature. Developing understanding about birds and animals Enhancing of interest in participating in the environmental protection activities.
ACTIVITY PRODUCTS	School documents; pictures, http://tauragesausra.lt
ACTIVITY ASSESSMENT	The activity was highly assessed by participants;
CONCLUSIONS	The students' behaviour and interest: well and satisfied; Strengths: students are exited to take part in the activities that are organised not at school; they enjoy discusses about thing that they know; Weaknesses: some students don't have pets and they didn't see some farm animals before, so they were afraid;

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN (non-class activity)

NAME AND SURNAME (of the organiser)	Danutė Kiliokaitienė
NAME OF THE ACTIVITY	In the Museum
DATE	16.11.2016
AIM OF THE ACTIVITY	to know more about birds and animals that live in our district
TARGET GROUP	Students from 5 th class
INDIRECT BENEFICIARY	to develop knowledge about farm birds and animals
ACTIVITY DESCRIPTION	Students visited the museum where the photographer told why we have to take care about animal and birds and what kinds of them are extinct
STUDENT IMPACT:	Awareness of the impact of human actions on nature. Developing understanding about birds and animals Enhancing of interest in participating in the environmental protection activities.
ACTIVITY PRODUCTS	School documents; pictures, http://tauragesausra.lt
ACTIVITY ASSESSMENT	The activity was highly assessed by participants;
CONCLUSIONS	The students' behaviour and interest: well and satisfied; Strengths: students are exited to take part in the activities that are organised not at school; they enjoy discusses about thing that they know; Weaknesses: sometimes the photographer used too difficult phrases for students;

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN (non-class activity)

NAME AND SURNAME (of the organiser)	Aida Vaičiūnienė and all Teachers
NAME OF THE ACTIVITY	The Day without a Car
DATE	28.10.2016
AIM OF THE ACTIVITY	to make the air less polluted, to take care about the environment
TARGET GROUP	students from all classes 1-10
INDIRECT BENEFICIARY	healthy lifestyle; to make the air cleaner
ACTIVITY DESCRIPTION	all teachers talk with students about air pollution, health problems and healthy lifestyle. Students were asked to walk to school or go by bikes. Their parents were asked to do the same (if it is possible)
STUDENT IMPACT:	Awareness of the impact of human actions on nature. Developing green world preservation skills and habits. Enhancing of interest in participating in the environmental protection activities.
ACTIVITY PRODUCTS	Posters, school documents; pictures
ACTIVITY ASSESSMENT	The activity was highly assessed by participants and also people outside school;
CONCLUSIONS	The students' behaviour and interest: well and satisfied Strengths: students are exited to take part in the activity where are many students; they feel proud that can help to make the air cleaner;

Weaknesses: some parents are not in such kind of activities and their kids can't take part (parents drive them to school);





POLAND

NON - FORMAL ACTIVITIES

I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie



NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi
(of the organiser)	im. Tomasza Zana we Wschowie
	Teachers: Agata Karolczyk-Kozyra, Agnieszka Jamrożek, Joanna Hubert
NAME OF THE ACTIVITY	A trip to the top of Ślęża.
DATE	September 2016
AIM OF THE ACTIVITY	Stimulating students' curiosity about learning the world, it's variety and beauty. Getting to know the natural values of the surrounding area. Understanding the advantages of Natural Polish Sudetes.
TARGET GROUP	Students from classes: 1a, 1c
INDIRECT BENEFICIARY	Parents.
ACTIVITY DESCRIPTION	During the tour, students learn about flora and fauna and history of the Sudeten mountains Ślęża. They learn about the rocks. They learn to wander the mountains. They learn the rules of hiking. They learn to cooperate in a group and first aid. Learn to use maps and navigate the trails.
STUDENT IMPACT:	Awareness of the impact of human actions on nature; enhancing of interest in participating in the environmental protection activities; active involvement during the curriculum integrated activities; development of project management skills; shaping active citizenship abilities and skills; refinement of the independent learning techniques

	through investigation, selection, presentation.
ACTIVITY PRODUCTS	Pictures. Developing pro-ecological attitude.
ACTIVITY ASSESSMENT	Educational, practical, important, interesting and good to connect with environmental change and a sustainable development.
CONCLUSIONS	Strengths: students are able to cooperate; they want to be eco-friendly. Weaknesses: some students did not seem to be interested in the lesson

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi im. Tomasza Zana we Wschowie Teacher: Agnieszka Jamrożek
NAME OF THE ACTIVITY	A trip to the Ponds in Wschowa.
DATE	September 2016
AIM OF THE ACTIVITY	Stimulating students' curiosity about learning the world, it's variety and beauty. Getting to know the natural values of the surrounding area.
TARGET GROUP	Students from classes: 1a, 1b
INDIRECT BENEFICIARY	Residents of Wschowa.
ACTIVITY DESCRIPTION	This part of the lesson takes place in school, where the teacher greets students, takes the register and axplains the rules of how to behave near the ponds. Then, students are divided into groups of 3 or 4. The groups are given worksheets, atlases, thermometres, jars to pour water from the pond, electronic ph meters and electronic weather stations. After getting to Wschowa's Ponds, the teacher introduces the problem, gives the main aims of the lesson and reminds them of chemical and physical properties of water. After that, students begin their group work which is based on carrying out observations and filling in the worksheets. At the end of the lesson, students present the results of their work and draw conclusions.

STUDENT IMPACT:	Awareness of the impact of human actions on nature; enhancing of interest in participating in the environmental protection activities; active involvement in local meetings with environmental agencies to the benefit of the community; active involvement during the curriculum integrated activities; perfecting digital competencies; development of project management skills; shaping active citizenship abilities and skills; refinement of the independent learning techniques through investigation, selection, presentation.
ACTIVITY PRODUCTS	Learning the variety of species in Wschowa's Ponds; using atlases, animal and plant guides skilfully; the ability to establishing the quality of water by means of simple laboratory techniques; developing pro-ecological attitude
ACTIVITY ASSESSMENT	The activity turned out to be successful, and it is hoped that it will be repeated next term.
CONCLUSIONS	Strengths: students are aware of the pollution in the pond water; students are able to cooperate; they want to be ecofriendly. Weaknesses: two students did not seem to be interested in the lesson. The students' behaviour and interest: Most of the participants were innterseted in the lesson, and were eager to take part in it. However, two students did not seem to be interested in the lesson. The students' activity: The majority of students were active in the lesson The students' results: Students' results were satisfying.

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi im. Tomasza Zana we Wschowie Teachers: Ewa Nowak, Bartłomiej Kopaczyński
NAME OF THE ACTIVITY	Promotion Olimpic values as principles of active citizenship.
DATE	September 2016
AIM OF THE ACTIVITY	Taking part in the regional event promoting fair play and Olympics values in daily living – the slogan can be translated as: "If you stand on the start position, you have already won, even you could be the last".
TARGET GROUP	Volunteers from our school: 40people;
INDIRECT BENEFICIARY	None
ACTIVITY DESCRIPTION	It was run on the 5km distance and spending free time in countryside with meeting gold medallist from Rio 2016 (Aneta Włodarczyk) and other Polish sport stars;
STUDENT IMPACT:	Students had opportunity to take part in regional sport event (5km run) and meet other students (also disabled) during this competition (everybody was the winner and achieved certificate of attendance) – basic Olympics value; that was also a way of promotion of healthy life style which should be part of our daily life.
ACTIVITY PRODUCTS	Pictures. Diploma and a few awards for our team participants; http://zan.edu.pl/xxiii-bieg-olimpijski-racot-2016/
ACTIVITY ASSESSMENT	The activity was highly assessed by participant and also people outside school;

CONCLUSIONS	Strengths: every time activities outside classroom are better and more powerful than lectures or even group work inside;
	Weaknesses: feeling that problem, which we touched is more complicated and difficult to solve;
	The students' behaviour and interest: well and satisfied even so this was their weekend;
	The students' activity: it enhanced the degree of tolerance and mutual acceptance among participants;
	The students' results: none Others: none

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi im. Tomasza Zana we Wschowie Teacher: Bartłomiej Kopaczyński
NAME OF THE ACTIVITY	Smog in Wschowa.
DATE	January 2017
AIM OF THE ACTIVITY	Checking level of our urban air quality. Do we have smog in Wschowa?
TARGET GROUP	Students from classes: 15 people class 2a (Geography higher level) and other class participants (mainly 3c also Geography higher level)
INDIRECT BENEFICIARY	Attempt to preparation of scientific researches
ACTIVITY DESCRIPTION	As a group of volunteers we tried to check visually cleanses of the air which we breath. By the usage of vacuum cleaner and small filter on the pipe, we sucked up the amount of air during 4 mins. It was during one evening with cold weather, because we wanted to know what people uses to burn in their stoves; students were chosen according the different land use to check if any correlation exist.
STUDENT IMPACT:	Experimentally proved smog problem; growth of environmental awareness, starting point to further discussion about our air quality.
ACTIVITY PRODUCTS	Filters with pollution particles and soot (http://zangeography.blogspot.com/2017/01/przymiarki-do-pomiaru-smogu-we-wschowie.html), consolidation of class

	team; in the future plan of the city with smog problems;
ACTIVITY ASSESSMENT	The activity was highly assessed by participant, we plane to show the results to the public audience.
CONCLUSIONS	The students' behaviour and interest: well and satisfied; The students' activity: quite easy and manageable; Strengths: every time activities outside classroom are better and more powerful than lectures or even group work inside; students could check what is "the scientific method of work" Weaknesses: some of students submit their help and in the time of experiment they resigned.

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME	I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi
(of the organiser)	im. Tomasza Zana we Wschowie
	Teachers: Agata Karolczyk-Kozyra, Agnieszka Jamrożek
NAME OF THE ACTIVITY	A trip to the museum of water "Hydropolis" in Wrocław.
DATE	April 2016
AIM OF THE ACTIVITY	Stimulating students' curiosity about learning the world, it's variety and beauty. Understanding the role of water in the world and in human life.
TARGET GROUP	Students from classes: 2a, 2c
INDIRECT BENEFICIARY	Parents.
ACTIVITY DESCRIPTION	While visiting the museum, students take part in a museum lesson on the role of water in human life and in the world. They discuss topics: ecology, the planet of water depths, ocean life, man and water, hydraulic works, town and water, water levels.
STUDENT IMPACT:	Awareness of the impact of human activities on nature; increasing interest in participating in activities related to environmental protection; active or will expire within the integrated program activities; The development of project management skills; development of skills and active citizenship skills.
ACTIVITY PRODUCTS	Pictures. Developing pro-ecological attitude.
ACTIVITY ASSESSMENT	The activity turned out to be successful, and it is hoped that it

	will be repeated next term.
CONCLUSIONS	The students' behaviour and interest: Most of the participants were innterseted in the lesson, and were eager to take part in it. However, some students did not seem to be interested in the lesson.
	The students' activity: The majority of students were active in the lesson
	The students' results: Students' results were satisfying. Strengths: students are able to cooperate; they want to be ecofriendly.
	Weaknesses: some students did not seem to be interested in the lesson.





PORTUGAL NON - FORMAL ACTIVITIES



NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

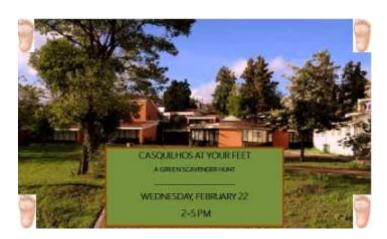
NAME AND SURNAME (of the organiser)	Cristina Ramalho
NAME OF THE ACTIVITY	Earth Day Celebration
DATE	April 2017
AIM OF THE ACTIVITY	 To celebrate the Earth Day To promote respect for Mother Earth To promote harmony with nature and the Earth. To raise awareness of environmental problems To use poetry to promote sustainable lifestyles and decisions To promote a taste for poetry
TARGET GROUP	Year 11 (16 students total)
INDIRECT BENEFICIARY	The whole school community
ACTIVITY DESCRIPTION	 In groups of 4, searching for poems about nature, mother Earth and the environment both in English and in Portuguese. Selecting five poems in English and five in Portuguese. Presenting each group's suggestions to the class. As a class, choosing the 10 poems or parts of poems to be used in the activity. Typing and printing the chosen poems or the parts of the chosen poems. Taping the poems or parts of poems on all the tables of our school: On each table there was only one of poems
	- Each table had either a poem written in English or in

	Portuguese.
	Awareness of the impact of human actions on nature
	 Development of green world preservation skills and habits
	• Enhancement of the interest in participating in the environmental protection activities
STUDENT IMPACT:	Development of the observation spirit and that of civic conscience
	Development of active citizenship abilities and skills
	• Refinement of the independent learning techniques through investigation, selection, presentation
ACTIVITY PRODUCTS	Photos
ACTIVITY ASSESSMENT	Direct observation: students' commitment during the whole activity/students' participation in the whole activity.
CONCLUSIONS	All students were highly committed to the activity and greatly enjoyed having participated in it. On 22 nd April, Earth Day, when all the other students of our school got into their classrooms, they were surprised to have a poem on their tables. According to their teachers, they enjoyed reading the poems. Moreover, in their opinion, it was a fantastic idea to celebrate the Earth Day.

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Conceição NunesCristina RamalhoMaria Leonor Inácio
NAME OF THE ACTIVITY	A Green Scavenger Hunt in English
DATE	22 nd February 2017
AIM OF THE ACTIVITY	 Creating awareness of the nature that surrounds school; Promoting a culture of preserving the school green spaces; Fostering consciousness of the impact of human actions on nature; Boosting further environmentally-friendly behaviours; Developing green world preservation skills and habits; Shaping active citizenship abilities and skills.
TARGET GROUP	Upper secondary students (General courses and VET) - 15-19 years old)
INDIRECT BENEFICIARY	The whole school community
ACTIVITY DESCRIPTION	Procedures 1 st step: - In the middle of the 1 st term the 3 teachers decide upon an informal activity on environment that would take place at Escola Secundária de Casquilhos (Casquilhos Secondary School) – inside some classrooms, in the corridors and outside the block of classes in the open air; - First decisions are made: A green Scavenger Hunt in English



- The group decides upon the necessary steps:
 - Best date for students (the week right before the school break or the week right after the beginning of the classes);
 - The activity would cover all the upper secondary courses general and VET;
 - There should be some sort of indoor activities related to the knowledge students have on the topic but also some sort of creative and physical performances;
 - Necessary documents to be prepared:
 - 1. A general regulation to be handed out to the competitors with important rules stated, such as: number of participants per team [4]; the requirement of a name for each team that should be in English; the documents students were about to receive at the beginning of the activity and the ones that should be delivered by them at the end, etc.;
 - 2. Other decisions were taken: students should receive the itinerary to be followed at the beginning and that the quiz should appear in a paper strip inside a drinkable yogurt container [started keeping them at home] that should be kept by the teams till the end of the competition and thrown into the recycling plastic bin;
 - **3.** Decide about the itinerary that students should follow during the competition and the clues to be given on the quiz paper strips to be related to the outside paths and the inside places teams should go to;
 - **4.** Score and prizes;

2nd step:

 Look up on the net for sites with quizzes on environment [general topics and also the necessity to have some kind of information about

environmentally-friendly measures recently taken in Portugal]; - Intermediate and upper intermediate levels;

 Another meeting to walk through the school and define the itinerary in accordance to the clues; First discussion about the dates for the activity [not easy at all] and about the prizes.

