



Analysis of survery done after the first stage "STEM+A_TECHNOLOGY VIEW"

by all countries of project "STEM+A around us"

June, 2021

Number of participants:

/ 11/				
COUNTRY	STUDENTS			TEACHERS
	TOTAL	BOYS	GIRLS	TE/ (CITERS
SPAIN	150	70	80	10
TURKEY	103	53	50	6
POLAND	10	5	5	2
BULGARIA	78	38	40	5
ITALY	50	20	30	8
HUNGARY	126	52	74	8

Improving language skills- conclusions: Spain

- 70% students think that their participation in Erasmus project helped them to develop their language skills in English, especially oral communication skill.
- In their opinion their level of communication in English with foreign project students was high.
- They didn't travel so they missed the direct relationship with other countries student.

Conclusion:

- Students are satisficed with the level of English used at the project. They liked the activities with communication between students.
- It's good and necessary to do more activities with students from different countries interaction.
- They missed the trip activity and hosting foreign students. The trip was not done because COVID 19 situation.

Improving language skills- conclusions: POLAND

In general, 85% of students were highly satisfied with the ERASMUS activities. They pointed out that the online activities improved their language skills on speaking, listening, and writing. They were very sorry that they couldn't travel because of the COVID-19 situation.

conclusion:

The result of the observation shows that some students were active and brave to speak English. The improvement of the students' speaking skills can also be seen on their abilities to correct their mistakes in pronouncing some words in English and reduce the use of their native language in different discussion.

Improving language skills- conclusions: Bulgaria

- •According to students they believed that they improved their language skills. Almost 90% of them think that the most useful skill is oral communication with their foreign peers. They improved their skills in speaking and listening. In their opinion their level of communication in English with foreign project students was high.
- •Because the COVID 19 situation the international meeting was held online, so the students missed the communication in a real situation outside the classroom with their foreign friends and the host families.

Conclusion:

Students are satisfied with the level of English used at the project. They liked the activities with communication between students. It's good to have more activities connected with the oral communication between the students from the countries in the project.

Improving language skills- conclusions: Italy

 In general, students were really satisfied with the communication activities. In their opinion their level of communication in English was high, even if they couldn't travel because of the Covid situation and they missed the direct contact with students from other countries.

Conclusion:

Students have been very satisfied with the level achieved during the project. They said it would be better to have more activities where English is used in an interactive way

Improving language skills- conclusions: Turkey

- 90% of students were highly satisfied with the ERASMUS activities. They improved their language skills on speaking and listening through online meetings.
- They didn't travel so they missed the direct relationship with other countries student.
- In comparison to previous stages, in this stage students have increased their confidence with English more.

Conclusion:

 Students are satisfied with the level of English used at the project. They liked the activities with communication between students.

Improving language skills- conclusions: Hungary

According to students, they have improved the ability to communicate with foreign peers.

Conclusion: They are satisfied with the level of English reached during the activities with oral communication and think it is important to have more activities of this kind.

Improving STEM+A skills- conclusions: Spain

- 100% students think that their participation in Erasmus project helped them to develop their STEM skills.
- Almost 35% think Science was the skill they developed the most.

Conclusion:

- They like work STEM and 100% was happiness because they worked Math in other way. They loved fruit batery activity.
- They think they improved their STEM and the project helped them to improve their Science skills and they like it.

Improving STEM+A skills- conclusions: POLAND

- 100% of respondents stated that all activities and cooperation with their friends helped them to improve their STEM skills.
- Especially, nearly 85 % think that they made a progress in Science and Maths. What's more, they claimed that they are more interested in those two subjects.

conclusion:

Teaching Science and Maths in different way made students more motivated in learning. They started to be more creative and engaged.

Improving STEM+A skills- conclusions: Bulgaria

•All the students think that they improved their STEM skills. Students improved their knowledge and skills in Maths and Science.

More than 50% think that Science was the subject they developed the most and became more interested in it.

 conclusion: Bulgarian students liked all activities. They improved their skills and became more motivated and involved. Even they worked in not a typical situation students used creativity and critical thinking during the activities of the stage and enjoyed it.

Improving STEM+A skills- conclusions: Italy

- All the students stated that the interaction with the other students helped them to improve their STEM skills. Science and Maths were the subjects they developed the most.
- conclusion: Italian students liked all the activities and found them very interesting. However they missed the direct relationship with other students.

