

# STREAM this TEAM

2020-1-PT01-KA220-078623



## Learning Teaching Training Activity 3:

Peer-to-peer Teaching  
and  
Collaborative Learning



3-5 OCTOBER  
2022

RUSE,  
BULGARIA



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

# AGENDA



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## 3rd October 2022 / Monday

09:45 – 10:00 Meeting in the  
conference room

10:00 – 10:10 Opening Speech  
and welcome by host partner /  
DABG

10:10 – 10:30 Introducing the  
project to the participants / EduFor

10:30 – 10:50 Collaborative  
Learning and Project Based  
Learning – ppt

10:50 – 11:10 Coffee Break

11:10 – 13:00 Collaborative

Learning - Hands-on experience

13:00 – 14:15 Lunch

14:30 – Walking to the  
Regional Public Library

15:00 – 16:30 STEAM – Reading  
could be interesting – Hands-on  
Experience

16:30 – 19:00 Free time

19:00 – 22:00 Dinner together



## 4th October 2022 / Tuesday

09:30 – 10:20 Coordinators'  
meeting regarding project outputs

10:30 – Meeting in the  
reception/ Going to Fr.Schiller  
School

11:00 – 12:00 Observation of  
lessons – STEAM and Reading;  
peer-to-peer teaching

12:45 – 14:00 Lunch

14:00 - Meeting in the  
reception/ Walking to O.Paisii  
School

14:30 – 15:15 Observation of  
lessons – Reading activities based  
on STEAM projects;  
peer-to-peer teaching

15:15 – 16:30 Observation of  
the day 2; discussion

16:30 – 19:00 Free time

19:00 – 22:00 Dinner together

## 5th October 2022 / Wednesday

09:00 – 10:30 Peer-to-Peer  
Learning – Hands-on experience

10:45 Meeting in the  
reception/ Walking to the Eco  
Museum

11:15 – 12:30 Visiting the Eco-  
Museum -

12:30 - 14:00 Lunch

14:00 - 16:00 Reflection of the  
training; discussion; conclusions

16:00 – 16:15 Certificates,  
Closure





# Aim of the LTTA 3:

The activity was planned as a study visit in which the participants would:

- see, on the ground, peer teaching / learning and cooperative learning practices in inclusive classrooms;
- discuss these practices, providing personal experiences, with the aim of improvement inclusion in all schools in the consortium;
- share the experiences in each country in the context of peer and cooperative teaching in the classroom already carried out under this project.

## Overview of the project:

The overview of the project STREAM thiS TEAM was presented in details by Mrs Fatima Almeida (project coordinator) and Mrs Isabel Serra (the Director of EduFOR).

The focus of the presentation was on the

- main aims and objectives of the project,
- outcomes and expected results
- activities, already completed
- tasks for the next project period
- administrative and financial issues



DAY 1

3RD OCTOBER 2022

## Programme

**Presenting the project  
STREAM thiS TEAM  
/Fatima Almeida,  
EduFOR/**

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**Collaborative Learning  
and Project Based  
Learning /Daniela  
Boneva, DABG/**

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**Collaborative Learning -  
Hands-on experience  
/TATUL - team game/**

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**STEAM – Reading could  
be interesting – Hands-  
on Experience /Regional  
Library - Ruse/**





## Daniela Boneva

is a Dyslexia Facilitator since 2005; founder of Dyslexia Association – Bulgaria; Master Degree in Electronics; Master Degree in English Philology. Has long experience working with children and young people, at first as a Youth programs coordinator in the Youth Department of the Municipality, later as an English language teacher in secondary and high schools. Have worked for many years for regional media as editor.

D.Boneva is an author of many Bulgarian resources and has translated and adapted different materials /Brochures, Guides, Articles, etc./ in Bulgarian; has organized and led many seminars and workshops for teachers, specialists and parents; has taken part in many national and international dyslexia related conferences, seminars and workshops in different European countries.

As a dyslexia facilitator Mrs Boneva has been working since 2005 individually with children and young people with dyslexia and other learning difficulties; has been giving consultations to their parents and teachers/tutors.

D.Boneva has experience of many dyslexia related EU projects /being a coordinator in some of them/, and is widely acknowledged as a dyslexia expert in Bulgaria.

