


# How to foster creativity ,critical thinking and problem solving of our students with a simple infrastructure

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Being a teacher at  
21st century is not  
a challenge.  
It is a multiple  
challenge.



**The most valuable resource that all  
teachers have is each other.**

**Without collaboration our growth is limited to  
our own perspectives**

Robert John Meehan  
American educator and Author

# Outcome

**My experience as Scientix Ambassador**

**Scientix MOOC & online webinars**

**Codeweeek activities**

**Flipped learning**

**Student's feedback**

# My experience as Scientix Ambassador

## One of the first Albanian Scientix Ambassadors

Sharing my experience with Albanian teachers by online meeting and face to face too



# Scientix Mooc-s and online webinars



## Certificate of Participation

This is to certify that

**Adriana Laze**

Attended the Scientix webinar

**Say yes to STEM! Join to find out more about the STEM Discovery week 2**

28/02/2018

Webinar duration: 1 hour

Marc Durando  
Executive Director, European Schoolnet



The work presented in this document is supported by the European Union's Horizon 2020 research and innovation programme under grant agreement No 730009, coordinated by European Schoolnet. The document is the sole responsibility of the signatory and does not represent the opinion of the European Commission nor responsible for any use that might be made of it.



## Certificate of Participation

This is to certify that

**Adriana Laze**

Attended the Scientix webinar

**Start to STEM**

29/03/2018

Webinar duration: 1 hour

Marc Durando  
Executive Director, European Schoolnet



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## Certificate of Participation

This is to certify that

**Adriana Laze**

Attended the Scientix webinar

**Cracking STEM with Project-based Learning (PBL)**

21/09/2018

Webinar duration: 1 hour

Marc Durando  
Executive Director, European Schoolnet



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## Certificate of completion

Opening Minds to STEM Careers

3 April - 4 June 2017



European Schoolnet Academy

This is to certify that

**Adriana Laze**

has successfully completed the "Opening Minds to STEM Careers" course at the European Schoolnet Academy

on 12 June 2017

**la Gr**

in Valais

June 2017

[www.european-schoolnet.org/academy/opening-minds-to-stem-careers](http://www.european-schoolnet.org/academy/opening-minds-to-stem-careers)  
Partnership also known as European Schoolnet, Rue de Trèves 61, B-1040 Brussels

