



viki

Central Repository of Digital Educational Content



IMPLEMENTATION PROJECT

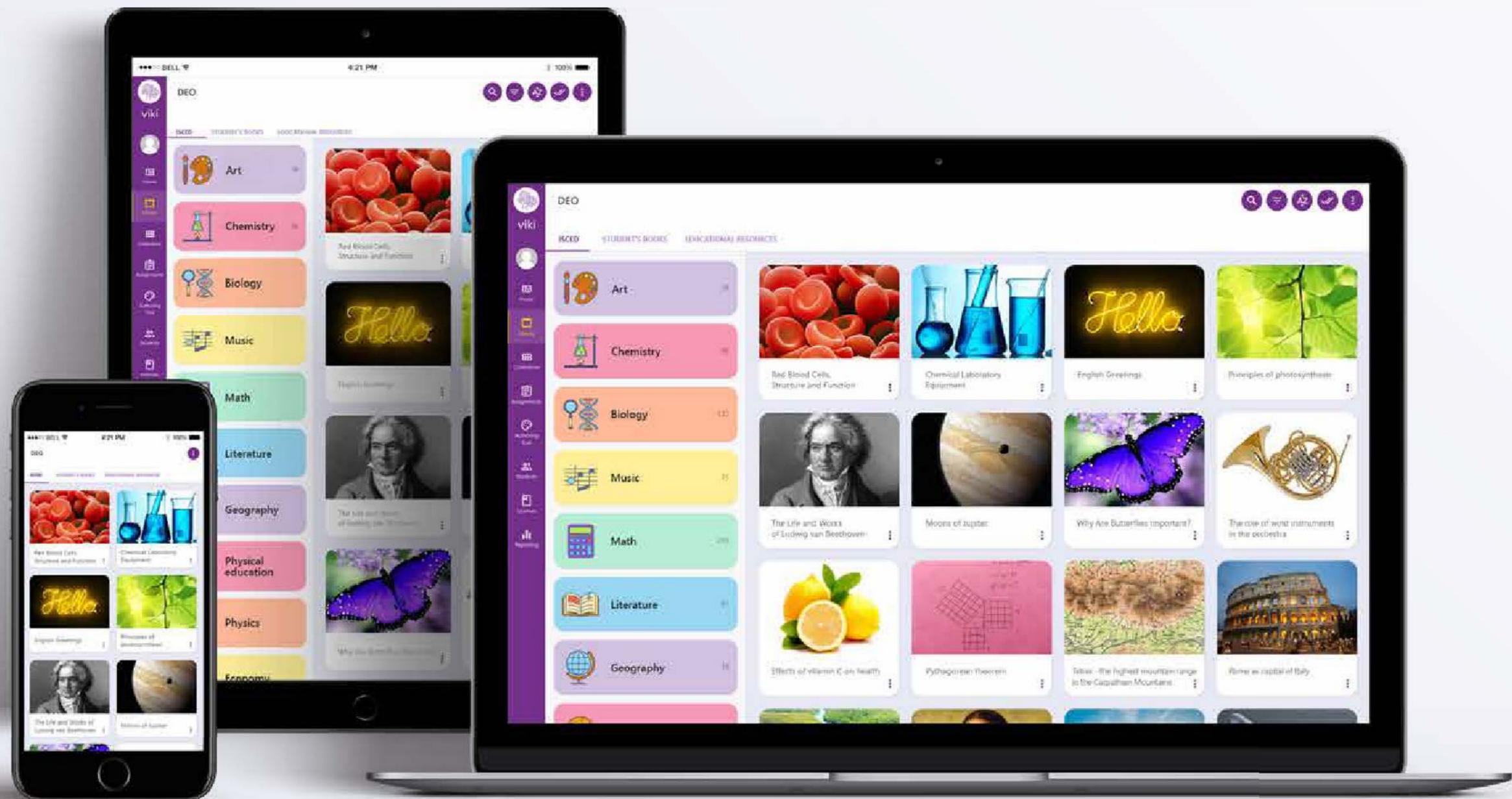
for the Ministry of Education, Science, Research
and Sport of the Slovak Republic, Europe