3rdstep:

- Choosing the opening and the closing activity of the competition: at the beginning students listen to the song "What a wonderful world" and then write a verse using some given words; and at end they sing the "3 R's song"
- Exemplify how the itinerary, the clues and the quiz or other creative /physical activity would work out together, for example:
- For the second activity students could read in their itinerary the following::

[TWO gone, twenty-four to go!

Do you know that human beings can survive 3 minutes without air, 3 hours without shelter and about 3 weeks without food? However, after 3 days you will be needing water!

Go and get a bottle of water.

The students have to think about a place at school where they could get a bottle of water – and that would be at the school bar. There they would have the paper strip quiz inside the yogurt container, and the quiz is:

How many liters of water does it take to package a liter of bottled water?

a.	4 liters
b.	3 liters
c.	5 liters
d.	10 liters

Next, the clue would say: "Look around and find the Loch Ness monster. They have to discover that outside the bar there is a small pond with ducks, they would go there and hidden in the small bushes they would find the quiz:

FOUR gone, twenty-two to go!

Where does drinking water come from?

a. surface water

b. ground water

c. desalinated water

d. all of them

For a creative activity, for example, the clue says:

Vincent Van Gogh said:

"If you truly love nature, you will find beauty everywhere" Look for Van Gogh's "Sunflowers", <u>take a photo</u> and get some inspiration to <u>make a sketch</u> of your own". Students would have to remember that at the Arts block, upstairs, there's the "sunflowers" painting painted by a student and that they should go there.

Or for a physical activity they would receive this clue:

FIFTEEN gone, eleven to go!

"Time to get down a slope. Walk for a few meters. Stop! Look around ... and find a wall to write a sign."

All of these are examples that had to be discussed, improved and checked out by the teachers.

4th step:

- Finally deciding about the date: 22nd February, the week before the Carnival break;
- Involving all the English teachers in the activity by asking them to present the activity to their students and encouraging them to register;
- Deciding about the certificates and prizes: for the first prize students would get a PET plastic bottle for water and a metal pen with Charles Dickens engraved. (There was an activity from the European Club in October named "Back to School" with a former teacher from our school, now working for the European Commission in Luxembourg. The Directorate for Education sent many "souvenirs" to be given to the students, such as computer pads, pens and pencils, informative brochures, the European passport, etc. Most of these materials were given to the students as participation prizes).

5th step:

On the day of the activity everything had to be prepared some hours before

the starting, meaning: certificates signed by the Head Teacher;
 paper bags with prizes, paper quiz stipes inside the yogurt container
 [more than 100] and spread all over the school, etc.

	 We got 14 teams, 54 students taking part in the hunt that performed the activity quite well in between 45 and 90 minutes; All of the teachers from the English Department were profoundly involved in the activity and helped with the scores and at half past five the winners were announced and prizes handed out.
STUDENT IMPACT:	 Awareness of the impact of human actions on nature Development of green world preservation skills and habits Enhancement of interest in participating in environmental protection activities Development of the observation spirit and that of civic conscience Development of active citizenship abilities and skills Improvement of teamwork and leadership skills
ACTIVITY PRODUCTS	 Poster to promote the activity Pictures Video News about the activity on the school website
ACTIVITY ASSESSMENT	Score grid (The winning team is the team earning the most points within the allocated time. In case two or more teams get the same points, the winner is the team that finishes the activity in the shortest length of time.)
	The students' showed a great enthusiasm throughout the activity. Some did the Hunt faster than others but teachers could witness their happiness and concentration. Also the physical and creative activities they developed were very enthusiastically performed. The teachers came to the conclusion that such activities should be
CONCLUSIONS	repeated but the date needs to be very well chosen because what happened was that more students wanted to participate but couldn't as they were having tests that week, once it was the week before the Carnival break. So next time the date needs to be more carefully planned.
	Also, there should be more flexibility in the constitution of the groups, meaning three or four members. The materials/documents created for this activity can be found at https://padlet.com/krismarfil/sqq8tuy7v34w

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Cristina Ramalho
NAME OF THE ACTIVITY	Kahoot games on environmental issues
DATE	January 2017
AIM OF THE ACTIVITY	 Consolidate and share knowledge of environmental issues through gamification. To develop research and synthesis skills To improve teamwork and digital skills
TARGET GROUP	Year 11 (Classes B and E)
INDIRECT BENEFICIARY	School community
ACTIVITY DESCRIPTION	 In the classroom students play a Kahoot game on environmental issues designed by the teacher. The teacher explains how to create a Kahoot game. The class is divided into small groups of 3. Each group is assigned the task of creating a Kahoot game on one of the topics dealt with throughout the unit "The world around us", which comprised the following topics: environmental problems, genetic engineering and alternative lifestyles. The teacher suggests a few topics for students' games; however, they are free to choose the topic they are going to deal with. The teacher suggests sites where students can get copyrights free images. Students are given a week to complete the assignment. Students are supposed to: Decide on the topic they are going to deal with. Research about the topic; Select useful/relevant information to create their Kahoot game. Decide on the number of questions of their Kahoot game (between 10 and 15). Decide whether their game is going to consist of

STUDENT IMPACT:	 multiple choice questions or true/false questions. Create the questions and the answers. Select images to accompany their questions so that their game can be more appealing for players. All images must be copyrights free. Check grammar and spelling. Preview and test the game. A lesson is assigned for students to play each other's games. Feedback is given both by the teacher and their peers. Students make any necessary adjustments bearing in mind their peers' and teacher's feedback. Students' Kahoot games are shared with other teachers so that they can be played by other students. Awareness of the impact of human actions on nature Development of green world preservation skills and habits Development of teamwork and digital skills Refinement of independent learning techniques through investigation, selection, presentation
ACTIVITY PRODUCTS	Students' Kahoot games
ACTIVITY ASSESSMENT	Assessment criteria for Kahoot games: - Content and relevance - Spelling and grammar - Aesthetics - Appropriate length - Appropriate timer for each question
CONCLUSIONS	Students like creating and playing games; therefore, they did enjoy this activity. They had no problems in coping with the software as it's a quite easy one to deal with. All groups did create very good games. Students specially enjoyed the fact of having had the chance to play each other's games. Students' games can be accessed at https://twinspace.etwinning.net/14440/pages/page/232203

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Cristina Evangelista and Susana Nogueira
NAME OF THE ACTIVITY	Making a leaflet calling people's attention to environmental problems
DATE	14/01/2016
AIM OF THE ACTIVITY TARGET GROUP INDIRECT BENEFICIARY	 To raise students' awareness to the environmental problems that are affecting our planet; To improve students' ability in writing persuasive texts; To teach students how to create a leaflet; To develop students' critical judgement; To develop students' teamwork and digital skills; To use media to express individual learning. Year 11: Classes A, B, C, D and E (96 students total) School community
ACTIVITY DESCRIPTION	 Learning about the environmental problems, their causes, consequences and possible solutions; Watching a film on it; Debating the consequences of the human's footprint on the planet; Researching about different ways of solving environmental issues; Creating a leaflet calling people's attention to the environmental problems that affect our planet nowadays. Students followed the following steps:

	 Researching about an environmental problem
	Selecting the fundamental information
	Choosing the appropriate software
	Organising the leaflet layout
	Creating a slogan
	Producing the leaflet
	Awareness of the impact of human actions on nature
	Adoption of an eco-friendly behaviour
STUDENT IMPACT:	Development of digital skills
	Improvement of critical thinking
	Enhancement of working skills
ACTIVITY PRODUCTS	A leaflet and a final exhibition of all the students' projects
ACTIVITY ASSESSMENT	 Direct observation The use of the English language in the written texts
CONCLUSIONS	This activity was very useful, because it helped students to realize the impact of the human footprint on nature. With the research they did, they could enlarge their knowledge regarding the issue they were studying. They were very creative and managed to produce great leaflets that sensitised and raised the awareness of the school community about the topic.
	Students' leaflets were later exhibited at the school library to celebrate the Earth Day. Photos of the exhibition can be found at https://twinspace.etwinning.net/14440/pages/page/140481

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Cristina Ramalho and Cristina Evangelista
NAME OF THE ACTIVITY	Workshop "Eco-journalists: Mission 3 R's" (Led by the staff of Media Lab at Diário de Notícias, a national daily newspaper, in Lisbon)
DATE	04/04/2016
AIM OF THE ACTIVITY	 To increase students' awareness and concern for the environment by deepening their knowledge of the importance of reducing, reusing and recycling; To improve students' ability in writing effective news articles; To teach students how to create an online newspaper; To develop students' critical thinking; To develop students' teamwork and digital skills; To use media to express individual learning.
TARGET GROUP	Year 10: Classes A, B and E (39 students total)
INDIRECT BENEFICIARY	School community; online community
ACTIVITY DESCRIPTION	 Getting to know the history of the newspaper Watching a video on it Guided tour to the newspaper offices Interactive training session: The importance and impact of information Information evolution
	Internet dangers

	 News articles (How to write a news article) Photojournalism Newspaper sections Newspaper organization roles Researching about recent news concerning the 3 R's
	• Creating an online four-page newspaper on the 3 R's in groups of 10.
STUDENT IMPACT:	 Awareness of the impact of human actions on nature Development of green world preservation skills and habits Improvement of digital competencies Development of critical thinking Enhancement of teamwork skills
ACTIVITY PRODUCTS	A four-page newspaper entirely devoted to the 3 R's
ACTIVITY ASSESSMENT	 Direct observation Questionnaire to assess the activity
CONCLUSIONS	This activity proved to be a very good asset as it gave students the opportunity to deepen their environmental awareness while developing important 21 st century skills. Students greatly enjoyed having taken part in the activity and managed to create five quite interesting newspapers. Students' newspapers can be found/read at https://twinspace.etwinning.net/14440/pages/page/114289 .

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Paula Neves
NAME OF THE ACTIVITY	Periodic Tables made from recycled materials
DATE	16 th December 2016 – 16 th January 2017
	To consolidate knowledge and understanding of the periodic table
AIM OF THE ACTIVITY	To develop understanding of alternative uses for waste products
AIM OF THE ACTIVITY	To use recycled materials to create a Periodic Table
	To develop students' teamwork skills
	To develop creativity and creative skills
TARGET GROUP	Year 9: Classes B and E (28 students total)
INDIRECT	School community
BENEFICIARY	Selicol community
BENEFICIARY	Division of the class into groups of 4 students.
	•
BENEFICIARY ACTIVITY DESCRIPTION	 Division of the class into groups of 4 students. Creation of a Periodic table, similar to the one found in students' workbook, with the following indispensable
ACTIVITY	 Division of the class into groups of 4 students. Creation of a Periodic table, similar to the one found in students' workbook, with the following indispensable elements:
ACTIVITY	 Division of the class into groups of 4 students. Creation of a Periodic table, similar to the one found in students' workbook, with the following indispensable elements: Chemical element symbol
ACTIVITY	 Division of the class into groups of 4 students. Creation of a Periodic table, similar to the one found in students' workbook, with the following indispensable elements: Chemical element symbol Atomic number Recycled materials had to be used to create the Periodic
ACTIVITY	 Division of the class into groups of 4 students. Creation of a Periodic table, similar to the one found in students' workbook, with the following indispensable elements: Chemical element symbol Atomic number Recycled materials had to be used to create the Periodic Tables. Students were free to choose the recycled material to work

	Improvement of teamwork skills
	Development of creativity and creative thinking skills
	 Optimization of interpersonal and social relationships Valorization of student potential
ACTIVITY PRODUCTS	Students' outputs: Periodic Tables made from recycled materials
	• Delivery date -10% (deduction of 1% for each day of delay)
	• Group identification – 5%
ACTIVITY ASSESSMENT	 Planning and execution – 20%
	Scientific correction – 20%
	• Creativity / materials – 30%
	• Global presentation – 15%
CONCLUSIONS	The students successfully achieved the goals of the activity. In general, they were quite creative and did reuse waste materials to create their own Periodic Tables. Moreover, they delivered their Periodic Tables, which illustrated an excellent performance, within the established deadline. Therefore, the general assessment of this activity was "excellent".
	Photos of students' periodic tables can be found at https://twinspace.etwinning.net/14440/pages/page/199406 .

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Cristina Ramalho
NAME OF THE ACTIVITY	Five-minute oral presentations on endangered animals or NGOs
DATE	Second week of December 2016
AIM OF THE ACTIVITY	 Improve knowledge of endangered animals and NGOs Give a standard oral presentation which informs and/or persuades the audience. Develop language and communication awareness Develop key information skills
TARGET GROUP	Year 11: Classes B, D and E (55 students total)
INDIRECT BENEFICIARY	Students' families, friends and colleagues
	 Choosing the topic to talk: an endangered animal or an NGO. The aim of the presentation is either to persuade their colleagues to protect an endangered animal or support an NGO. Researching about the topic on the Net.
ACTIVITY	 Selecting the most important ideas about the topic and then writing them down in note form.
DESCRIPTION	Organising the information: introduction, development, conclusion
	 Selecting images, animations and/or videos to accompany and support the oral presentation.
	• Creating the multimedia presentation using the software of their choice.
	Practising the oral presentation at home.
	Delivering the argumentative arguments in the five-minute oral presentation in class.

	Having the class express their opinion on the presentations (Have they been persuaded to save the animal presented? Have they been
	persuaded to support the NGO presented? Why (not)?
	Note - Students are free to approach the topic the way they want. However, they are given a few topics that they might take into consideration.
	An endangered animal:
	 Its name; The place where it lives; How many there were before; How many there are now; The reasons why the species is in danger; Ways to protect it; Reasons for having chosen this animal; Reasons for saving this animal.
	An NGO:
	 Mission and/or goal of the organization; History of the organization: when it was founded, where, people responsible for its foundation, when it was started; The accomplishments of the organization over the years; Future goals of the organization; Kind of membership it has: number of members, the type of people that support the group and their reasons for supporting it; Reasons for having chosen this organisation; Reasons for joining/supporting it.
	 Awareness of the impact of human actions on nature Developing green world preservation skills and habits
STUDENT IMPACT:	Refinement of the independent learning techniques through investigation, selection, presentation
	Confidence in one's capacity to communicate in the language of the project and refining of linguistic abilities
	Improvement of digital competencies
ACTIVITY PRODUCTS	Students' presentations
	Assessment criteria for students' oral presentations:
ACTIVITY	ContentOrganisationFluency

ASSESSMENT	AccuracyDeliveryVisual/media aidsAudience engagement
CONCLUSIONS	Most presentations successfully accomplished the goals of the activity. However, a few didn't due to the poor research done and/or the lack of engagement in producing an appealing media presentation to accompany and support the presentation so as to grab the audience's attention.