## Dyslexia Association - Bulgaria

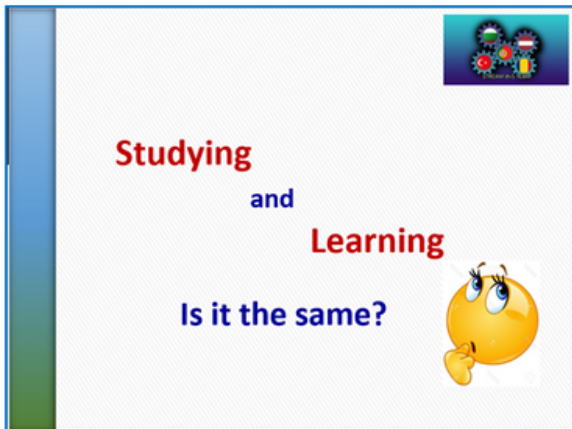
SDRUZHENIE ASOCIACIA DYSLEXIA - BULGARIA (DABG) is a non-governmental and not-for-profit organisation, which main aims are: to increase awareness about dyslexia and other learning difficulties, to train teachers how to recognise the symptoms of dyslexia and all comorbid conditions, to educate and support parents of children with SLD, to provide help to students for overcoming their difficulties and better realisation after school, etc.

Specialists in the Association provide trainings, seminars, workshops, presentations for teachers, specialists and parents; assessment and individual consultations for children, young people, and adults from all over the country.

Since its formation in 2005, DABG has taken part in many projects related to dyslexia and other specific learning difficulties, early identification and early intervention; supporting students to develop good study skills, using assistive technologies in education, bilingualism, foreign language learning/teaching, etc.

DABG works in collaboration with local educational authorities, schools, universities, NGOs, media.





Daniela Boneva started her presentation with sharing the observation that for many people (not only for students), the words “studying” and “learning” have always been similar and they use them interchangeably.

It is true that both activities involve shaping our knowledge and our proficiency in some area: **We study Math** and while studying Math **We learn how to calculate the area of a triangle.**

In fact there is a big difference in the meaning between the two words.

**Studying** is usually associated with formal education. Students gain the basics of different disciplines taught at school.

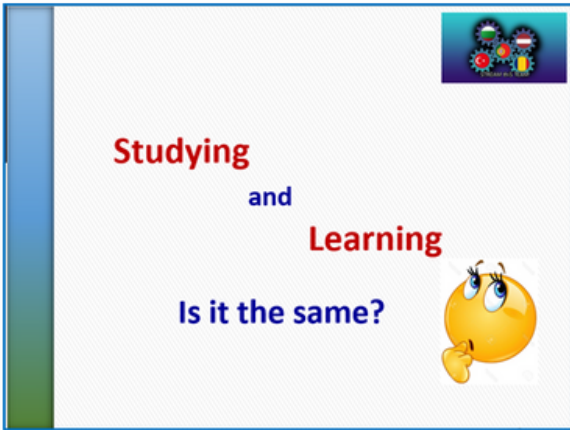
**Learning** is applying the knowledge one acquired at school in situations in their daily life.

### What is **studying**?

**Studying** is the process of learning and finding information. People use different resources to acquire information. Nowadays the main resource is Internet, as it contains a huge amount of information in practically all spheres of the science, culture, arts, sport, politics, society, etc. But we also have access to many written resources, like books, encyclopaedias, magazines, newspapers, etc. that could be found in public and/or personal libraries and book stores. We can look for information in museums, galleries; talking to knowledgeable people/specialists with experience in the field. In the process of studying we search for information, summarize and analyse the facts we find, and use this information to enrich our knowledge on the topic. For example, if we study history, we may find interesting facts in history book, we can visit a history museum and talk to experts that work there; we can talk to participants in events, etc.

To summarize: we study because we want to learn something.

Most of the time, studying takes place in a formal environment, like schools, colleges, universities, training centers, and so on.



## What is **learning**?

**Learning** is the process of acquiring new understanding, knowledge, behavior, skills, etc.

The ability to learn is inherent in human beings, but animals also can learn, and even some high-tech machines. Sometimes learning happens immediately, in a very short period (could be even a few seconds). Imagine you got your fingers being burned by a hot stove. As a result, you learn that it is painful and will try not to get into the same situation again. But sometimes to learn something we need much longer time (e.g. a small child needs months to learn to walk, and years to learn to talk). To acquire some skills, we need to accumulate knowledge from repeated experiences (reading, writing, math, foreign language, etc.)

