

Umjetna inteligencija u osnovnoškolskom obrazovanju - izazovi i mogućnosti novog doba:

predstavljanje rezultata istraživanja i početne faze razvoja kurikuluma, priručnika za učitelje i obrazovnih materijala za učenike u osnovnoškolskom obrazovanju

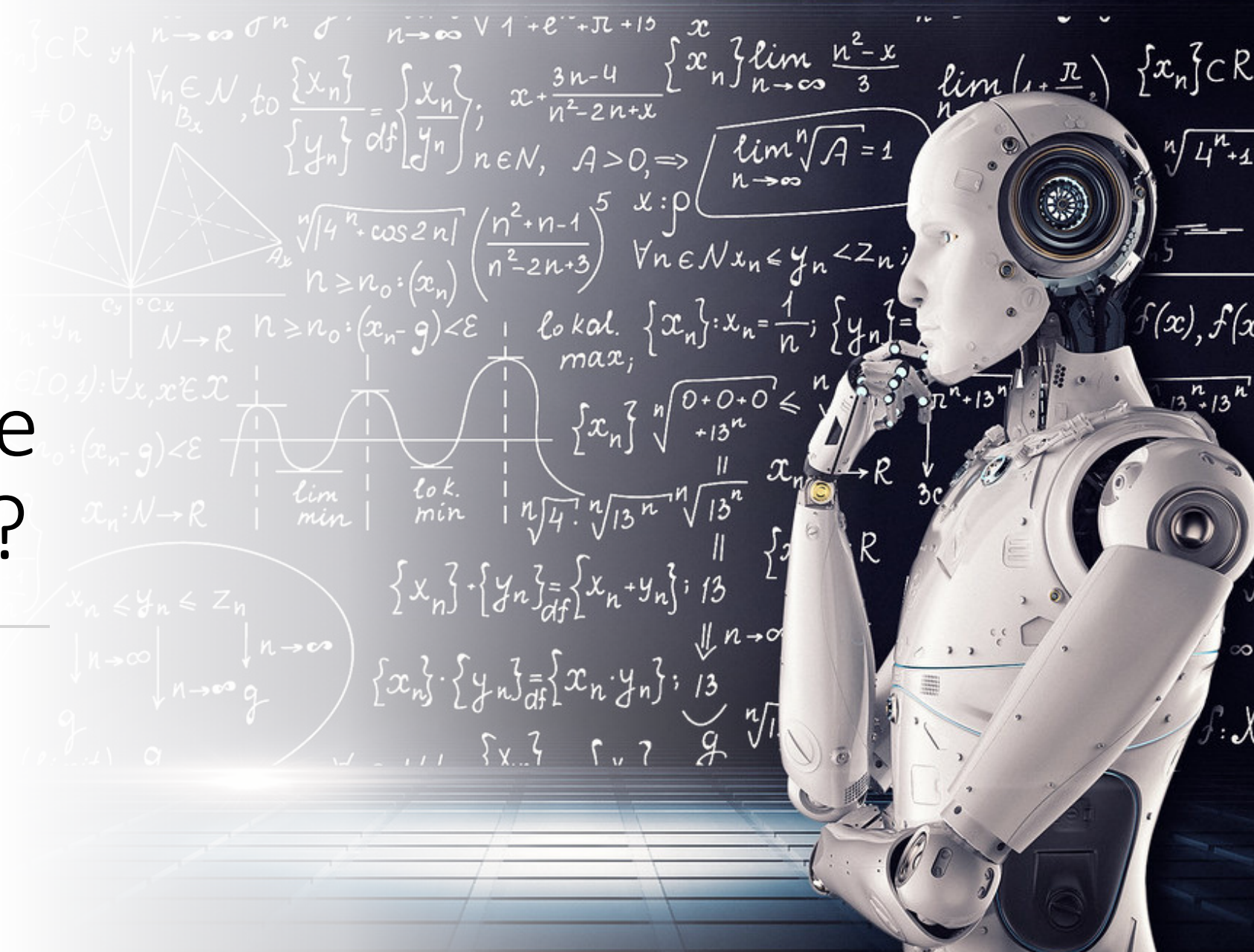
Ivana Ružić

I. osnovna škola Čakovec

Info@EDU 2021.

Agencija za odgoj i obrazovanje

Što je umjetna
inteligencija i
kako ona utječe
na naše živote?



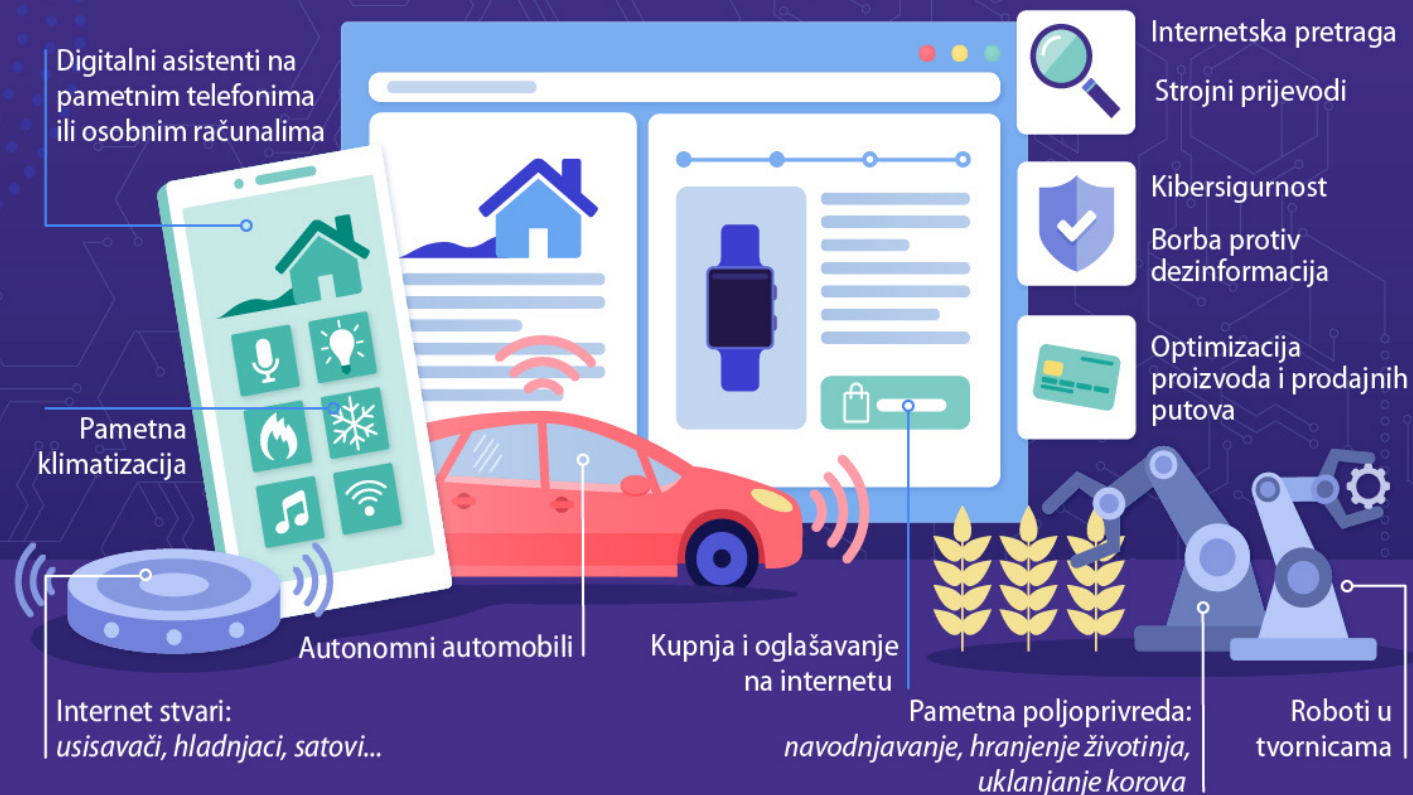
Vrste UI

- Softver: virtualni asistenti, softver za analizu slika, tražilice, sustavi prepoznavanja govora i lica
- „Ugrađena” umjetna inteligencija: roboti, autonomni automobili, bespilotne letjelice, internet stvari