Improving STEM+A skills- conclusions: Turkey

- All the students think that they improved their STEM skills.
- Students improved their knowledge and skills in Maths and Science.
- More than 50% think that Science was the subject they developed the most and became more interested in it.

conclusion:

 They liked fruit battery activity so much and they were eager to work on it.

Improving STEM+A skills- conclusions: Hungary

Our students think that their participation in Erasmus project helped them to develop their STEM skills.

conclusion: Even though they worked on line they managed to be creative and enjoyed it.

Improving ICT skills- conclusions: Spain

- Most of students think they improved their ICT skills during the Project and they like it.
- With online activities they used different ICT tools and enjoyed a lot with them.

Conclusion:

- We will use more ICT tools during the Project.
- With online activities they used lots of ICT tools and they liked it.

Improving ICT skills- conclusions: POLAND

Many students (about 60%) claimed that they improved ICT skills during the projects tasks. They really liked apps such as tangram creator. They enjoyed apps such as KAHOOT, padlet, learning apps or food calculator.

Using Kahoot was the most interesting for all of them.

conclusion:

The survey reveals that teachers should use more ICT during their lessons.

Improving ICT skills- conclusions: Bulgaria

•According to students they achieved very good level of ICT skills in the project. They used different ICT tools with online activities and some of them were new for them.

They enjoyed apps such as KAHOOT, padlet, learning apps or food calculator.

Using Kahoot was the most interesting for all of them.

conclusion: With online activities students used new and different ICT tools and enjoyed a lot with them. We will use KAHOOT more often in our lessons in future.

Improving ICT skills- conclusions: Italy

- Students stated that they achieved a good level of ICT skills.
 They liked various ICT tools and many of them were new for them. They particularly liked apps such as Kahoot and food calculator.
 - <u>Conclusions:</u> It is necessary to use more ICT tools during lessons.

Improving ICT skills- conclusions: Turkey

- According to students they achieved high level ICT skills in the project
- ICT activities are interesting, useful and entertaining for them.
- They enjoyed apps such as KAHOOT, padlet.
- Using Kahoot was the most interesting for all of them

conclusion:

- With online activities they used lots of ICT tools and they liked it.
- Students should keep practising applications and improve their skills in also new ICT tools

Improving ICT skills- conclusions: Hungary

Our students think they improved their ICT skills during the project and they like it. Many students use their own devices during online meetings.

Conclusion: With online activities students used new and different ICT tools and enjoyed a lot with them.

Improving social and cultural skills- conclusions:

Spain



- Most of students did the activities in groups or pairs. They enjoed working together.
- They used to decided what to do everybody voluntarily or in negotiation way. This is very important because they are learning for future and for group work at schooll, university and their life.
- Online activities were done in full groups.
- They use to solve problems talking and discussing and this is great for their future.
- The atmosphere during the project activities was good or very good (100% enjoyed the activities).

Conclusion:

- Project work is very important to improve social and cultural skills.
- Students couldn't travel but they enjoyed a lot because they had the chance to meet lots of different people with different cultures with all their colleagues during STEM classes.

Improving social and cultural skills- conclusions: POLAND

All of students were involved and comfortable with people from different cultures and backgrounds. In the class, they worked effectively in pairs, preparing brain-storing maps and conclusions. They took part in discussions. Nearly 100% of students who were involved in the project really liked online activities

conclusion:

Students were very sorry that they couldn't travel because of the COVID-19 situation. Nevertheless, they became more appreciative of other cultures.

Improving social and cultural skills- conclusions: Bulgaria

- •Because the situation with COVID 19 our student worked in smaller groups than usual and mostly in pairs. They had opportunity to exchange opinions and experience. They solve problems by discussions in a negotiation way. The students like working together and are more self confident in their way of working.
- •The students think that the atmosphere during the project work was very good.

conclusion: Students couldn't travel but during the online meeting they had the chance to communicate with their foreign friends, to share ideas and to solve problems together. They enjoyed it a lot. They also learned different things about the countries and culture of their peers.

Improving social and cultural skills- conclusions: Italy

- Students worked in groups or pairs and really liked working together. They decided what to do voluntarily or in a negotiation way. The atmosphere during the project was very good.
- conclusion: Italian students were very unhappy they couldn't travel because of the Covid situation. However during the online activities they managed to communicate with their foreign partners, share ideas and solve problems together and learned different things about the culture of partners' countries.

