



Erasmus+

Practical guide for deploying tablets in the classroom

Erasmus+KA1

Innovation through education

I.gimnazija Osijek

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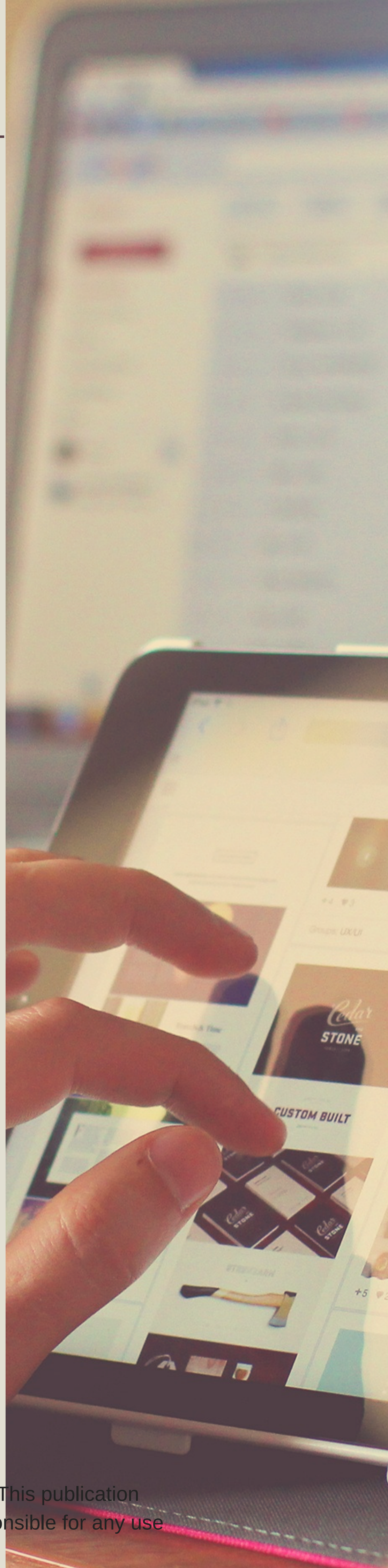


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STRATEGIES AND TIPS FOR LAUNCHING TABLETS IN THE SCHOOL

In this e-book we decided to share our experience of teaching with tablets and smartphones and different ways to use tablets in class for education and entertainment. We will also show some practice examples and what our students have learned.

Why do we use tablets in teaching?

Tablets are mobile within the classroom

Tablets save paper and keep notes

organized in one place

Tablets support digital conversations

Tablets allow us to work from anywhere

Tablets can replace multiple forms of teaching



TAP-SWIPE-PINCH

TABLETS CHANGING THE WAY TO LEARN AND TEACH

Malaga, 18- 24 March 2018.

Nataša Tram, prof.



LIST OF APPS:



Padlet is an application that teachers can use to create an online bulletin board . It can be used to display information for any topic. You can create an account and build a new board. You can add images,links,videos,ideas and more.

Padlet is a great platform for bookmarking and sharing digital content. Padlet is very easy to use. It is web based and does not require any software installation. It allows you to add notes, text, images, videos, and drawings to your wall. You can also add word documents from computer to your Padlet wall. It enhances collaborative work. Multiple people can post to the same wall at the same time.

Some suggested ways to use Padlet in class:

- Use it as a backchannel tool where students can post comments and feedback on what they are learning.**
- Use is as a brainstorming tool. Create a Padlet wall for the whole class where they can collect and share ideas about a given topic.**
- Students can use it as portfolio where they display their best work.You can use the classroom Padlet wall to post assignments and homework reminders to students.**
- Use it as a book review page where students post reviews of the books they read**



- Create walls for major cultural events and holidays of the year and invite students to search for information relevant to each of these events and share them with the class.**
- Classroom Padlet wall can be used as an open space where students engage in group discussions and interactive exchange of ideas.**
- Students can use Padlet for sharing their reflections on what they have learned and what they need help with.**



Nearpod is an interactive presentation and assessment tool for teachers to engage students with interactive lessons.

The app's concept is simple.

A teacher can create presentations that can contain Quizzes, Polls, Videos, Images, Drawing- Boards, Web Content etc.

The students can access a teacher's presentation through a code. It is up to the teacher to then move the class through the presentation and let them interact with the media as they go.

*** I used the Nearpod for the teaching of the Unit Modern and Contemporary Art.**

It was an integrated teaching lesson of the History of Art and English Language.



Coggle is an online tool for creating and sharing mind maps. Whether you're taking notes, brainstorming, planning or doing something awesomely creative. It is super simple to visualise your ideas.

*** I used this app for a mind map in the museum.**



It is an interactive media platform that allows students to use multimedia content and links to share their knowledge and tell their story by tagging images or videos with hotspots that include additional information.



Flipagram is an interactive social photo album, where users can choose pictures from their Instagram profiles, as well as their personal camera roll. Users then arrange their chosen photographs into a slideshow, adding text, music or even a recorded voice narration to help tell their story.

An included editor lets users add effects to photos too. Slideshows can be either 15 seconds long or 30 seconds in length.





Blanka Andrašić-Živalj

TABLETS IN EDUCATION - UPDATE YOUR PEDAGOGICAL APPROACH



Helsinki (22-27 April 2018)





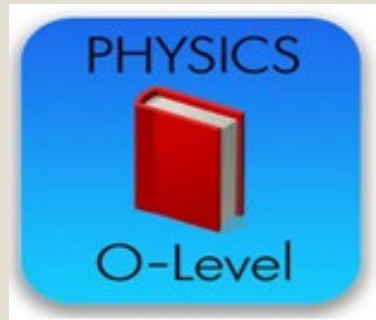
Seesaw – Seesaw is a student-driven digital portfolio. Seesaw empowers students of any age to create, reflect, collaborate and share. Invite families to Seesaw to keep them in the loop about their child’s learning, and easily communicate between school and home. This app is essentially a learning journal that students can upload their best work to and share with their teachers and parents.



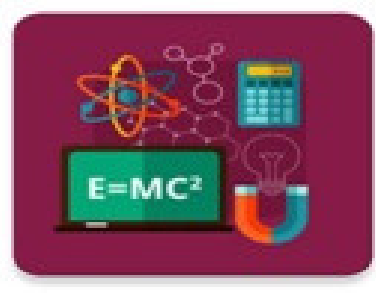
Quizizz – Gives you access to hundreds of ready-made quizzes (English language) or you can make your own. Quizizz is compatible with all devices, tablets and smartphones and can be launch through Google Classroom. The teacher just needs to share the Game ‘Code’ with their students. Complete with points, and leaderboards, students earn points for speed and accuracy. Teachers also get a report on each student so they can monitor who needs help.



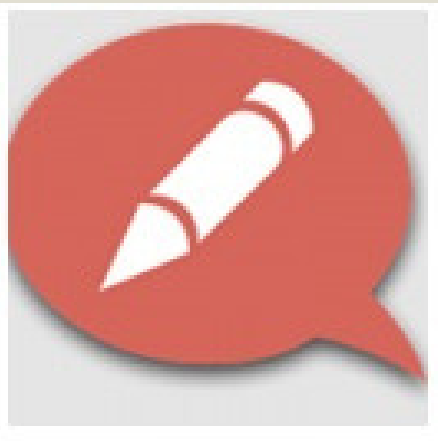
Know Recorder is a free Android app for creating whiteboard-style instructional videos. With Know Recorder installed on your Android tablet you can draw and talk while the app records everything that you do and say. Your video can have multiple pages which is a nice feature when you want to give a multiple step demonstration without having to erase anything.



This app is based on the GCE 'O' Level Physics Syllabus. It covers Chapters, Definitions and Formulas on General Physics, Thermal Physics, Properties of Waves, Electricity and Magnetism, and Atomic Physics.



**Best collection of physics formulas in one app!
Here you will find more than 250 formulas with explanation.
Particularly useful for students who is going to pass physics exams.**



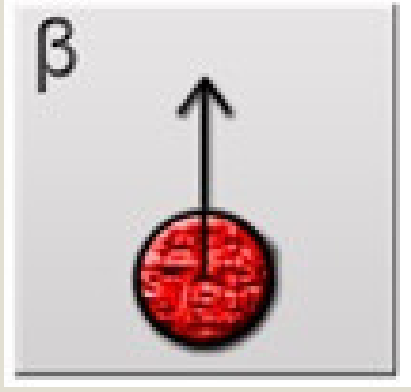
Clarisketch is a free Android app that has great potential for classroom use. The app allows you to take a picture or pull one from your device's camera roll then add your voice to it. While you are talking about your picture you can draw on it to highlight sections of it. Completed projects are shared as links to the video file hosted on Clarisketch.