Umjetna inteligencija

Svakodnevna i potencijalna upotreba

Primjeri kako već koristimo umjetnu inteligenciju i mogućnosti koje ona nudi



Europski parlament: Preispitivanje obrazovanja u digitalno doba

- **samo obrazovanje** može stvoriti kvalificiranu radnu snagu koja je spremna za buduće poslove i promjenjivo tržište rada
- **samo obrazovanje** može pružiti preduvjete za socijalno uključivanje i ravnopravno sudjelovanje europskih građana u digitaliziranoj demokraciji

—

Europski
parlament:
četiri
najrelevantnija
dionika
obrazovanja u
digitalnom
dobu



DOBRODOŠLI U ŠKOLU BUDUĆNOSTI

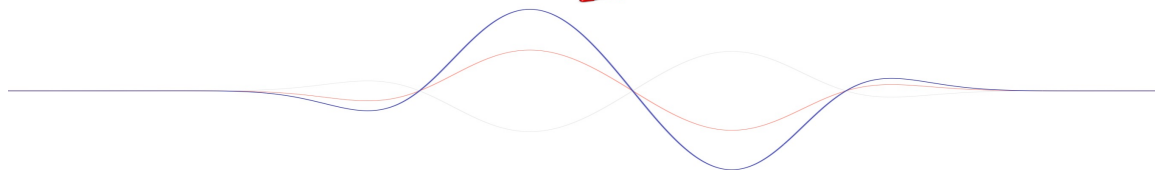
Inovativni STEAM program umjetne inteligencije ravno iz industrije

STEMI
LEARNING BY CREATING

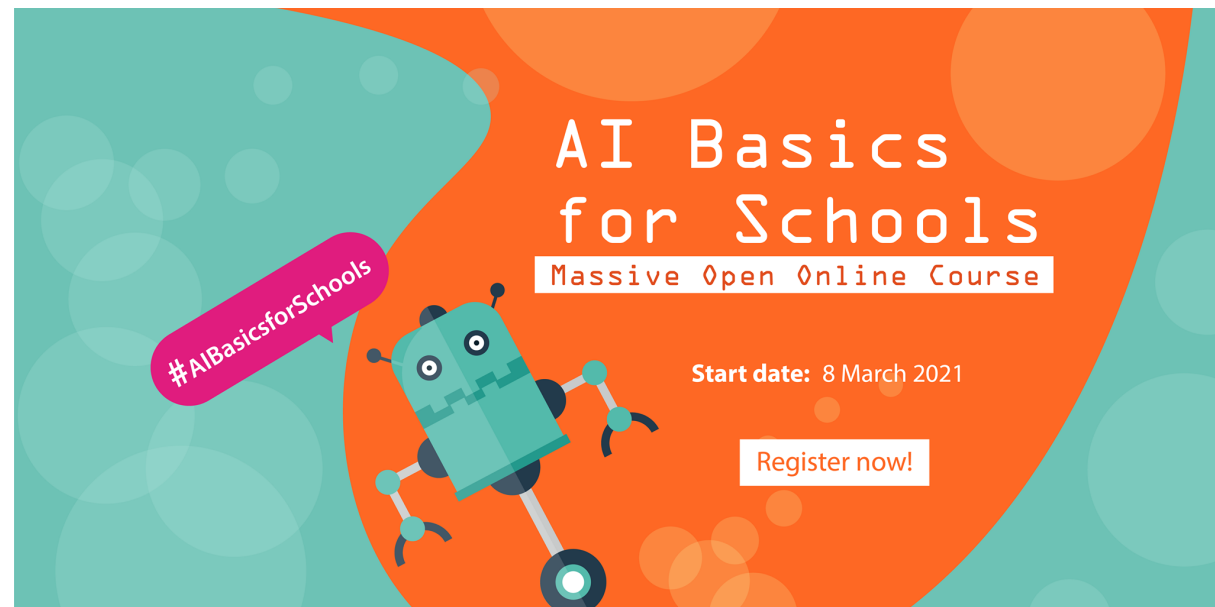
 **infobip**

Powered by

A1



Aktualno



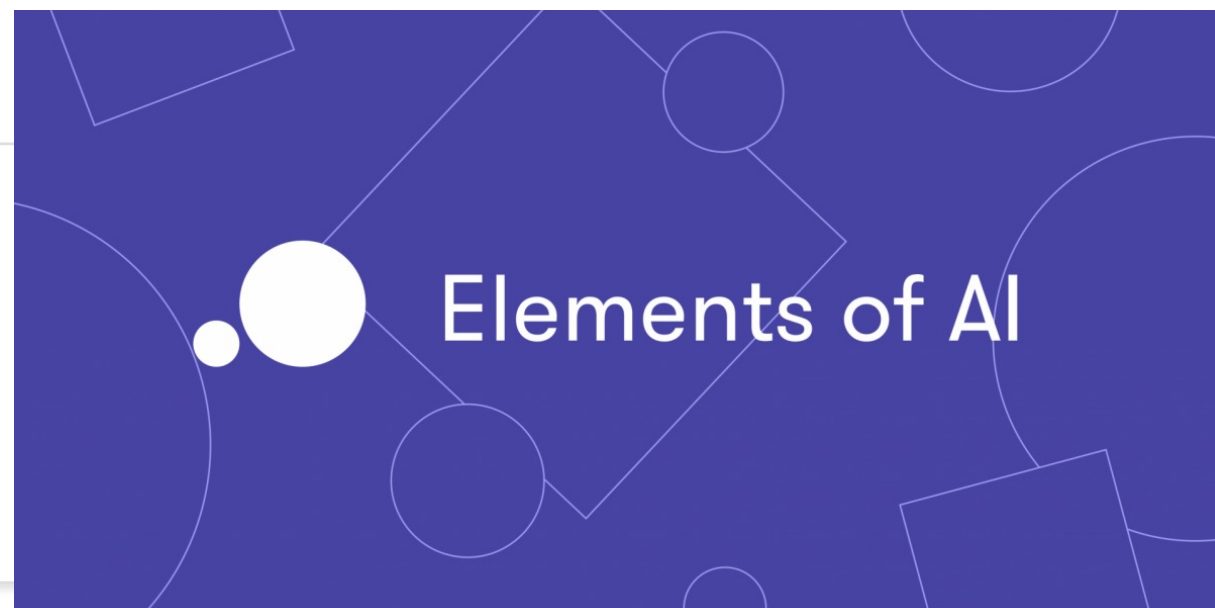
AI Basics
for Schools
Massive Open Online Course

#AIBasicsforSchools

Start date: 8 March 2021

Register now!