A lot of learning randomly happens in our life. It can be from a new experience, the information we read, and even from our perceptions. Learning can also occur from watching the news on television. It can also be gained by talking to our friends.

Learning can happen subconsciously, practically at any moment in our lives. But when we talk about education, what matters most is conscious learning, which we also call active learning.

Active learning occurs when a person takes control of his/her learning experience. Since understanding information is the key aspect of learning, it is important for learners to recognize what they understand and what they do not. By doing so, they can monitor their own mastery of subjects. Active learning encourages learners to have an internal dialogue in which they verbalize understandings.

Active learning is a key characteristic of student-centered learning. Conversely, passive learning and direct instruction are characteristics of teacher-centered learning (or traditional education).



Although we are able to point out the difference between the concepts of studying and learning, it would be right to note that both processes are of utmost importance and neither can or should be neglected or belittled.

Without the process of studying, learning is impossible.

Without learning, studying is pointless.

### Why **studying** is important?



- It helps to learn the basics and to develop cognitive and problem-solving skills
- It gives access to knowledge and helps to understand this knowledge better and easier
- It helps to develop abilities and skills, to use our strengths and improve our weaknesses
- During the process of studying we can interact with the others and learn from them

### Why **learning** is important?



- **It involves our senses** – the use of our five senses helps us to learn something. The more senses we use, the more learning we acquire.
- **It involves our feelings** – learning involves our feelings. It is said that learning is best when people are treated with respect.
- **It involves our will** – If we do not have the choice to learn, everything will be in vain.



## Collaborative learning



is the educational approach of using groups to enhance learning through working together. Groups of two or more learners work together to solve problems, complete tasks, or learn new concepts. This approach actively engages learners to process and synthesize information and concepts, rather than using rote memorization of facts and figures.

Collaborative learning is one of the most effective methods of active learning, based on using the strengths of each student.

Students have to work together, with each other on different tasks, where they must collaborate as a group to understand the concepts being presented to them and to find a solution to the given problem.

Working together, as a group, learners gain a more complete understanding of the topic rather than if they work individually. In the process they need to learn how to defend their positions, how to reframe ideas, need to learn to listen carefully and patiently to other viewpoints and to be able to present their points in a clear way.

In collaborative learning, most of the learning activities implemented focus on searching and exploring information on the given topic, learning new concepts or rules, and applying what is learned. Students clarify the topic through discussion, asking and answering questions, reasoning, analysing what they already know and finding a solution to a problem. They do not rely solely and exclusively on the teacher's presentation or explanation of the material.

Implementation of collaborative learning is of benefit for students both in individual and in group aspect (good for the group/class in general).

- Among the individual benefits could be listed:
  - it turns learning into a truly active process
  - Teaches how to think critically and quickly
  - Develops public speaking and active listening skills
- Among the group/class benefits should be mentioned:
  - Develops self-management and leadership skills
  - Increases learners' skills and knowledge
  - Improves knowledge acquisition and retention
  - Improves relationships within the teams and in the class



## Project based learning

Project-based learning (PBL) or project-based instruction is an instructional approach designed to give students the opportunity to develop knowledge and skills through engaging projects set around challenges and problems they may face in the real world.



### Why to use project based learning?

- Because we live in a project-based world – every day we need to solve tasks that are like small projects (we need to plan, to organize and to realize the planned activities in order to achieve the goal)
- Because as teachers we need to prepare students for success in life after the graduation, so we need to prepare them for a project-based world.



### Main elements of the project based learning

- The focus should be on a big and open-ended question/problem
- To consider what students should academically know
- To stimulate intrinsic curiosity, to generate questions and to encourage students to seek answers
- To provoke critical thinking and creativity
- To facilitate communication and collaboration



### Benefits of the project based learning

- connects students to the world beyond the classroom; preparing them to accept and meet challenges in the real world
- provides an opportunity for students to engage deeply with the target content; long-term retention
- building intrinsic motivation - student learning is centered around the main question or problem and a meaningful outcome

# To summarize:

## Traditional learning

- In traditional learning goals are competitive (where students work against each other towards the same goal) or individualistic (where students work alone towards independent goals)
- In traditional learning student's success depends only on his own knowledge, skills and efforts; he can rely only on his own strengths, trying to avoid what is difficult for him

## Collaborative learning

- In collaborative learning students work with each other (in pairs or in small groups) towards a common goal
- In collaborative learning the success of each student depends on the knowledge and skills of all group members; each student can benefit from the strengths of the others, can learn from the others and this way to improve what he is not so good at.