Explain Everything for Android allows you to create explanatory videos with drawings, text, pictures, PDFs, and your voice. On Explain Everything you can draw on a white canvas while talking to explain how to solve a math problem.

Explain Everything videos are created screen-by-screen. When you've finished talking about one screen, create a new one to add to your video.

You might also like:



Physics Sketchpad is a free Android app that physics teachers may find useful. The app, which is still in beta, provides a simple interface creating simulations of the effects of global gravity on object and gravity between objects. The app also allows users to create collisions to view their effects on objects. The simulations that you create can be saved in your Physics Sketchpad notebooks. Sharing notebooks is a feature advertised for future development.



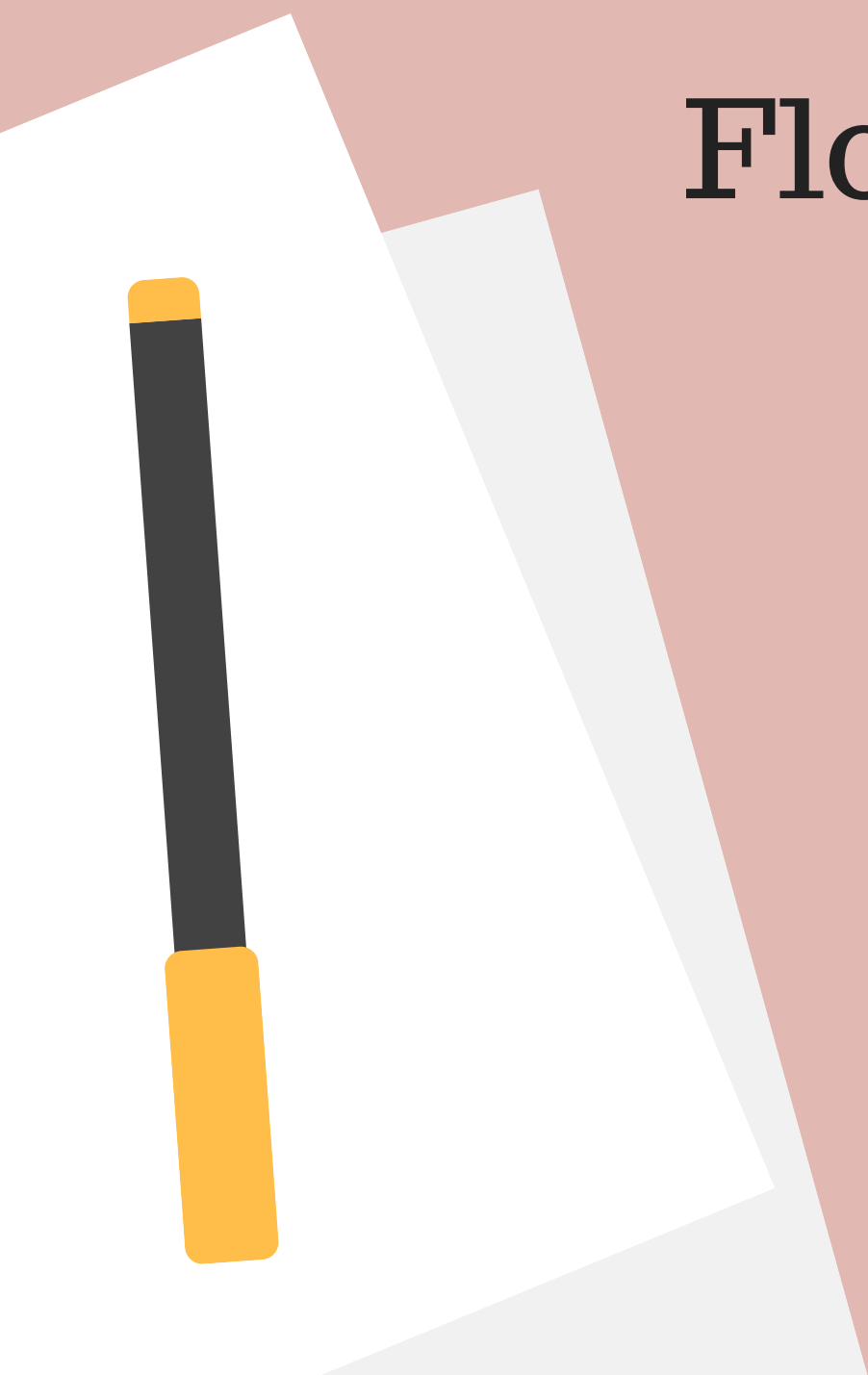
Pocket Physics is easy to use, free education app that covers most of the vital concepts, equations, and formulas of physics. This education application is a must-have guide, whether you want to refresh your knowledge, prepare for an exam, or just refresh the core concepts of physics. Pocket Physics provides discrete explanations of critical concepts taught in an introductory physics course from linear motion to astronomy. It is also a perfect reference, full of formulas, equations, and images for students who need help with physics homework assignments.



Tanja Ivković

Tablets and Smartphones: using mobile devices as educational tools

Florence (10-15 July 2017)



Fun Easy Learn is a language learning app (vocabulary). It is very useful. There are many languages to choose from. There are several categories e.g.: food, health, leisure, transport etc. and their subcategories.



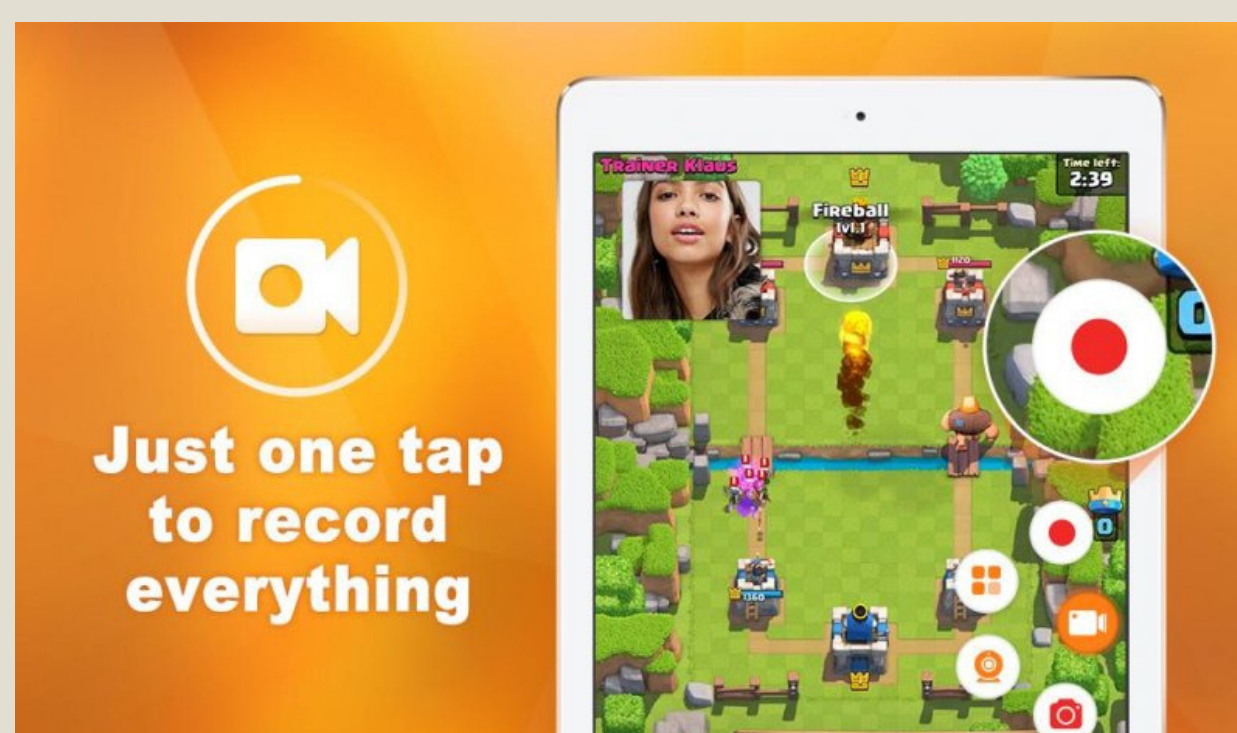
I personally really like the web tool called **Canva**. It is a free graphic-design tool website where you can create beautiful posters, logos, presentations, invitations, cards, brochures etc. My students liked it as well. They enjoyed making postcards and presentations.



