

THE GREEN MICRO:BIT

LJUBLJANA - ZAGREB - SLAVONSKI BROD



CONTENTS

SUMMARY

ABOUT SCHOOLS

PROJECT AIMS

C1 MICRO:BIT WORKSHOP

C2 GREEN ARCHITECTURE WORKSHOP

C3 E-BOOK WORKSHOP

C4 THE GREEN WALL

C5 EDUCATIONAL PATH AND THE SOUVENIR WORKSHOP

C6 LITTLE ENTREPRENEURSHIP FAIR

C7 DISSEMINATION

PROJECT RESULTS

SUMMARY

The Green Micro:bit is a project about the eco role of schools and encouraging critical thinking about environment issues. The project includes different activities: teacher and student mobilities, enhancing school interior and exterior and introducing contemporary teaching concepts into curriculum.

ABOUT SCHOOLS

An aerial photograph of a vast, green field, possibly a pasture or agricultural land. The field is divided into sections by a prominent diagonal line that runs from the upper left towards the lower right. The grass is a vibrant green, and the overall scene is bright and clear.

COORDINATOR SCHOOL: VIŽMARJE – BROD PRIMARY SCHOOL, LJUBLJANA SLOVENIA

Vižmarje Brod Primary School is situated in Ljubljana, the capital of Slovenia. Pupils are aged between 6 and 15. The school was built in 1975 and being situated in a greenery setting makes it very special and interesting. The grounds are extensive and allow for plenty of outdoor activity areas.

There are 550 pupils and 65 teachers and most pupils come from the nearby area.

The interesting fact is that the school orchestra and choir perform regularly at school events and in the area. The school is the founder of the »Mini school of rock'n'roll«.



PARTNER SCHOOL: GRAČANI PRIMARY SCHOOL, ZAGREB, CROATIA

Gračani Primary School is a public school in Zagreb, Croatia. It has 55 employees and 412 pupils aged from 6 to 15. The scope of the school is primary education of children in various fields (as stated in our national strategy of education). It also provides extra-curricular activities for children: a film group, sports activities, citizenship, first aid education, creative workshops, chess and other.

The school and its staff have a holistic approach to teaching and learning, we want to encourage children to think critically and teach them to be self-confident. The school has the certificate of the Eco School and a special eco school board that consists of teachers, pupils and parents together.



PARTNER SCHOOL: DJURO PILAR PRIMARY SCHOOL, SLAVONSKI BROD, CROATIA

Djuro Pilar Primary School is a school situated in the city of Slavonski Brod. It provides education for more than 500 pupils, age 7 – 15. There are 71 employees in our school and 52 teachers of various profiles. The curriculum is based on the National curricula, so the school covers a variety of subjects.

In the past 3 years, EU projects, mainly Erasmus +, KA2 projects have been a core source of innovation in classes because of the curricula “freedom” they offer.

The school motto is “A school where good ideas come true!” and the project team considers the ideas of the project to be more than good.

The school is also involved in “SMART schools” in IPA Interreg project designed to ensure responsible behaviour towards resources (energy) and in “The Water Agent” international project (Cro/Slo/Srb) designed to monitor and evaluate water consumption in the school.



PROJECT AIMS

The first aim is to raise awareness in schools and the wider community about the ecological issues through ecological activities. The second one is to enhance digital competence in schools and promote innovative methods of learning and tackling the ecological issues. These aims meet the horizontal priority because they include digital competences, innovative practices and open educational resources which will be described in results. The third aim is fostering critical thinking among pupils and teachers about ecological issues and the fourth is encouraging European cooperation between schools. The last two aims meet the field-specific priority because they include holistic approach to learning, promoting entrepreneurship and fostering critical thinking through teaching in environmental context, which will be explained in the results.

A close-up photograph of a vibrant green leaf, showing a complex network of veins. The central vein runs vertically down the middle, with smaller veins branching off at various angles. The leaf's surface is covered in a fine, honeycomb-like pattern of small cells, creating a textured appearance. The lighting is bright, highlighting the natural colors and structures of the plant.

ACTIVITY C1
MICRO:BIT WORKSHOP

Date: 24 - 28 October 2018

Place: Ljubljana

Activities: project team meeting, managing project activities and education about using micro:bits in watering systems



Experts in coding and ICT conducted the workshop and education for teachers from all schools about the usage of micro:bits in different educational fields, with the emphasis on its installation on "a green wall" in order to provide water for plants. Staff mobility lasted for three days.



A close-up photograph of a vibrant green leaf, showing a detailed network of veins. The veins are light green and form a complex, branching pattern across the darker green leaf surface. The texture of the leaf cells is visible, creating a honeycomb-like appearance.

