







SCIENCE AND TECHNOLOGY IN ACTION FOR RESPONSIBILITY AND SUSTAINABILITY

CIP ISAAC ALBÉNIZ CUENCA

Erasmus + KA 121

01/09/2023

31/08/2024







Part I: SCHOOL DESCRIPTION ISAAC ALBÉNIZ BILINGUAL PRIMARY SCHOOL.- CUENCA-SPAIN http://ceip-isaacalbenizcuenca.centros.castillalamancha.es/

CHARACTERISTICS OF THE SOCIAL, CULTURAL AND SCHOOL ENVIRONMENT

The school population of our school comes largely from lower middle class families and a medium cultural level. The predominant economic activity is included within the services sector. The majority of mothers work outside the home, thus reflecting the general tone of the increasing participation of women in the world of work. The academic qualification of the parents of our students is of an average level of studies. The economic crisis and subsequent COVID pandemic has left many families unemployed.

A high attendance of the parents of students to the school; whenever both they are summoned, for group meetings or for individual interviews with the teachers and a high concern for the progress and educational performance of their children is detected. Thus, we find that most parents collaborate in the educational task of the school, in terms of controlling their study time, providing them with material or reference books, encouraging reading, helping them with their homework, etc. We conclude, therefore, that most of our students have an appropriate environment for study at home.

The neighborhood of *Villarromán*, where our school is located, is located in the east of the city of Cuenca, in an area of urban expansion, bordering the areas of *San Fernando and Villaluz*, and the next beltway of the western ring road. Urbanistically speaking, the area is made up of high-rise homes, single-family homes, including buildings adjoining the center, intended for official protection and social use housing. Students are coming school by Bus transport from districts of *La Melgosa* and *Mohorte*, whose families come mostly from countryside jobs

Currently, in the 5th year of Primary (possible recipients of Erasmus mobilities next year) we have 51 students enrolled. Of these, 7 students are recipients of partial or total aid for books and/or school meals, according to family income, and 8 students are students with specific educational support needs of various kinds. We understand that, being a bilingual school, these students are at a clear disadvantage when it comes to accessing an appropriate linguistic immersion in English and achieving the objectives proposed in each of the CLIL subjects taught.







The subject of Natural and Social Sciences is being taught in our school entirely in English, and the correct use of the language, with a view to effective learning of the contents, can often become a barrier without family support or adequate reinforcements.

That is why we have considered the main objective of this program, which is none other than to **provide our students with STEAM immersion activities in English**, which will allow them to develop communicative activities in this language, in an environment of real communication, while deepening their knowledge of Steam and Science Projects, previously worked on in class, as well as being able to show what they have learned to the rest of the group.

As we are considered a Digital School, all of these students are also using technological devices and they are familiar with the use of tablets and innovative tools, apps and programs.

All scheduled activities will be included in our School General Program (PGA) for the 23-24 academic year and within the classroom schedules for the Natural Social Science subject and Steam Projects of 6th graders.

The way in which this Erasmus KA 121 project contributes to the achievement of the objectives of our Erasmus accreditation KA 120 will be:

- 1.- Digitally transform the center and advance and improve the skills of all teachers, students and their families.
- 2- Promote an ecological and sustainable school environment. Create, care for and respect green spaces and awaken interest in climate change by providing solutions applicable to our environment.
- 3.- Recognize manifestations of bullying and cyberbullying. Educate students through educational programs on dangers of using networks and how to prevent and identify risky situations for them.
- 5.- Permanently implement the principles of educational inclusion, coeducation and respect for sexual and affective diversity, gender identity and diversity of family models.
- 7.- Expand knowledge about the EU and its possibilities to train future citizens with active participation in our society.
- 8.- Arouse interest in quality language skills by expanding the offer of a second or third foreign language. (when they are under a meeting)







GENERAL OBJECTIVE SET FOR SCHOOL year 2023/2024:

Referring to the teaching-learning processes, including inclusive education: "Provide 6th grader students with immersion activities in English language, allowing them to develop communicative activities in this language, in a real communication environment, while deepening their knowledge of Science and STEAM activities throughout Collaborative Projects, within the STARS project"







The student selection criteria for exchange mobilities will be:

At the beginning of the course 23-24, all 6th graders families will be informed about our participation in the program, explaining the criteria for selection and participation in the student's exchanges activities, respecting the following order:

- Volunteer families and students who have a predisposition to learn STEAM subjects and English language. Teachers in year 6, will decide about his/her suitability to join the Erasmus program, taking into consideration participation, behavior, autonomy and other student features, that make this trip ideal for her/his best possible academic achievement.
- Participation in any Erasmus mobility is subject to the commitment of each family to accommodate another foreign Erasmus student in their home, be it the same or a different one.
 - Students (always volunteer families), who receive total or partial lunch aid and/or textbooks, will have an extra point on final score.