Ziteboard and **RealtimeBoard** are the perfect apps for drawing and ideal for math teachers. Ziteboard is zoomable online whiteboard with realtime collaboration.

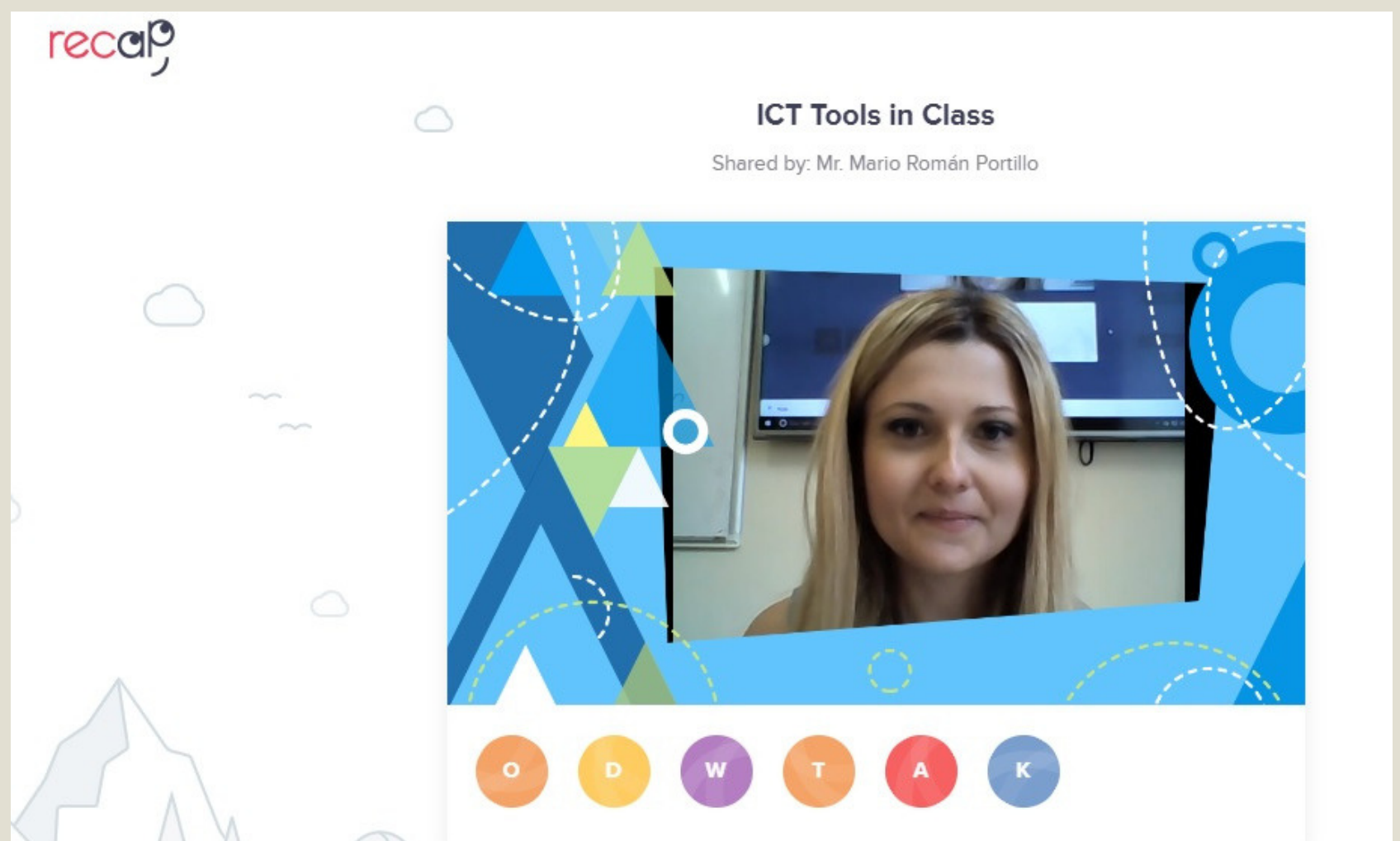


Emaze is an online presentation software. You can use free templates to create amazing presentations. There is a free version and pro/business version. It uses Cloud Based Storage by default, which means that data can be accessed from anywhere. As free user you are limited to 250MB storage and 5 public presentations online. Presentations cannot be downloaded but we were advised to record them using DU recorder - Screen Recorder & Video Editor. Teachers (or students) can write blogs, make photo albums or e-cards in Emaze and even upload PDF files and include them into their presentation. You can use DU recorder tool to record what is happening on your screen. Once you've recorded the video you can also edit it using the editing tool that's been included in the app. I really like it and use it for all of my presentations.



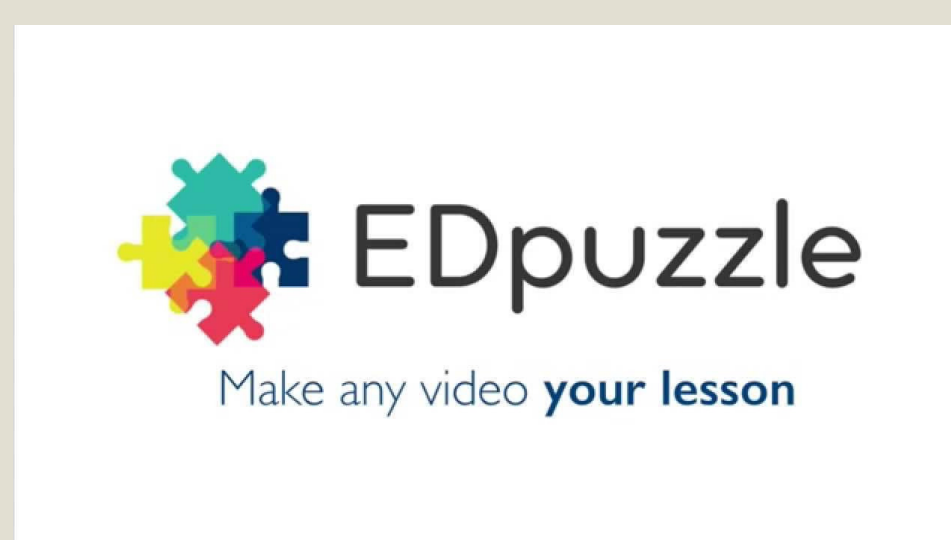
Recap

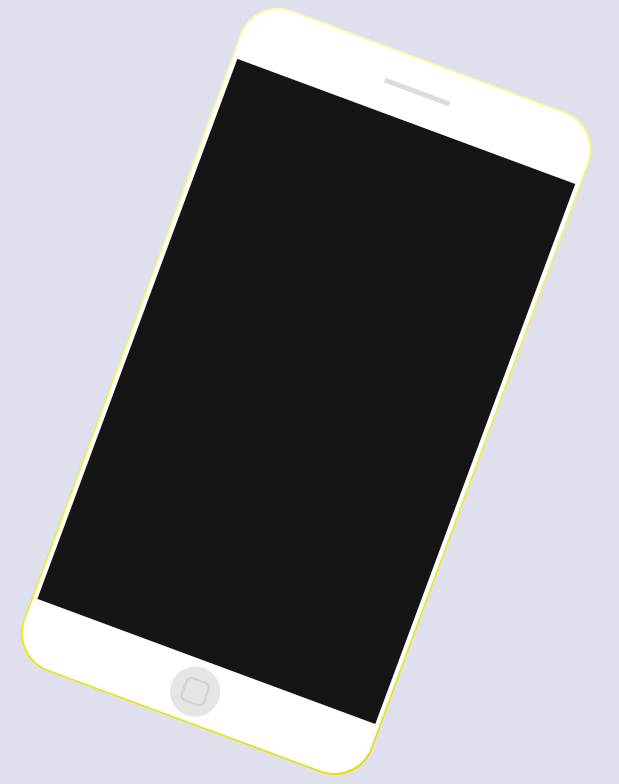
is a video response system / Q&A platform. Students can record themselves while answering questions. Recap can be used for oral examination because sometimes students can feel embarrassed when they have to speak in front of the whole classroom. Students can retake the questions. We can use it to collect data or ask students what they don't understand.



EDPuzzle :

Teachers can access their accounts and prepare materials only on their computers and students can access theirs on their mobile phones or tablets as well. In this app teachers can record their voice, do a voiceover for a role play, cut the videos and even prevent students from skipping the questions. We can make our own videos, or find some on Vimeo or YouTube for our classes. There are several types of questions we can make, e.g. multiple-choice questions, true-false questions, essay questions.

