

CONTEST REPORT

**European School Contest: Design
Your Sustainable 3D Schoolyard!**



CLIMATE CHANGE AND NATURAL DISASTERS AWARENESS RAISING USING VIRTUAL WORLDS

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YOU DESIGNED AMAZING SUSTAINABLE SCHOOLYARDS!



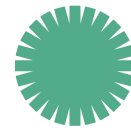
The ***Design Your Sustainable 3D Schoolyard*** school contest invited students, with a mentorship of their teachers, to rethink school spaces through sustainability, climate awareness, and digital creativity. Using tools such as *Tinkercad* and *Delightex Edu*, participants were challenged to design a 3D model of a sustainable schoolyard based on their real school environment. The task encouraged students to transform concrete spaces into greener and more functional areas, propose solutions for energy and water use, introduce biodiversity, and think about how schools can respond to climate change and environmental challenges.

The competition brought together 37 student teams from 5 countries (Serbia, Greece, Bosnia and Herzegovina, Romania, and North Macedonia) regions that have increasingly experienced the effects of droughts, floods, heatwaves, and other extreme weather events linked to climate change. This made many of the students' ideas especially connected to real environmental challenges affecting their local communities and everyday lives.

The submitted projects showed a wide range of ideas, from eco-labs, rainwater collection systems, and solar energy solutions to biodiversity zones, outdoor classrooms, and climate-resilient green spaces. Beyond the final results, the competition highlighted the importance of learning through experimentation, collaboration, and imagining more sustainable futures for school communities.

evaluation

CRITERIA



Inovation

We were looking for original solutions for improving the school yard's sustainability, creative use of Tinkercad designs, fresh approaches to environmental challenges (e.g., water use, shade, biodiversity, student wellbeing) and imaginative design choices that show thinking beyond typical playground layouts

Sustainability & Environmental Impact

Use of eco-friendly solutions, such as renewable energy features (solar, wind), water-saving systems, recycling points, or green areas. Support for biodiversity, e.g., planting native species, creating habitats for insects, birds, or small animals. Efficient use of resources, such as designing low-energy structures. Climate awareness, showing how the yard addresses heat, shade, flooding, erosion, or other climate-related challenges.

3D Design & Technical Quality

Correct shapes, alignment, proportions, and clean geometry. Realistic structures, thoughtful placement and well-designed sustainable elements. Effective importing and integration of Tinkercad models into Delightex Edu (correct scaling, positioning, and functionality in the virtual environment).

Teamwok

How well the did student teams work together throughout the design and creation process. Students were supposed to demonstrate shared responsibility, good communication, discussing ideas, giving feedback, and making decisions together, fair division of tasks, such as research, 3D design, virtual world building.



JURY



Mladen Šljivović (Serbia)

Mladen is teacher of physics and an internationally recognized STEM educator, known for innovative, project-based teaching and strong student achievements in national and international competitions. He is the recipient of major education awards including the Serbian “Prosvetitelj” prize (2024), the St Sava Award by Ministry of Education Serbia (2022), and the title of Best Educator in Serbia (2018), as well as a STEM School Label Expert Ambassador (2021).



Zoi Mammi (Greece)

Zoi is a geologist with a great experience in environmental education. She has been leading the *Center of Environmental Education of Stylida - Ypati* and is currently working for the *Center for Innovation of Education of Central Greece*.



Manolis Voutsakis (Greece)

Manolis is a member of the EPU of the Decision Support Systems Laboratory of the School of Electrical and Computer Engineering at the National Technical University of Athens (NTUA). He is active as a project management consultant, contributing to research, innovation, and the implementation of scientific and technological projects. His work focuses on applying engineering and decision support methodologies to real world challenges.



Vasileios Chioktour (Greece)

Vasileios is a physicist working in public secondary education. He holds an MSc in environmental physics and PhD from the University of Thessaly (UTH). He is post doctoral researcher at UTH.



Isidora Čalija (Ireland)

Isidora is an architect and exhibition designer. With a background in architecture and experience in spatial design, visual communication, and science communication, she has contributed to projects connecting design, education, and public engagement. Her work focuses on translating complex ideas into accessible and engaging formats, with a strong interest in the role of design in shaping inclusive and sustainable environments.