# Collaborative learning: Hands-on Experience

One of the most important skills to achieve effective learning is the ability to ask the right questions. When we ask the right question we are much more likely to get the information we need to solve a task or problem. It not only helps us find the information we're looking for but also encourage discussion and challenge existing ideas. Developing this ability can help one advance his career (at school or at work place) by improving his communication and collaboration skills.

Asking the right questions can uncover opportunities that a person may not even have suspected, and help them to achieve significantly better results, for example in studying a subject at school. The more questions you ask, the more answers you will get and the more solutions you will discover.

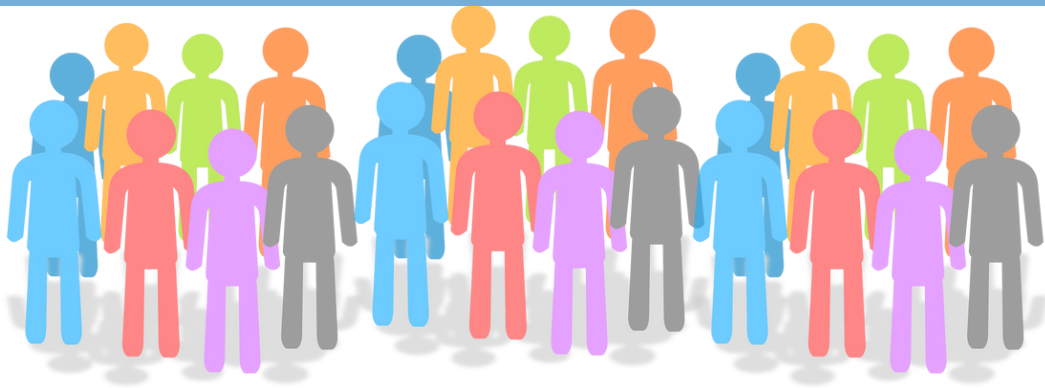
Teachers, as a rule, encourage students to ask questions if they do not understand something in the lesson or regarding the homework set. Good teachers tell their students not to worry about looking stupid, and to just ask questions when in doubt. A favourite line often used by teachers is, "There's no such thing as a stupid question!"

And it's true. Asking the right questions is the key to finding the right answer and a prerequisite for progress (in this case, in learning).

The activity we suggested to the LTT participants was aim at development of the following skills:

- careful listening to the others;
- extractibg information;
- asking the right questions;
- collect new facts;
- analyzing the new information;
- compare the new-gained information to what we already knew;
- making conclusions;
- formulation of new questions to find the information that is still missing;
- to formulate the answer to the general question (solution of the task/problem)

# Tatul - Game: Procedure



- All participants were divided into teams (in order to make the communication easier each country formed their team).
- Each team identifies one "spokesperson" who will communicate with the other teams.
- Each team carefully studies the information they have and considers what questions they want to ask the others to get additional information. The team has 3 minutes to do this.
- The spokesperson goes to a "council" which includes the spokespeople from all teams.
- Each speaker is only allowed to ask one question.
- A speaker from the other teams answers the question if they have the information sought. The answer should be only one, maximum two words.
- After all speakers have asked their question, they return to their teams and pass on the information they have gathered.
- The teams have 3 minutes to discuss the information, check it against what they already know and consider new questions.
- The spokespersons of all the teams reconvene for a "council".
- The procedure is repeated until one of the teams thinks it has an answer.
- He writes it on a piece of paper, hands it to the presenter and exits. The other teams continue until all teams have come to a decision and have given their answers to the presenter.
- When only one team is left, they have no one to ask questions of and have an extra 3 minutes to discuss their answer.

# Preliminary information:

## The Sanctuary of Orpheus

Not far from the village of Tatul in Southern Bulgaria is a sanctuary of the Thracian singer Orpheus. The sanctuary is high in the mountains. In the centre is a huge stone sarcophagus in the shape of a parallelepiped.

You are a large group of archaeologists who have spent the last few weeks exploring the ancient sanctuary.

Your task is to determine in which month of the Thracian calendar the construction of the sarcophagus was completed.