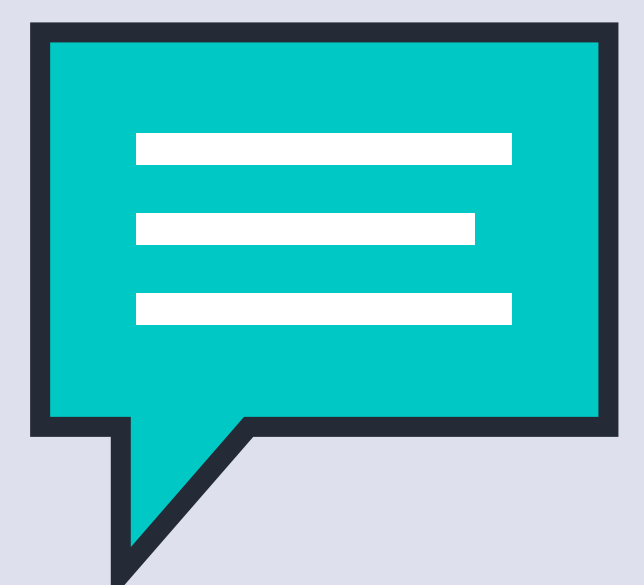
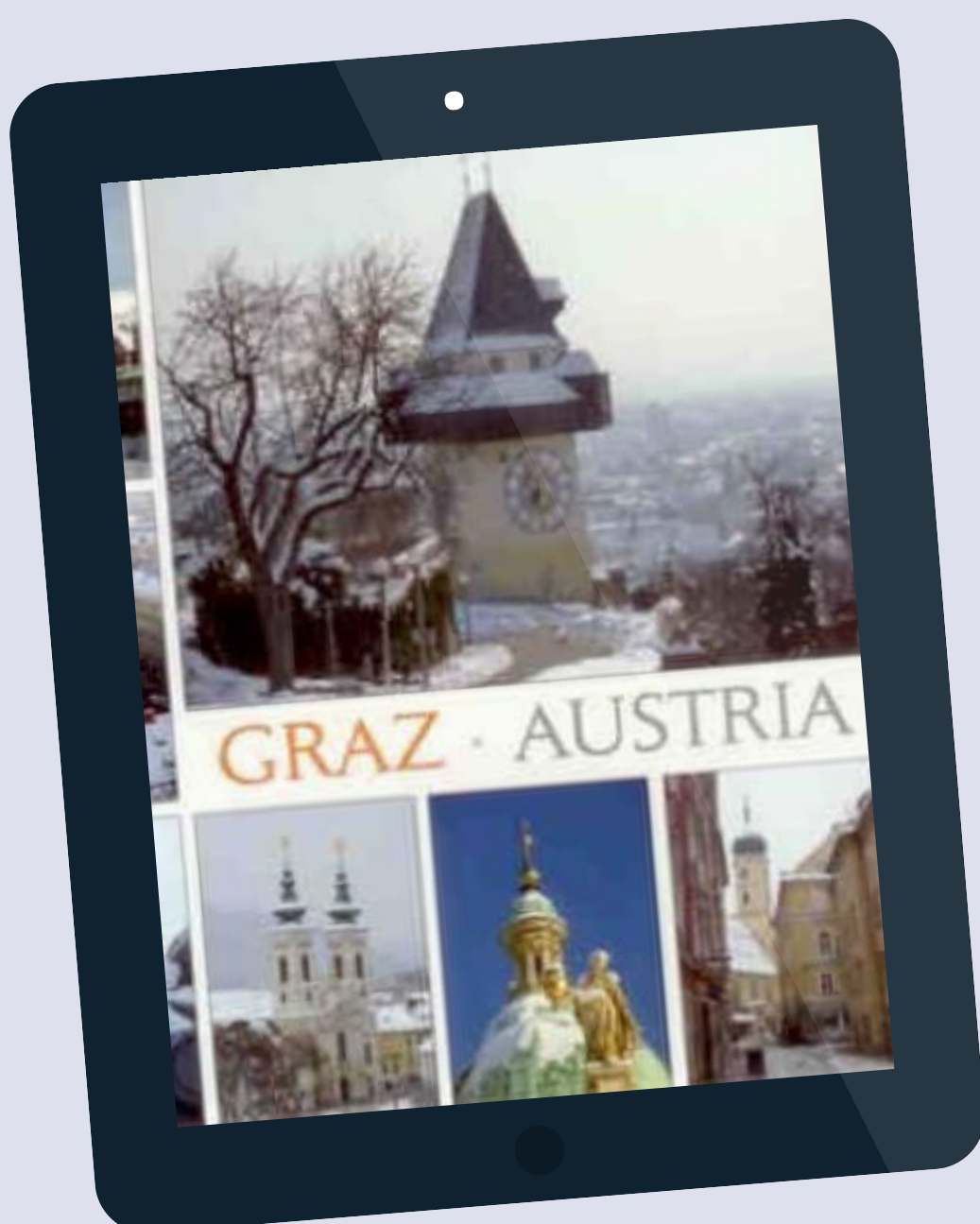




Margareta Princip

TABLETS IN EDUCATION- GET NEW IDEAS

(11- 16 February 2018, Graz)



I teach Croatian language and literature so I use web tools that I can use during my lessons (while teaching grammar and literature). The same web tools and apps can also be used by teachers who teach other subjects. One of the disadvantages of using ICT technology in the classroom is that unfortunately we don't always have a good internet connection. Luckily, not all tools need internet connection.

Quizlet and Classroomscreen can be used offline. **Quizlet** is a digital learning tool . It takes information and converts it into flashcards, quizzes, and games. Test mode gives teachers a chance to prepare different tests for students. **Classroomscreen** is also available in Croatian and it has a countdown timer (or traffic lights) so the students have to perform quickly.

Padlet is an online virtual “bulletin” board, where students and teachers can collaborate, reflect, share links and pictures, in a secure location. You can log in with your already established Google or Facebook account or sign up to create a new Padlet account.

As a teacher, you can create a classroom Padlet wall to post assignments and homework reminders to students. That way everyone can see all the information they need to see. Students can present their ideas there as well, write book reviews, upload photos, graphs and videos.





Personally, I really like the web tool called **Book Creator**. It is a simple tool to create ebooks on iPad, Chromebooks and on the web. It is perfect for Croatian or English teachers . You need to sign up to create a new account. Students can add photos, clips and videos. This tool can really spark and unlock your creativity.

My students and I used it for book reviews. All the students had to read a certain book and one student made an e-book and the rest of the class had to notice similarities and differences between the book they were supposed to read and his book with the similar topic. Students really liked it and were very responsive.

LessonUp helps you to create interactive school materials. You can use your lessons right away in the classroom on your central screen or interactive whiteboard. All you need to do is to sign up and explore.

Plickers

Plickers is a simple powerful tool that lets teachers collect real-time formative assessment data without the need for student devices.

So, how does it work? When you add students into a class, each student is assigned a number that will correspond with the number of the Plicker card that you give them later.

Each student is given a card with a unique visual code (QR code). The code has 4 sides, each lettered A, B, C, and D. The student holds the card so that the letter they choose to answer the question with is at the top of their card. The teacher uses the iOS or Android app on their smart phone to slowly scan the room. The app recognizes the cards, records who the teacher assigned them to, and captures the answer that the student chose. The app will only record each student's answer once.

You can group students into classes online and students don't need tablets or smart phones. I used it as a book review assignment and to check grammar (č and ć).

This app can take up a lot of your time, so you can use it at the beginning of the lesson (to motivate the students) or at the end. The use of ICT provides the chances for students to be active and take more parts or roles for their best learning experience. Teachers should not be afraid of using technology in today's classroom.



A top-down view of a wooden desk. In the top left, a portion of a white laptop is visible, showing the keyboard with keys like 'enter', 'return', 'shift', 'alt', and 'option'. In the top right, a white cup filled with dark coffee sits. Two yellow pencils with pink erasers and green bands are positioned diagonally on the right side of the desk. One pencil has 'SIXON JAPAN' printed on it. A black-bordered box in the lower half of the image contains the text.