The selected students for each meeting will be awarded with a **STARS** accreditation, which distinguishes them as a **STAR STUDENT**, ready to participate in the English language student exchange.







- SCIENCE CAN MAKE A BETTER WORLD IN.... (host country).

What can sixth graders do to promote Science in order to make a better world?

In a country, as Spain is, that global awareness for the care of the environment needs to be promoted constantly, where scientific advances are on the rise, and where Science and Technology sometimes are rejected rather than embraced, we need to promote Science education at school.

Sixth graders at *Isaac Albeniz* Bilingual Primary School, in Cuenca are going to become scientists, technicians and even journalists with an assignment to promote Science and Technology in our community, our neighborhood and our city.

And it will be about these axes of knowledge:

- SPAIN, EUROPE AND PLANET EARTH, CLIMATE ZONES, ECOSYSTEMS, CLIMATE CHANGE.
- SOCIAL RESPONSIBILITY, CONSUMERS, HUMAN IMPACT ON THE ENVIRONMENT. SUSTAINABLE USE AND EXPLOTATION OF LAND.
- MATTER AND ENERGY.
- STAR STEAM PROJECT: LOWERING GAS EMISSIONS, CLEAN ENERGY, HELPING ANIMALS IN DANGER.

STARS PROJECT will bring environmental education to a practical, student-centered methodology and enrich the teaching repertoire of the students through a collaborative exchange of information about current practices, and how they might affect the environment, while creating a space to dialogue within Etwinning platform about alternative more ecofriendly alternatives.

During the life time of the developing of STARS project (school year 23-24) 2 different kind of activities will be developed:

- IN CLASS
- EUROPEAN activities (Etwinning project site, Erasmus+ student exchanges)







Activities IN CLASS, included in General School Program.

STARS: Science and Technology in Action for Responsibility and Sustainability

Students will develop analytical, scientifical and linguistic skills.

Students first will analyze and research about of each axe of knowledge. They will lookfor relevant community members related to Science.

Then, they will learn how to design interview questions and write a digital newspaper profile article of a local Scientific or person related to each topic they are working with, for instance: Doctors, Researchers, Nutritionists, Women in Science, Science Museum staff. Next, they will study the contents within their curriculum in Science featured adincluded within the didactic units:

Projects/Collaborative work:

1ST **TERM: SPAIN, EUROPE AND PLANET EARTH, CLIMATE ZONES, ECOSYSTEMS, CLIMATE CHANGE,** research and interview to communitymember.
Digital individual work using APPS Upload all results and student Works on
Etwinning Project site.

2ND TERM: SOCIAL RESPONSIBILITY, CONSUMERS, HUMAN IMPACT ON THE ENVIRONMENT. SUSTAINABLE USE AND EXPLOTATION OF LAND, research and interview to communitymember. Digital individual work using APPS Upload all results and student Works on Etwinning Project site.

3rd TERM: MATTER AND ENERGY. LOWERING GAS EMISSIONS, CLEAN ENERGY, HELPING ANIMALS IN DANGER, research and interview to communitymember. Digital individual work using APPS Upload all results and student Works on Etwinning Project site.







Etwinning.

We will create a space to plan and organize all the information about the development of the Project as well as keep in touch with other possible schools interested in work together in **STARS** Project. We'll initiate contact and collaboration between teachers and schools of some other countries.

PHASE 1: SEPTEMBER 2023 Upload the Project to Etwinning. Partner contact (Slovakia, C.R., Germany)

PHASE 2: OCTOBER 2023

Teachers will brainstorm, organize and plan the logistics and procedures for student involvement. Involves the students who would survey each other and self-report on: - our schools, our opinions – Our Country (SP;GR;CR; SL), Europe And Planet Earth, Climate Zones, Ecosystems, Climate Change proposed activities and interviews, actions, teamwork and DIGITAL WORKS.

1st school mobility to partner country. 5 students and 1 teacher??