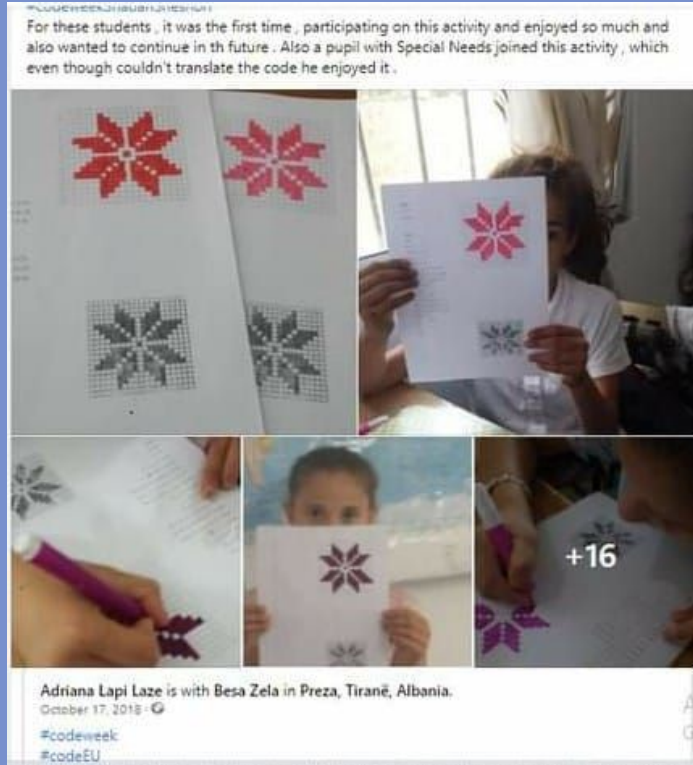


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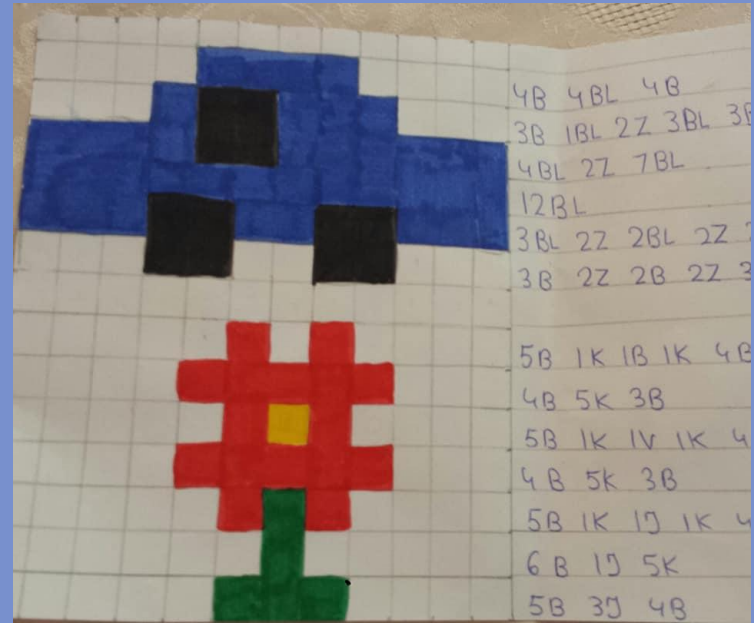
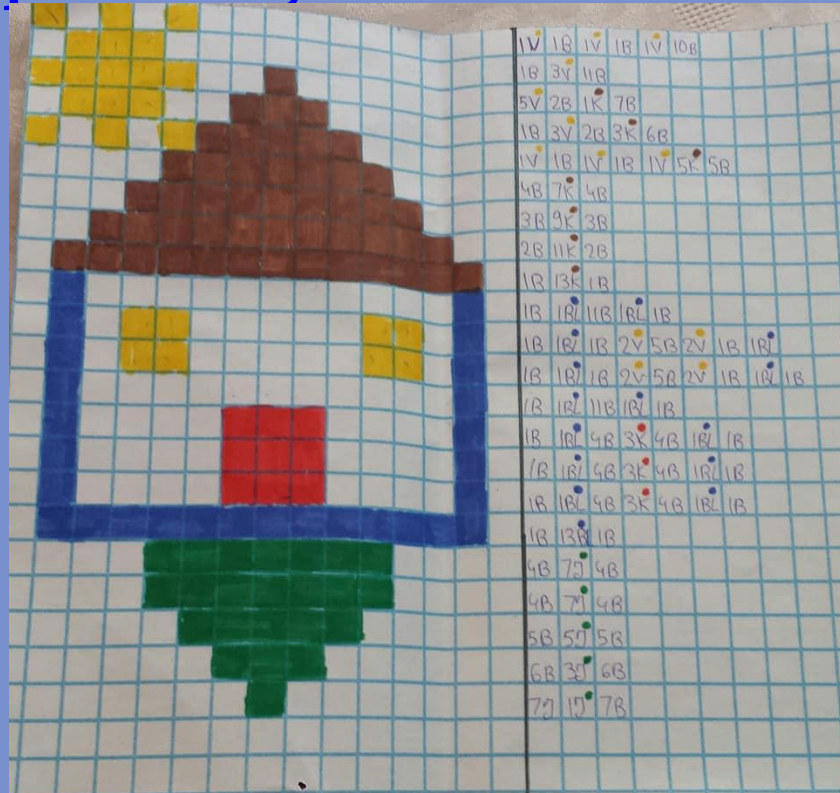
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# First activity for these students