**Applying new
knowledge
and skills
(Students &
Teachers)**

STUDENTS

Teacher Tanja Ivković teaches English and German. Her students took part in an eTwinning project with colleagues from Poland. The name of the project was "A bit about us". Students made these postcards and presentations in web tools Canva and Emaze:



<https://app.emaze.com/@AOLWZWIOF/croatiafood>

<https://www.emaze.com/@AOLWZWIOC/tourist-summer-destinations-in-croatia>

<https://www.emaze.com/@AOLWZWLT/croatian-famous-people>

<https://www.emaze.com/@AOLQZRCLW/croatian-traditions-gabrijel-svrek>

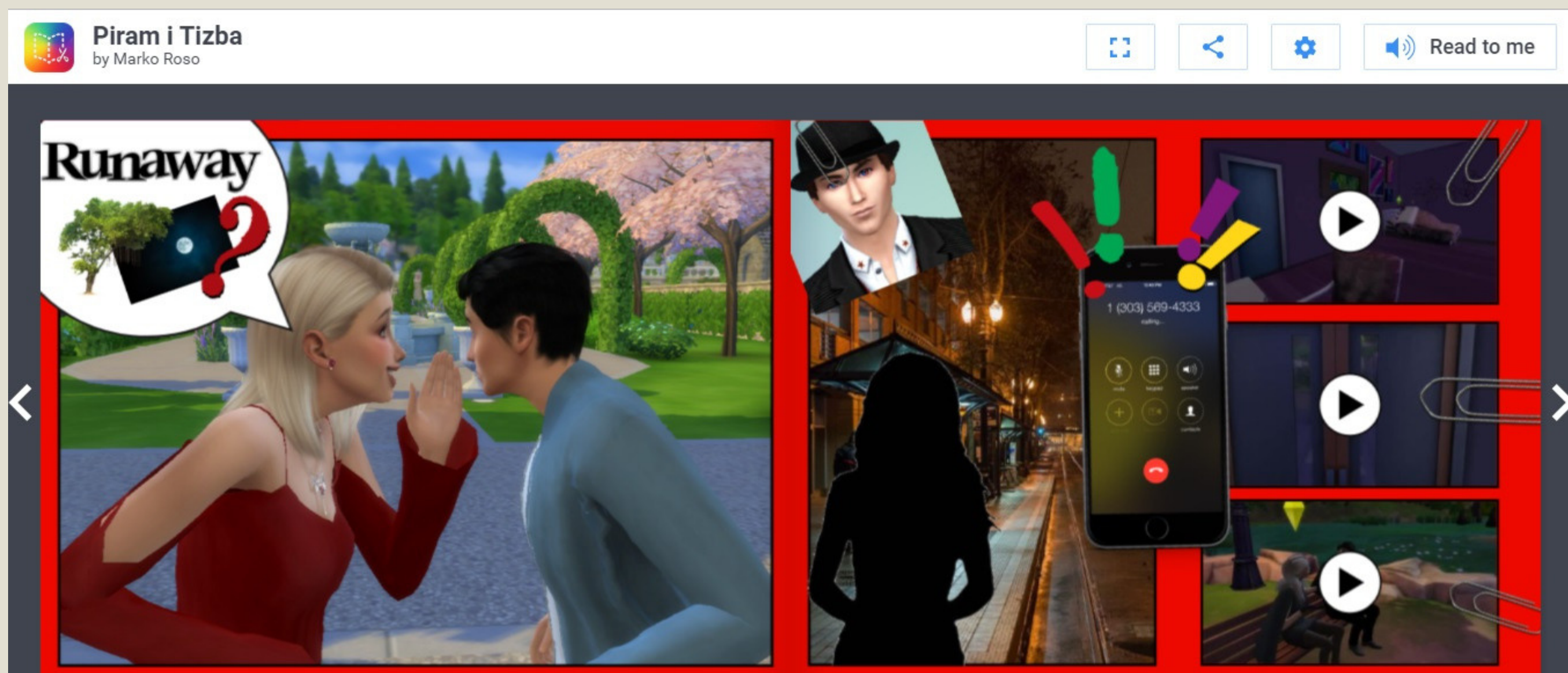
<https://www.emaze.com/@AOLWZWIRF/our-school>

<https://www.emaze.com/@AOLWZWLTR/croatian-most-famous-cities>

<https://www.emaze.com/@AOIRFRCFL/osijek-by-sara>

Teacher Margareta Princip teaches Croatian language and literature. Her students took part in an eTwinning project called "Poznati Slavonci i Zagorci koji su dali obol hrvatskoj kulturi"

Her students also made e-books (as a part of their book reading assignment) using Bookcreator.



<https://read.bookcreator.com/W9g86yaDuYQdaftIxa6zJVO NvJO2/9ZVJ4dxdRzKTKWm17Bsxrg>

<https://twinspace.etwinning.net/66987/pages/page/409322>

<https://read.bookcreator.com/57YudAp3KwemQlYF6spP1Xh8sYr1/6dNUaFpARD6nrhV8Y-oepg>

Teacher Blanka Andrašić-Živalj teaches Physics. Her students created several bulletin boards, exercises, assignments and quizzes using Padlet, Quizizz and Mindomo

padlet SIGN UP LOG IN SHARE ? ...

Energija
Rad, snaga i još puno toga!

Općenito o energiji

- tijelo koje ima veću energiju može obaviti i veći rad
- kada tijelo obavlja rad energija mu se smanjuje, a kada se rad obavlja na tijelu energija mu se povećava
- rad se može pretvoriti u energiju i energija u rad, pa zbog toga rad i energija imaju istu jedinicu, džul [J]

Osnovni oblici energije

- susrećemo mehanički i nemehanički oblik energije
- u mehaničku energiju ubrajamo potencijalnu i kinetičku energiju
- u nemehaničke oblike energije ubrajamo sve ostale oblike kao što su električna, sunčana, kemijska, nuklearna, itd.

Kinetička energija

- neko tijelo ima kinetičku energiju ako može obaviti rad zbog toga što se giba određenom brzinom
- veća što se čestice brže gibaju i što imaju veću masu
- njegova kinetička energija ovisi o masi tijela i kvadratu brzine kojom se to tijelo giba

$$E_k = \frac{m \cdot v^2}{2}$$

Potencijalna energija

- potencijalnu energiju ima svako ono tijelo koje je sposobno obaviti neki rad zbog svog položaja u odnosu prema ostalim tijelima
- potencijalna energija ovisi o masi tijela i visini (položaju) na kojoj se tijelo nalazi

$$E_p = m \cdot g \cdot h$$

Gravitacijska potencijalna energija

- Energija koju tijelo ima zbog svog položaja na nekoj visini naziva se gravitacijska potencijalna energija
- označava sa E_{gp}
- povećava se povećanjem težine, odnosno mase tijela i visine na kojoj se ono nalazi
- formula: $E_{gp} = mgh$

Impuls sile i količina gibanja video primjer:

<https://edutorij.e-skole.hr/share/proxy/alfresco-noauth/edutorij/api/proxy-guest/cb9c95d4-ad59-40d1-8a35-b47b2f60254d/video/11531-0-kugle-na-mp4-1526302748346.mp4>

Neelastični sudar

Da bi to bio neelastični sudar, kuglice moraju biti gline. Kuglice upadaju pod nekim kutem jedna na drugu i dolazi do stapanja tj. nastaje jedna kuglica koja se giba brzinom većom i od brzine prve kuglice i brzinom većom od brzine druge kuglice, ali budući da dolazi do gubitka energije ta brzina nije zbroj brzine prve i brzine druge kuglice nego nešto manji broj.