viki.iedu.sk

Introduction

The Central Repository of Digital Educational Content is a technology platform ("the CRDEC" or "Viki") that makes digital educational content (hereinafter "DEC") accessible to teachers, pupils, parents and the general public. The content is available online anytime and anywhere, and everything is adapted for mobile phones, tablets and computers. This comprehensive online learning platform provides broad functionality to support modern digital education at school and home. It is operated as 'Viki' by the Ministry of Education, Science, Research and Sport of the Slovak Republic ("the Ministry of Education").

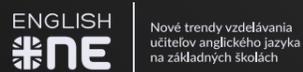
Viki provides effective tools for content creation and publishing, teacher and pupil work, online task assignment and evaluation, interactive classroom lessons, as well as various reports and statistics. The quality of published DEC is ensured by an integrated system for evaluating by external evaluators, either by individual evaluators or by a committee of evaluators before content publication. The platform has a multilingual interface, and is also accessible as mobile apps.



Fragmented DEC

Between 2009 and 2018, the Ministry of Education carried out several projects in which various DEC was procured. This content was gradually made available mostly to select users on specific, technologically-diverse platforms.

Participants in DEC preparation:

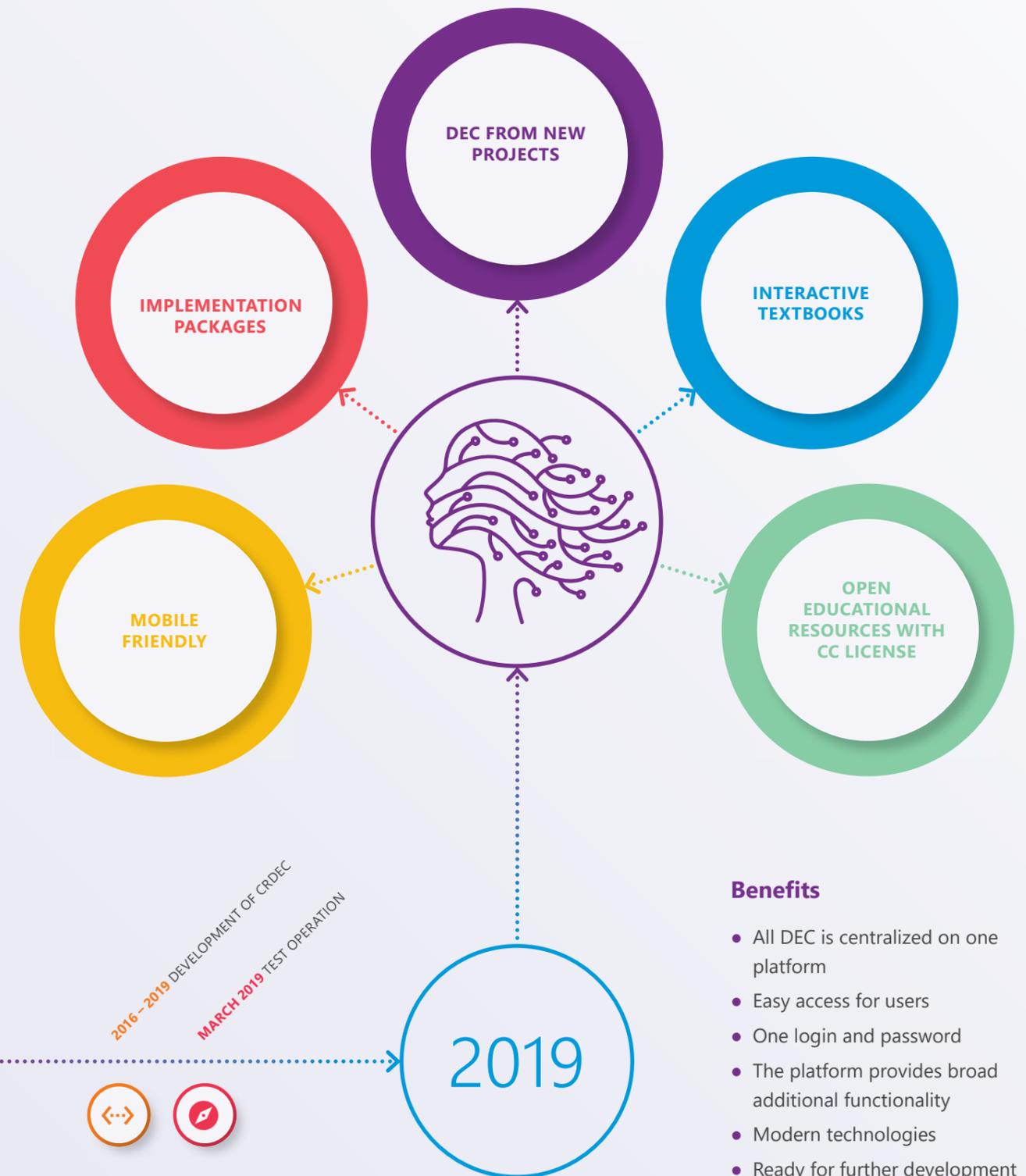


Disadvantages:

- DEC deployed on various platforms
- Often difficult to access by users
- Obsolete technologies
- Absence of further development and modernisation

Central Repository of Digital Educational Content

Since 2019, the DEC procured by the Ministry of Education has been centralized and accessible on a single technology platform. It provides a wide range of opportunities for interactive teaching, and creating new content by teachers, pupils and publishers. The platform is ready for further updates and expansion with additional content and functionality.



Benefits

- All DEC is centralized on one platform
- Easy access for users
- One login and password
- The platform provides broad additional functionality
- Modern technologies
- Ready for further development



viki

What does Viki enable?