The banner features a teal robot character on an orange background with a teal wave on the left. A pink speech bubble contains the hashtag #AIBasicsforSchools. The text is in white and orange, and there is a white 'Register now!' button.



Elements of AI

The banner has a dark blue background with white geometric shapes like circles and rectangles. The text 'Elements of AI' is in white.



ERASMUS+ ARTIE

ARTIFICIAL INTELLIGENCE IN EDUCATION

Erasmus+ KA201

Artificial Intelligence in Education
- challenges and opportunities of
the new era: development of a
new curriculum, guide for
educators and online course for
students



5 partnera, 2 godine, 3 intelektualna rezultata

umjetna inteligencija
u obrazovanju: novi
kurikulum

Izazovi i mogućnosti
novog doba: priručnik
za učitelje

Twinspace - otvoreni
prozor u nove
obrazovne stvarnosti:
online tečaj za učenike

oprema

Raspberry Pi i Intel Movidius Neural Compute Stick

Smart Robot Codey Rocky & Neuron



6 projekata

prepoznavanje lica

vizualno prepoznavanje

manipulacija objektima

prostorna orijentacija

stvaranje govora

prepoznavanje govora

<https://bit.ly/3lgW6SG>



SCAN ME

Erasmus+ ARTIE

Poštovani učitelji, nastavnici, profesori, zahvaljujemo na vašem sudjelovanju u početnom istraživanju koje je dio dvogodišnjeg međunarodnog strateškog partnerstva Erasmus+ Artificial Intelligence in Education - challenges and opportunities of the new era: development of a new curriculum, guide for educators and online course for students.

Nositelj projekta je I. osnovna škola Čakovec, broj projekta 2020-1-HR01-KA201-077800 koji se vodi kod Agencije za mobilnost i programe EU u Zagrebu. Kontakti: Ivana Ružić, voditeljica: ivana.ruzic@skole.hr i Siniša Stričak, ravnatelj: sinisa.stricak@skole.hr
Glavni cilj projekta je izrada novog kurikuluma, metodičkog priručnika za učitelje i nastavnike, e-tečaja za učenike koji će olakšati poučavanje, primjenu i stvaranje radova umjetne inteligencije u osnovnim školama. Stvaranje i dijeljenje brazilnih programa i sadržaja koji će biti jedinstveni i slobodni za korištenje svim zainteresiranim obrazovnim institucijama.

Svi vaši odgovori su od velike važnosti i pridonijet će poboljšanju stvaranja obrazovnih materijala i obrazovnog procesa. Odgovori u anketi su anonimni. Odgovori će se koristiti isključivo u svrhu strateškog partnerstva Erasmus+ Artificial Intelligence in Education - challenges and opportunities of the new era: development of a new curriculum, guide for educators and online course for students.

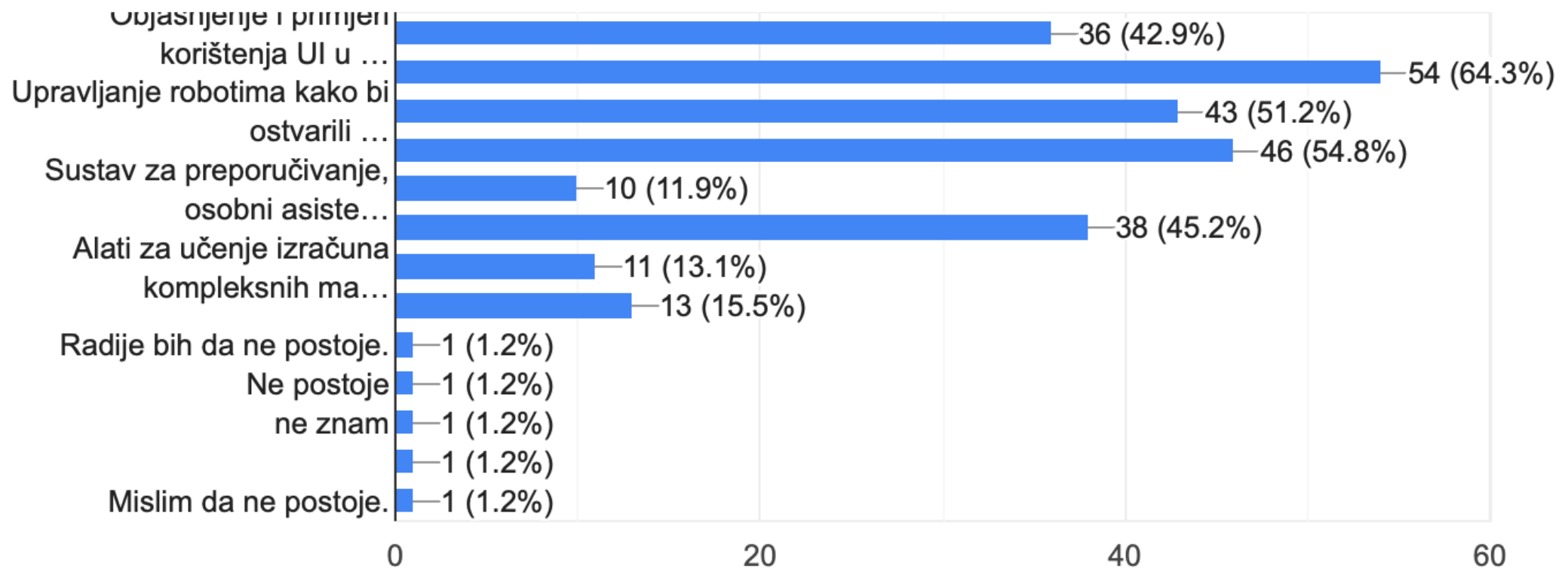
*Required



ERASMUS+ ARTIE
ARTIFICIAL INTELLIGENCE IN EDUCATION

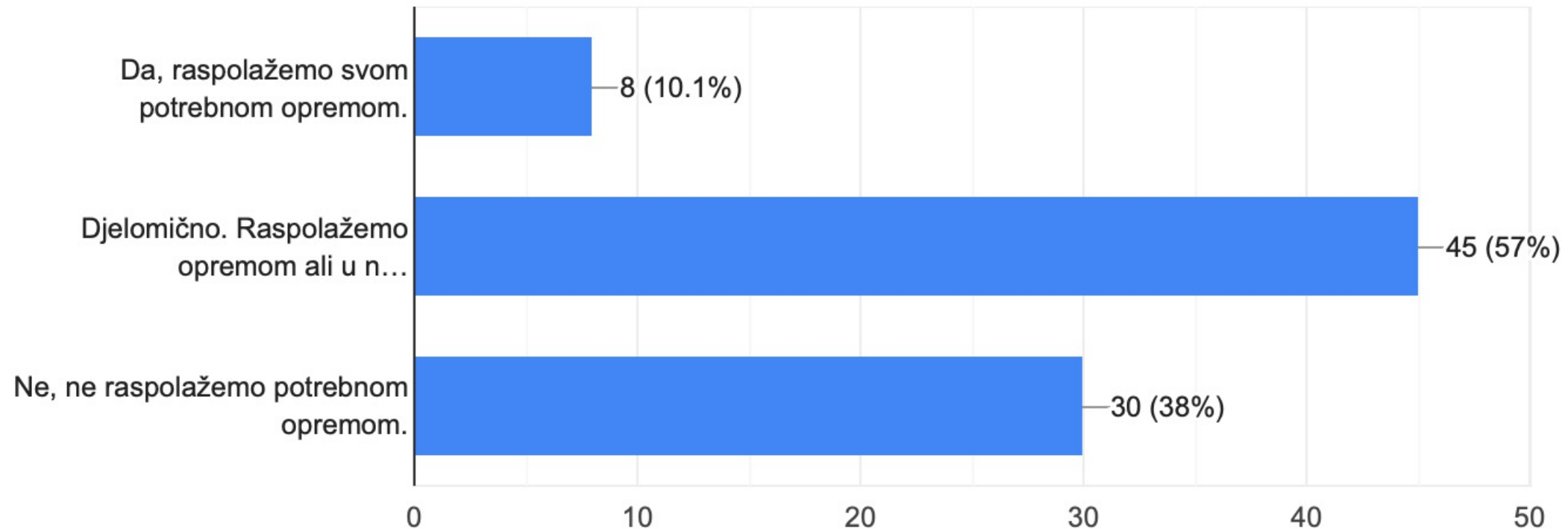
1. Postoje li elementi UI uključeni u postojeće predmetne kurikulume, međupredmetne teme i sl.?