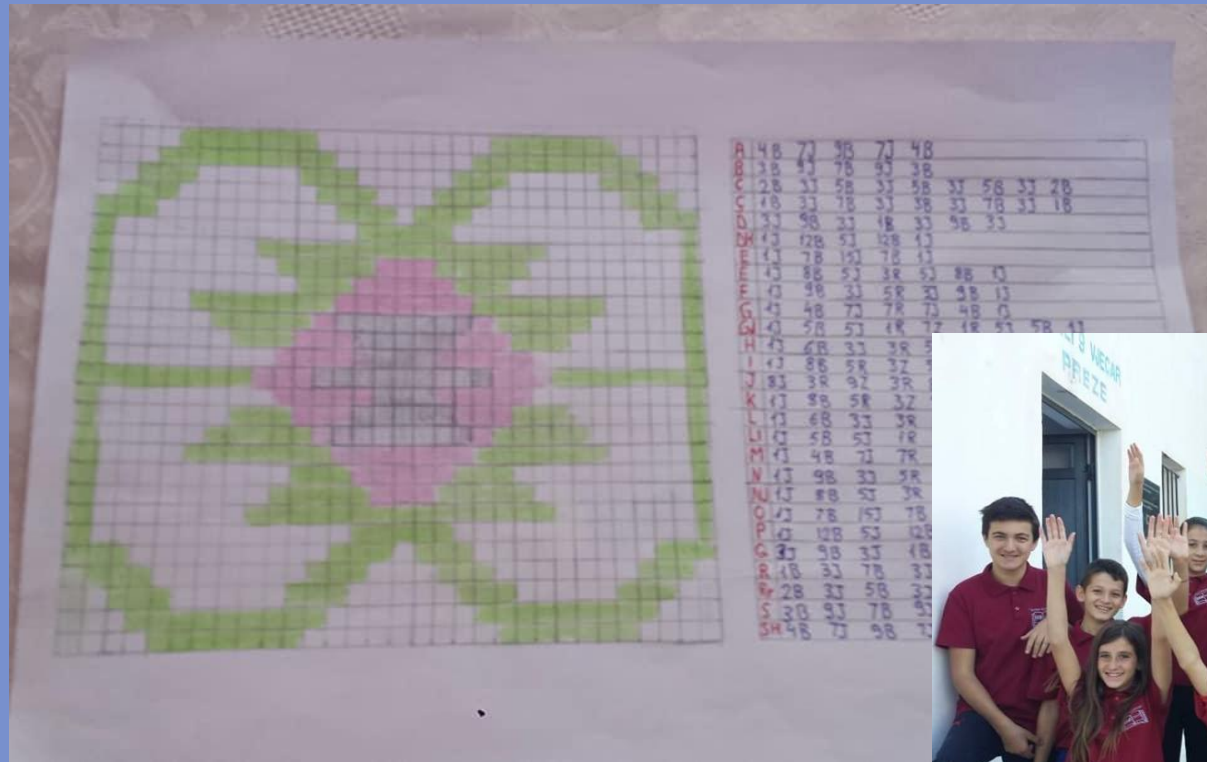


This activity during Code Week 2018 fostered their creativity.

# They started to create by themselves worksheets for primary students







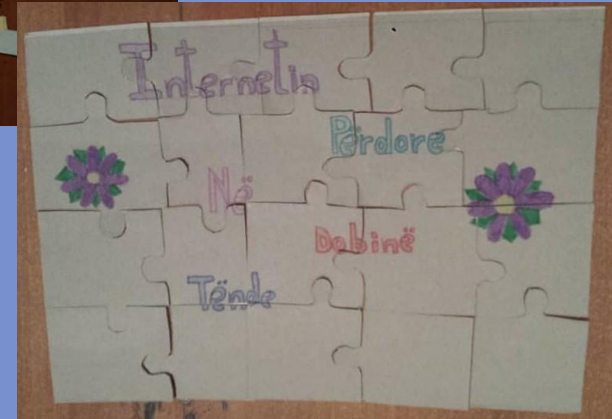
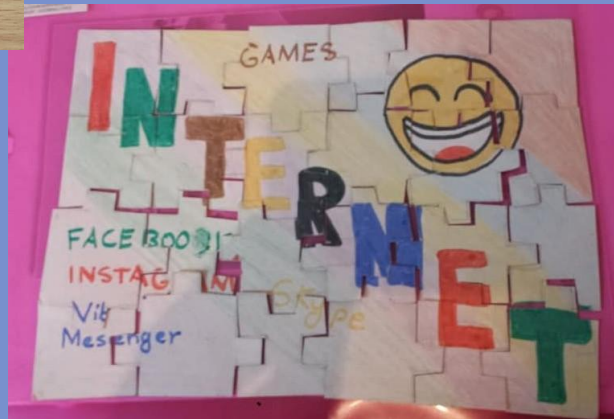
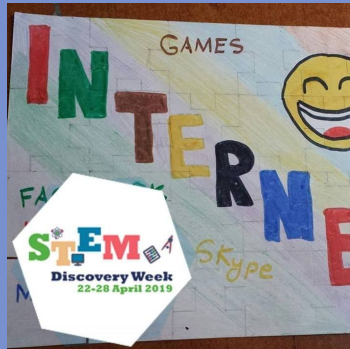
# Their creativity couldn't be stopped