PHASE 3: DECEMBER 2023/JANUARY 2024

Teachers will brainstorm, organize and plan the logistics and procedures for student involvement. Involves the students who would survey each other and self-report on: - our schools, our opinions -- Social Responsibility, Consumers, Human Impact On The Environment. Sustainable Use And Exploitation Of Land, Proposed activities and interviews, actions, teamwork and DIGITAL WORKS.

2nd school mobility to partner country. 5 students and 1 teacher??

PHASE 4 MARCH 2024

Teachers will brainstorm, organize and plan the logistics and procedures for student involvement. Involves the students who would survey each other and self-report on: - our schools - our opinions -- surveys on **Matter and energy** and worldwide concerns related to "Renewal and non renewal forms of energy,new suggestions ideas and perspectives from students point of view to make a better future" --proposed activities and interviews, actions, teamwork and DIGITAL WORKS.

3rd school mobility to partner country. 5 students and 1 teacher??

PHASE 5 MAY/ 2024 mobility to Spain

Upload results and final report. Podcasts recording. Science fair, Science/STEAM exhibitions.

Teachers and students from 3 other European partners will come to Spain and they'll be welcome and host on our school families.







Suggested Activities during students international meetings

Selected students will, record, and produce DIGITAL WORKS AND/OR PODCAST on various topics promoting **Science in order to make a better world**. (Previously written and scripted in class)

We have suggested PODCAST as our media in Spain, since mastering this technique will allow our students to continue to amplify their voices on topics that are important to them. Since the barriers to entry for podcasting are relatively low, students can podcast using our school equipment.

More About the STARS project

The STARS project will bring environmental education to a practical, student-centered methodology and enrich the teaching repertoire of all the partners, through a collaborative exchange of information about current practices and how they might affect the environment, while creating a space to dialogue (ETWINNING) about alternative more ecofriendly alternatives. Three/Four European schools could participate and work together during 23-24 school year.

E-Twinning will: create a space to plan and organize together and initiate contact and collaboration between teachers and schools of other countries. Our project is one to make a better world for the 11-12 age group, to inform our students about climate change among European countries, to make our economy sustainable by changing the mode of production and consumption. To raise awareness of our students about the climate Change and Global warming in European countries.

STUDENTS EXPECTED RESULT:

After development of or Stars project Students will have:

- Learned new strategies and tools in order to be aware how their influence on the environment and Science, can make others change this world into a better world.
- Practiced giving and receiving information in English.
- Learned to survey, write an interview, record a podcast, teamwork, Exchange information and learn from other schools.
- Proposed solutions to problems and share concerns with other students, other communities, other countries.







- Communicated their findings to their educational community and other Europeanschools through DIGITAL WORKS AND/OR PODCAST.
- Informed to their community about Science among European countries. The sustainability of our economy by changing the way of production and consumption. Human beings health problems with climate change, informing the students. to use existing resources(renewal and non-renewal) only according to their needs, to be nature friendly. Turn students into conscious citizens in this process using SCIENCE.

-Turned students into STARS.

We expect each participating group to use the learning from this exchange to create a greater conscientiousness in their own school and educational community.

The results and proposed actions should be published, and proposed, to their school and families. They will likewise have demonstrated the capability of communicating and collaboratingin a second language with their European associated partner.

By exchanging ideas and sharing with project partners being aware of different schools and practices enrichment of studies.

To develop the sense of responsibility of our students with the feelings of cooperation and unity.

European countries are learning about climate change, to consolidate what they have learned.

What our students will make from climate-related waste materials developing skills such as self-expression and painting in activities.

To enable students to learn by doing, experiencing and discovering. To protect our climate.

To become aware of climate change lately.

By organizing a final exhibition in which European countries will reflect climate-related proposals by our students.

NOTES:

Our student exchange could be developed with 3 partners or 2 partners.

As we have granted with 15 students and 3 accompanying teachers.

OPTION 3 partners: described as above: 5 student 1 teacher, 3 times (October 23, December/Jan 23-24, March24 and final meeting in Spain in May 24)

OPTION 2 partners: 8 students, 2 teachers, 2 times (October/November 23, February/March 24 and final meeting in Spain in May 24)

Our idea as a school is to give continuity to this project, not only during the 23-24 academic year, but rather we intend to make it a stable project turning it into an Erasmus KA210 Action type: Small-scale partnerships in school education (KA210-SCH) in such a way that we can include our friends and partners, whether they are accredited or not.