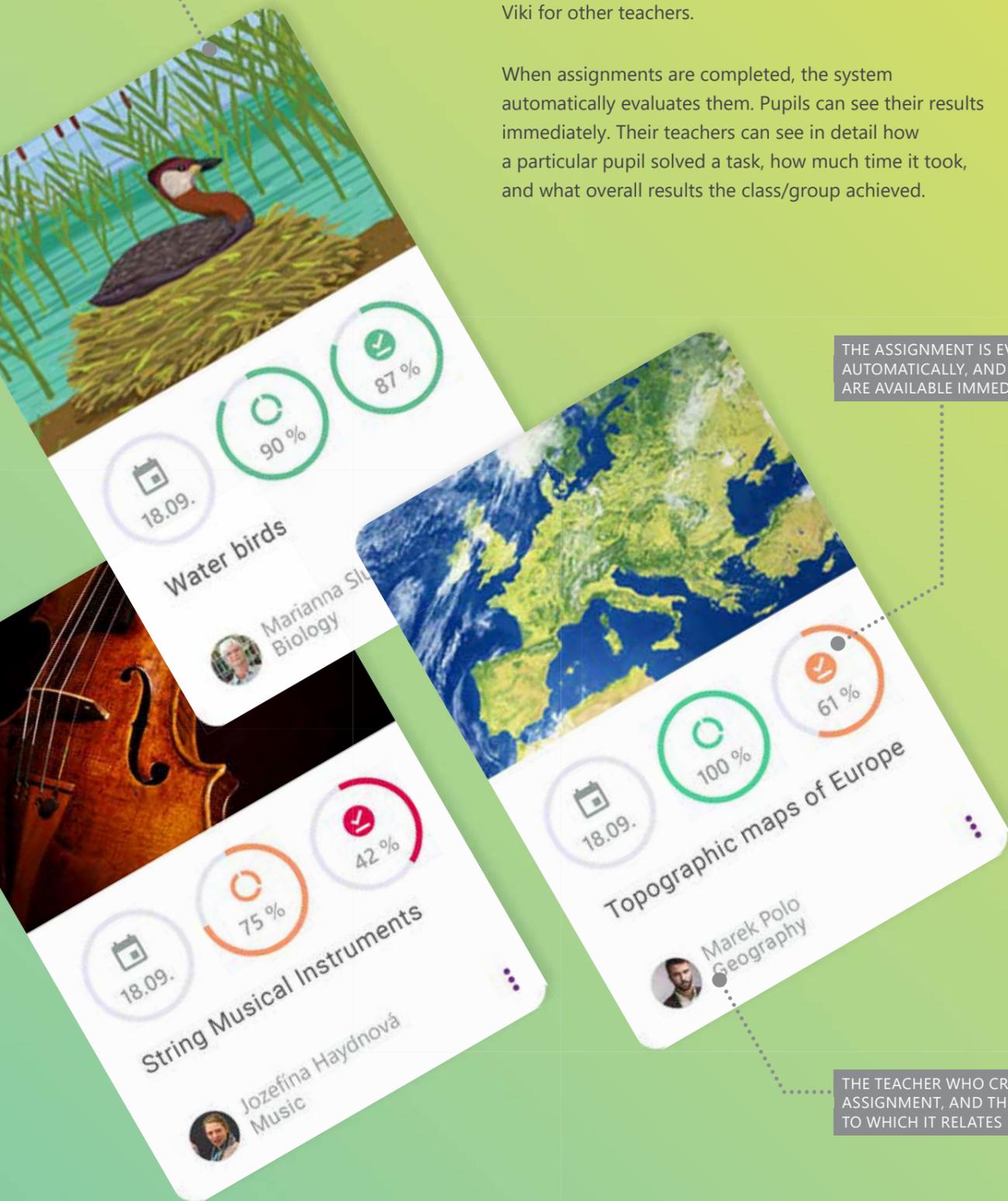
PLATFORM FEATURES AND MODULES

Assignments

Teachers can easily create and assign online assignments, which pupils can work on at school or home. They can add DEC from the library to the assignments, create quizzes, and add multimedia and various content from the internet. They can make templates from created assignments, and reuse them at any time or publish on Viki for other teachers.

When assignments are completed, the system automatically evaluates them. Pupils can see their results immediately. Their teachers can see in detail how a particular pupil solved a task, how much time it took, and what overall results the class/group achieved.

OPTIONAL PREVIEW
IMAGE OF AN ASSIGNMENT



THE ASSIGNMENT IS EVALUATED
AUTOMATICALLY, AND RESULTS
ARE AVAILABLE IMMEDIATELY

THE TEACHER WHO CREATED THE
ASSIGNMENT, AND THE SUBJECT
TO WHICH IT RELATES

Students and groups

Teachers can create groups of pupils for specific needs. So assignments can be given to individual pupils as well as whole groups for work during class. Teachers can also see the activity's results and statistics, and the success of their pupils and groups.

PUPIL DETAILS WITH AVERAGE EVALUATION,
PARTICIPATION ON ASSIGNMENTS, AND
A LIST OF GROUPS AND CLASSES WHICH
HE/SHE BELONGS TO



CONCISE LISTS OF
ALL PUPILS, GROUPS
AND CLASSES WITH SEARCH
AND FILTER

Collections

Teachers and pupils can easily create their own educational materials. They can create collections of content available on the platform and add their own files, multimedia, text, and various content from the internet. The collections on Viki are similar to presentations from slides, yet creating and linking them to DEC is even easier and presentation more attractive.

Teachers can create assignments for pupils from the collections, and also publish their collections for other users.