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Cristina Ramalho
NAME OF THE ACTIVITY	In defence of human rights: a five-minute oral presentation on a human rights fighter
DATE	March 2017 (third week)
AIM OF THE ACTIVITY	 Developing knowledge of human rights activism Give a standard oral presentation which informs and/or persuades the audience. Develop language and communication awareness Develop key information skills
TARGET GROUP	Year 12: Classes A/B and C/D (29 students total)
INDIRECT BENEFICIARY	Students' families, friends and colleagues
ACTIVITY DESCRIPTION	 Choosing a human rights fighter. The aim of the presentation is to provide their colleagues with the most important information about the human rights fighter chosen, as well as to persuade them to get involved in the defence of human rights. Researching about the human rights fighter on the Net. Selecting the most important information about his/her biography; the reasons that led him/her to get involved in the fight for human rights; his/her role as far the defence of human rights is concerned; his/her impact on other people's lives and then writing them down in note form. Thinking of the reasons for having chosen him/her as a role model in the fight for human rights among so many others. Thinking of a powerful way to get their colleagues more motivated to get involved in the defence of their individual rights and those of others, as well as more prone to accept difference. Organising all the information gathered: introduction,

	development and conclusion
	 Selecting appropriate images, animations and/or videos to accompany and support the oral presentation.
	• Creating the multimedia presentation using the software of their choice.
	Practising the oral presentation at home.
	Delivering the five-minute oral presentation in class.
	• Having the class express their opinion on the presentations (Were they given enough info about the human rights fighter? Was it presented in an engaging way? Do they feel like knowing more about that person and his/her accomplishments? Was the presentation about someone they had never heard of? If the presentation happened to be about someone everybody knows, were they provided with any new information? Do they feel more prone to become more active citizens after having heard the presentation?).
STUDENT IMPACT:	Development of active citizenship abilities and skills
	• Enhancement of the degree of tolerance and mutual acceptance
	Eradication of prejudice and xenophobia
	• Refinement of the independent learning techniques through investigation, selection, presentation
	Confidence in one's capacity to communicate in the language of the project and refining of linguistic abilities
	Improvement of digital competencies
ACTIVITY PRODUCTS	Students' presentations
	Assessment criteria for students' oral presentations:
ACTIVITY ASSESSMENT	 Content Organisation Fluency Accuracy Delivery Visual/media aids Audience engagement
CONCLUSIONS	Students did put a lot of effort into their presentations. They were very interesting and the audience was engaged. The feedback from their peers was highly positive.

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Cristina Ramalho and Maria Leonor Inácio; however, the activities at Tapada Nacional de Mafra (the National Hunting Grounds of Mafra) were led by its staff.
NAME OF THE ACTIVITY	On the track of biodiversity at Tapada Nacional de Mafra (the National Hunting Grounds of Mafra)
DATE	24/10/2016
	• To foster students' knowledge of the concept of "biodiversity" and its importance for the preservation of life on our planet.
	 To learn how to categorize lichens according to physical characteristics.
AIM OF THE ACTIVITY	To encourage students to discover and appreciate Tapada Mafra's existing biodiversity and habitats;
	To raise awareness of the importance of protecting biodiversity.
TARGET GROUP	Years 11 and 12 (50 students total)
INDIRECT BENEFICIARY	Students' families/friends/colleagues
ACTIVITY DESCRIPTION	• First, students are provided with background information about the history of Tapada Nacional de Mafra, as well as about its flora and fauna.
	• Second, they explore the concept of biodiversity: What is it? Where can I find it? Should I preserve it? Why?
	Third, they make lab experiments related to microorganisms and analyse plants' DNA.
	• Fourth, they have a guided tour around Tapada Nacional de Mafra to learn about it as an island of biodiversity. During the guided tour, in groups of 13/14, students carry out an activity which consists of identifying/categorising

	lichens according to physical characteristics. Their findings are registered in a table. The spokesperson of each group reports back. • Finally, they watch a video about biodiversity to consolidate the knowledge learnt and to make them more prone to assume their responsibility as far as the protection of biodiversity is concerned.
STUDENT IMPACT: ACTIVITY PRODUCTS	 Awareness of the impact of human actions on nature Development of green world preservation skills and habits Enhancement of the interest in participating in environmental protection activities Development of the observation spirit and that of civic conscience Development of active citizenship abilities and skills Improvement of digital competencies Photos Article for the school website
ACTIVITY ASSESSMENT	 Interactive reports on the activity Direct observation: students' commitment during the whole activity/students' participation in the whole activity. Interactive reports (content; English language; creativity)
CONCLUSIONS	The guides/staff from Tapada Nacional de Mafra (the National Hunting Grounds of Mafra) did a great job. Students proved to be highly engaged in the activity. Their knowledge of the importance of preserving biodiversity definitely got a boost and so did their digital skills as they had to create an interactive report on the activity using software like Genial.ly, Piktochart, Powtoon or Glogster. Their work can be found at https://twinspace.etwinning.net/14440/pages/page/173809

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Cristina Ramalho and Leonor Inácio
NAME OF THE ACTIVITY	Lecture on biodiversity and sustainability led by Susana Fonseca of the Portuguese non-governmental organisation ZERO.
DATE	07/10/2016
AIM OF THE ACTIVITY	 To raise students' awareness of the challenges our planet faces in terms of environmental sustainability. To raise students' awareness of the necessity of creating a more sustainable living. To promote and normalise visions of sustainable lifestyles.
TARGET GROUP	Years 11 and 12 (Classes: 11.° B and 12.° A – 23+)
INDIRECT BENEFICIARY	Students' families/friends/colleagues
ACTIVITY DESCRIPTION	 Presentation of the organisation: when it was created; why it was created; its staff/members; its goals; its accomplishments Talking about the world's ecological footprint. Comparing the world's ecological footprint to the world's bio-capacity. Exploring the relationship between the UN Human Development Index (HDI) and the Ecological footprint Identifying the risks/challenges for the world brought along by overconsumption, overpopulation, food loss and waste, natural catastrophes, etc. Talking about the challenge to agriculture posed by food insecurity and climate change.

	• Identifying the differences between industrial agriculture and small-scale farming, between industrial and sustainable farming production.
	Talking about EU's and USA's Goals for 2050 as far as the world bio-capacity per person is concerned.
	• Identifying the potential areas for youth entrepreneurship within sustainable development.
	• Identifying the steps to taken towards sustainable development.
STUDENT IMPACT*:	 Awareness of the impact of human actions on nature Development of green world preservation skills and habits Enhancement of the interest in participating in the environmental protection activities Development of active citizenship abilities and skills
ACTIVITY PRODUCTS	• Photos
	Article for the school website
ACTIVITY ASSESSMENT	Questionnaire to assess the activity
CONCLUSIONS	According to students' feedback, this lecture was quite valuable as they did get a lot of input concerning the state of the planet as far as environmental sustainability is concerned, the sustainable development goals for 2030 and the best practices towards sustainable lifestyles. Evidence of this activity can found at https://twinspace.etwinning.net/14440/pages/page/168972



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ROMANIA

NON - FORMAL ACTIVITIES

National College "Ienachita Vacarescu"



NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	GHEORGHIAN ANCA
NAME OF THE ACTIVITY	FOOTBALL AND THE ENVIRONMENT
DATE	17.11.2015
AIM OF THE ACTIVITY	Raising awareness about the advantages of using AstroTurf while arranging Leisure Sports Facilities and the positive impact this has on the surrounding environment
TARGET GROUP	8 th grade students
INDIRECT BENEFICIARY	the community
ACTIVITY DESCRIPTION	Some of the students played a football match on the school football field. The others followed the match and cheered their favourites. At the end of the match, there was a debate on the ideal surface for playing football. Starting from the actual surface that the match was played on (bitumen), the students came up with other examples of surfaces: Natural turf and Astroturf. The students discussed the advantages and disadvantages of each type of surface. After their debate and after drawing their own conclusions, the teacher presented some advantages that the Astroturf has, as far as the surrounding environment is concerned. The Astroturf has a positive impact on the environment: Depending on the climate of the specific area, the Natural turf requires between 500.000 and 1milion litres of water each year. Only during 2010, between 12 and 24 billion of litres of water was saved by using Astroturf. According to the USA Agency for the Protection of the Environment (EPA), a medium size family of 4 members in the USA uses 400 litres of water per day. As a result, the saving of 24 billion of litres of water is the annual requirement for about 55.000 medium

	size America families.
	Taking into account the huge impact on the conservation of the natural resources of water, a large number of local administrations offer help and financial aid to the private and also economic investors who use the Astroturf. The Water Authority from the south of Nevada estimates that every square foot of natural turf replaced by AstroTurf saves 55 litres of water per year. If a garden with natural turf has about 1.800 square feet, it means that every owner from Las Vegas who uses Astroturf will save 99.000 litres of water per year. Of course the saving is also seen in the cost with the sewage. The total surface of Astroturf has also saved millions of pounds which would have been spent on pesticides and fertilizers which have a significant negative impact on the natural environment. For example, in North Carolina, the main cause of water pollution is the excessive use of pesticides and fertilizers on the natural lawns. Moreover, the Astroturf contributes to the diminishment of fumes (EPA says that a lawn mower pollutes in an hour more than 11 cars) and the reduction in vegetable waste, which in the EPA states is the third most disposed solid waste.
STUDENT IMPACT:	the students were very active in the activity and interested in the points discussed.
ACTIVITY PRODUCTS	photographs and short videos taken during the match
ACTIVITY ASSESSMENT	Following the activity, the students became aware of the immediate advantages of replacing the natural turf with the Astroturf, even in the national and international sports competitions
CONCLUSIONS	The students' behaviour and interest: The students were very competitive during the match and also in the debate that followed.
	The students' activity: The students were actively involved throughout the activity.
	The students' results: They were able to draw their own conclusions towards the advantages that the Astroturf has

over the natural turf
Others: The whole activity was a success. Both the students and the teacher learnt new things about the ways in which the natural water resources can be preserved and protected.

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	TRANDAFIR CARMEN
NAME OF THE ACTIVITY	GREEN CITY
DATE	10.01.2017
AIM OF THE ACTIVITY	To help students develop skills and considerate attitudes towards the environment
TARGET GROUP	Students of the XI th B
INDIRECT BENEFICIARY	teachers, parents
ACTIVITY DESCRIPTION	Within this activity, students were divided into 3 large groups and asked to consider if a GREEN CITY could actually exist and if they, with a minimum amount of materials would be able to manufacture a scale model. The students were given 3 weeks for the manufacturing process using, as a matter of course, knowledge and skills acquired during the physics and informatics classes.
STUDENT IMPACT:	What impact did the activity have? Their opinions: "The ecological spirit and the power of information generated by technological advances gave us the idea of "The Little Green City": a modern city, which uses ecological, renewable ways of producing energy, in which people adjust their program according to environmental needs, with a common goal: to protect the planet from pollution, and, implicitly, to reacha better living standard (from an environmental perspective)". "The obvious and possibly the only reason that urges you to
	eliminate the devices that waste energy is a diminished electricity bill. Furthermore, from the series "the economic crisis awakens your inner ecologistin you", there is also a secondary effect: you will be doing the planet a favor and you will be awarded a white bullet in the little ecologists' catalogue. "

ACTIVITY PRODUCTS	3 Green City models (see photo)
ACTIVITY ASSESSMENT	The assessment of the activity used a series of criteria established previously (ever since the topic was suggested): - the theoretical part of the paper - the practical part of the paper - use of knowledge acquired while studying the Electricity chapter - use of digital components - use of recyclable materials
CONCLUSIONS	The students' behaviour and interest: seriousness, team spirit, empathy with the environment STUDENTS' ACTIVITY: GROUP 1 While creating our project we have tried to put into practice the most efficient ideas (from our point of view) in order to fight pollution and to save energy. Thus, we have used the following green elementsmeant to act as components of an ecological city: • House inside the hill: Initially, we left from the idea of a wattle house, but since we are in the 21st century, we thought that the reproduction of the home in "The Hobbit" would be more exciting. In order to manufacture it we used newspapers for the base body, and in order to cover and define the house in the shape of a hill we used paper paste; • Wind turbines: In our city they will provide the power symple for our sity. The turbines' hody is made out of
	 supply for our city. The turbines' body is made out of cardboard, that turns into a tube, while their paddles were made out of paper (similar to origami); Solar panels: these will power the independent consumers or they will generate electricity. They were easy to manufacture as we only needed some cardboard. The Tesla automobile: Everyone knows how dependent we have become of carsso, we decided to integrate in our city an electric vehicle with zero emissions, which will be powered by an all-electric

- engine. Regarding the car, we can say that wecheated, as it is the only component which is not actually built by us.
- Hydroelectric plant: Using an accumulation dam, the mechanical energy can be converted into electric energy. The dam itself is made of cardboard; the socalled river is made of paper and more newspapers; while the whole dam is hold in place by 3 rolls of toilet paper.

We tried to use recyclable materials exclusively in order to manufacture the whole city

GROUP 2

- Thebaseof the ensemble is an extruded polystyrene board (1*0.5 meters).
- A green artificial carpet was placed over the board (artificial).
- The city's buildings are recycled toys arranged so that they resemble a real city.
- Illumination consists of white LEDs(3.2V, 25 mA). The power supply was represented by 4 18650 –li poconnected in parallel (4.2V, 2200 mAh * 4), controlled by a TP4056E module— which ensures a constant charge and protects the batteries from overcharge or over discharge. In order to avoid LED damage we used 130 ohm resistors (value determined using Ohm's law). The resistors reduce the intensity that is conducted to the LEDs. We selected a value bigger than necessary in order to have a weaker, less harsh illumination. We fixed the LEDs in place using a silicon glue gun.
- The screen used for displaying the information within the city is an LCD display (16*2 pixels), containing 16 pins, controlled by an Arduino Uno R3 microcontroller. The programming was done in native micro-controller language. Every single display pin was connected to an adequate port. We used 100 kOhm potentiometer necessary for setting the contrast of the display.
- Solar cells are part of a previous experiment. These produce under optimal conditions 5V, 100 mAh * 2.