After  
Safer Internet Day  
they had another  
excitement

They were  
continually  
thinking in a  
critical way



During SDW 2019 they started to create puzzles with different messages about being safe on internet for primary school students





# With the fourth grade students



# Coding with Math as a portfolio

Matematik

**CODEWEEK ALBANIA 2020**

**I**

- 1)  $y+y+y$
- 2)  $7x+5+2x+7$
- 3)  $3y+5x-8-2y$
- 4)  $4fg+2g-5fg$
- 5)  $6(x+7)$
- 6)  $5fg-2ad-7fg-da$
- 7)  $4(9x-9)=$
- 8)  $8+6:2$
- 9)  $12^2+6$
- 10)  $-42-(-6)$

**II**

- 1)  $-9+21x+21-12x$
- 2)  $(-3) \cdot [5+(-4)]$
- 3)  $11^2+(-11)^2$
- 4)  $6x^4-2^3$
- 5)  $\sqrt{576}$

**III**

- 1)  $18-(-4)+12; (-6)$
- 2)  $3(x+4)+2(x+4)$
- 3)  $9-7(2x-5)+6$
- 4)  $13+\frac{3x}{y}+\frac{4y}{x} \begin{pmatrix} x=8 \\ y=6 \end{pmatrix}$

**DEZINFERTONI SHART SHPESH.**

- 20  $\rightarrow$  Sh
- 14x+50  $\rightarrow$  E
- 5x+20  $\rightarrow$  P
- 24  $\rightarrow$  T
- 16  $\rightarrow$  R
- 242  $\rightarrow$  A
- 3  $\rightarrow$  U
- 3y  $\rightarrow$  O
- 9x+12  $\rightarrow$  D
- y+5x-8  $\rightarrow$  F
- 2g-fg  $\rightarrow$  E
- 6x+42  $\rightarrow$  E

- 2fg-3ad  $\rightarrow$  Z
- 36x-36  $\rightarrow$  I
- 11  $\rightarrow$  N
- 150  $\rightarrow$  K
- 36  $\rightarrow$  T
- $11+(-11)^2$
- $11-11^2$

Shkruani fjalë  
die me vize  
Shkruani fjalë  
die me vize

1. Enver  
2. Plumbi  
3. Plumbi  
4. Plumbi  
5. Plumbi  
6. Plumbi  
7. Plumbi  
8. Plumbi  
9. Plumbi  
10. Plumbi

Shkruani me vize



DETYRE PORTOFOLI NR 1

MATEMATIKE

KLASA 9

Cdo ushtrim me poshte qe ka lidhje me dy kapitujt e pare , I zgjidhur sakte e me kujdes korrenspondon me nje shkronje, si ne tabelen e kodeve ne fund te ushtrimeve . Nje grup ushtrimesh korrenspondojne me nje fjale . Te gjitha fjalet formojne nje fjale. Printoje fleten dhe zbulo fjaline .

Afati I fundit i dorezimit eshte data 29 Tetor . Nxenesit, te cilet e perfundojne brenda dates 23 Tetor , do te perfitojne nje certificate Europiane , sepse kjo detyre eshte vec nje detyre portofoli edhe perfishirje ne nje aktivitet te rendesishem European Code Week 2021.