84 responses



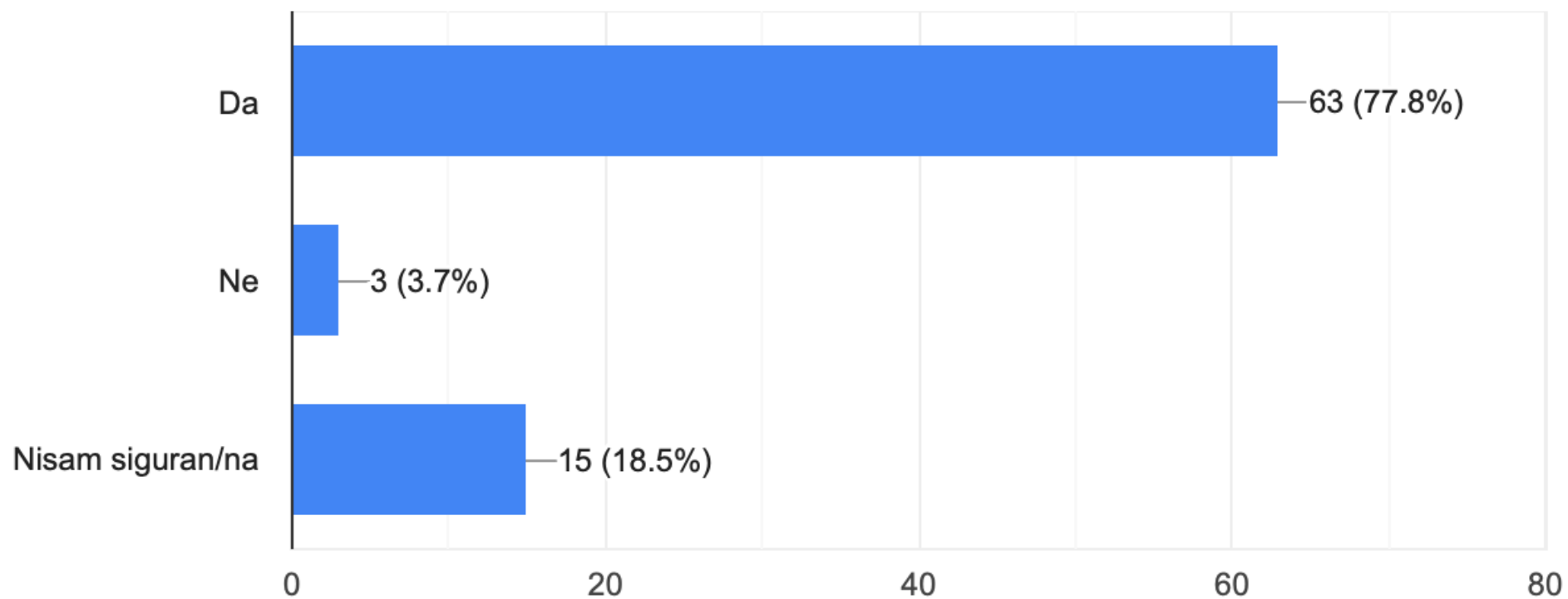
2. Raspolaže li vaša ustanova potrebnom opremom (programskim alatima i uređajima) koja se može koristiti u obrazovanju o umjetnoj inteligenciji?

79 responses



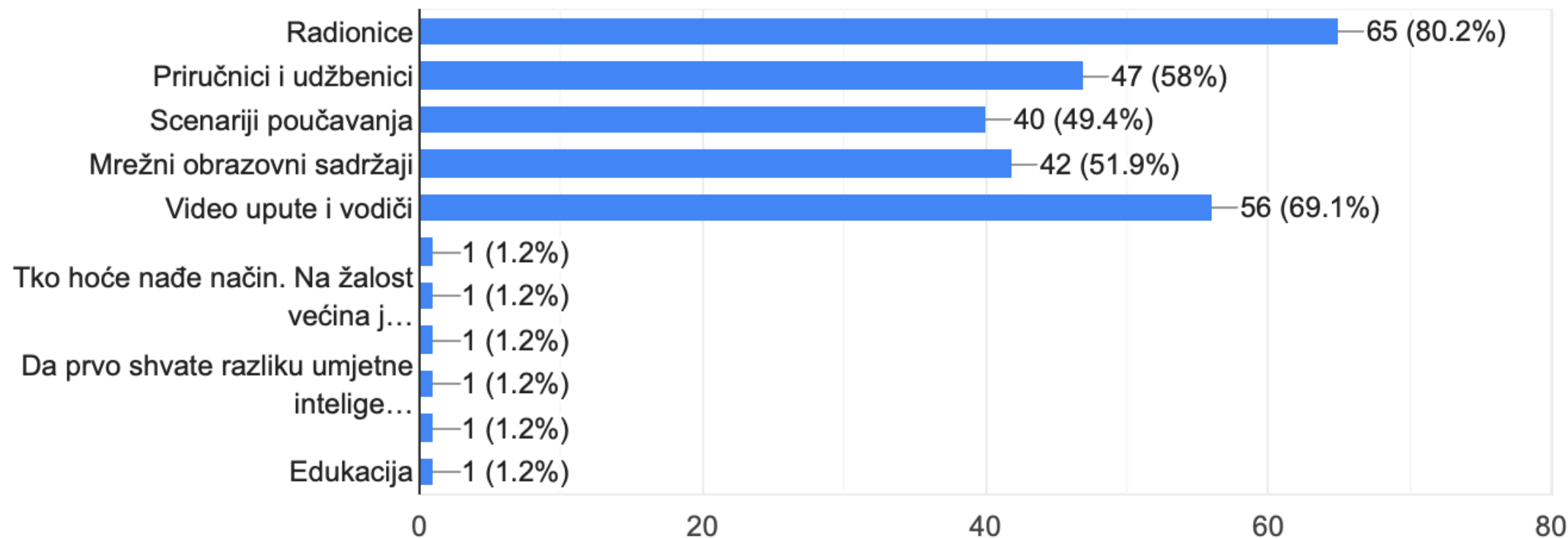
3. Da li je učiteljima/nastavnicima u vašoj ustanovi potrebna podrška u obrazovanju, upoznavanju i primjeni metodologija vezanim uz UI?