ACTIVITY C2
THE GREEN ARCHITECTURE WORKSHOP

DATE: 5 - 8 December 2018

PLACE: Zagreb

ACTIVITIES: the green architecture, education path and the workshop



The green architecture workshop provided school staff with information and skills needed for implementing the principles of green architecture in schools. This covers making the school interior and exterior suitable for stress free and ecologically friendly learning environment, as well as creating land art decorations. The staff mobility lasted for three days.



A close-up photograph of a vibrant green leaf, showing a detailed network of veins. The central vein runs vertically down the middle, with smaller veins branching out to the left and right. The leaf's surface is covered in a fine, honeycomb-like pattern of smaller veins, creating a complex, organic texture. The lighting is bright and even, highlighting the natural colors and structures of the leaf.

ACTIVITY 3

E-BOOK WORKSHOP

DATE: 19 - 21 November 2018

PLACE: Slavonski Brod

ACTIVITIES: e-book workshop



E-book workshop included education and practical tasks about creating a simple e-book for schools. Experts in ICT held the workshop for the school staff. The staff mobility lasted for three days.





ACTIVITY 4
THE GREEN WALL

DATE: 7- 11 April 2019

PLACE: Ljubljana

ACTIVITIES: green wall workshop



Students and accompanying teachers shared their experience in creating "the green wall" in their schools. They gathered the information about the plants they have planted on the wall for the e-book. They also made a plan for creating the educational path and its rough sketches. Short-term exchange of group of pupils lasted for three days.



Pupils also started working on the e-book and their experiences during the mobility.



FIRST DAY

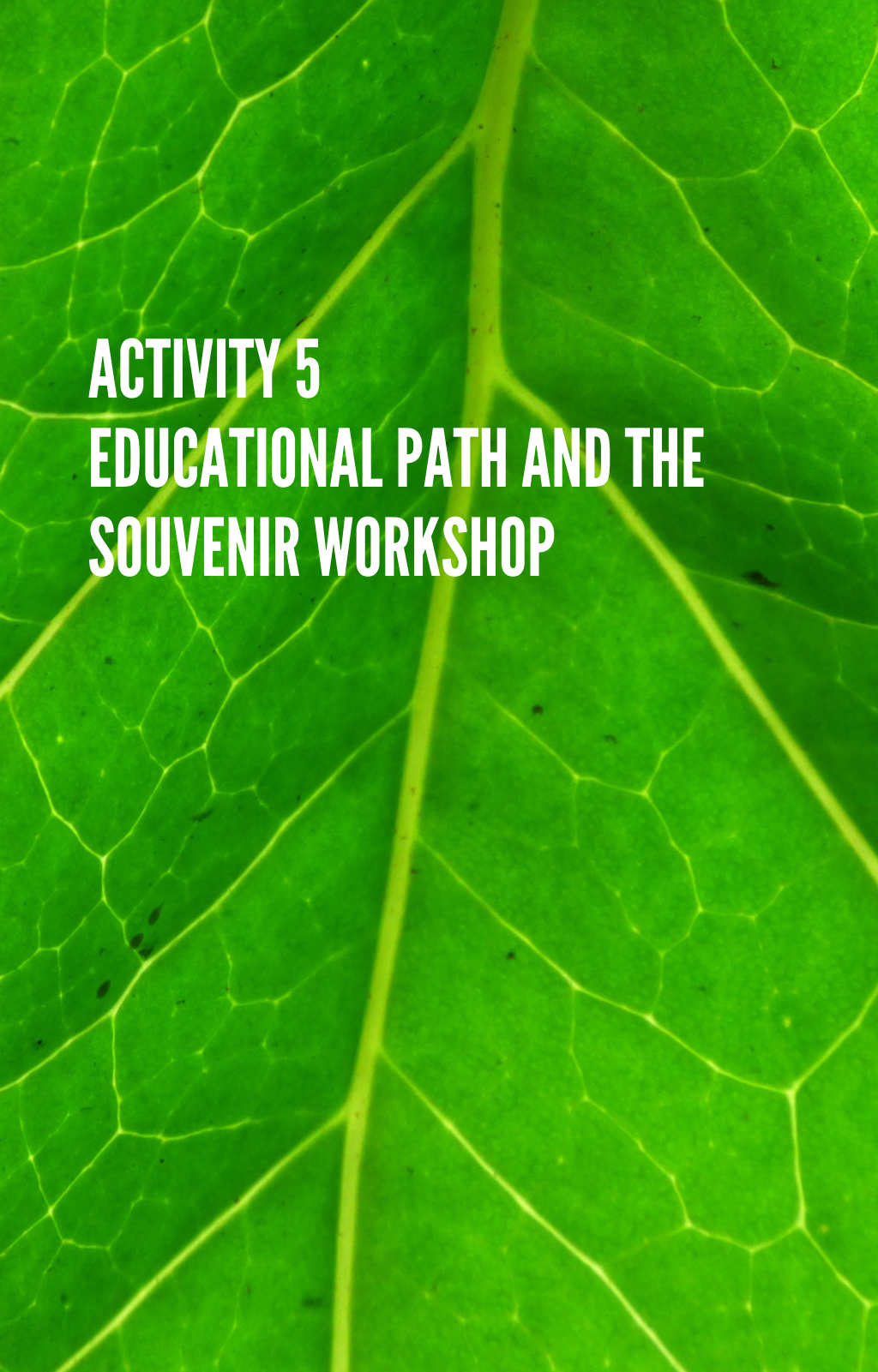
On Monday we came to school at 9am. First little school of rock and roll welcomed us with a performance. Then we presented some power points about our school, city and country. We had lunch at 1pm and then we went to a music escape room in our school. When we finished a bus was waiting outside for us. We visited sights such as Ljubljana castle with a cable railway (we had a guide to show us around), the main market and the Robb well.