Elastični sudar

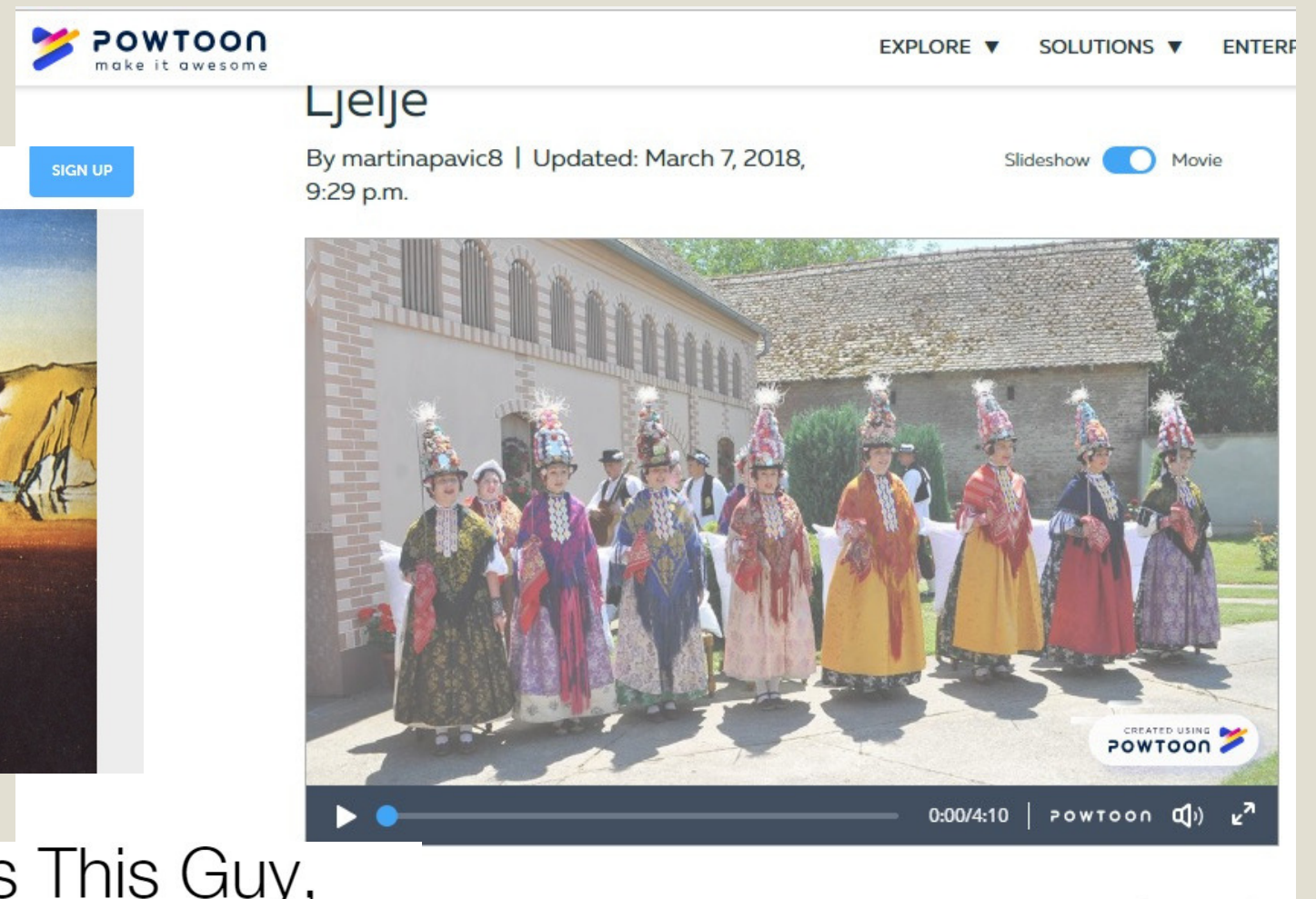
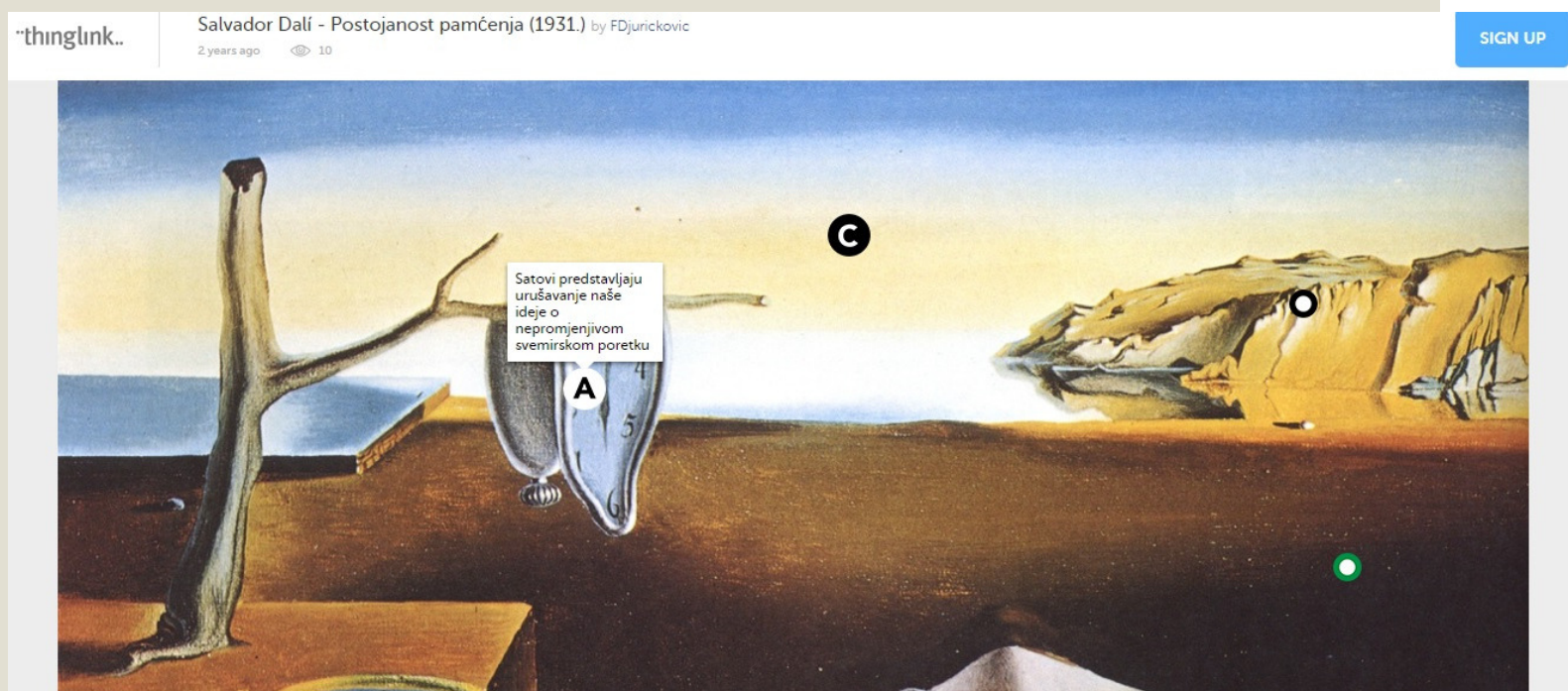
Kuglice različitih masa i različitih brzina nalije jedna na drugu i sudar se centralno te se odbijaju jedna od druge. Budući da je sudar elastičan. Nakon sudara kuglice nastavljaju gibati u suprotnom smjeru, mase im ostaju iste ali su im brzine promijenile.

<https://quizizz.com/admin/quiz/5b0c44c77e9a14001a2e415e>

<https://padlet.com/lacivodli5/5h1wmzf5voeu>

<https://www.mindomo.com/mindmap/valovi-i-njihova-svojstva-df1bed2fcef64d43aa9722b026ad8c3d>

Teacher Nataša Tram is an Art teacher. Her students took part in an eTwinning project. They made videos about Croatian tradition Ljelje using PowToon web tool. Her students also created lesson using EdTed and Thinglink.



Michelangelo Biography: Who Was This Guy, Really? | Art History Lesson

LESSON CREATED BY NIKOLINA MEZNARIC USING **TEDEd**
VIDEO FROM **Artrageous with Nate** YOUTUBE CHANNEL

Let's Begin...
Proučavat ćemo život Michelangela.



- Watch
- Think
- Dig Deeper
- Discuss

<https://www.powtoon.com/online-presentation/fANIT8XOVAf/?>

[utm_campaign= copy%2Bshare%2Bby%2Bowner&utm_medium= SocialShare&mode= movie&utm_source= player-page-social-share&utm_content= fANIT8XOVAf](https://www.powtoon.com/online-presentation/fANIT8XOVAf/?utm_campaign=copy%2Bshare%2Bby%2Bowner&utm_medium=SocialShare&mode=movie&utm_source=player-page-social-share&utm_content=fANIT8XOVAf)

<https://ed.ted.com/on/2Wfgw0kk#finally>

<https://www.thinglink.com/scene/773934294648225793>

<https://www.thinglink.com/scene/773613058747531264>

TEACHERS

Teacher Nataša made a mobility poster using Piktochart.

Class observation-In April 2018, Art teacher Marko Babić observed the class of his colleague Nataša Tram, who used some of tablet applications in her lesson on Roman architecture. She made the whole lesson in Nearpod.



Teacher Margareta made a mobility poster using Piktochart.

Class observation-School pedagogue

Vlasta Knežević observed the class of the teacher Margareta Princip, where she applied what she has learned during her course.