They were connected to a recycled circuit board taken from a car phone charger (only to be able to reuse the USB port).
 We used a fanfrom an old PC(12V, 300 mA) for a practical application: visualizing how electricity is generated.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	MARCU POPESCU MADALINA ANETA
NAME OF THE ACTIVITY	The live library
DATE	20.11.2015
AIM OF THE ACTIVITY	to raise students'awareness on the environmental problems in thearea where they live
TARGET GROUP	7 th grade students
INDIRECT BENEFICIARY	students from other classes who may witness the activity, students' families,teachers of other subjects
ACTIVITY DESCRIPTION	The week previous to the development of the activity, the teacher announces the topic and establishes the students who are to impersonate some environmental elements and components that are, obviously, in a critical situation in the area of students' residence and that might benefit from people's help. Following this discussion, the students identified: the trees, the rivers, the stray dogs and cats, the migratory/non migratory birds, the streets, etc. Then, the students are asked to choose one of these components or elements and make up a 150-word narrative in which to emphasize the need for help, the causes, the effects, the possible solutions and the results, in case their proposals are to be considered. At the next class of the week prior to the activity, the impersonating students come up with their work which is checked by the teacher. During the week-end, the students learn their stories by heart and make up the costumes. When the time for the activity itself has come, the teacher arranges the costumed students in a circle, at some distance from the others, on the chosen spot- auditorium, interior/exterior school garden, the park, while the others divide in small groups, in this case-groups of three, who move around the circle until they have listented to all stories. The character students repeat their story for nine-ten times

	while the readers/listeners only listen to them. At the end of the class they speak about which story has impressed them mostly and why.
STUDENT IMPACT:	-Awareness of the impact of human actions on nature
	-Enhancing interest in participating in the environmental protection activities
	-Development of the observation spirit and that of civic conscience
	-Shaping active citizenship abilities and skills
	-Initiative and volunteering spirit
	-Confidence in their own capacity to communicate in the language of the project and refinement of
	linguistic abilities
	-Availability to cooperate with students from other countries
	-Optimization of interpersonal and social relationships
	-Development of green world preservation skills and habits
	-Refinement of the independent learning techniques through investigation, selection, presentation
ACTIVITY PRODUCTS	costumes, a collection of storiesunder the title <i>When the Earth Cries</i>
ACTIVITY ASSESSMENT	All students' works were ckecked by the teacher, the collection of stories won Ist prize in an International Contest, the students' pronounciation and intonation in English were appreciated by most teachers from all countries within the project
CONCLUSIONS	
	The students' behaviour and interest:
	Students were actively involved, eager to participate in the development of the activity
	The students' activity:
	- the character students worked hard as they wrote the story, learnt it by heart, made their costumes and presented the stories for every group willing to hear it

- the listener students move around the set centres and at the end they assess the story that impressedd them mostly
The students' results:
Due to the multiple skills involved and considering the prize awarded as well as the direct congratulations- addressedby all teachers to both students and coordinator -I consider that the students' results are very good

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	ISTRATE NICOLAE CECILIAN
NAME OF THE ACTIVITY	ICT for sustainability and environmental protection
DATE	whole school year
AIM OF THE ACTIVITY	Raising awareness of the applicability of IT to sustainability and environmental protection.
TARGET GROUP	XII th graders: 17-19 years old
INDIRECT BENEFICIARY	peers of the students involved, people living in our town
ACTIVITY DESCRIPTION	The students come to the IT laboratory, where the provider announces the main topic of the activity and proposes the students to do some research on the internet on sustainability and environmental protection. The students are given 40 minutes to develop the activity using Open Space method of non-formal education, by accessing the following sites:
	http://www.alter-edu.ro/openspace.html
	http://erasmus-plus.ro/ro/category/metode/
	http://www.nonformalii.ro/metode/open-space
	The next step takes place in the classroom, where the desks are arranged in circle, which induces the idea of equality and diversity. On the black/whiteboard the topic of the activity is written. The students are invited to brainstorm ideas for debate and write them down on the black/whiteboard. These ideas can be divided in three main categories, which leads to having the class diveded in three workshops:

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL

	NON-FORMAL EDUCATION" (ACEAFNE)
	Group1: Recycling
	 electronic components for recycling (hardware PC) and using electronic devices instead of paper promoting and implementing recycling projects by using Internet and web pages. Group 2: Stocking data about the environment and the access to these
	 The use of data bases Promoting the information about and for becoming ecologically sound Group 3: Renewable energy
	 Designing sources of renewable energy Studying the energy sources. The students are invited to join in one of the groups and carry on debating on the ideas proposed. At the end of the debate, each group notes down the ideas that stand out.
	Duration – 60 minutes
	The provider and the students go to the "Mitropolia"Park, Where the spokespeople of each group present the main ideas to the rest of the class.
	Finally, the provider underlines the following:
	 The human race has to protect The Blue Planet, the craddle of our civilisation People will make use of all means to protect the environment The students today will later follow to accomplish this pursuit at their workplace later in life The young generation will pass on their ideas and the message to protect the environment Time -50 min
STUDENT IMPACT:	-Awareness of the impact of human actions on nature
	-Enhancing interest in participating in the environmental protection activities
	-Development of the observation spirit and that of civic conscience
	-Shaping active citizenship abilities and skills
	-Initiative and volunteering spirit

-Availability to cooperate with students from other countries

	-Optimization of interpersonal and social relationships
ACTIVITY PRODUCTS	Files on conservation, Recycling, Stocking data about the environment and the access to these, Renewable energy
ACTIVITY ASSESSMENT	Direct observation
CONCLUSIONS	The students' behaviour and interest: Actively involved, eager to participate in the development of the activity The students' activity:research and debate The students' results: identification of various means to protect the environment

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	BOBU RALUCA
NAME OF THE ACTIVITY	Live Library using Plotagon
DATE	25 th November 2016
AIM OF THE ACTIVITY	To integrate IT tools (Plotagon) into a speaking activity to boost students' knowledge about the 17 Global Goals and to perfect digital competencies
TARGET GROUP	students from classes: 10 G
INDIRECT BENEFICIARY	Parents, Friends of the participants
ACTIVITY DESCRIPTION	The students had to use the IT instrument (Plotagon) and create a character or two characters (depending on their preferences). Then thought of a short story linked with one of the 17 Global Goals and presented the story in class with the help of the avatars and this was followed by a discussion and debate.
STUDENT IMPACT:	The students enjoyed using Plotagon to create their own avatar and then combined that with a short story, so in the end they not only learnt about environmental issues in a funny way, but they also combined their knowledge with IT skills
ACTIVITY PRODUCTS	The Avatars (the characters)
ACTIVITY ASSESSMENT	The assessment was done in a follow-up activity consisting of a questionnaire and interpretation of the answers
CONCLUSIONS	The students' behaviour and interest: The students were very interested and found both the subject and using Plotagon very attractive
	The students' activity: The students got involved and supported with arguments and examplestheir points of view

about environmental issues
The students' results: The students benefited from this activity by creating an avatar and a story thus learning about green issues in a fun and relaxed way

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	BARBU CAMELIA
NAME OF THE ACTIVITY	"S.O.S Nature!"
DATE	24.11.2015
AIM OF THE ACTIVITY	To stimulate feelings of respect toward the environment
TARGET GROUP	students from class XIE
INDIRECT BENEFICIARY	students
ACTIVITY DESCRIPTION	-To describe the features of the natural environment; -To observe and name the effects of natural phenomena on nature -To identify ways that can help maintain a healthy environment; -To conduct a role play in less than 5 minutes on environmental protection Methods: conversation, observation, analysis, case study, the locationtour, role play, independent work and team work. QUESTION: How does/can man protect nature? 1. Possible answers: - Do not scratch the tree bark - Do not break branches and flowers - Plant new seedlings - Do not tread on grass - Do not cut trees other than when the forest is too dense or has too old trees - Do not throw trash into the water - Do not make fires in the forest - Do not drop litter in woods or parks - Collect waste and debris in trash bags

- Reuse some materials, transforming what others consider useless / throwing in something useful
- Selectively collect waste (yellow plastic, metal, blue paper, cardboard, green glass)
- Whitewashing trees and clearing dead branches and weeding
- Protect rare plants and animals
- Make animal shelters
- Travel more on foot, bike
- Wash the car, laundry and dishes after a picnic at home and not in the rivers
- Do not keep birds in cages
- Do not write names on walls
- Do not cling to tree branches
- Water the plants
- Fish / hunt only when it's fishing/hunting season
- Do not play loud music (Sound pollution)
- 2. Identification of means to protect the environment
- * The identification of pollution sources and ways to prevent it
- * Drafting rules on environmental protection(team work)
- 3. Case Study
- -Each Team will receive a sheet with a text that shows the situation of environmental pollution and will have to find solutions.
- 4. Direct frontal activity
- -The pupils discuss about the solutions set
- The pupils comment on the solutions and reach a common denominator, formulating the conclusion of the exercise: You need not only to know, but to apply the rules to protect the planet. The planet is our home. Keep your house clean!
- 5. Give some reasons why the planet should be protected (brainstorming)
 - Because we enjoy its beauty
 - Because it makes us better people
 - Because it gives us air / oxygen necessary for life
- Because without it, we would live in an ugly, boring environment.

positive
photos, essays
The students' behaviour and interest: it generated interest
The students' activity: Students were highly proactive
The students' results: it enhanced awareness and motivation
T

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	BARBU CAMELIA
NAME OF THE ACTIVITY	Healthy Lifestyle
DATE	24.03.2017
AIM OF THE ACTIVITY	To understand what different foods are made from
	Distinguish what is healthy/unhealthy
	Teaching strategies: dialogues
	Teaching method: groupwork, pairwork
	Problem solving: Do we know what is healthy to eat?
TARGET GROUP	students from classes: 11 th E
INDIRECT BENEFICIARY	
ACTIVITY DESCRIPTION	Students write down what they like to eat, then they have to think about what is healthy and what is not and make a list of healthy things as well as list of unhealthy things. With their teacher, students discuss about heatlhy food, their task is to think about some healthy snacks made from the healthy ingredients that they have written down.
	Students can prepare the snacks at home as homework and enjoy them together during the next lesson
STUDENT IMPACT:	Students think about hygiene, they realise what is good to eat and why, learn about possible allergies and the importance of fresh heatlhy food.
ACTIVITY PRODUCTS	Various types of food
ACTIVITY ASSESSMENT	Informal exchange of information, very useful

CONCLUSIONS	The students' behaviour and interest:Students were extremelyinterested.
	The students' activity: Class activity
	The students' results:
	Students think about hygiene, they realise what is good to eat and
	why, learn about possible allergies and the
	importance of fresh heatlhy food.
	Others: The students were interested and enjoyed the healthy
	snacks.

NON-FORMAL EDUCATION (ACEAFNE)

NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	PAUNESCU CAMELIA
NAME OF THE ACTIVITY	Flashmob
DATE	21.02.2017
AIM OF THE ACTIVITY	Implementation of physical education among youths Teaching strategies: working with others Teaching method: Demonstration and explanation Problem solving: Through dance
TARGET GROUP	Class 8A
INDIRECT BENEFICIARY	another 200 students
ACTIVITY DESCRIPTION	Flashmob is a term coming from English ("flash" meaning "instant" and "mob" meaning "crowd") and it refers to a very short gathering in a public place where the participants perform a certain unusual action for a short period of time (a couple of minutes) and, after this, the crowd disperses. The idea appeared in the literature of the 20 th century, and it was made reality in 2003. It was facilitated by the wide spread use of the internet, e-mail and instant messaging as these are the main means of organizing these assemblies. Flashmob has the purpose of fostering feelings of mutual understanding, interest and even sensations that something is wrong about the spectators themselves. Any Flashmob-like activity has rules, the most important being: • The action must be spontaneous and simultaneous. Attracting attention on the part of the participants is forbidden • The impression that participants do not know one another must be created and it is also forbidden to show that they are preparing themselves to do something unusual

	 All actions must follow a plan At the end, all participants must leave the place of action immediately without showing that something special happened The organizers do not offer or receive money for participating as it is a voluntary action and the purposes of this activity can be: Having fun The feeling of being free from behavior stereotypes Impressing the others Testing personal abilities to perform spontaneous activities in public places The attempt of getting new sensations The feeling of belonging to a common action New emotional feelings Finding new friends Participants in these kinds of actions can be successful and serious people. Some psychologists explain the need of being part in such activities through the fact that people get bored with rational life, thus, trying to participate in something special that could bring new sensations into their lives. Flashmob is usually organized through the internet. In each country there is an individual community whose purpose is to avoid misunderstandings about the way and place where these activities are held.
STUDENT IMPACT:	relaxation
ACTIVITY PRODUCTS	sound system
ACTIVITY ASSESSMENT	the flashmob to be spread in students' free time
CONCLUSIONS	The students' behaviour and interest:. Great coordination and flawless behaviour; Big interest as it is one of the first activities of its kind to take place in this city. The students' activity: dancing and socializing The students' results: better health and wellness





SWEDEN

NON - FORMAL ACTIVITIES

Sundsvall's Gymnasium Västermalm



NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	SLU, the Swedish University of Agricultural Sciences
NAME OF THE ACTIVITY	The Autumn Trial
DATE	August-October 2016
AIM OF THE ACTIVITY	Encourage students to be outdoors all year round and take part in real research on the effects of climate change. In Autumn experiment, conducted annually since 2013, thousands of students have participated and submitted data on the autumn leaf colors development.
TARGET GROUP	Students from classes: EE2
INDIRECT BENEFICIARY	A nationwide database to all interested.
ACTIVITY DESCRIPTION	Changes in the nature's calendar is the most obvious biological effects of climate change. Plant season's start, end, duration and other events in nature's calendar is linked to the basic properties of the ecosystems. We also wonder how the interaction between interacting species, for example, plants and their pollinators, affected about nature's calendar is changed. A change of nature's calendar may also impact on the country's pollen because both the timing and length of pollen season changes. The aim of the Autumn Trial is to gather data about everything from the first signs of spring to the last autumn characters, so that we can offer a nationwide database to all interacted. In this way, we have to facilitate research.
	interested. In this way, we hope to facilitate research, environmental work and information and making us better equipped to face the effects of climate change. Data from the trial is used, for example, by the Swedish environmental goals through environmental indicator "Plants growing season."

	Students observe trees, leaves, taking pictures and reports to a database.
STUDENT IMPACT:	The students learn about when the trees drop their autumn leaf and the processes around that.
ACTIVITY PRODUCTS	Pictures and contribution to the national database.
ACTIVITY ASSESSMENT	Educational, practical, interesting and good to connect with environmental change and a sustainable development.
CONCLUSIONS	Educational and interesting to be part of the research.
	Strengths: To be a part of a national commitment.
	Weaknesses: You need to sign up in time, and there must be time to, on several occasions, visit the trees to observe changes.
	The students' behaviour and interest: Great, excited students.
	The students' activity: Good.
	The students' results: Good.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	The foundation "Hållbara hav".
(of the organiser)	
NAME OF THE ACTIVITY	Visit the ship "Tre Kronor af Stockholm", sailing for the awareness of Sustainable Seas in the Gulf of Bothnia.
DATE	19/9 2016
AIM OF THE ACTIVITY	Visited a environment-exhibition and listened to a lecture about the condition of the Baltic Sea.
TARGET GROUP	Students from classes: EE2 and NA16.
INDIRECT BENEFICIARY	Everyone visiting the ship around Sweden, they visit about 20 cities around the Baltic Sea each year. They are investing heavily in cooperation with local government leaders in various port-cities which provide visibility, activities and presence.
ACTIVITY DESCRIPTION	The theme of the environment-exhibition is plastic, chemicals and pharmaceuticals in our home environment. Much of what we use at home finds its way into our waterways. The best way to prevent this is to begin in the home. The exhibition has been designed as a "one room with kitchen" where you can find products that surround us in our everyday lives. The students also listened to the lecture: Baltic Sea - Will it be better or worse? Areas covered include eutrophication, bird life as an indicator of the status of the Baltic Sea, sustainable fishing and the impact of chemicals on our beautiful inland sea.
STUDENT IMPACT	Large, it was exciting to visit a large ship. It gave many ideas about what products we have in our homes and of course also the knowledge of how the situation is in the Baltic Sea and why it is such a sensitive sea.
ACTIVITY PRODUCTS	Pictures, and we god a PPT from the lecturer.

