



Co-funded by the  
Erasmus+ Programme  
of the European Union



# Innovative Strategies



# **An eBooklet for an innovative pedagogical strategies to class-based teaching**

## **Personalized and Adaptive Learning**

Personalized learning is an educational approach that aims to customize learning for each student's strengths, needs, skills, and interests. Look for each child's strengths and strengthen what the child is best at.

Adaptive learning is an educational method that uses modern technology - computers as interactive teaching devices and organizes the distribution of resources according to the unique needs of each student.

### **Personalized and Adaptive Learning**

- uses modern technologies - computers as interactive teaching devices
- important is what you do, not how you do it
- unique approach to each student - takes into account the skills, abilities and at the same time shortcomings.
- the teacher becomes a "guide" or "assistant" to the students, standing by their side and not just in front of the whole class.
- the student does not feel the fear and stress of failure, it increases his motivation to learn
- students use computers, tablets or smartphones at their disposal to practice what the teacher explained to them earlier.
- each student progresses at his own pace.

With this type of learning, each student is different in a given subject: gifted, average, weak, but it is true that each one of them has access to content adapted to his abilities and learns in conditions that suit his abilities. In other words: adaptive learning knows how that student learns, knows how others learn and, based on these experiences, offers tasks precisely adapted to the students so that they learn the given subject matter

## **VIDEO-BASED LEARNING**

Video-based Learning is the use of video to teach knowledge or skills.

Video-based learning is a remote training method that relies on live or prerecorded video to teach new skills and knowledge. Video-based learning uses images, graphics, on-screen text, and audio to deliver a multi-sensory learning experience that fosters engagement and knowledge retention.

Video-assisted learning (VAL) is defined as a strategic teaching approach to using videos – either educational or conceptual – to improve a student's comprehension, cognitive ability, or social-emotional skills.

What are learning based activities?

Activity-based learning is the process of learning by performing tasks or activities. As opposed to asking kids to simply listen and take notes, activity-based learning motivates students to participate in their own learning experience via practical activities such as independent investigation and problem-solving.

## **GAMIFICATION**

- uses elements of games such as collecting points, earning rewards and comparing yourself to others, outside of the game environment.
- as opposed to a game where it is the main goal is fun, the game is just a tool to achieve the goals that are in the first to increase attention and motivation
- is used to make the learning process more interesting, interactive and engaging for students.

Benefits of successful gamification initiatives in the classroom

- giving students ownership of their learning
- opportunities for identity work through taking on alternate selves
- freedom to fail and try again without negative repercussions
- chances to increase fun and joy in the classroom
- opportunities for differentiated instruction
- making learning visible
- providing a manageable set of subtasks and tasks
- inspiring students to discover intrinsic motivators for learning citation needed

Gamification

- achieving goals in an environment of "joy"
- application of elements of experience and interactivity
- long-term motivation
- the use of game elements in the learning process
- support of self-realization and critical thinking
- supporting the activity and engagement of pupils
- application of progress indicators
- turning the educational process as a whole into a game

Limitations on gamification

- Not all learning can be gamified.
- Gamification should be balanced with other teaching approaches.
- It can be distracting if it is not well connected with the educational goals.
- If set incorrectly, it may support external rather than internal motivation of the student.

## **Project-based learning (PBL)**

Project Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.

- student-centered pedagogy that involves a dynamic classroom approach
- students acquire a deeper knowledge through active exploration of real-world challenges and problems
- Students learn about a subject by working for an extended period of time to investigate and respond to a complex question, challenge, or problem

7 steps of project-based learning

1. the formulating the expected learning outcome,
2. understanding the concept of the teaching materials,
3. skills training, (4) designing the project theme,
4. making the project proposal,
5. executing the tasks of projects
6. presentation of the project report.

Essential elements of Project-Based Learning

- A challenging question or problem;
- Authenticity;
- Sustained inquiry;
- Reflection;
- Student choice and voice;
- Public product;
- Revision and Critique.

## **CLIL - CONTENT AND LANGUAGE INTEGRATED LEARNING**

Teaching method based on teaching a school subject through a foreign language, so that the student acquires knowledge and skills in both subjects at the same time. Suitable subjects - geography, history, mathematics, natural history, civics or physical education

Advantages of the CLIL method

CLIL offers students a natural situation for language development and this natural use of language supports motivation and desire for language learning. In this way, students stop focusing on the language and focus only on the subject being taught.

The teaching of languages and other subjects is interconnected.

The lesson has two objectives – one focuses on the subject, topic or thematic unit and the other on the language.

It involves the use of two languages, the mother tongue, which is dominant, and a foreign language. The main information is provided in the mother tongue and some teaching activities take place in a foreign language. Pupils thus learn to think in a foreign language, practice the foreign language while teaching another subject and develop various competencies.