RANKING

Age group:
11 - 14

Project ID	Group of students	School name	Country	Rating
5131	Filip, Matea, Mihaela, Martina	MPS „Straso Pindzur“ Karbinci	North Macedonia	472
5137	Marija, Emina, Nemanja, Đorđe	Obrazovno-vaspitni centar "Braća Nedić"	Serbia	433
5186	Dunja, Dunja, Neda, Kala , Đurđa, Lenka	Primary school Andra Savčić	Serbia	395
5163	Andrija, Đurađ, Helena ,Helena, Branko, Sava	OŠ „Miloje Simović"	Serbia	393
5187	Hristina, Magdalena, Marija, Mina, Nikolina	Primary school Andra Savčić	Serbia	389
5164	Dimitris, Giannis, Nikos, Orestis, Giannis	Primary School of Ekali	Greece	382
5185	Филип, Павле, Алекса	ОШ "KEKEЦ"	Montenegro	380
5029	Anđela, Tara, Leda	Elementary school „Rada Miljković"	Serbia	373
4712	Mihailo, Novak, Mila, Andrej, Filip	OŠ "Bora Stanković"	Serbia	368
5042	Bill, Lydia, Artemis, George	16th Experimental Primary School of Lamia	Greece	356
5044	Nikolia, Antonis, Olga, Athanasios	16th Experimental Primary School of Lamia	Greece	327
5047	Loukas, Ilias, Davier, Giakou	16th Experimental Primary School of Lamia	Greece	299
5045	Georgia, Marilia, Ioanna	16th Experimental Primary School of Lamia	Greece	294
5012	Myrto, Amalia, Vasileios, Apostolis, Orestis	2nd Primary School of Lamia, Greece	Greece	288
4940	ILIAS	3RD GYMNASIUM OF ARGYROUPOLIS	Greece	285
5054	Stefanos, Markella, Christos, Anastasis, Georgios	2nd Primary School of Lamia	Greece	273
5055	Amalia, Margarita, Savvas, Nektarios, Lydia	2nd Primary School of Lamia	Greece	270
4990	Sava, Pavle, Milan, Jelena	OŠ "Kralj Petar II Karađorđević"	Serbia	268
5002	Antonia, Iasonas, Foteini, Artemis, Konstantinos	2nd Primary School of Lamia	Greece	246
4934	Dorotea, Lazar, Vesna, Nadja, Đurđina, Nikolija, Dimitrije, Lena, Lana, Anđela, Snežana, Nevena, Dimitrije, Jovana , Miona, Milica,	Vuk Karadžić	Serbia	237
4721	Aleksa, Lea, Nikolina, Milica	Jovan Serbanovic	Serbia	158

RANKING

Age group:
14 - 18

Project ID	Group of students	School name	Country	Rating
5160	Lazar, Nataša, Lenka	Gimnazija Kraljevo	Serbia	457
4713	Gabrijela, Amar, Benjamin	PI First gymnasium (JU Prva gimnazija)	Bosnia and Herzegovina	454
5158	Sofija, Iva, Ivona, Anja	Hemijsko-prehrambena tehnološka škola (Chemical and Food Technology School)	Serbia	452
5157	Nea, Aiša, Kerim	PI First gymnasium (JU Prva gimnazija)	Bosnia and Herzegovina	405
4991	Milica, Nikola, Sava	Tehnička skola Čačak	Serbia	398
5192	Ivan, Nikolina, Petra, Miona, Jelena	Gymnasium and Vocational School "Dositej Obradović"	Serbia	397
4949	Mihajlo, Miljana, Marko, Teodora, Staša, Krsman	Zrenjaninska gimnazija	Serbia	392
4989	Svetlana, Una, Sara, Jovana, Mihailo, Matija	Tehnička škola Čačak	Serbia	370
5156	Viktor, Janko, Angelina, Mihailo, Denis	"Josif Pančić" Gymnasium	Serbia	352
5168	Georgios, Panagiotis, Ioannis	4th Experimental Junior High School of Lamia	Greece	339
5191	Alek, Lena, Lucia, Una	OŠ "Jovan Dučić" Novi Beograd	Serbia	338
5030	Nina, Lara, Maja, Helena, Marko, Mihailo	Srednja škola „Dragačevo” Guča	Serbia	307
5040	David, Țuțuian, Andrei	Liceul Tehnologic "Clisura Dunării"	Romania	286
4711	Sergej, Mateja, Sara, Neda, Vladimir, Mihajilo	Technical High School "Nikola Tesla", Velika Plana	Serbia	273
5189	Ali, Emir, Kerim, Timur	PI First Gymnasium (JU Prva gimnazija)	Bosnia and Herzegovina	125
5193	Maja, Dunja, Nikolina	Gymnasium and Vocational School 'Dositej Obradović'	Serbia	120