ACTIVITY ASSESSMENT	Pictures, and we god a PPT from the lecturer.
CONCLUSIONS	Strengths: Since the crew also takes samples to researchers at Stockholm and Umeå University in order to detect drug residues around the lake, the connection to current research is great. The lecture was very informative. Very many facts in the exhibition about chemicals, plastics, etc. in our homes. It was fun for the students to be out from school. The students' behaviour and interest: Good. The students' activity: Good. The students' results: Good.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Sundsvalls kommun, SIDA.
NAME OF THE ACTIVITY	Workshop "Think globally - act locally".
DATE	5/10 – 2016.
AIM OF THE ACTIVITY	Participated in a workshop with "value-learning". The students were given tasks to find out how we can find ideas to concretize the global goals in Sundsvall.
TARGET GROUP	Students from classes: NA15 and NA16.
INDIRECT BENEFICIARY	The city of Sundsvall.
ACTIVITY DESCRIPTION	How can we do concretely to approach the UN Global goals here in Sundsvall? The students met some of the local politicians that brought the current challenges for our town. The students developed ideas on how we can make Sundsvall to a better city. They first inventoried their own interests and strengths and then took part of a group where they together produced as many ideas as possible, partly on the question of how we can make Sundsvall to a better city, partly on the basis of global objectives. They reviewed the Global Objectives - What do these goals in Sundsvall? The workshop was a part of the value creation learning -a project in City of Sundsvall.
STUDENT IMPACT	Students were given the opportunity to give the local politicians views and ideas from young people. They got to practice to pitch an idea and sell it.
ACTIVITY PRODUCTS	Pictures, pitches and the politicians got knowledge.

ACTIVITY ASSESSMENT	Very good work shop where students come together and get to work with and find solutions to local and global problems.
CONCLUSIONS	Strengths: Students learned more about the global goals and local challenges. They learned how to work in groups, listening to different opinions and to pitch an idea. Reality came close.
	Weaknesses: Requires that the activity is organized by the City of Sundsvall and that the politicians can come to the meeting.
	The students' behaviour and interest: Very interested and active.
	The students' activity: Great.
	The students' results: Great.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME (of the organiser)	Unicef
NAME OF THE ACTIVITY	The UN-day
DATE	19/10 – 2016
AIM OF THE ACTIVITY	Unicef visited to pay attention to the UN-day, CNC and the global goals.
TARGET GROUP	Students from classes: NA16
INDIRECT BENEFICIARY	The government.
ACTIVITY DESCRIPTION	The students got to listen to information about UNICEF's work, the child-convention and the global goals. A volunteer also told about her latest trip, poverty, diseases, human-rights, etc. They were given the task to write about what they believe are the rights of children and then connect concrete cases to paragraphs from the CNC and the global goals. Then they reported their "case" for one another.
STUDENT IMPACT	Students received new knowledge of the conditions out in the world and the opportunities available for reaching the global goals and the CNC.
ACTIVITY PRODUCTS	The students created documents about CNC that will be passed forward to governments.
ACTIVITY ASSESSMENT	Great, we will keep on inviting UNICEF to pay attention to the UN-day and inspire students to work for a better situation in the world.
CONCLUSIONS	Strengths: Great information, educational information about the world situation and fun with some practical work. Good to lift positive cases so the students gain a greater confidence in the future.

Weaknesses: None.
The students' behaviour and interest: Great.
The students' activity: Great.
The students' results: Great.

NON-FORMAL EDUCATION (ACEAFNE) NON-FORMAL SCHOOL/EXTRA-SCHOOL ACTIVITY PLAN

NAME AND SURNAME	The university of Sundsvall, MIUN.
(of the organiser)	The university of Sundsvan, Micro.
NAME OF THE ACTIVITY	Values
DATE	12-16/12 2016
AIM OF THE ACTIVITY	Give scientists more understanding of young people's views on crime.
TARGET GROUP	Students from classes: NA16
INDIRECT BENEFICIARY	The teachers and the scientists at MIUN. The recipients of research.
ACTIVITY DESCRIPTION	A project with collaboration with a research-study at the University of Sundsvall. The students makes movies and presentations about CRC, the human rights, crimes among youths and how the grown-ups can be informed about this issues. In a week, the students work with the project and regular education are interrupted. At the end of the week the students show their films to each other and the teachers at the natural science program and also reports statistics and the connection between crimes and the CRC and the human rights.
STUDENT IMPACT	Students work on their own and have an supervisor who they have meeting with and get feedback from.
ACTIVITY PRODUCTS	The movies and presentations from the students. Research results.
ACTIVITY ASSESSMENT	Different activity that provides creative space, and the students learn more about human rights, injustice and crime.
CONCLUSIONS	Strengths: Students appreciate a different and creative week. They thought it was fun to get free rein and create from their

own reality.
Weaknesses: The technique can mess, video editing software needed and may be difficult to understand. Other teaching will have to wait, the activity need to be planned in at the beginning of the school year.
The students' behaviour and interest: Very good.
The students' activity: Great.
The students' results: Great.





CZECH REPUBLIC

ENVIRONMENTAL PROJECT 1st International School of Ostrava



PROJECT STRUCTURE

ENVIRONMENTAL PROJECT Let The Eco-tourism Come To You

A. Project details

- a) Name: Let the Eco-tourism come to you
- b) Competition in presenting skills in English, presentations about environmental topics
- c) Type of project: It is a project on regional level, middle schools from the whole region are involved.

B. Details of Applicant

- -Dagmar Blahetová (<u>blahetova@is-ostrava.cz</u>): Erasmus+ project coordinator
- Ivo Helebrant: leader of similar kind of competitions in past years, head of the school

C. Partners (the one ones already existent within the ACEAFNE project) or others: Moravia-Silesia Region, World of Technology-local technical museum, Čas-local radio, Forum Nová Karolína-local hypermarket

D. Project Summary

The project encourages students from different middle schools in Ostrava region to prepare the presentation in English on one assigned environmental topic. Our students do the model presentation to show them and they are helping with the semi-final and final of the competition. The final is held in Nová Karolina shopping mall, so it has a very high impact as it can be seen by hundreds of people.

The necessary equipment is the computer and screen for showing the presentations.

E. Project description.

At first, we proposed the topics for possible presentations and we sent them to all middle schools of the region. The topics are based on the Sustainable Development Goals of the UN. The topics are:

- 1. Protect the life below water in Brazil
- 2. Against hunger in Zimbabwe
- 3. Protect clean water in China
- 4. Climate action support in Chile
- 5. Protect the life on land in Tanzania
- 6. Protect clear water and support water sanitation in Egypt
- 7. Support of responsible consumption and production in New Zealand
- 8. Protect the life on land in Peru
- 9. Protection and development of suistable cities and communities in Israel
- 10. Protect life below the water in Scandinavia
- 11. Development of affordable and clean energy in India
- 12. Support quality education in Mongolia
- 13. Protection and development of suistable cities and communities in Bhutan
- 14. Support of responsible consumption and production in Thailand

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- 15. Support quality education in Marocco
- 16. Development of affordable and clean energy in France
- 17. Protect the life on land in Canada

After, our students visited the schools that were interested and showed them the model presentation. They made there a little competition for students and the winners then participate in the competition by making a presentation on the assigned topic (they can choose from the list)

After, in February 2017, there is a semi-final of the competition: all participating schools show their presentation in DOV (museum of technology in Ostrava) and there is a jury of 5 people who choose the top 8 presentations. These best teams show their presentations a week later in Karolina where the project can be seen by hundreds of people. Another hundreds saw the model presentation at one of the schools so many people learnt about the topic of sustainable tourism.

Direct beneficiaries are the students who participate in the competition, indirect are all the the people as the audience.

F. Project Calendar

The work on the Project started in October 2016 by choosing the topics. The schools were visited in December 2016. The semi-final and final of the competition will take place in February 2017. The target group of participants are students from Middle schools in Ostrava region.

G. Evaluation/Assessment

The project is very popular among the students. For many of them, it is the first time when they can present something in English in public. At the end, the best 3 teams can win valuable prize.

H.Project monitoring

The monitoring is done by Dagmar Blahetová (Erasmus+ coordinator), Ivo Helebrant (school head)and Martina Řehůřková, coordinator of extra-curricular activities on regular basis. Each of them made sure that everything is ready for each phase of the project.

I. Project dissemination

The dissemination is done by the project itself as it can be seen by all the people in the shopping mall and students of many different schools of Ostrava region. The project was also advertised in local radio.

J. Project Impact

The project has very high impact in raising the awareness on environmental topics among students of middle schools and Ostrava inhabitants who see the final.

K. Project sustainability

Similar competition can be organized also other years.

L. Project budget

The budget was around 2000 EUR from Erasmus + project implementation money+subvention of Moravia-Silesia region.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)





ITALY

ENVIRONMENTAL PROJECT

IPS CABRINI – Taranto



"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

PROJECT STRUCTURE

Title: "RES COMMUNES OMNIUM: WATER"

School Type: Upper secondary school

Project Type: Local

Features of the project proposal Contacts: Istituto Cabrini
Via Dante, 119 – Taranto
099.4777646

Tarc05000g@istruzione.it **Coordinator:** Anna Locantore

Project Team Maria Giovanna Russo (teacher of literature)

Antonella Chiloiro (English Language teacher)

Francesca La Neve (science teacher) Maria Messinese (graphics teacher) Francesca Annoscia (student) Angela Gennaro (student) Paola Risolvo (student)

Experience in projecting: All teachers involved are professionals and have considerable experience in projecting.

The students took part in the training course Training-"writing environmental project proposal" in Romania as far as concern

ERASMUS+ K2

Partner: ISDE- National Association "Doctors for the Environment"

 $\textbf{Taranto Respira -} Local \ association \ actively \ involved \ in \ environmental \ protection \ and \ preventing \ pollution$

Synthesis of the project: The topic chosen, the water, allows to approach the study of the matter and its transformations, starting from personal experience up to the definition of the chemical and physical properties that

characterize the materials from a systemic perspective. It will be followed by purposes related to the construction of an environmental sensibility. The first approach will be very sensorial and we will start from personal experience and observation and, at a deeper level, in a multidisciplinary way. From the study and to the chemical and microbiological analysis.

Purpose: Understand the interconnections between individual behavior and environmental consequences using water resources

Targets: -It's a topic in which all the students have direct experience; it is a subject that allows us an interdisciplinary perspective in the curricula of the various disciplines (historical, geographical, scientific, technological, artistic); it becomes a crucial matter with a view of an effective environmental education as it encourages the awareness that:

- Life on earth dependson water;
 - -a bad management of water affects the ecological balance and the quality of life;

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

-It is a limited resource and there forests necessary to change our behavior for a responsible use.

Beneficiaries: Students of the school Fallout on families

Time: Two months

Activity:

-The teachers will think of a problem-solving approach, understandable and motivating, articulated on the project, aweless some execution and discussion of the various experiences, encouraging the active building of knowledge. Starting from the observations of the system "water / physical state", it will be possible to observe and study the reports of "water / environment system" by introducing the living / non-living concepts. There will be links to the Italian subject, in theformation of an adequate and correct specific language; history, technology; chemistry, microbiology, graphics.

It will be expected: - Analysis of previous experience;

- Analysis of previous experience,
- Observations and free explorations;
- Observations and direct works given by the teacher regarding the task to be performed and the observations to be conducted;
 - Experimental and research activities;
 - Description of the phenomen a observed through the drafting of reports.

We will use:

- -Science, chemistry and microbiology laboratories;
- -Computer laboratories to search for information on the Internet and the

drafting of reports;

- -Graphics Workshops;
- -Audiovisual Laboratory;
- -Textbooks.

Works can be made and projected among groups of students with a view to a peer education.

Expected results

Students will be able to:

- -Look through their senses and/or tools;
- -Understand the phenomena observed;
- -Describe the phenomena observed with verbal and non-verbal

language;

- -Formulate hypotheses;
- -Collect water samples and analyze them;
- -Use background knowledge.

Project schedule

Assessment: Learning assessment will be carried out either on the direct observation of the students or the quality of the reports and / or relations, or tests and / or questionnaires suitable to verify the understanding of the projects and the acquisition of the contents.

Dissemination: Meetings will be set up with other classes to present the work carried out so as to make the students real protagonists.

Page sharing of final products on the institute's website and on the Facebook page of the Erasmus+project.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Possible participation in exhibitions and / or competitions. Articles in local newspapers.

Impact: Awareness of all the students of the school to the preservation of the water resource and, in this context, to take appropriate attitudes.

Sustainability: Environmental protection projects have always been made in our school and will continue over the next few years because of the environmental problems that afflict our city, compromising the health of citizens.





LITHUANIA

ENVIRONMENTAL PROJECT

Tauragės "Aušros" pagrindinė mokykla



PROJECT STRUCTURE

A. Project title: Christmas trees

Domain and category of education type: non formal activity

Type of Project: at local level

B. Details of Applicant

contact details: Tauragės "Aušros" pagrindinė mokykla, Aerodromo 6, Tauragė, Lithuania

responsible: students of 7th and 8th classes

coordinator: Daiva Kvietkuviene, English teacher

project team: 5 members

experience in the field of project management: students have some experience because they took part in many different kind of projects. This kind of projects is some different because everything they have to decide by themseves. It is new experience for them.

C. Partners: parents and other teachers

D. Project Summary

Pollution is the process of making land, water, air or other parts of the environment dirty and unsafe or unsuitable to use. This can be done through the introduction of a contaminant into a natural environment, but the contaminant doesn't need to be tangible. Things as simple as light, sound and temperature can be considered pollutants when introduced artificially into an environment

Toxic pollution affects more than 200 million people worldwide, according to <u>Pure Earth</u>, a non-profit environmental organization. In some of the world's worst polluted places, babies are born with birth defects, children have lost 30 to 40 IQ points, and life expectancy may be as low as 45 years because of cancers and other diseases.

People destroy rainforests, kill animals, pollute water where fish die, pollute the air. Many people talk about it but it is hard to change something. But we can start from ourselves and do small things to save nature and to change situation. We can do many things at home, at school or in our city to make our land cleaner and nicer place to live.

E. Project description.

Purpose: The purpose of the Project is to take care about the environment

Objectives

- to decorate the school;
- to collect and use things for recycling;

Target group:

Students from 7th and 8th classes will take part in the Project

All community will see the exhibition (Christmas Trees)

Project duration 2 weeks (5th -19th December)

Project activities and work plan:

Each team make the work plan. Students decide who is responsible for what.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

Expected project results: there will be less rubbish in our area and homes; students will make nice decorations, save paper, save trees. Each team will make a Christmas Tree and will present their work to other students and teachers

F. Project Calendar:

During the first week students talk about their responsibilities, give their ideas and discuss about them. They collect things that can be used for their Christmas Tree. During the second week students make decorations and decorate their trees. On 19th December the Christmas tree should be done.