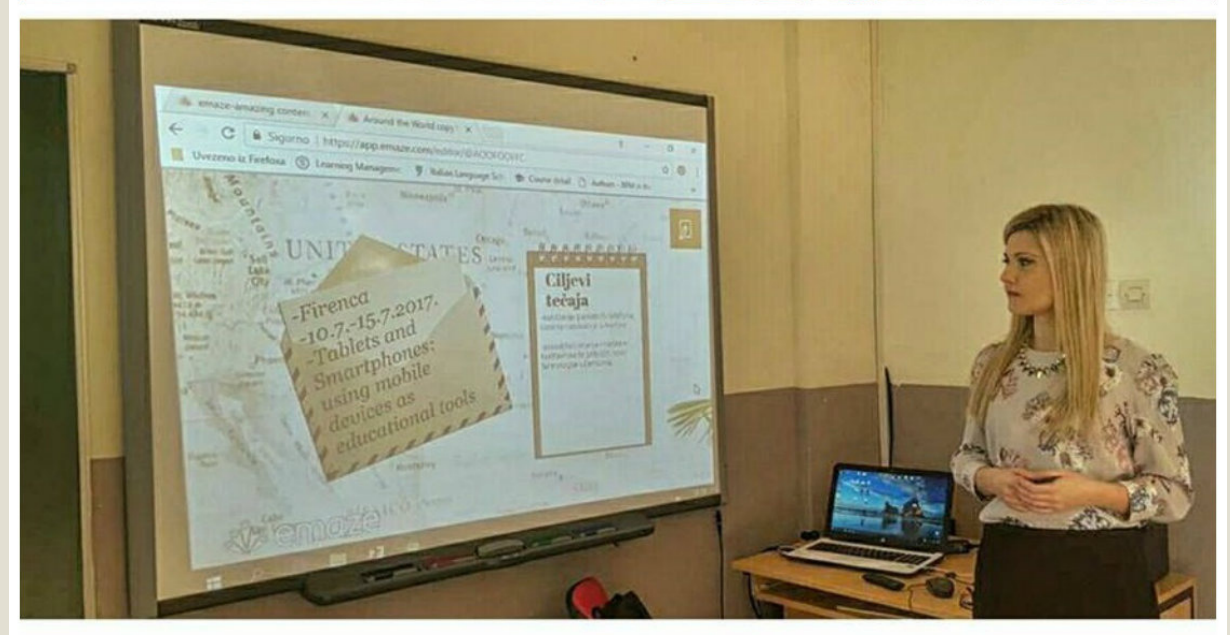
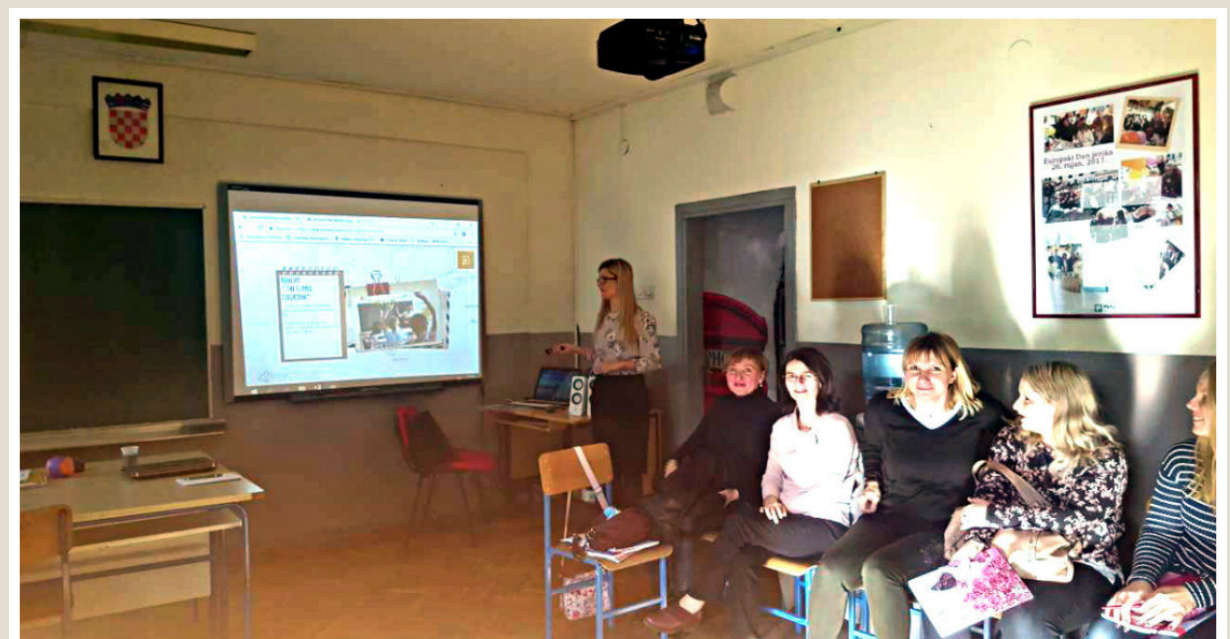
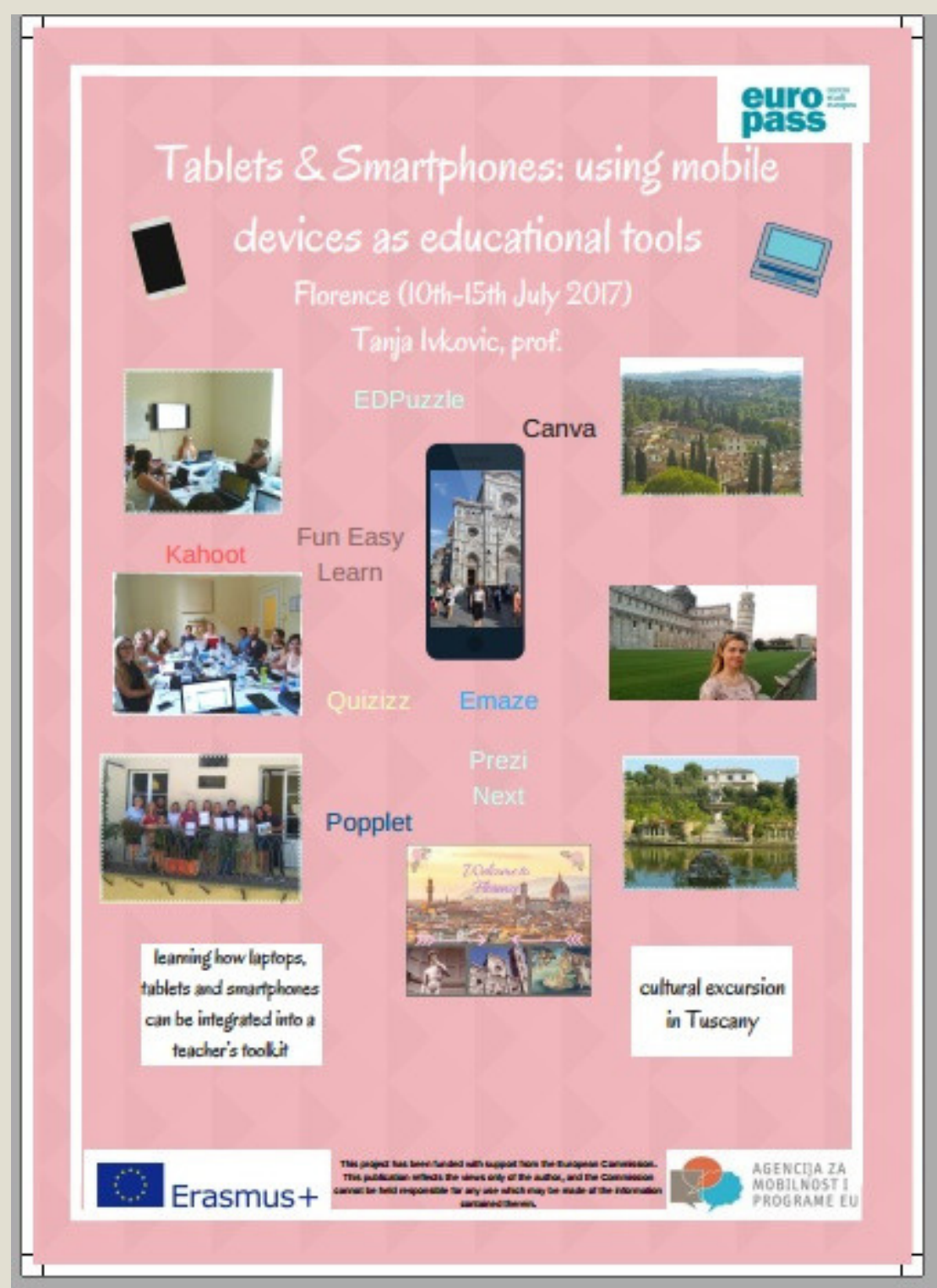
She used Plickers (with QR codes).