AWARDS

1

**Gimnazija
Kraljevo, Serbia**

in the 14-18 age category

The jury was impressed by the amount of thought, teamwork, and creativity behind this project. The application presented an inspiring vision of a future school, combining innovative ideas, sustainability, and a welcoming learning environment. The jury especially appreciated the detailed model, fresh concepts, and the clear dedication shown throughout the whole process. It was evident that the team learned a lot while developing the project and approached the challenge with imagination and care.

As a first-place award, the school will receive a VR headset, which students and teachers can use to further explore virtual environments, develop immersive educational content, and experiment with future ideas and projects before bringing them into real-life spaces.

2

**PI First
gymnasium,
Sarajevo, BiH**

in the 14-18 age category

The jury appreciated the creativity, energy, and thoughtful planning behind this project. The clear three-zone concept successfully combined biodiversity, smart resource management, and spaces for sports and energy use in a well-organized way. The jury especially liked the additional effort put into the pre-sketches, which helped show the development process and the thinking behind the final design. The project stood out for its fun and imaginative approach, while also paying attention to how people would use and experience the space.

As a second-place award, the school will receive a book on climate education and an issue of Elements magazine by CPN, to further support learning and exploration of climate topics.

1

**MPS "Strašo
Pindzur"
Karbinci, North
Macedonia**

in the 14-18 age category

This project stood out because of the energy and effort visible in every part of it. The team explained their ideas clearly and added extra elements like a video, song, and mobile app testing, which made the whole presentation more engaging and fun to follow. It was easy to see strong teamwork, curiosity, and a lot of learning behind the process. The project was detailed, creative, and communicated its ideas in a lively and memorable way.

As a first-place award, the school will receive a 3D printer, supporting hands-on learning, creativity, and the development of ideas through design, prototyping, and making.

2

**Obrazovno-
vaspitni centar
"Braća Nedić"
Serbia**

in the 14-18 age category

This project presents a clear and easy to understand idea for a sustainable schoolyard. The layout of the space is well thought through, especially in the way greenery and planting areas are arranged. The model clearly shows the main concept and good attention to how the space is designed and used. It reflects a thoughtful approach to making the school environment more pleasant and useful for students.

As a second-place award, the school will receive a book on climate education and an issue of Elements magazine by CPN, to further support learning and exploration of climate topics.

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**Hemijsko-
prehrambena
tehnološka škola
Serbia**

in the 14-18 age category

This is an interesting and well-developed project where it is clear that both Tinkercad and Delightex were used effectively. The idea connects well to the school's profile, especially through the Eco Lab concept and the focus on sustainability, including natural fertilizer production, rainwater irrigation, recycling, use of lavender, solar energy, and smart water management.

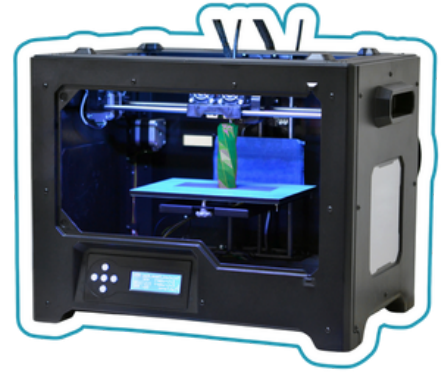
The design is visually appealing with great concept. While some elements are not fully consistent, this does not take away from the creativity and clarity of the idea. The jury awarded the cross-category prize as a 6-month Delightex licence, kindly provided by the company, as an encouragement to further develop skills and continue refining 3D modelling techniques. The project was highly rated and clearly stood out among the submissions.



AWARDS *

11-14 AGE CATEGORY: 3D PRINTER

* valued up to €500



14-18 AGE CATEGORY: VR HEADSET

* valued up to €500

* cross-category

SPECIAL MENTION:



delightex 6-MONTH LICENSE

* in both categories

2nd-PLACE TEAMS: BOOK ON CLIMATE CHANGE AND SUSTAINABILITY

THANK



YOU

and continue
using our
toolkits!

For any questions - contact us via email vr4clima@gmail.com



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