G. Evaluation/Assessment

Each team presents their two – weeks work and answers to the questions.

H. Project monitoring

Coordinator is responsible for monitoring all the time. Coordinator discusses with students and helps them.

I. Project dissemination

All Christmas Trees decorate the school and all community can visit the exhibition; all information about this project is put on the school page.

J.Project Impact

Students understand that they can make nice decorations using things for recycling. They can work in a team, share their ideas, use things that aren't used anymore. Students understand that they are responsible for the environment and they can do small things for to make our area cleaner and nicer.

K. Project sustainability

L. Project budget





POLAND **ENVIRONMENTAL PROJECT**

I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi we Wschowie



PROJECT STRUCTURE

Title

A. Project details

- a) Project title (message, slogan) Water our precious resource
- b) Domain and category of education type

High School (A-level)

c) Type of project (at local, county, inter-county/regional, national, international level)

Local with national and international elements

B. Details of Applicant

- contact details (address, telephone number, fax, e-mail,)

I Liceum Ogólnokształcące z Oddziałami Dwujęzycznymi im. Tomasza Zana we Wschowie

- responsible Bartłomiej Kopaczyński
- coordinator (a member of the faculty) Agata Karolczyk-Kozyra
- project team (3-5 members) Krzysztof Sobczuk, Zuzanna Golinowska, Krzysztof Binkowski
- experience in the field of project management (expertise of team members)

Students who were involved in many school activities;

C. Partners (the one ones already existent within the ACEAFNE project) or others

Spółka Komunalna (The water supply and sewage plant department)

D. Project Summary

– argumentation of the proposed project (strengths, opportunities), needs analysis, (3500 characters maximum) Water shortages and access to fresh water is global problem mention by UN SDGs agenda. Poland is also a country with fresh water problems. The shortages occur mainly in industrial and urban areas. The main purpose of our project is to bring water scarcity into the public/school attention and discussion, which can be the base for both, assessing and finding some solutions for mentioned problem.

This will be done in two ways, which are the strength of this project because of their local dimension.

Firstly, we will put some effort to increase awareness of problems with too high consumption of water of students in our school. It will be done by giving few informations about global and national water scarcity and shortages then we want to come to our local situation. It will be realised by questionnaires about student's water usage. After drawing conclusions our team prepare few activities which will be an answer for some problems. In other words, we will try to suggest some solutions to high water usage and wast of water. The final will be at UN World Water Day which title is 'Wastewater'.

Secondly, with support of our local authorities, we are going to investigate the way of the water from the well to our taps and then to sewage plant and further to rivers. It will be conducted with one class. We try to assess potential threats to cleanness of water. The final result should be shown as presentation or video. This part is connected with spring season, because it needs to walk outside of our town, therefore it is fixed on late March.

- **D. Project description.** Please provide a description of the project, according with the following structure (3500 characters maximum):
- Purpose Bringing school community attention to the problem of fresh water shortages as not only global, but also local problem.
- Objectives To increase knowledge and awareness about water, its usage and possible methods of saving; growth of ICT and managing skills for project team;
- Target group (direct / indirect beneficiaries)

Directly class 2a (Geography Higher Level) and indirectly -

school community with GCSE classes;

- Project duration December 2016 to April 2017
- Project activities and work plan 1) consideration of project and fixing title, purpose and schedule;
- 2) preparing questionnaires with the help of ICT and making survey;
- 3) drawing first conclusions and discussion of results;
- 4) according to results preparing the information and activities about water problems and possible solutions (eg. poster, leaflet, blog entries, happenings, lesson presentations) for both class 2a HL and school community with culmination on UN World Water Day;
- 5) walk with class 2a HL to local water supply plant and sewage plant to learn how the water supply works and how big is our water consumption and therefore sewage production, then creating presentation or video "From the well to a river";
- 6) preparation of results to share in Italy on April;
- 7) Project summary
- Expected project results
- qualitative Increase of awareness of our national water supply, local consumption and possible solutions, which should led to changing mindset of students;
- quantitative
 Questionnaires, leaflets, poster, presentations/video, set of prowater rules;
- **E. Project Calendar;** One must state the: Activity / Target group / Deadlines / Responsibilities / Results / Observations/Notes See table below;
- **F. Evaluation/Assessment** Project was prepared for students of our School and was presented to the audience. There were larger involvement of students expected. The project team tried to get to students using different ways (blog entries,

The most efficient were presentations in classrooms and real contact with students. Time spent on discussion with classmates gave us and participant more engagement which is base for development. The smallest impact had the internet. Generally all active methods were better than passive ones.

The final conclusion is that to increase awareness and change mindset or habits of students (and adults as well) the longer time is needed and activities should be planned in wider perspective. But the first steps are successfully made.

- **G. Project monitoring** Project was monitored by responsible teacher. Each month were meetings and summaries of conducted parts of projects. We also allowed ourselves for modifications of existed plan, to be more efficient.
- **H. Project dissemination** School board (outside classroom and inside as well), county website (http://wschowa.info/uczniowie-z-zana-wloszech/), project blog (http://zangeography.blogspot.com), leaflets for parents and students.

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

I. Project Impact The project was aimed at growth of sustainable awareness and this goal was achieved. After one month students were asked about what did they have changed after the project, they answered that generally they have been thinking about saving water during daily life. And if it is true, the impact is positive.

J. Project sustainability The results of project will be on the classroom board and on the

internet (blog);

K. Project budget 730 euro

E. Project Calendar

Activity	Target group	Deadlines	Responsi- bilities	Results	Obse- rvations	Notes
Consideration of project and fixing title, purpose and schedule	None	End of December	Project team	Schedule		
Preparing questionnaires about students water consumption with the help of ICT	School community	Half of January	Zuzanna Golinowsk a	Questionnaire in google docs;		
Water consumption survey	School community with teachers	To the end of January	Project team	Numbers of electronic questionnaires		
Drawing conclusions and discussion of results	None	To half of February	Project team			
Preparation activities based on results	School community	To half of February	Project team	Plan of activities, responsible people;		
Realisation of activities which will be based on survey results	School community	February to March	Project team	Poster about results, blog entries, SDG information, possible happening; lesson presentations; informations about decreasing water usage in daily life;		
Celebration of the UN World Water Day which is culmination	School community	22 March	Project team	Short lecture about Polish water supply, presentation about		

of school part of the project				water consumption leaflet; work out of 3-5 rules of pro- water behaviour;	
Investigation of our local water - "From the well to a river"	2a Geography HL	Second part of March	Geography teacher and project team	video	
Preparation of summary materials for Italy trip	Italy audience	End of March	Geography teacher and project team		
Presentation of results in Taranto	Italy	April	The project team	Speech and presentation	





PORTUGAL ENVIRONMENTAL PROJECT



PROJECT STRUCTURE

A. Project details

- a) Project title Keep it green!
- **b)** Domain and category of education type High school
- **c)** Type of project School project

B. Details of Applicant

-Contact details:

- Address: Quinta dos Casquilhos
 - 2830-046 Barreiro
 - Portugal
- Telephonenumber: +351 212 148 370
- Fax: +351 212 140 265
- E-mail: <u>direcao@aecasquilhos.pt</u>
- Responsible Class A 11th Grade
- Coordinator Maths and English teachers
- Project team (3-5 members)
 - Team 1: Daniel, Tânia, Carlota, Carolina
 - Team 2: Pedro, Mariana São, Margarida, Madalena
 - Team 3: Mariana Pereira, André, Ana Sofia, David
 - Team 4: Mariana Pedro, Luana, Rodrigo, Tiago

C. Partners

- Amarsul
- Barreiro City Council

D. Project Summary

Students realised that in Casquilhos High School there is no waste sorting whatsoever. There are some recycling bins which are placed randomly throughout the school and which are not used appropriately.

So, this group of students (Class A from 11th grade) decided to create a project which would raise awareness in the school community about the importance of sorting out their waste (especially paper) in order to contribute to a sustainable environment.

E. Project description

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- <u>Purpose</u> - To make all the members of the school community understand the importance of some environmental issues, namely those caused by the human beings, and convince them to sort out their waste regularly.

- Objectives:

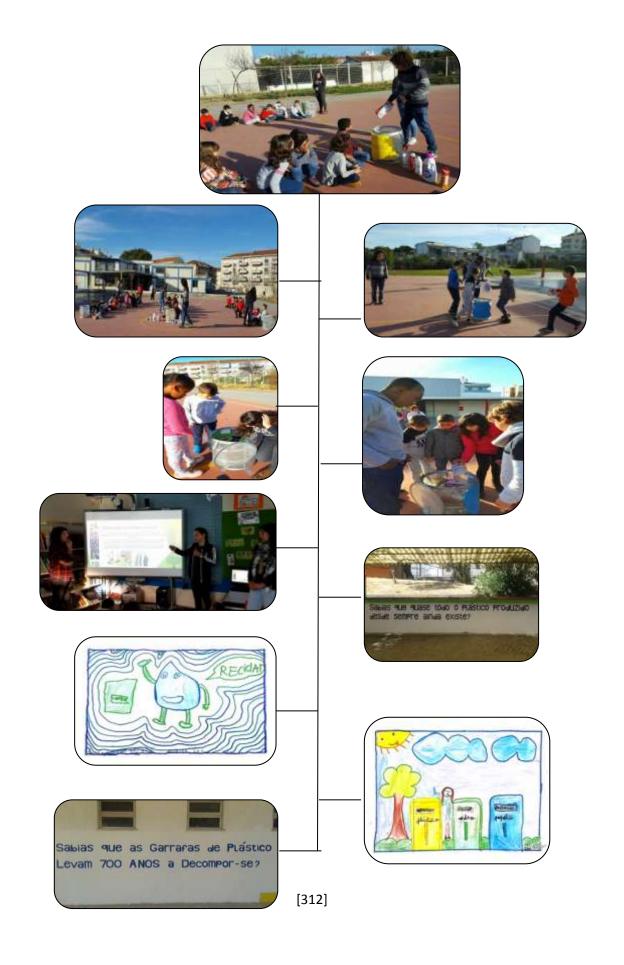
- To contribute to the creation of a school culture, inside our Federation of schools, in which environmental problems are a central issue;
- To manage that all waste will be sorted out and recycled at the end of the school year;
- To settle the basis for a project that will be continued in the next years.
- Target group: Students, teachers and school caretakers.
- Project duration: The whole school year
- Project activities and work plan:
 - To write sentences appealing to recycling to be painted on the school walls;
 - To apply some questionnaires to the students and the school caretakers to make a survey of the recycling habits at school;
 - To establish a connection with the Primary Schools through awareness raising activities, in which the pupils are going to participate;
 - To arrange a meeting with the Chief of the school staff with the aim of sensitizing the school community to the importance of sorting out their waste;
 - To put the recycling bins in strategic locations in order to encourage people to separate their waste:
 - To publicize the location of the recycling bins among students;
 - To supervise the whole process of recycling together with the school staff, in the initial phase;
 - To make a school trip to *Amarsul* (a company which evaluates and treats solid waste);
 - To make a video promoting the project.
- <u>Expected project results</u>: to make all the school community sort out their waste on a regular basis.

F. Project Calendar

- 1st Term:
 - Elaboration of the Project Plan;
 - Applying the questionnaires;
 - Creation of the Project Logo;
 - Writing sentences related to the project;
 - Choosing the school walls for the sentences to be painted.
- 2nd Term:
 - School trip to *Amarsul*;
 - Activities with 1st grade students;
 - Painting the sentences on the school walls;
 - Setting up the recycling bins in strategic locations;

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- Analysing the questionnaires' results.
- 3rd Term:
 - To collect old toys and clothes to donate to some institutions;
 - To make a video promoting the project;
 - To create the "G" Day (G stands for Green) as an analogy to the "B" Day (B stands for Barreiro) to promote the project at school.
- F. Evaluation/Assessment: a final questionnaire that will be applied to the school community in order to evaluate the project dissemination and its effects in the recycling habits at school.
- **G.** Project monitoring:
 - Monthly meetings between teachers and students;
 - Team up;
 - Google drive.
- **H.** Project dissemination: School site
- **I.** Project Impact: Final questionnaire and project monitoring.
- **J.** Project sustainability:
 - The activities with the Primary Schools aim at the creation of a school culture that will have a continuity in the following years;
 - This group of students intends to continue this project next school year.
- **K.** Project budget: € 300





ROMANIA

ENVIRONMENTAL PROJECTS

National College "Ienachita Vacarescu"



PROJECT STRUCTURE

A. Project details

- a) Project title (message, slogan)
- "Electromagnetic pollution and its effect on people"
- "Pollution-The most recent execution platoon"
- b) Domain and category of education type

Environmental education/ Health education

c) Type of project (at local, county, inter-county/regional, national, international level) Local

B. Details of the Applicants

-contact details (address, telephone number, fax, e-mail)

Zărnescu Andreea Georgiana: 0724651899, <u>geo.geo333@yahoo.com</u>, Târgoviște, strada Sârbilor, numărul 63

Zepisi Andreea Diana: 0725252454, <u>diana_adep@yahoo.com</u>, Târgoviște, strada Alexandru Ilie, numărul 13

- -responsible: Zepişi Andreea Diana, Zărnescu Andreea Georgiana
- coordinator (a member of the faculty) prof. Zepisi Simona Valinda coordinator of ACEAFNE
- project team 3 members
- experience in the field of project management (expertise of team members)

Zarnescu Andreea Georgiana – class XII G

- -participantin the national symposium "Major problems of the man of the XXIst century" the 2015 and 2016 editions, part of it beingEnvironmental education.
- -organizer of theconference "Sustainability Development and Energy Consumption for an Ecological Society" with materials created by the students within the ACEAFNE project (collecting the materials, dividing them into categories, distributing diplomas)
 - -participant in formal and non-formal activities within the ACEAFNE project
 - -volunteer of "The Red Cross" Romania
 - -participant in first aid contests organized by The Red Cross
- -organizer of activities for students, in her capacity as the secretary of the Student Council of The 'Ienachita Vacarescu' National College
- -organizer of some extracurricular activities as the class representative (taking part in the high school's football championship, field trips, interactive homeroom activities realized at the homeroom teacher's notice etc.)