CLIL is an excellent way to teach children not only to speak, but mainly to think in a foreign language.

By using the CLIL method

- we motivate students to learn a foreign language
- we strengthen intersubject relationships and communication
- we increase the time in which students use a foreign language without increasing the foreign language time allowance
- we enable students to use a foreign language meaningfully
- pupils acquire a lot of extra-curricular knowledge.

## **LESSON PLAN 1**

### **LIFE IN POLLUTED WATERS**

Subjects - Native language, Art, Environmental education

The main aim of the project

- to expand students' knowledge about the pollution of nature, especially rivers. Realize the importance of water for humans and animals. Acquaintance with different types of river animals.
- to look for possibilities of waste material to express the idea of life in water
- to support creative thinking and the creativity of the child's personality
- teach students to appreciate all forms of life. Lead them to the protection and preservation of life under water.
- to realize the importance of maintaining cleanliness and order, especially around rivers. To encourage students to creatively solve the problems of river pollution.

Forms of work

- walking, observing the surroundings of the river
- narration, discussion, description
- work with books – children's encyclopedias, poems
- individual and group work, verbal presentation.

## Techniques

- drawing, painting with aniline paints
- collage from waste materials.

## Material

- books, encyclopedias, pictures, clippings;
- art supplies: drawing, pencil, aniline paints, scissors, glue, brushes, color

## Individual stages of project activities

### 1st stage: How to protect nature (reading)

We will arrange the classroom space so that benches and chairs are placed in the middle. We sit in a circle and in the middle we place books, encyclopedias, pictures with the theme of the environment, rivers, river pollution, river animals. We encourage the children to use the available books to figure out in what the lesson will be about. Looking at illustrations in books and discussing the chosen topic "life in a polluted river" - questions and answers..... We will discuss life in water, mention different types of aquatic animals, show a picture for each. Each student takes one book and finds in it a suitable picture for the given topic. The student describes it.

2nd stage: Observing the surroundings of the river, focusing on its pollution.

We will test our theoretical knowledge in nature. We will go for a walk to the nearby river. We observe the surroundings of the river, whether it is polluted, to what extent, and what kind of pollution it is. Each student independently makes notes about the observation. He notes what types of garbage he sees. After returning to the classroom, discussion of the knowledge gained.

### 3rd stage: Our clean river (Art)

In this stage, we will focus on the artistic representation of life in the river. WE work with a model of the cross section of the river. Images of aquatic animals, plants, but also garbage that do not belong in the river are attached to it. The task is to remove the garbage and thus help the aquatic animals to breathe better. We will create a clean environment for them. Then, using the collage technique, we will depict the rest of the environment of the river bed - stones, plants. We observe the tolerance during group work during the collage on a common background.

### 4th stage: Littering is prohibited

The students' task will be to make a sign from various cardboard and waste materials - "Littering is prohibited." We will motivate ourselves by discussing what we could do to prevent river pollution.

At the end, the students write and read what they liked the most on this project.

## LESSON PLAN 2

PROBLEM TASK - TOPIC: Environmental protection

Educational objective:

- to be able to express an opinion on certain problems,
- be able to reproduce the opinions of the group,
- check your communication skills and level of knowledge from a certain area.

The method of group work in solving problem tasks.

Acquaintance with the teaching objective.

Motivation:

We motivate pupils to express their own opinions, to take positions on the given problems.

Exposure of new curriculum:

We will divide the students into groups of five to six members, each group will choose its own speaker, who will choose a ticket with a given problem task for the group. Each group has to take its own position on the mentioned topic, or answer the given questions.

Problem tasks:

- 1.) climatic changes
- 2.) recycling
- 3.) environmental pollution
- 4.) lack of energy sources

The task of the pupils is to take a position on problematic tasks within 20-25 minutes, the spokesmen of the groups present the opinions of the group and the other pupils have the opportunity to ask questions.

End of lesson:

At the end of the lesson, we thank the students for their independence and activity in presenting their own ideas.

Possibilities of use:

We use it for topics where we want to find out the opinions of the pupils, their knowledge about certain problems, and at the same time we support their independence and activity.

## LESSON PLAN 3

General instructions (can be used in any subjects)

1. Warm up activity to activate existing knowledge
  - a short video that connects closely to the topic.
  - discussion of language, content and educational outputs.
  - to find out what the students already know and what they want to know about the given topic. (Students write notes)
2. Pre-teach the target language in as many ways as possible (i.e. with images, listening, realia etc.).
3. Main activity

- students independently read a short text in which they look for specific information
  - students compare the readings and create something new, such as a plan or list of recommendations
  - class suggestions on how they could improve the final result of their group work)
  - students present the results of the group, followed by a discussion with the whole class
4. Review the lesson's learning outcomes (students write down what they have learnt) and decide on the next steps.