81 responses

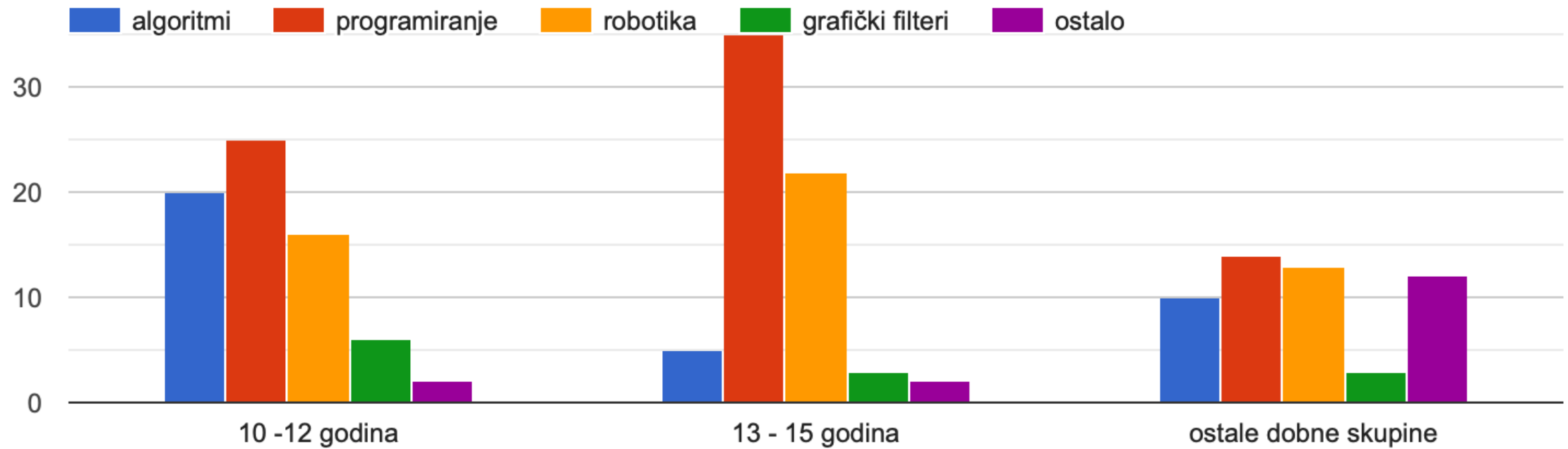


4. Koji oblik podrške je potreban učiteljima/nastavnicima?

81 responses

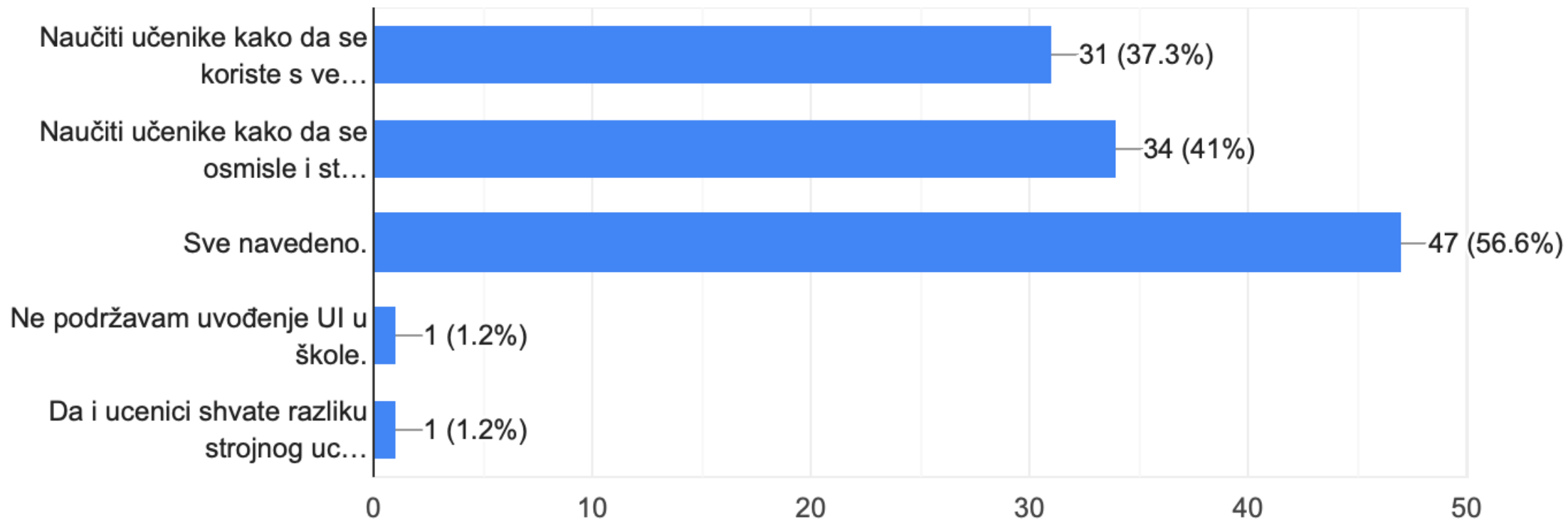


5. Koji su alati/tehnologije UI već poznati vašim učenicima? (ako je moguće, posebno se posvetite ciljnim skupinama učenika u projektu: 10-12 i 13-15 godina)



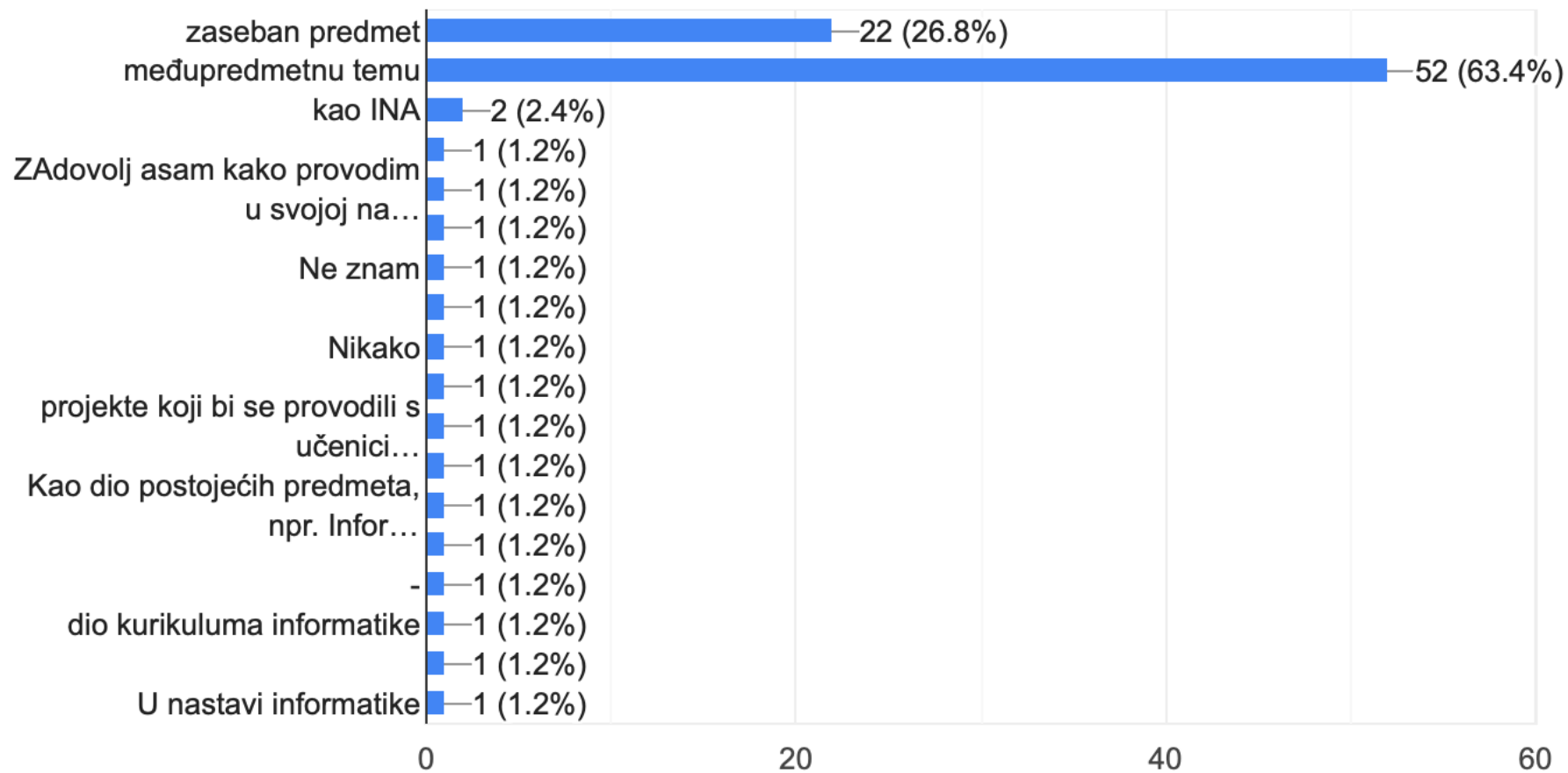
6. Koja je vaša vizija o uvođenju UI u škole?