Zepisi Andreea Diana – class XII B

- -participantin the national symposium "Major problems of the man of the XXIst century" the 2015 and 2016 editions, part of it being Environmental education.
- -organizer of the conference "Sustainability Development and Energy Consumption for an Ecological Society" with materials created by the students of the ACEAFNE project (collecting the materials, dividing them into categories, distributing diplomas)

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- -participant in formal and non-formal activities in the ACEAFNE project
- -participant in the Comenius project called "The Healthy Young People of Today Are The Future of Europe Tomorrow"- "Constantin Carabella" National College
- -organizer of some local activities during the student cultural exchanges with Spain and Greece
- -taking part in debate sessions organized by The Romanian Association for Thinking and Oration (ARGO)

Bosnea Vlad Alexandru – class XI C

- -ICT competencies : operating, office, photoshop, in design, video & audio editing
- -participant in formal and non-formal activities in the ACEAFNE project
- C. Partners (the one ones already existent within the ACEAFNE project) or others

Valahia University Targoviste- Faculty of Electrical Engineering, Electronics and the Technology of Information

D. Project Summary

- argumentation of the proposed project (strengths, opportunities), needs analysis, (3500 characters maximum)

On May 11th 2015, a group of 190 scientists and researchers, from 39 countries, signed an appeal to U.N.O. and W.H.O., trying to raise awareness of the negative effects that the electromagnetic fields have on our health and demanded that the safety rules present in this field of work be changed.

Even though nowadays there isn't a lot of data about the danger posed by the artificial electromagnetic fields (created by humans), the number of scientists and researchers that warn us about the real threats that the so called "electromagnetic pollution" sets forth. All the artificial electromagnetic devices such as the electrical sockets, electrical cables, light bulbs, TVs, computers, wireless devices, microwave ovens, cellphones and even TV antennas, electrical antennas and radio antennas. They all record a loss of electromagnetic energy that goes even higher than 50Hzs all of it being released in the environment. This occurrence is called by some researchers "polluted electricity".

In spite of the good that came along with technology, it has its secondary effects, affecting our health being one and the most common of those negative effects. Scientists and researchers from all around the world came to the conclusion that the main sources of radiation (power lines, the radiations generated by the radio waves used in every radio/TV transmission, the radiations generated by the microwaves that are used in the domain of mobile telephony, of mobile technology and of wireless devices) degrade our health and make us sick.

Researchers noticed an increase in the number of cancer types, most of them believing that this number increases because of the expansion of the electromagnetic fields from our environment, including those belonging to the domain of microwaves and radiofrequencies (RF/MW). A good example Is the device that all of us have in our pockets right now. The cell phone. Research shows that the large spread of cell phones tripled the incidence of brain cancer, a type of cancer that is fatal especially when it affects younger people.

Through a questionnaire, at school level, administered to 20 students with ages between 14 and 17, we noticed a lack of knowledge when it comes to the effects of the electromagnetic pollution.

Strengths:

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- -Approaching the project from a "peer education" point of view
- -The project team is encouraged to create and engage into projects
- -The experience gained throughout the first year of the ACEAFNE project regarding the protection of the environment
- -The existence of a budget from the ACEAFNE project Opportunities:
- -The professionalization of the members of the team through project management training
- -The existence of the ACEAFNE project that generates mini environmental projects
- -The existence of a collaboration protocol with "The ValahiaUniversity" Targoviste
- Organization of a National Symposium (split into 2 editions) on environmental issues attended by project team members
- -The existence of a radio station in our school

E. Project description. Please provide a description of the project, according with the following structure (3500 characters maximum):

- Purpose

Raising awareness amongst teenagers regarding the fact that most devices generate electromagnetic radiations, by engaging into activities meant to inform about the risk factors as well as methods to prevent the degradation of our health

- Objectives
- Making 20 students realize the risks generated by the excessive use of the artificial electromagnetic devices
- The guidance of 20 students towards leisure activities
- Promotion at school level and community level of a healthy behavior
- Target group (direct / indirect beneficiaries)

Direct beneficiaries

20 students (classes 8th B and 10th B)

The students that wrote and helped the implementation of the project indirectly

The classes of the 20 students

The students of our school

Families, friends of the students from the target group

The local community

Contributing teachers:

State Gabriel-Physics teacher; Diaconu Ioana- Arts teacher; Paunescu Camelia- P.E teacher; Rafira Anca-Informatics teacher; Vlad Catalina-Informatics teacher; Matei Bogdan-Music teacher;

- Project duration-(2 months)
- Project activities and work plan

Even though the modern technology brings countless positive things such as: comfort, better time usage(being able to have conversations online, the usage of appliances—microwave oven-in order to cook our food faster etc.), few people are aware of the negative effects that the electromagnetic fields generated by the new generations of devices have on our health. Studies conducted at worldwide level uphold this theory and the questionnaire that was applied at local level on a group of 20 students aged between 14 and 16 proves the low level of information of the students about the effects that the electromagnetic pollution has on our health and that they tend to ignore this information even though they have access to it.

The aim of this project is to raise awareness, especially among students and among the people that belong to our local community, about the negative effects that come with the excessive use of the devices that generate electromagnetic radiations (especially mobile phones, TV's, computers, wireless devices, appliances) and to convince them to gradually stop using one of the many devices that they do use(or to diminish the number of excessiveusers).

We will address a group of 20 students from the 7th grade and the 10th grade. Our approach will generally be a type of "peer education", the students, members of the target groups of the ACEAFNE project, will have the responsibility to write and implement the project. Among the project's activities: sessions dedicated to raise awareness at a local level with the help of the "Valahia" University Targoviste, visits to the Multidisciplinary Institute of Scientific Research and Technology at the "Valahia" University Targoviste, formal activities (during physics, arts and physical education classes), non-formal activities-workshops (measuring the level of electromagnetic waves, creating some collages with information, organizing an exhibition) and physical activities that will help students acknowledge the effects of electromagnetic pollution on their health and on the health of their families.

Pointing them towards free time activities (sports), we will help diminish the use of mobile phones and other wireless devices and we will offer them the possibility to give up their phone in order to get a recreational hour by helping them to benefit directly with good effects on their health.

Through street campaigns with umbrellas that containmessages such as "warning signs", every person in our town can see the messages that we send about the electromagnetic pollution. Through radio campaigns and the campaigns at school level: "A week day without the mobile phone" will have as results: becoming informed, raising awareness and changing the student's attitude regarding the negative influences that radiations have on our health.

The brochure "Did you know...?", the thematic quizzes made by the students (in Romanian and English) will be published on the project's site and will be accessible to the local, regional, national and international community.

The students from the target group can organize, in the future, similar activities at school level, and the students that wrote and implemented the project will be able to evolve as active citizens, by perfecting their project management competences, designing and managing projects of greater scale with the same theme. The products of the project will act as a source of inspiration and documentation for a large range of formal and non-formal activities at the level of our school and also other schools that wish to assimilate other good practices.

- · Expected project results
 - qualitative
 - -a radio ad
 - -a brochure "Did you know...?"
 - -auizzes
 - -8 umbrellas with messages for the campaign
 - -a street campaign
 - -an exhibition
 - -3 physical activities
 - -weekly radio campaigns
 - -weekly campaigns "A weekday without mobile phones"

F. Project Calendar

One must state the: Activity / Target group / Deadlines / Responsibilities / Results / Observations/Notes

The Activity	Target Group	Dead-	Responsa ble	Results
Activities for preparing the implementation	82. 3. 3. a.	line	zzesp szaw sze	
Presenting the project at school level (to the principal and the teacher's council)	The teachers from our school	Oct.	Zărnescu Georgiana Zepiși Diana	Teachers will be informed
Presenting the project to the student's council	Students of the council School's students	Oct.	Zărnescu Georgiana Zepiși Diana	Students will be informed
Selecting the implementation team(based on the project's needs and the competencies and the level of interest of the students	Students affiliated to the ACEAFNE project	Oct.	The coordinating teacher	The selection of the implementation team
Contacting the teachers that will collaborate within the project	The teachers from our school	Oct.	The coordinating teacher	The selection of the teacher's team
Selecting the target group(classes and students)	The students from our school	Oct.	The coordinating teacher	The target group
Applying a questionnaire	The 20 students that were selected	Oct	Zepişi Diana	Explaining the requirements to the target group

for evaluation				
Creating a radio advertisement	The students from our school	Oct.	A few members from the music teacher's team	The advertisement
The Faculty of Electric Engineering and the Information of Technology -UVT	ICST representants	Oct.	A coordinating teacher	Setting the days for activities
Implementation Activities				
Radio campaigns	The students from the target group	Weekly	Zepişi Diana	Students's attitude regarding electromagnetic pollution will be changed
Sessions dedicated to inform about the effects of electromagnetic pollution	The 20 students from the target group	Oct Nov	Zărnescu Georgiana Collaborating teacher	Students will be informed about pollution by specialists The effects of electromagnetic pollution will be acknowledged TV news presentations
Workshop- analyzing electromagnetic waves at The Faculty of Electric Engineering and the Information of Technology -UVT	The 20 students from the target group Students from different classes	Nov	The physics teacher Zărnescu Georgiana	Diagrams with the final results of the measurements
Workshop- creating collages with drawings/cutout s from news- papers and magazines with a prevention role	The 20 students from the target group Students from different classes	Nov	The arts teacher Zepişi Diana	An exhibition
– "Did you	The 20 students from the target	Nov	The physics teacher	Quizzes

know?" Workshop – Creating thematic quizzes – Kahoot.com Designing flyers	group		Zarnescu Georgiana	Flyers Printouts https://padlet.com/catavlad99/p oluare
Physical activities	The 20 students from the target group Students from different classes	Nov	The physical education teachers	Physical activities
Street campaign	Local communication/med ia	Dec.	Zărnescu Georgiana Zepiși Diana	The local population will be informed http://www.columnatv.ro/indo or-air-polution-an-unseen-enemy/Printouts
School campaign "A weekday without mobile phones"	The 20 students from the target group	Weekly	Zărnescu Georgiana Zepiși Diana	Students will be encouraged to avoid the radiations generated by mobile phones A poster that presents the effects of electromagnetic pollution

G. Evaluation/Assessment

- Initial and final questionnaire
- -Direct observations throughout the activities
- Questionnaire in order to evaluate the activities

H.Project monitoring

At school level:

- -Student's council
- -The ACEAFNE project's panel
- -The school's website
- -The ACEAFNE project's website

At local level:

- -Street campaigns umbrellas with suggestive messages
- -Writing and publishing articles about the project in the "Gazeta Dambovitei"
- -Facebook pages for the ACEAFNE project

I. Project Impact

- -Understanding the negative impact that the electromagnetic pollution has on our health
- -Creating a tendency to avoid electromagnetic pollution

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- -Perfecting our ITC skills
- -Improving our communication and interpersonal abilities
- -Developing team spirit
- -Developing our entrepreneurship skills

J. Project sustainability

- -Usage of createdmaterials(radio advertisement, umbrellas with messages, printouts, quizzes)
 - -Collaboration with Valahia University in other projects
- -The students from the target group can create similar activities in the future with other students
- -The activities performed with the help of the coordinating teachers can be resumed in the future with other students
- -The experience we gained as people responsible for the project will allow us to get involved in other projects

We are deeply convinced that because we took an "equal to equal" approach, this project represents a beneficial opportunity in the lives of the students, as well as for the beneficiaries and the persons responsible for the organization and implementation of this project. Furthermore, this projectensures for the persons responsible, competences and abilities such as writing/unfold/coordinate similar projects or other projects and increases the participants' motivation in order to get involved in other actions that protect their own health, their own lives.

K. Project budget

-The budget will be ensured by the ACEAFNE project (umbrellas with messages, transportation, expendables, the printing of printouts)



PROJECT STRUCTURE

A. Project details

a) Project title (message, slogan)

Indoor pollution- an unseen enemy!

- b) Domain and category of education type ecological domain, health education
- c) Type of project (at local, county, inter-county/regional, national, international level) local

B. Details of Applicant

-contact details (address, telephone number, fax, e-mail,)

Vancea Carmen – project responsible – student at "Ienăchiță Văcărescu" National College, class XII B

Telephone number: 0733966062; e-mail carmenvancea123@yahoo.com

Ilie Mădălina – project responsible – student at "Ienăchiță Văcărescu" National College, class XII B

Telephone number; e-mail madalinailiemaria@gmail.com

Zăhărăchescu Bogdan- project team member – student at "Ienăchiță Văcărescu" National College, class XII B

Telephone number 0744630846; e-mail zaharachescubogdan@yahoo.com

- Responsible -Ilie Mădălina, Vancea Carmen
- Coordinator (a member of the faculty) Professor Zepişi Simona-Valinda coordinator professor ACEAFNE
- Project team (3 members)
- Experience in the field of project management (expertise of team members)

In 2015, some of the project team members participated in Greece on an exchange experience on the country's natural patrimony and also in Belgium on the European Union patrimony. They had also participated in other experience exchanges in countries such as The Netherlands, France, Belgium and Sweden.

Furthermore, the project team members participated in volunteering programs like The Theatre Babel Festival, Ariss Project EU282 and also in activities coordinated by Interact Târgoviște.

- C. Partners (the ones already within the ACEAFNE project) or others
 - The Dâmbovița County Hospital
 - The Red Cross Dâmboviţa Subsidiary

D. Project Summary

- Argumentation of the proposed project (strengths, opportunities), needs analysis, (3500 characters maximum)

Even though the concept of pollution is often associated with the outside world, the indoor spaces such us our homes, classrooms can also become polluted environments, extremely dangerous for our health.

A study published in a British medical journal in 2012 explains how one in three persons at global level is threatened by household pollution. The World Health Organization published

in March, the same year, a report regarding this concerning subject. Concretely, the researchers say that indoor pollution is responsible for the death of 4.3 million people, while atmospheric pollution is responsible for 3.7 million deaths, both during the same year. This type of pollution threatens the health of about 2.8 billion people at global level, considering the fact that its main sources are pollen, mold, cigarette smoke, cleaning products, pesticides, radon and building materials (asbestos, formaldehydes, lead etc.).

Experts of the World Health Organization suggest that "Women and children are particularly more sensitive to the toxic effects of this pollution and are exposed to the highest concentrations". Dust, mold, moisture, air conditioning or mites are only some of the pollutants that can cause problems in personal homes. Indoor pollution has been occupying the top of the list when it comes to medical congresses, being the cause of severe affections such as pneumonia, rhinitis or legionellosis.

Furthermore, the concern manifested at global level regarding the pollution emitted by some home appliances is justified by the fact that the measured emissions are 100 times greater than they should be. It's mainly about cooking, lighting and warming devices, but more specifically about the resources on which these function. Because of this, The World Health Organization has recently established the first set of limits regarding indoor pollution.

In order to assess the present situation, we have applied a questionnaire in our school on a sample of 20 students aged between 13 and 19. He have come to the conclusion that at local level, people tend to be the victims of ignorance or lack of information regarding the indoor pollution and the degree of exposure it creates. For example, 35% percent of them consider that microorganisms hiding in the bed sheets can only affect us in an insignificant amount and only 15% percent believe that radiations produced by electronics affect us considerably. As a result, 47,4% of them consider that only 100 000 people die because of household pollution, while their number is much higher, reaching about 4 million persons. Among the most common hazards that we find, probably, in each house are insecticides, cleaning products based on chlorine, even common deodorants, these being the cause of 20% of chronic lung diseases. Unfortunately, 47.4% consider that these are responsible for only 2% of these afflictions.