During the research, your group has been divided into several teams. Each team worked in a different location and had different information. This information is important for solving the mystery. But... none of the teams has all the information they need.



### The task:

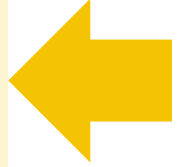
Find out when the construction of the sarcophagus was completed (in which month, which week and which day of the Thracian calendar), if you know that it began on the third day of the second week of the fourth month.



# Additional information:

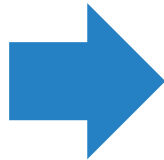
## Team 1:

- The sarcophagus is 60 metres long.
- The first month in the Thracian calendar was called BENDIDA.
- The month of ZUMURDOS was dedicated to religious festivals and then no work was done.
- Several brigades worked on the construction of the sarcophagus.
- One BRANK is equal to 3 cubic meters.
- In an ARIM there are eight REZes.



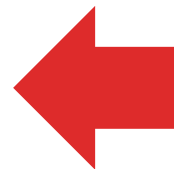
## Team 2:

- The second month of the year was called AZDUL.
- Each working month is divided into five ARIMs.
- The width of the sarcophagus is 20 meters.
- Each stone block has a volume of 1 BRANK.
- There were two women in each brigade.
- BRANK is a Thracian measure of volume.



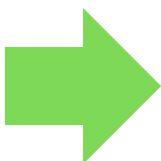
## Team 3:

- The sanctuary is carved into a granite rock.
- The sarcophagus is 15 metres high.
- The third month of the year was called CANDAEON.
- The year in the Thracian calendar consisted of five months.
- Only one brigade worked on the construction at any time.
- The sarcophagus was made of stone blocks.

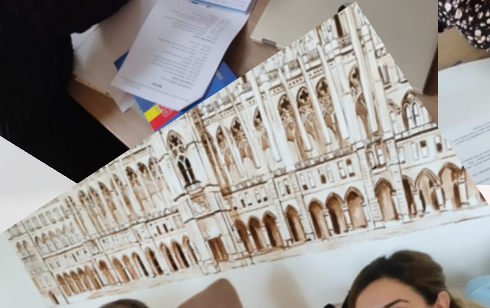


## Team 4:

- Every month in Tatul was divided into ARIMs and REZes.
- In each brigade there were 8 workers.
- One man from the brigade had religious functions and did not work on the construction site.
- Each worker cut 10 BRANKs for one ARIM.
- The work started in the month called PLEISTOR.
- The fifth month in the calendar was called ZUMURDOS.



# Working moments /Tatul Game/





# Reading could be interesting

## Regional Library

The visit to the Ruse Regional Library was aimed at introducing the participants in the training to the various initiatives that the Children's Department of the library organizes for the children and students of Ruse.

The demonstration was in two parts:

- Presentation of rare and interesting titles in the Library (the longest book in the department, the heaviest book, the smallest book, some interesting phototype editions, etc.).
- Presentation of interactive books (scientific encyclopedias) for viewing with 3D glasses, National Geographic's three-dimensional encyclopedias, musical encyclopedias with real animal sounds and those with classical music.

After that the teachers participated in a short art studio "Sensory World" workshop. They worked with special fluorescent paints on a theme of their choice, using different techniques they were shown. Then, in the "Sensory World" area, under the lights of special UV lamps, the painted pictures "came to life" and turned into glowing works of art.

At the end the Library team demonstrated the "Interactive Floor" projector, which is the object of great interest by both children and adults who visits the Library!

### Regional Library "Lyuben Karavelov"- Ruse

is one of the oldest and earliest established spiritual centres in Bulgaria after the liberation of the country in 1878.

The library bears the name of one of the most prominent Bulgarian revivalists - poet, writer, encyclopedist, journalist, ethnographer; national hero, fighter for the liberation of Bulgaria.



# Working moments in the Library







## Open observation lessons:

Participants in the LTTA 3 had the opportunity to be guests in three open-observation lessons, organised in two schools in Ruse, which are local partners of the Dyslexia Association - Bugaria and where the STREAM thiS TEAM project activities are implemented.

During these lessons some of the STEAM teams in Secondary German Language School and in Otetz Paisii Primary School presented to younger pupils three of the STEAM projects developed with the support of mentors and orientators-teachers.

