

**Dacia Technological High School Pitesti, Romania**

## **REPORT**

### **on Learning/Teaching/Training activities from Italy and the output after LTT**

The first Learning / Teaching / Training activity took place in Cittanova, Regio Calabria, Italy at the Liceo Scientifico Statale, from 24.03 to 31.03.2019, with 6 pupils from the partners from Lithuania, Romania and Turkey and Italy.

The host pupils in the host country, Italy, participated in all the activities carried out within the framework of mobility. Each group of pupils within the strategic partnership was accompanied by 2 teachers and the Turkey teachers by 3 teachers.

The preparation for participation in mobility consisted of:

- a video conference with partners, in February 2019, for setting the date of mobility;
- selecting pupils according to their involvement in the project activities;
- signing Commitments between students participating in mobility, their parents and school, for information on the necessary documents, the obligations of the parties and the grant offered;
- Issuing notarial powers of attorney for minors participating in mobility;
- obtaining the criminal record for accompanying teachers (where it was imposed);
- informing the School Inspectorates in the jurisdiction of the partner schools about the LTT's activities in Italy;
- preparation of the electronic portfolio with the presentations and materials necessary for the implementation of LTT activities in Italy;
- preparing the participating pupils in order to improve their communication skills in English;
- the purchase of airline tickets and accommodation reservations as well as the transfer to and from airports.
- the validation of Europass certificates by the Europass National Center.

The purpose of LTT mobility in Italy was to develop communication, socialization, teamwork and projecting skills, critical thinking and problem solving by learning STEM - Science, Technology, Engineering and Mathematics. To obtain these results, the Italy partner proposed the Visual Basic programming language.

On the first day of mobility, pupils from the four countries designed PPT presentations with the results of the project and socialized, thus improving their interpersonal, communication, English, social and cultural awareness skills.

An on-line questionnaire was applied to establish the initial level of knowledge of the participating students.

The workshops were held in the high school's computer lab: Liceo Scientifico Statale, from 9:00 to 16:00, with related breaks.

On Day 1 – Monday 25<sup>th</sup> March 2019, the Welcome ceremony featured a Performance of the National Anthems played and sung by the School Choir. Then, all the partners visited the building of Liceo Scientifico “M.Guerrisi”, and the the School Staff guided all component teams on a tour of sites of cultural interest in the Town of Cittanova. The Town Gardens were most appreciated by all guests, as well as the general architecture of the town, its specifically agricultural economy and the monuments on important events in the town history

Workshop and Training Activities took place in the School Labs. Students were introduced to Visual Basic application. Teachers observed presentation and later joined a contemporary Training session on “Mathematics and Cloud Computing”.

On Day 2 – Tuesday 26<sup>th</sup> March 2019, a Lecture on “ICT today” was delivered by Professor Giacomo Fiumara, an expert in ICT from Messina University (UNIME). An organizational meeting took place. Teams decided on the next mobility dates (Lithuania, 29.10.19 – 5.10.19). Further commitments to dissemination were also agreed upon.

On Day 3 – Wednesday 27<sup>th</sup> March 2019, study visit in Reggio Calabria (capital city of the Province), to the National Museum of *Magna Grecia* and to other local places of cultural interest took place. The guests also visited Scilla, a typical village by the sea. In the afternoon, workshop activities in the school labs on Visual Basic and its practical applications (general calculation and databased schedules, representation of physical phenomena as reflection and models of representation of levers work in new technology).

On Day 4 – Thursday 28<sup>th</sup> March 2019, activities in the school labs took place. A demonstration of the use of Visual Basic to formal equations was provided by Maths and Science teachers (assisted by the English teachers). Teachers from the national teams joined in the group work with the students.

Teachers’ meeting took place on practical Arrangements on transfers back, ensuing mobilities, projects fulfilment (implementation and dissemination targets) and other formalities for the final Handling of Certificates.

On Day 5 – Friday 29<sup>th</sup> March 2019, Final Evaluation of the activities carried out during the week and Handling of Certificates to all participants took place. Students discussed their work with the Visual Basic software and a Final Evaluation Session followed with a questionnaire on Visual Basic acquisitions. In the afternoon the teams went to Siderno, on

the Ionian coast, it was not possible to reach Gerace, a medieval town, because the street was closed.

The teaching strategies used to initiate the Visual Basic programming language were student-centered, interdisciplinary, project learning, and problem-solving.

Visual Basic programming lessons aimed at developing communication skills, teamwork, problem solving, and critical thinking

To measure the degree of satisfaction with the quality of the activities carried out, the pupils responded to an online feedback questionnaire.

The results of the LTT activity in Italy were:

- Certification of competences acquired in mobility through the Europass Certificates and participation certificates
- 3 PPT presentations
- 4 projects made in Visual Basic
- diversification of teaching and learning methods, extracurricular activities
- transfer of knowledge and experience
- developing digital competences and communication in English
- developing positive attitudes of life
- developing the skills of orientation in a foreign country
- developing social and civic competences
- increasing the prestige of the school and its internationalization.

The dissemination of the results of the mobility activity in Italy was as follows:

- publishing an article in the local press in each partner country in the project
- publishing on-line and local media in Italy
- publishing the project results on the facebook page of the project, in the eTwinning virtual space and on the project website, made by the Turkish partner
- organizing the dissemination workshop within the Teaching Council after returning from mobility
- organizing the dissemination workshop with students in the target group
- publishing in the on-line environment the documentary film and PPT presentation with the mobility activities, carried out by each team of students from the strategic partnership.

The assessment of the LTT's results in Italy was made by:

- Mobility Activity Report
- analysis report of students' reflexive journals
- feedback questionnaire, initial and summative

- questionnaires to measure the achievement of the project objectives.

The exploitation of the project results was achieved through the organization of workshops where the students of the target group, together with teachers from the disciplines of the sciences: mathematics and physics, have developed teaching materials on the Visual Basic Programming, materials that will be part of the educational resources database open, thus achieving the three objectives of the project.

A demonstration lesson on physics, with the theme " RLC series circuits in C.A Impedance and voltage calculation " at the Dacia Technological High School in Pitesti, Romania, was supported during the normal teaching-learning-evaluation program, in which the physics knowledge was applied with applicability in real life, making a project in Visual Basic.

In conclusion, all the activities carried out in Italy's mobility have been carried out according to the agenda drawn up by the Italy partner, all the objectives set in the approved project have been achieved and tangible and intangible results have been obtained.

**Written by the project coordinator,**

**Prof. Iuliana Ionita**