Because of the relatively weak information process among the young people, the project aims to conduct at school level a series of activities of information and development of abilities in order to increase the number of persons aware of the present situation. In their turn, the trainees will be able to inform others about the hazards of indoor pollution.

Strengths:

- team committed to project implementation
- "peer education" type activities ("de la egal la egal" education)
- teachers' involvement in a project written and conducted by students
- combination formal with non-formal activities

Opportunities:

- participation of the project coordinating students in the training on project management within the reunion in Romania (September 2016)
- a team member participated in the activity within the Sweden reunion and has experience in practical activities regarding sustainable education
- experience gained during the first project year;
- the project coordinating students' participation in formal and non-formal activities concerning the environment

E. Project description. Please provide a description of the project, according with the following structure (3500 characters maximum):

- Purpose

The purpose of this project is to raise student awareness of the harmful effects of indoor pollution and also to develop the necessary behavior in order to be able to protect personal health and the health of others.

- Objectives
 - 1) Identification by the 23 students of the indoor pollution risk factors
 - 2) Development of skills needed to reduce the impact of indoor pollution (the 23 students)
 - 3) Promotion of a healthy lifestyle at the school community level
- Target group (direct / indirect beneficiaries)
 - 23 students Class VIII B

Contributing teachers: Vlad Cătălina – informatics teacher, Leontescu Georgiana-chemistry teacher, Săvescu Cornelia-biology teacher, Diaconu Ioana- arts teacher

- Project duration two months
- Project activities and work plan

Within this project we are committed to inform students, young people about household pollution and its harmful effects and also to generate an adequate attitude towards those hazards. The project is intended for the target group (formed by 23 students) who will learn to identify the indoor pollution risk factors and also to develop a series of behavioral abilities meant to reduce their effect on personal health. Indirect beneficiaries will also benefit from this process of promoting a healthy lifestyle at school/local level: others students, parents of students involved and other members of the community.

Activities within the project are divided into two main categories: implementation of preparation activities and implementation activities. During the preparation stage, the project will be presented at school level (school administration, teachers and students), the target group will be accurately determined, an initial assessment questionnaire will be applied and contributors will be contacted: chemistry and TIC teachers and also a physician.

Implementation activities will commence by meeting with a doctor, and students will be informed regarding the risk factors. For a better information experience, the 23 students will visit a local store, where they will create a list of harmful substances found in cleaning products used in households. The identified substances will be analyzed during a chemistry class with the help of the chemistry teacher. Afterwards, the students will continue the activities by creating posters/flyers/leaflets which will later be distributed during weekly campaigns in November with the help of the project responsible. Moreover, a workshop entitled "How do we protect our health?" will be established. The project will come to an end with a street campaign, where the 23 students will inform others, the project sustainability thus being completed. Every week the project team students will conduct a promoting campaign about a healthy lifestyle at school level.

Expected results: an awareness of hazards, a significant change in the way students perceives the effects of indoor pollution, the development of practical skills required to prevent or reduce their effects through formal (chemistry class, TIC class) and non-formal activities, which will directly contribute to and reach the project's objectives. Materials developed by students: posters, leaflets, flyers – will all enhance TIC skills, while padlets will represent an open source of documentation for other students or adults interested in indoor pollution, a branch often ignored by the majority of people at the moment.

Project's activities will contribute as well to the development of citizenship, team spirit, interpersonal relationships and entrepreneurship of the students involved.

The project can be considered an example of good practice and can also be reapplied at school level by other students, with other target groups, in order to propagate the process of gathering information about the hazards of indoor pollution at school, family and later at community level. Furthermore, it will be an example of good practice at international level, as it will be presented within the activities of teaching/learning/development in Italy and will also be included within the second intellectual project product – "Methodological guide for formal/non-formal education and environmental projects" within the ACEAFNE project.

- Expected project results
 - qualitative
 - awareness of indoor pollution risk factors
 - changing the students' attitude of ignorance regarding the hazards of household pollution
 - developing skills and behaviors necessary to reduce the effects of household pollution
 - quantitative
 - 23 students informed about the risk factors of indoor pollution
 - 23 students with necessary skills to reduce the effects of indoor pollution
 - non-formal activities
 - formal activities (chemistry and TIC)
 - posters
 - flyers
 - leaflets
 - information campaign in school and at town level
 - 10 T-shirts for the campaign
 - padlets containing students' materials
 - project diary
 - exhibition

F. Project Calendar

One must state the: Activity / Target group / Deadlines / Responsibilities / Results / Observations/Notes

	Activity	Target group	Term	Responsible	Results
	e-implementation ivities				
-	Presenting the project at school level (School's Principal, Teacher's Council)	School's teachers	First week	Coordinating teacher	The teachers will be informed
•	Presenting the	Students	First	Vancea	The students will be informed

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

project within the Students' Council	Students' Council	week	Carmen	
• Establishing the target group (classes/students)		First week	Coordinating teacher	20 students selected
• Initial assessment questionnaire	The 23 students	Second week	Zăhărăchescu Bogdan	Questionnaires' results
• Contacting a physician who will be part of the activity	-	Second week	Vancea Carmen	A physician that participated in the activity
• Contacting the classes' teachers	-	Second week	Coordinating teacher	2 contributing teachers: chemistry (Leontescu Georgiana), informatics (Vlad Catalina), biology (Savescu Cornelia), arts (Diaconu Ioana)
Creation of padlets containing students' materials	School's students		Coordinating teacher	Padlets
The campaign of T-shirt printing	-	Third week	Coordinating teacher	10 T-shirts
Designing of flyers for the weekly campaigns	Local population	Third week	Vancea Carmen Zaharachescu Bogdan	Campaign flyers
Implementation activities				
-Meeting a representative of the Red Cross Dambovita subsidiary	The 23 students	Fourth week	Vancea Carmen	Awareness of risk factors
-Visiting a household cleaning products shop-collecting information concerning products used in personal homes		Fifth week	Biology teacher	List of harmful substances for the body
-Analysis of chemical substances	Target group	Fifth week	Chemistry teacher	Analysis of the substances recorded in the shops' lists

contained in household items (chemistry class)	students Their classmates		Ilie Madalina	
-Development of posters/flyers/leaflets	The 23 students	Sixth week – an hour a week	Informatics teacher Zăhărăchescu Bogdan	Posters Flyers Leaflets
- Debate "How do we protect our health?" – material presentation - Power point, essays, drawings	The 23 students	Seventh week	Biology teacher Informatics teacher Vancea Carmen Ilie Mădălina	Awareness of risk factors Padlet containing students' materials https://padlet.com/catavlad99/poluare Brochure Exhibition
-Weekly campaign at school level (distribution of leaflets)	The 23 students	Every week starting with the fourth week	Ilie Mădălina Vancea Carmen	Information campaign
Street campaign	10 students	Ninth week	Ilie Mădălina Vancea Carmen	Information campaign http://www.columnatv.ro/indoor-air-polution-an-unseen-enemy/

G. Evaluation/Assessment

- -initial/final questionnaires, questionnaire interpretation
- -questionnaires applied after every activity
- -team impressions
- -project beneficiaries impressions
- -sharing the students' impressions

H. Project monitoring

Project monitoring will be conducted by the project team. The monitoring will include:

- -direct observation
- -focus group with the participants
 - -analysis of questionnaires, statistics and project schedule

Monitoring will be conducted using the following steps:

- permanently collecting information and archiving it in order to easily monitor what has been done
- evaluation of the extent to which the objectives have been reached
- drawing conclusions and using the resulted experience in the future

I. Project dissemination

At school level:

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- -students' council
- -project's pin board
- -ACEAFNE project's website
- -school's website
- -project's Facebook page

At community level:

-Articles within the local press

J. Project Impact

Impact on students:

- -awareness regarding the harmful effects of indoor pollution
- -development of a beneficial behavior regarding the preservation of personal health
- -development of skills needed to reduce indoor pollution
- -optimization of collaboration, trust, mutual respect, respect for our own work and for the work of others
 - -development of the spirit of initiative and also of the capacity required for proper teamwork
 - -development of skills needed for various TIC tasks

K. Project sustainability

- -use of materials developed within the project for further educational activities intended for students or teachers
- -participanting students can conduct similar activities with their classmates during counseling classes
 - -student created padlets can be accessed anytime and anywhere by anyone

L. Project budget

-material resources within the ACEAFNE project (flyers printing, campaign leaflets, T-shirt printing)

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)





SWEDEN

ENVIRONMENTAL PROJECT

Sundsvall's Gymnasium Västermalm



"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

PROJECT STRUCTURE

A. Project details

a) Project title (message, slogan)

Creating an Eco-room, increasing environmental awareness.

b) Domain and category of education type

Sundsvalls gymnasium, Natural science program year 3, ecological domain.

c) Type of project (at local, county, inter-county/regional, national, international level) Local school project

B. Details of Applicant

-contact details (address, telephone number, fax, e-mail,)

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responsible

Wilhelm Fröjdholm.

- coordinator (a member of the faculty)

Maria Wisén, local-coordinator ACEAFNE.

project team (3-5 members)

WilhelmFröjdholm, LinneaPetterson and RebeccaÅslinIdén.

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experience in the field of project management (expertise of team members)
 The project team is participating in the ongoing Erasmus+ project ACEAFNE. They have previously worked on projects in school assignments. Students have also received training of students and teachers who participated in the project-training at earlier exchange within the Erasmus project.

C. Partners (the one ones already existent within the ACEAFNE project) or others The teachers and pupils that in Romania (in the Erasmus+ project) participated in training on project writing

Teachers: Ulf Edström and BertilMelander

Student: Jonathan Antonic, JesperHöglund and JoakimLundkvist.

D. Project Summary

- argumentation of the proposed project (strengths, opportunities), needs analysis, (3500 characters maximum)

Sweden is one of the leading nations in trash recycling and trash management, but that is on the national level. We have done this project in order to see how well the students at our programme are at it and what would motivate them to be better.

We've done a survey to gauge the interest in recycling and what would encourage students to adopt a more ecological way of living. This has helped us ascertain what is needed to make our ECO-room desirable for student use and inhabitation.

The positives with this project is that the students involved get a place away from home that teaches them proper trash recycling and management that is dependent on the students own interest in learning. With this opportunity to learn we may experience a surge in young people taking care of the environment by releasing less trash in forests, suburbs and in cities.

Youths today lack a certain sense of what it means to recycle and what does the term eco-friendly exactly mean? We've done this project in hopes to teach young people the significance of recycling and how to lead an eco-friendly lifestyle. We achieve this through creating a space in our school where this type of thinking is encouraged (our so called eco-room). In the room people has access to a mulch container where they can throw away their banana peels and other decomposable materials, newspapers and magazines made using eco-friendly methods and containing eco related subjects. A box where students can choose to put their used/unwanted clothes that will then be sent to organizations such as the Red Cross where they then will be sold as second-hand goods promoting a less consumer-intensive way of thinking and another box where students can put books which they've already read for another book that's already in the box in a 1-for-1 type of exchange.

D. Project description. Please provide a description of the project, according with the following structure (3500 characters maximum):

- Purpose

The purpose of this project is to increase environmental awareness and teaching students an ecofriendly behavior, and create a space where this is encouraged that they themselves will use and manage without major supervision by teachers.

Objectives

Creating a habit that leads to a sustainable future for mankind through exposure to an environment encouraging such qualities.

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Survey results show that the students already are environmentally aware and are actively participating in recyling materials with a only small minority ignoring to recycle.

To use the ECO-room students have expressed the desire for a more homelike environment with games, speakers for music playing and the like.

Materials needed: Sofas, paint, speakers, refrigerator, low efficiency light bulbs, recycling unit and appliances for cleaning for when it is needed.

- Target group (direct / indirect beneficiaries)

Directly will 87 students on the naturalscienceprogram. Indirect the students that coming years will begin to study on the program and all the other students at the school.

Project duration

2 months.

- Project activities and work plan

This project will be by and for the students so the ones actively driving it forward will be the students.

- Expected project results

- qualitative

Awarness about the environment.Our impact on it, and what we can do to lessen that impact. Skills and behavior that will be beneficial to the environment will be developed.

quantitative

Most affected will be the students with an immediate connection to the project which is the students at Västermalm Gymnasium. And to a lesser extent parents of said students which hopefully is brought about by the students own knowledge about the related issues.

A room will be redesigned for the purpose of the project about teaching students environmentally friendly behavior.

Survey that will inform us on the students' pre-existing environmental friendliness.

Information about the ECO-room in leaflets and pamphlets

Through this project we also hope to get some media attention which we hope will inspire more schools to create their own ECO-rooms and make a positive trend happen.

E. Project Calendar

One must state the: Activity / Target group / Deadlines / Responsibilities / Results /

Activity	Target group	Deadlines	Responsible	Results
Presenting the project to the principal and school teacher teachers council		First week	Coordinator teacher	Informing teachers and principal
Presenting the project to the student council Students composing the students' council		First week	Wilhelm Fröjdholm	Informing the students

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Initial survey for students	Schools nature programme	Second week	Rebecca ÅshlinIdén, LinneaPettersson	Survey results
Contacting local companies for materials	-	Third week	Coordinator teacher	Materials for the ECO-room
Expense assesment	-	Third week	Wilhelm Fröjdholm	Estimated budget for ECO-room
Taking estimated budget to the school principal	-	Third week	Coordinator Teacher	Budget for ECO- room
Implementation activities				
Plan the lay-out of the ECO-room	Students	Fifth week	Students	Ideas for the ECO-room
Purchasing materials for the ECO-room	Students	Sixth week	Coordinator teacher	Refurnish the ECO-room
Acquire environmentally friendly paint		Seventh week	Coordinator teacher	Repaint the ECO-room
Finishing touches to the ECO-room		Eight week	Students	

F. Evaluation/Assessment

-Survey and survey results

Team evaluation

Project beneficiaries impressions

G.Project monitoring

The project will be monitored by project members and assisting teachers. The monitoring will include: Direct observation, statistical analysis and project schedule.

Monitoring will be conducted using the following steps:

- -Collected information will be archived for future referencing
- -Evaluate to which extent the projects objectives has been reached
- -Draw conclusions based on resulting experience for future use

H. Project dissemination

School level:

- -Student council
- -Students
- -Social media

ACEAFNE's project website

Local community level:

"ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)

- -Articles with the local press (Sundsvallstidning)
- I. Project Impact

Impact on students:

- -Enviromentalawarness
- -Developing behavior beneficial for the environment
- -Enhancing knowledge about sustainable development
- -Developing an initiative spirit with the capacity for proper teamwork
- -With small encouragement affect the conscious decision to make a difference

J. Project sustainability

The ECO-room will be accessable for future students who will manage and develop the room further for an even better ECO-room.

K. Project budget

Resources within the ACEAFNE project and from the school.

Strategic Partnership Project (Key action no 2) "ACTIVE CITIZENSHIP AND ENVIRONMENTAL AWARENESS THROUGH FORMAL AND NON-FORMAL EDUCATION" (ACEAFNE)