1. Gjej numrin e nenbashkesive te bashkesise  $A = \{x \in \mathbb{N} / x < 5\}$

2.  $6 \times 10^{-1} =$

3.  $(3^{-9})^4 \times (3^{-5})^{-7} =$

4.  $1500000 : 0.0003 \times 0.000000002 =$

5.  $2 - 8 + 22 =$

6.  $[(-2)^4 + 2 \times (-5)] \times 10^5 : 10^{-4} =$

7.  $\frac{0.000000009}{0.000000003} =$

8. Gjej vleren e  $x$   $2^{3x+5} = (2^2)^7 \times ?$

9.  $2^{-5} : (2^{-2})^{-3} =$

10.  $\{-9.8 + [-12 - 6 + (-4)] : (-2)\} : 2$

11.  $6^7 : 6^4 =$

12.  $4^{-3} \times 8^2 =$

13.  $\sqrt{16} \times 10^{-1} = 10^{-1}$

14.  $6^3 =$

15.  $4^6 \times 4^5 : 4^9 =$

16.  $(8^3)^{-5} : 8^{-25} \times 0.000008 =$

17.  $(144 : 8 - 2^2) \times 2 =$

18. Per bashkesine  $A = \{-5, -4, -3, -2, -1, 1, 2, 3, 4, 5\}$   $n(A) = ?$

19.  $60 : (-2)^2 : 50$

20.  $21.600000000 \times 0.00000001$

21.  $\sqrt{1000} + (-3)^2 + (1254 - 254)^0 + 2^5 \times 2^{-2}$

22.  $(-1)^0 \times (-1)^{126} + (-3)^2$

23.  $5^{-3} \times 5^3 =$

24.  $2 \times 10^{-5} \times 3 \times 10^4$

25.  $0.000000008 : 0.000000008 =$

26.  $7^{125} \times 7^{-125} =$

27.  $(\frac{1}{2})^{-11} =$

28.  $(\frac{60}{600})^{-1}$

29.  $A = \{1, 3, 5, 7, 9\}$   $B = \{x \in \mathbb{N} / x < 10\}$   $n(A \cup B) = ?$

30.  $(2 - \frac{1}{2})^{-5} \times (1 + \frac{1}{2})^4 =$

31. Gjej prerjen e bashkesive :

$A = \{x \in \mathbb{Q} / x \text{ numer dhjetor dyshifror midis } 0 \text{ dhe } 1\}$

$B = \{0.27 ; 0.49 ; 0.6 ; 0.85\}$

32.  $(\frac{13}{11})^{-\frac{1}{2} - \frac{5}{22}} \times (\frac{2}{5} + \frac{1}{3})^{-2} : 2$


33.  $\sqrt[3]{-27} \times \sqrt[3]{64} + \sqrt{121} + (-5+2)^2 + (-5)^0 + (-1)^{100}$

Pergjigjet e sakta	216	16	3	1	$\frac{2}{3}$	0.6	$2^{-11}$	$8 \times 10^{-6}$	4.5	0.3	28	10	9
Shkronjat korensponduese	ë	M	I	SH	C	A	K	B	V	T	R	E	N



## Flipped learning , another way to foster :

- student's critical thinking
- their independence
- problem solving
- their relation with the book



Feedback of our students is  
another important instrument for  
a successful teaching

[https://docs.google.com/forms/d/1kImTk7APZUA77Ejcm02rRI1HT1gFRNhakB\\_2P1pXZQA/edit#responses](https://docs.google.com/forms/d/1kImTk7APZUA77Ejcm02rRI1HT1gFRNhakB_2P1pXZQA/edit#responses)



Metoda Flipping Classroom ( ku ju e pergatitnit mesimin paraprakishtne shtepi ) qe ne perdorem gjate gjithë vitit 2020 mendoni se ia vlejti ?

25 responses



Nese mendoni se nuk vlejti , Pse ? Ku ishin pikat e dobeta ?

25 responses

# To be continued ...



## Thank you for your attention!