SECOND DAY

At school we had a work shop about greening of the surrounding area. We had a break and then a bus waited for us to drive us to secondary school Jožeta Plečnika in Ljubljana. We went to see their terrace. We went back to school to have lunch and then we went to Bled by bus. There we tried Kremšnita which is a famous cream cake. Then we walked around the lake and went back home.

THIRD DAY

Wednesday was the most boring day. We had a work shop about plants in green gardens. We had a break. We had another work shop about different ways to programme for watering the plants. We had lunch and went back to work. Then we made this ebook about our work.

A close-up photograph of a vibrant green leaf, showing a detailed network of veins. The central vein runs vertically down the middle, with smaller veins branching out to the left and right. The leaf's surface has a slightly textured appearance with some minor dark spots.

ACTIVITY 5
EDUCATIONAL PATH AND THE
SOUVENIR WORKSHOP

DATE: 18 - 20 September 2019

PLACE: Zagreb

ACTIVITIES: workshops about the educational path and the green wall



In this short-term exchange, pupils shared experiences about creating the educational path in their schools. They made a short presentation about it and presented it to other pupils. Pupils and teachers continued working on the e-book and planned how to make different souvenirs out of dried plants from the educational path. They created initial souvenirs together and created a simple business plan for it, such as the way it can be promoted.



A close-up photograph of a vibrant green leaf, showing a detailed network of veins. The central vein runs vertically down the middle, with smaller veins branching off at various angles. The leaf's surface has a slightly textured appearance with some minor dark spots.

ACTIVITY 6
LITTLE ENTREPRENEURSHIP FAIR

DATE: 19 - 23 November 2020

PLACE: Slavonski Brod

**ACTIVITIES: e-book, souvenir and
project logo workshops**



In this short-term exchange of pupils participants presented each others their school souvenirs and kept working on the e-book. Moreover, they started designing a project logo together. They also presented project activities so far to a wider audience at St Catherine's Fair.



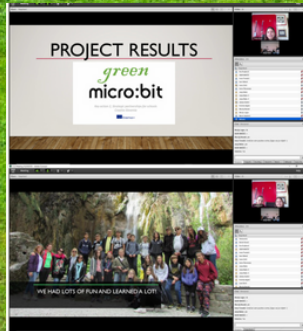
A close-up photograph of a green leaf, showing a detailed network of veins. The veins are light green and form a complex, branching pattern across the darker green leaf surface. The texture of the leaf cells is visible, creating a honeycomb-like appearance. The lighting is even, highlighting the natural structure of the plant.

ACTIVITY 7
DISSEMINATION

**DUE TO THE GLOBAL PANDEMIC, THE LAST
ACTIVITY WAS HELD VIRTUALLY ON
ETWINNING.**

**The last activity took place from 21 to 23 April
2021.**

**Pupils and teachers from Ljubljana, Zagreb
and Slavonski Brod gathered to brainstorm
project ideas and present final project results.**



OFFICIAL WEBPAGE:

[HTTPS://GREENMICROBIT.EU/](https://greenmicrobit.eu/)

E-TWINNING:

[HTTPS://LIVE.ETWINNING.NET/PROJECTS/PROJECT/180583](https://live.etwinning.net/projects/project/180583)

ARTICLES:

**[HTTP://WWW.ENERGETIKA-
NET.COM/SPECIJALI/PREDSTAVLJAMO/TAKO-
NASTAJU-SKOLE-BUDUCNOSTI-29316](http://www.energetika-net.com/specijali/predstavljamo/tako-nastaju-skole-buducnosti-29316)**

NATIONAL TV:

**[HTTPS://PHOTOS.GOOGLE.COM/SHARE/AF1QI
PMU9KS7D7V517G__YHLBINV3-
YUIZ90YFPNTOPA-
PTG_YW04DZ_OBCKA29KDSMT--W?
KEY=SJJGBVBLOXQXQOHGYUNOCJRWAVDNAG
HXBDDSNIJ3](https://photos.google.com/share/AF1QIPMU9KS7D7V517G__YHLBINV3-YUIZ90YFPNTOPA-PTG_YW04DZ_OBCKA29KDSMT--W?KEY=SJJGBVBLOXQXQOHGYUNOCJRWAVDNAGHXBDDSNIJ3)**

LOCAL MEDIA



Zanimljiv međunarodni projekt u zagrebačkoj školi

TAKO NASTAJU ŠKOLE BUDUĆNOSTI

Potaknut modernim tehnologijama i suvremenim strategijama poučavanja i u želji za stvaranjem okruženja za učenje koje je doraslo izazovima modernoga doba projektni tim Osnovne škole Gračani iz Zagreba postao je partner na međunarodnom projektu The Green Micro:bit.

Projekt The Green Micro:bit dio je programa "Erasmus" u okviru strateških partnerstava škola, a ciljovi su mu usavršiti digitalne kompetencije učenika i učitelja i promicati inovativne metode učenja, podići svijest o ekološkim pitanjima u školi i zajed-

nici, njegovati kritičko mišljenje o ekološkim problemima i jačati europsku suradnju između različitih škola. Škola koordinatorica je Osnovna škola Vilmarje Brod iz Ljubljane, a škole partneri su OŠ Gračani iz Zagreba i OŠ "Duro Pilar" iz Slavonskoga Broda. Projekt je



14

posavska hrvatska

petak, 19. travnja 2018.

Osnovna škola "Duro Pilar"

Međunarodni projekt Green Micro:bit

Četvrti mobilnost nastavnika osobito i učenika OŠ "Duro Pilar" u okviru projekta The Green Micro:bit, programa Erasmus+, ključne aktivnosti 2 podjela je 7. travnja. U mobilnosti su sudjelovali učitelji i učenici OŠ Vilmarje Brod iz Ljubljane, OŠ "Gračani" iz Zagreba i OŠ "Duro Pilar". Mobilnost je počela prigodnim programom, a zatim je uslijedilo izlaganje učenika o održivim aktivnostima u projektu. Učenicima su predstavili svoju aktivnost vezanu uz izradu i postavljanje zelenog stila u predvorju matične i područne škole. Svi sudionici projekta izvjestili su koje vrste bilja-

ke su zasadili te objasnili način postavljanja micro:bit uređaja uz pomoć kojih se biljke zadržavaju.

Tijekom boravka u Ljubljani učenicima su sudjelovali u zajedničkim radionicama i predavanjima. Naučili su kako se izrađuju fotokolage u koje su postavljali dokumentaciju vezanu za projekt. Domaćini su organizirali stručni izlet u Ljubljano, gdje su sudionici projekta posjetili Genovaju Jožefa Plečnika i njegove visoke vrstove koji se nalaze na krovu škole. Tijekom boravka u Sloveniji domaćini su upitali goste sa znamenitosima Ljubljane i Bleda.



Općina Staro Petrovo Selo

Nova Gradiška

Tradicionalni susreti umirovljenika

A close-up photograph of a vibrant green leaf, showing a detailed network of veins. The central vein runs vertically down the middle, with smaller veins branching off at various angles. The leaf's surface has a slightly textured appearance with some minor dark spots. The text 'PROJECT RESULTS' is overlaid in white, bold, uppercase letters on the left side of the leaf.

PROJECT RESULTS

Project results are "a green wall" in the school, the educational path in the school yard, the e-book about the project, school eco souvenirs and raised eco-awareness.



Zagreb





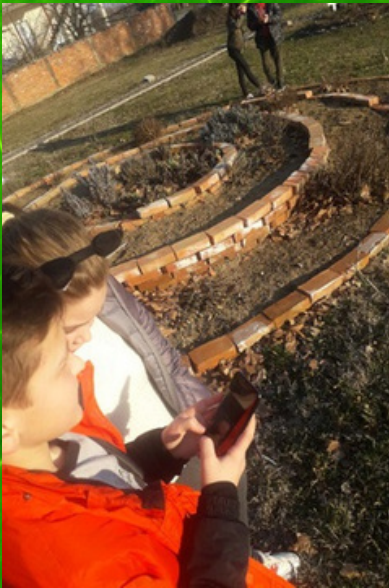








Slavonski Brod



green
micro:bit

*Key action 2, Strategic partnerships for schools
Croatia-Slovenia*



Erasmus+