DAY 2

4TH OCTOBER 2022

### Programme

Open-observation lesson - Fridrich Schiler Secondary German Language School - Ruse

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Open-observation lessons - Otetz Paisii Primary School - Ruse

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# Fridrich Schiller Secondary School - Ruse

General Topic: Animals in Bulgaria

Specific Topic: Animals in Srebarna reserve zone

Presented by:

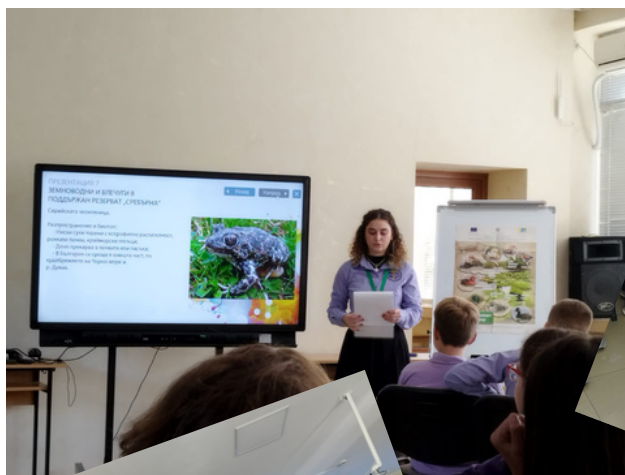
- Ani Todorova - 7th grade
- Martina Angelova - 7th grade
- Ivayla Marinova - 7th grade

Mentor:

- Ilina Linkova - 12th grade

Orienteers:

- Aygyul Ahmed - biology teacher
- Katya Paskaleva - science teacher





# Otetz Paisii Primary School - Ruse

## Topics: Solar System; Reflection and Refraction of Light

Presented by:

- Krasimir Minkov - 7th grade
- Daniel Atanasov - 7th grade
- Mihail Georgiev - 7th grade

Orientator: • Diana Peteva - physics teacher





# Otetz Paisii Primary School - Ruse

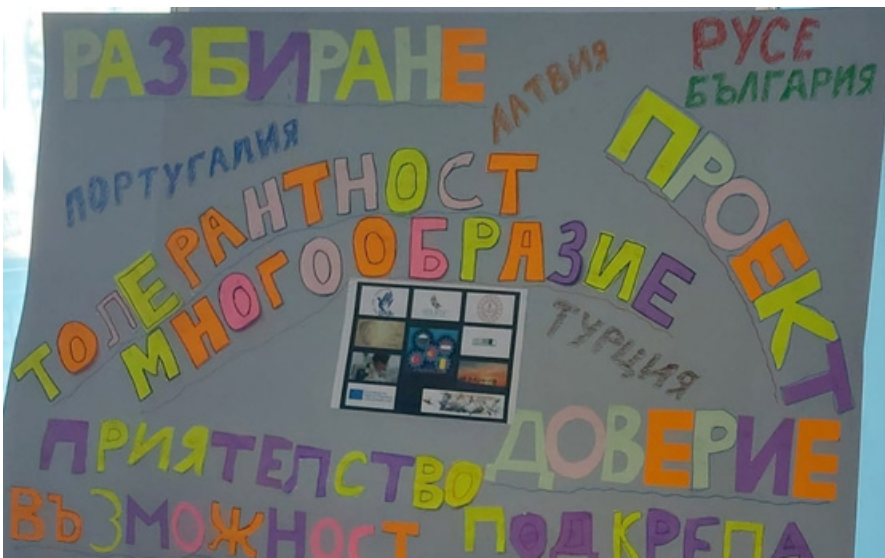
## Topics: Human Musculoskeletal System;

Presented by:

- Stiliyan Gunchev - 7th grade
- Petar Varbanov - 7th grade

Orientator: • Iskra Ivanova - biology teacher





DAY 3

5TH OCTOBER 2022

## Programme

Working together - ...

Visiting Eco museum -  
Ruse

## Working together:

In the last day of the LTT participants were suggested to learn Bulgarian alphabet, how to read it and then were asked to compose some words in Bulgarian.

Divided into teams, teachers had an opportunity to get into shoes of a child who find learning to read and write difficult.

Hosts from Dyslexia Association - Bulgaria chose words that are so important for partners and for this specific project.



## Words on the Poster

- understanding
- tolerance
- trust
- variety
- friendship
- support
- opportunity
- help





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## Learning Teaching Training Activity 3:

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