## CLIMATE CHANGE

<https://www.youtube.com/watch?v=WkvPdUtYhX8>

### **What is the difference between weather and climate?**

The main difference is time. Weather is only temporary. For example, a blizzard can turn into a flood after just a few warm spring days. Climate, on the other hand, is more than just a few warm or cool days. Climate describes the typical weather conditions in an entire region for a very long time – 30 years or more.

### **What is climate change?**

Climate change describes a change in the typical weather for a region — such as high and low temperatures and amount of rainfall — over a long period of time. Scientists have observed that, overall, Earth is warming. In fact, many of the warmest years on record have happened in the past 20 years. This rise in global temperature is sometimes called global warming.

### **How do we know Earth's climate is getting warmer?**

Scientists have been observing Earth for a long time. They use satellites and other instruments to collect many types of information about Earth's land, atmosphere, ocean, and ice. This information tells us that Earth's climate is getting warmer.

### **Why is Earth warming?**

Some of the gases in Earth's atmosphere trap heat from the Sun—like the glass roof and walls of a greenhouse. These greenhouse gases keep Earth warm enough to live on. But human activities, such as the destruction of forests and burning fossil fuels, create extra greenhouse gases. This traps even more of the Sun's heat, leading to a warmer Earth.

### **Has the climate ever changed before?**

Yes, but this time is different. Over millions of years, Earth's climate has warmed up and cooled down many times. In the past, Earth often warmed up when the Sun was very active. But nowadays, we can carefully measure the Sun's activity. We know Earth is warming now, even when the Sun is less active. Today, the planet is warming much faster than it has over human history.

### **Why does climate change matter?**

The average air temperatures have gone up in the last century. A couple of degrees over a hundred years may not seem like much. However, this change can have big impacts on the health of Earth's plants and animals.

## LESSON PLAN 4

Improve listening skills.

Main aim - understand the dialogue.

The game is going to be played in Voscreen – free website helping users to improve English language skills through short video clips. It is based on video extracts obtained from youtube. When a user starts, he has to select his native language, watch the clip, and then choose the accurate translation to the short phrase uttered in the clip. For each correctly selected translation, he gets a point and moves on to the next clip in the series.

<http://www.voscreen.com/>

Voscreen is suitable for practicing paraphrasing. The teacher choose the level or grammar, play the clip and ask students to paraphrase what they just heard. Compare their ideas and finally check the two options offered by Voscreen. Play a random clip. An alternative is for students to imagine what happened after/before the scene they see

If the teacher selects the category Questions or What in Accesses a series of clips in the VoStructure tab different types of questions. Play the clip and ask students to write below answers to the questions asked in the video. It could be speed competition who comes up with a logical answer first or imagination who comes up with the most logical answers at the time given).

The most suitable categories are those that contain simple the sentences. The game can be played to practice sentence stress: distinguish between the content and structure of words and see whether the meaning of the sentence changes when there are different words he emphasized. Since the clips serve as a pronunciation model, students either try to recreate what they hear or modify it to convey a different meaning.

## LESSON PLAN 5

### BINGO

Helps to improve speaking skills. The student learn how to communicate with team members

Most students are probably already familiar with the rules of Bingo. Simply get five numbers in a line on a chart. Sometimes, rather than having numbers, the cards can have experiences, professions or various activities, adapted to the topic we are dealing with, and students must find out their opinions on the given issue.

Game rules:

1. Print the picture sheet and cut it into individual picture cards. Place the cut pictures in a bowl or basket.
2. Print one game plan for each player. Everyone has to have a different game plan.
4. Choose a player among you who will draw cards.

5. Draw one card from the hat.
6. Each player crosses out this picture with a pencil.
7. Draw another picture and continue in the same way.
8. The game is won by the player who will be the first to have 5 boxes marked next to him in a row or below him in a column. The player who collects the necessary crosses first shouts BINGO!

After the game, you can use the following discussion questions engage students in further discussion. The teacher should ask the students if they liked the game (why/why not?). Create a discussion with follow-up questions from the answers students. Students can create additional Bingo boards based on various topics.

#### Optional activity

1. Work with class to compile a list experiences that a person might have had. For example, riding a horse, travelled by plane, eaten calamari, parachuted. Work together on the list until you have about 20-30 different experiences. Then, give students a blank bingo board (a 5x5 chart) and have them write one experience in each of the boxes. When the cards are distributed, students mingle and talk to each other to find someone with each experience they have chosen. If a student finds someone who, for example, has parachuted, that student signs the square where your student wrote it on his Bingo board. The first person to get five in a row yells, "Bingo!"

2. Arrange students speed dating style: two rows of chairs facing each other. Each pair then gets two minutes to talk to each other. When time is up, the students in one row shift one chair to the right. The game is over once someone has gotten five spaces in a row on their bingo board.

The Commission is not responsible for any use of the information contained in the document.