Improving social and cultural skills- conclusions: Turkey

- 100% of students who were involved in the project really liked online activities
- Students worked mainly in pairs or groups
- Problems were solved by oral communication.
- The students like working together and are more self confident in their way of working.
- The atmosphere during the project activities was very good.

conclusion:

Because of the COVID-19 situation, students couldn't travel so they were sad. Neverthless, they had a chance to meet foreign peers during online meetings.

Improving social and cultural skills- conclusions:

Hungary



Students worked in groups and liked working together.

Conclusion: Students couldn't travel but they enjoyed a lot because they had the chance to meet lots of different people.

General questions:

- Spain
- 100% students enjoyed the activities.
- They enjoyed working Math in a different way.
- 3D printing activity was the most valorated acttivity.
- Trip and activities with students from different countries was the most valorated. They love share activities.

Conclusion:

- They like all the activities
- They like the contact with students from other countries. So it is necessary to strengthen the peer relationships of the different countries, through more reading texts, more skype and this activities with students from other countries.

General questions: POLAND

- 100% of Students who took part in the Erasmus Programme were satisfied with all activities
- They especially enjoyed using Maths, ICT in the online activities and websites which they hadn't known before

conclusion:

All the students definitely gained broad knowledge about Maths, Art, Science and using ICT. They improved their communication, language and intercultural skills. For sure, they will participate in Erasmus programme again.

General questions: Bulgaria

- 100% of the students like the activities and all of them regarded the project online meetings as interesting and involving.
- Students improved their skills and gained knowledge in Maths, ICT, Art. They
 became familiar with new activities they didn't do before as and they were very
 interested in it.
- Students definitely gained knowledge about project countries,

conclusion:

Because of the COVID 19 situation students and teachers did online activities and met each other online but all students developed variety of skills to cope with many tasks and became more open - minded in social way. All of them want to participate in another Erasmus project.

General questions: Italy

 All the students enjoyed the different activities. They really liked using ICT tools, especially those that were new for them.

 conclusion: All the students gained a great knowledge about Maths, Science and the use of ICT tools. All of them would like to take part in another Erasmus project.

General questions: Turkey



- All the students who took part in the Erasmus project were satisfied with all activities.
- Students developed a variety of skills to cope with many tasks.
- They became more open-minded in social way

conclusion:

- Because of the COVID 19 situation students and teachers did online activities and met each other online but all students developed variety of skills to cope with many tasks.
- The students should continue to communicate with their peers via Skype, e-mails, messengers, etc. to make a life-long friendship.

General questions: Hungary

It was necessary to do online activities because of the Covid situation but students managed to cope with many tasks.

conclusion: Students definitely gained knowledge about project countries.

Level of students' satisfaction: Spain

- The students valorated their participation in the project between very good and excelent.
- So level of student's satisfaction is very high.

Conclusion:

- Spanish's students are really happy with the Project
- They are enjoying and learning.

Level of students satisfaction: POLAND

All participants really like activities during the Erasmus programme. They love to travel to other countries. They have gained a lot of new knowledge, friends from all over the world, and memories that cannot be put into words. It is definitely a guide for their further personal and career development.

conclusion:

The students are grateful that they could participate in the project.

Level of students' satisfaction: Bulgaria

 All the students think that their level of participation in the Project was very good and high. They worked enthusiastic and enjoyed the activities.

conclusion:

Bulgarian students enjoyed the activities. They found them interesting and motivating. They improved their skills and gain new knowledge different fields.

Level of students' satisfaction: Italy

 All the students who took part in the project were highly satisfied.

 conclusion: Italian students found all the activities very interesting and gained new knowledge in different fields

Level of students satisfaction: Turkey

- Turkish students were so eager to take part in all activities and tasks.
- They were very happy to be a part of this project.
- Through taking an active role in the project the students gained self-confidence.

conclusion:

 The students feel lucky because by working with foreign peers, they explore new ideas, learn about different cultures, develop communicative skills and the feeling of satisfaction



Our students love all of online activities.

conclusion: Our students improved their skills and gain new knowledge in different fields.

INFORMATION COLLECTED BY

- Spanish information collected by Leticia Reyes
- Polish info by Karolina Przybylska-Zebzda
- Turkish info by Seda Uzcan
- Italian info by Michela lannantuono
- Bulgarian info by Elisaveta Slavkova
- Hungarian info by Peter Piltmann