83 responses



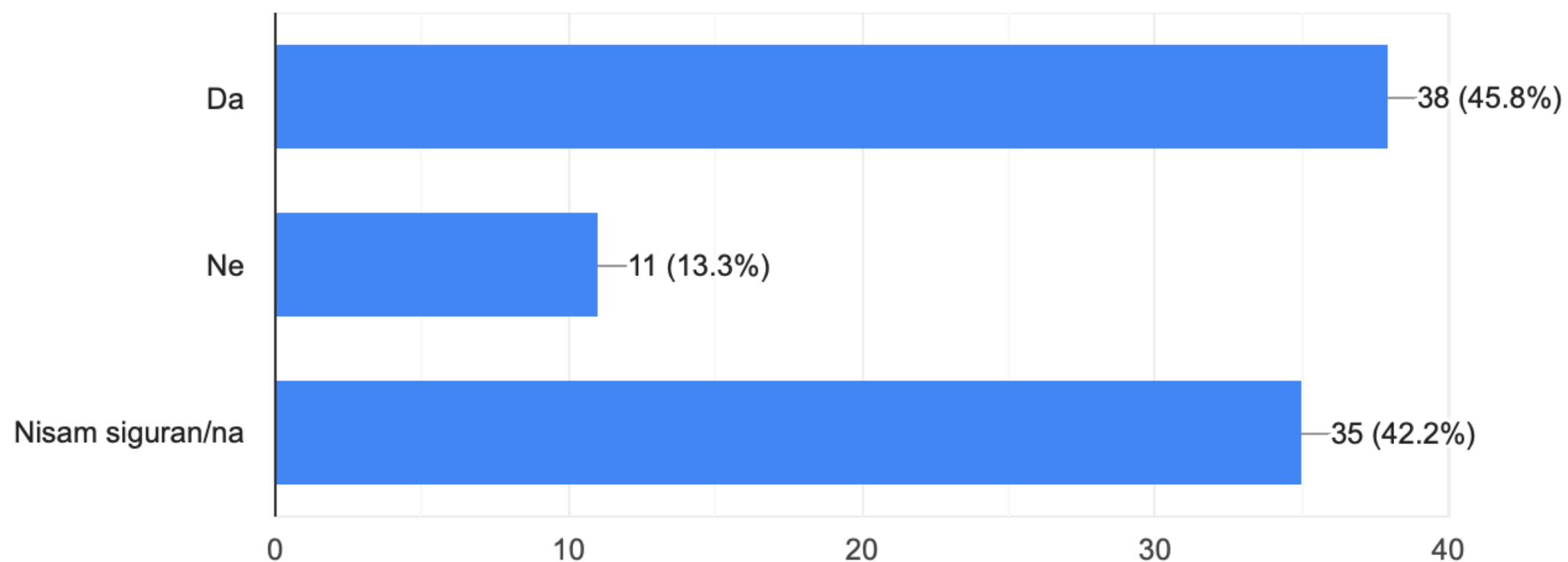
7. Prema vašem mišljenju, treba li UI uvesti kao

82 responses



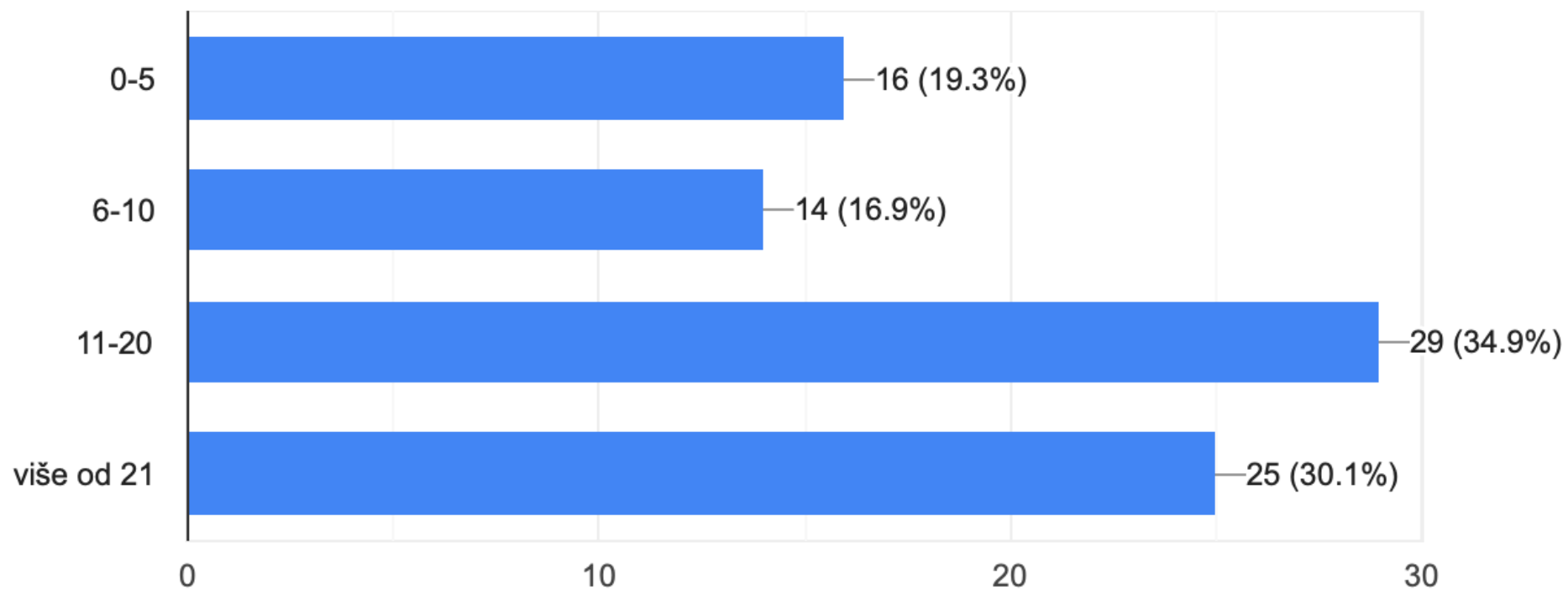
9. Sa ciljem boljeg razumijevanja o UI u obrazovanju, biste li bili zainteresirani da podijelite svoje ideje s drugim učiteljima u Hrvatskoj i Europi?