Teacher Tanja made a presentation in web tool Emaze and presented her mobility and its results at the Županijsko stručno vijeće nastavnika njemačkog i engleskog jezika OB županije.

She also used web tool Canva to make her mobility poster. She used Quizizz to make quizzes for the students.

<http://app.emaze.com/@A00F00FFC/tablets-and-smartphones-erasmus--tanja%20Attachments%20area#1>



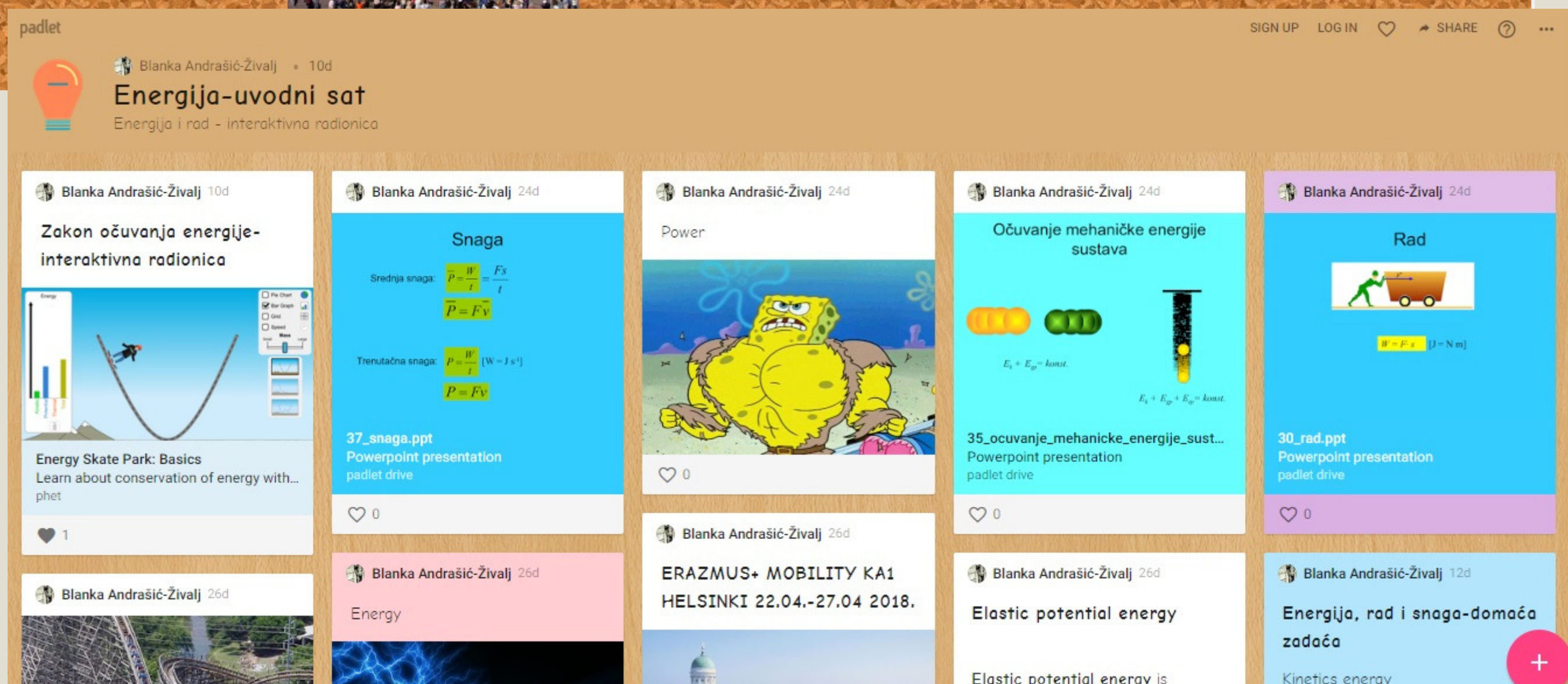
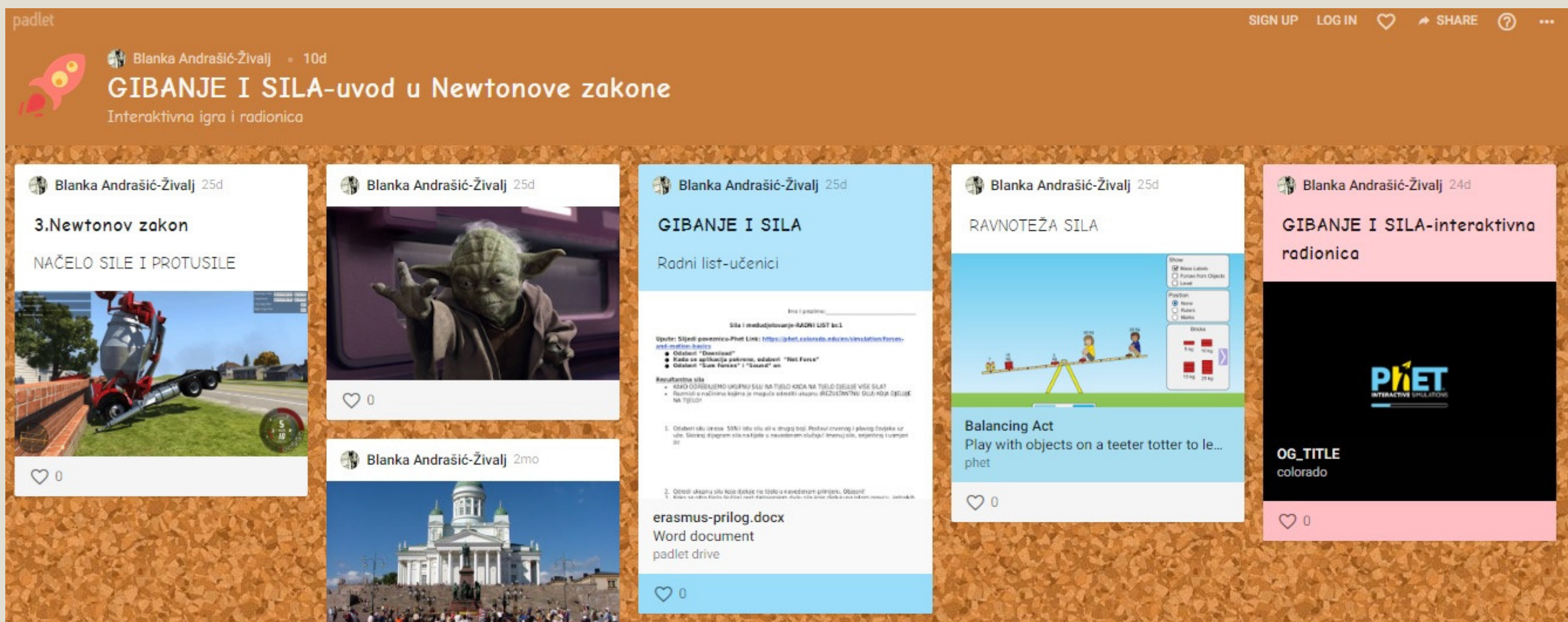
Teacher Blanka prepared her teaching materials using Padlet. She also prepared quizzes for her students using Quizizz.

https://padlet.com/blanka_andrasic_zivalj/55lm3n3lpr33

https://padlet.com/blanka_andrasic_zivalj/hj4rcatg8ov

https://quizizz.com/admin/quiz/5b0a8e511dc4e000193dc342

https://quizizz.com/admin/quiz/5af34101cce390001f5e5df6



Useful links

<https://www.canva.com/>

<https://quizizz.com/>

<https://kahoot.it/>

<https://edpuzzle.com>

<https://prezi.com/business/kb/get-started/get-started/>

<https://popplet.com/>

<https://spark.adobe.com/>

<https://screencast-o-matic.com/>

<https://www.thinglink.com/>

[https://play.google.com/store/apps/details?
id=Gecko.Droid.PhysicsHelper](https://play.google.com/store/apps/details?id=Gecko.Droid.PhysicsHelper)

<https://ed.ted.com/>

<https://coggle.it/>

<https://www.4danatomy.com/>

<https://www.plickers.com/>

<https://padlet.com/>

<https://nearpod.com/>

<https://www.mindomo.com/>