83 responses



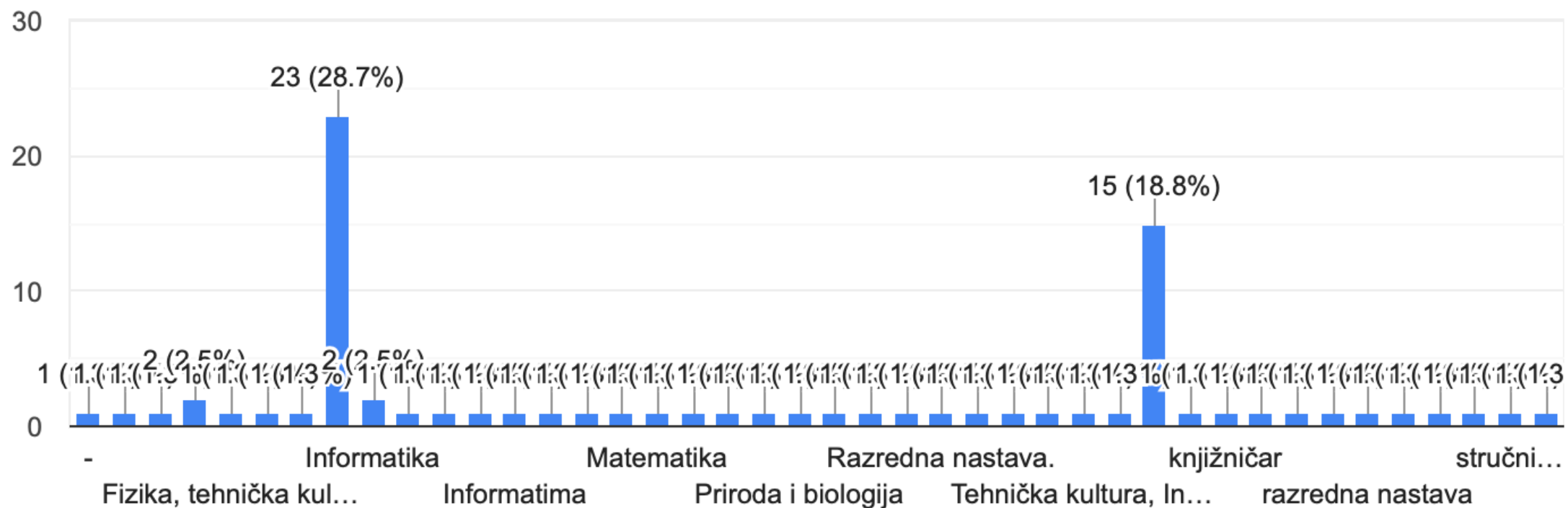
Vaše godine iskustva poučavanja

83 responses



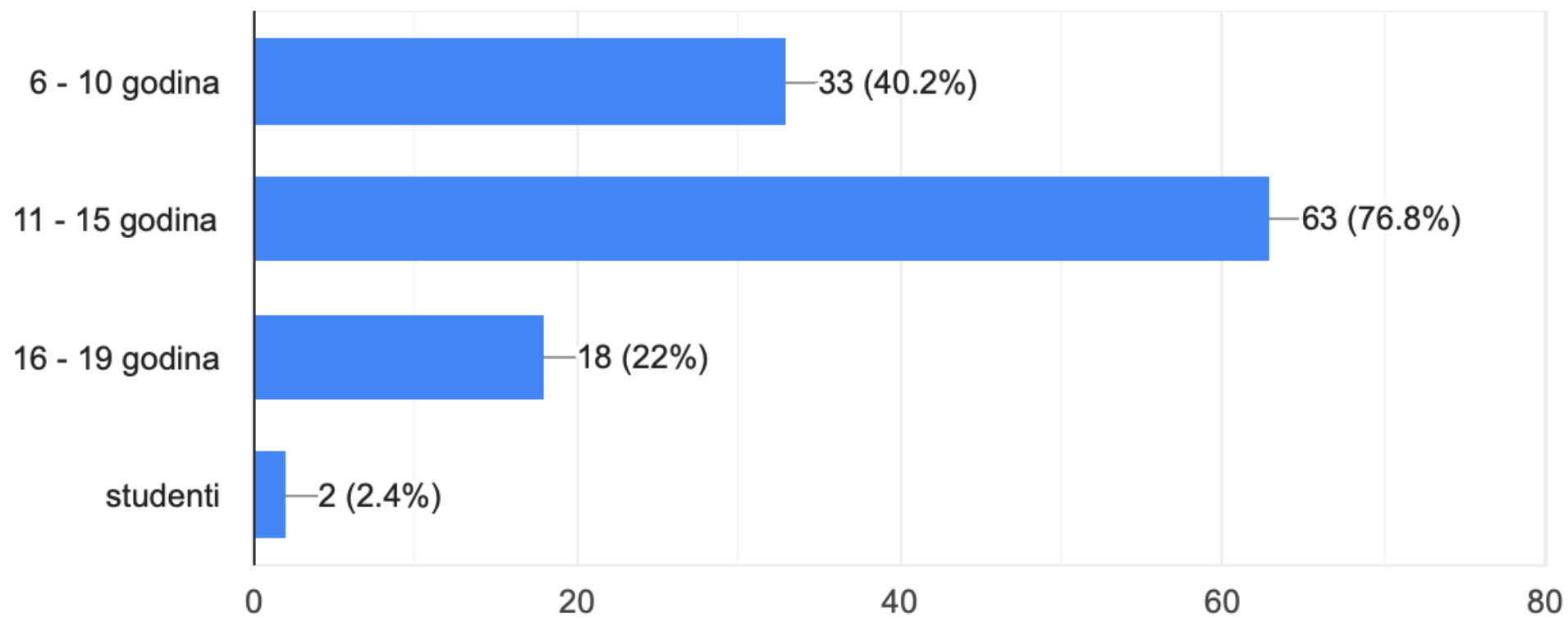
Predmet/i koji poučavate

80 responses



Dob učenika koje poučavate

82 responses



Zanimljive poveznice

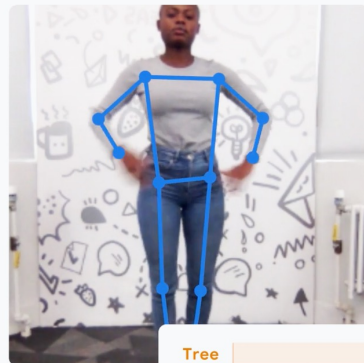
- <https://studio.code.org/s/oceans/stage/1/puzzle/1>
- <https://teachablemachine.withgoogle.com>

Teachable Machine

Train a computer to recognize your own images, sounds, & poses.

A fast, easy way to create machine learning models for your sites, apps, and more – no expertise or coding required.

Get Started



Tree

Wings

AI for Oceans 2 I finished! Sign in

Is this a fish?

Garbage dumped in the water affects marine life. In this activity, you will program or train A.I. (artificial intelligence) to identify fish or trash. Let's clean up the ocean! Click anywhere on the screen to continue.

Continue

Zanimljive poveznice

- https://petalica-paint.pixiv.dev/index_en.htm
- <https://quickdraw.withgoogle.com>



Can a neural network learn to recognize doodling?

Help teach it by adding your drawings to the [world's largest doodling data set](#), shared publicly to help with machine learning research.

Let's Draw!



petalica paint

Upload

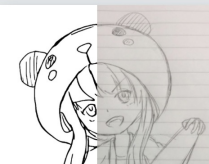
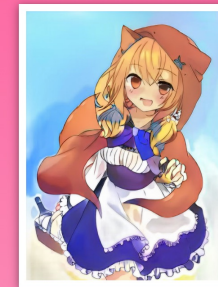
Colorize a sample image

How to

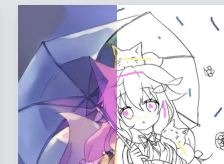
AI-Powered
Automatic Colorization

Upload sketch image

Colorize a sample image



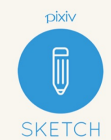
You can simplify and refine the strokes of your rough sketch.



You can add color hints to influence the colorization.



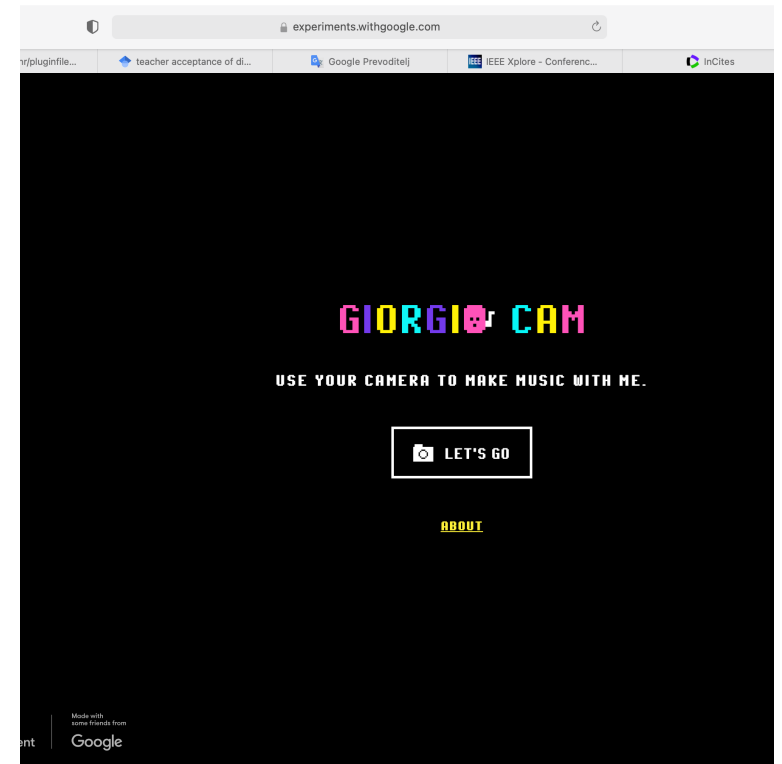
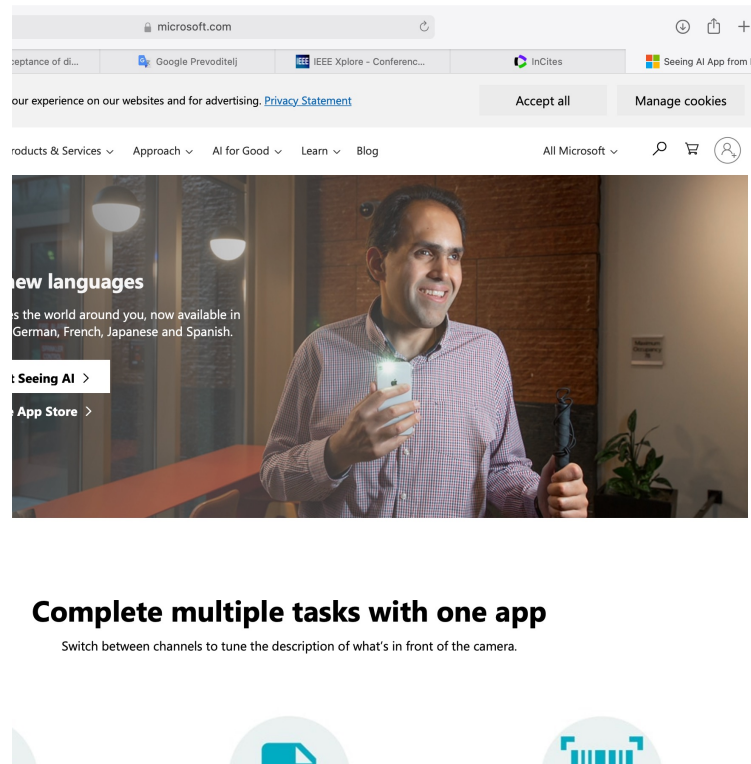
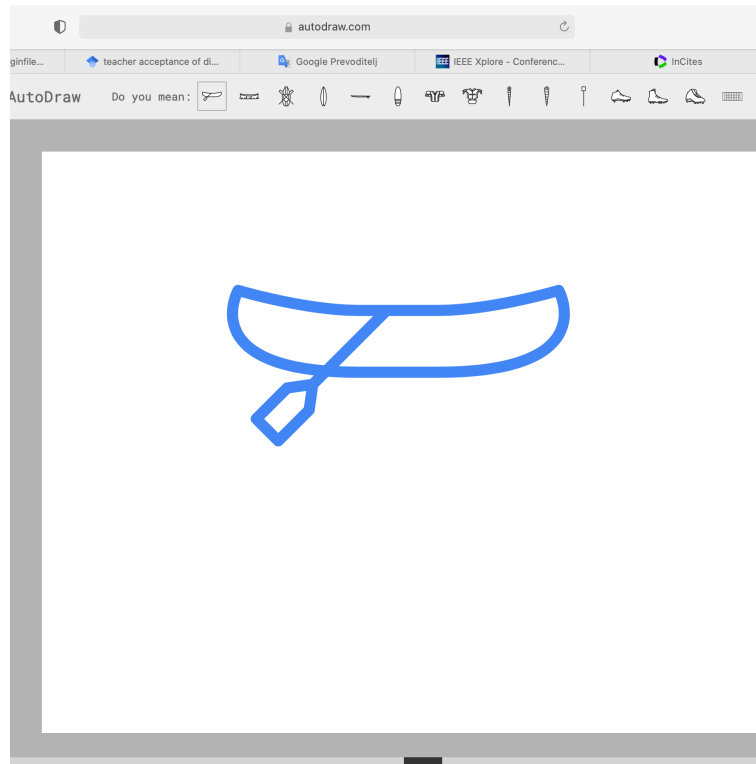
Colorization styles "Tanpopo", "Satsuki" and "Canna" are available.



You can also experience Petalica Paint within pixiv Sketch

Zanimljive poveznice

- <https://www.microsoft.com/en-us/ai/seeing-ai>
- <https://experiments.withgoogle.com/ai/giorgio-cam/view/>
- <https://www.autodraw.com>



Hvala na pažnji!

ivana.ruzic@skole.hr