IN A COLLECTION VARIOUS EDUCATIONAL RESOURCES CAN BE COMBINED OR CREATED ANEW

Authoring tool

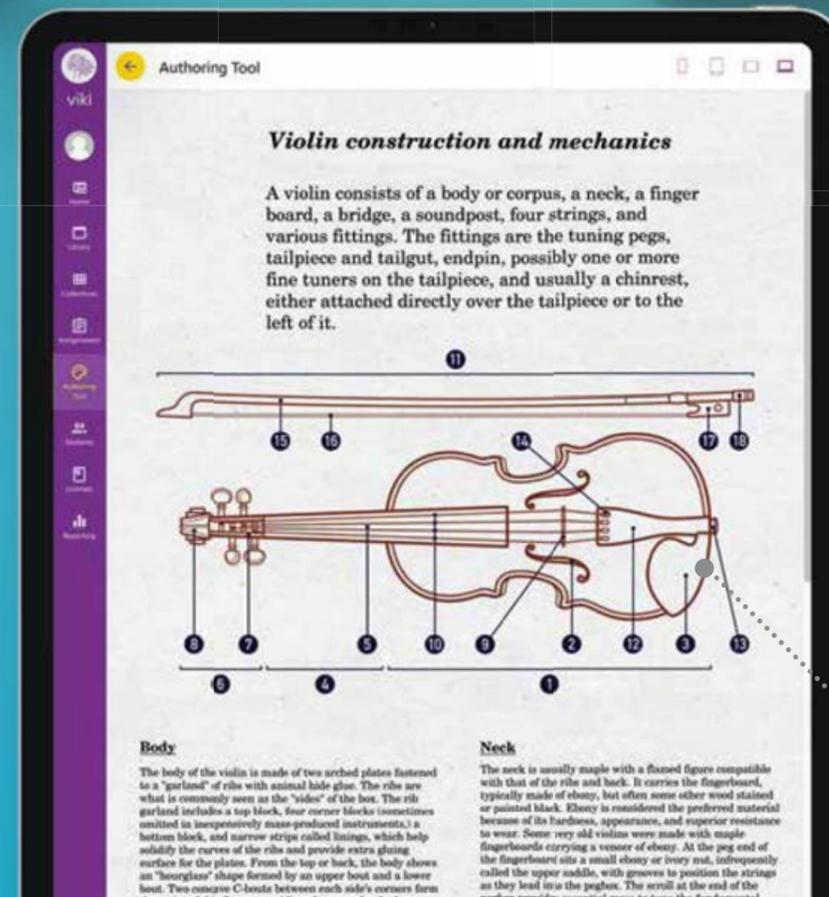
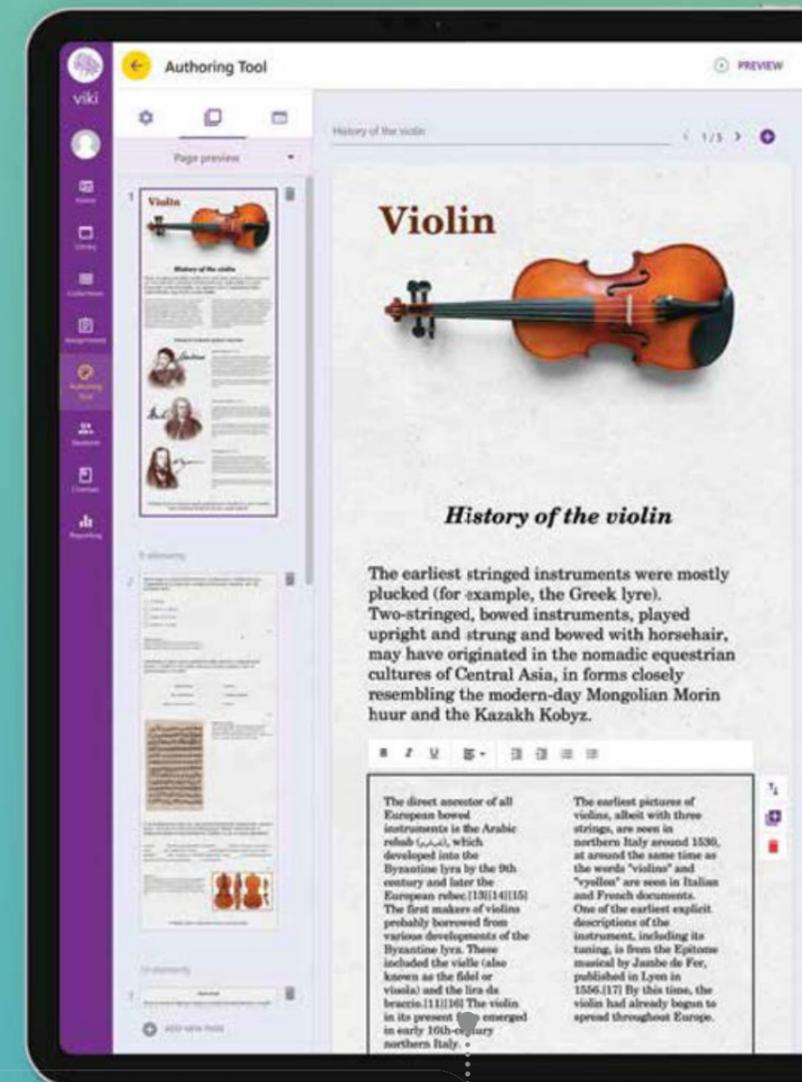
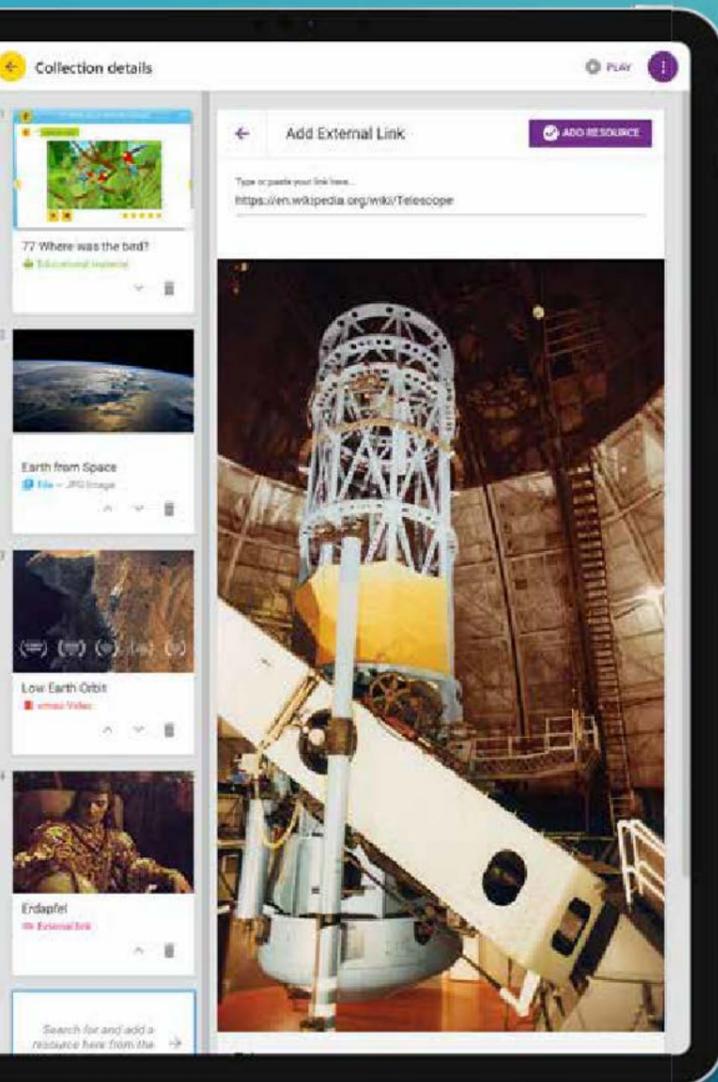
Teachers also have an authoring tool available to create more complex, graphically-engaging and more structured lessons. They can combine headlines, text blocks, image galleries, videos, audio, internet resources, as well as custom quizzes.

When creating a lesson, a teacher can preview how a lesson will look on a mobile phone, tablet, or computer to adjust content layout.

EXTENSIVE EDITING OPTIONS ALLOW ENGAGING AND CLEAR LESSONS CREATION

Lessons can be presented to pupils in the classroom, and distributed, shared, or published on the platform.

TEACHERS CAN ADD IMAGES, TEXTS, MULTIMEDIA, QUIZZES AND VARIOUS RESOURCES FROM THE INTERNET TO LESSONS



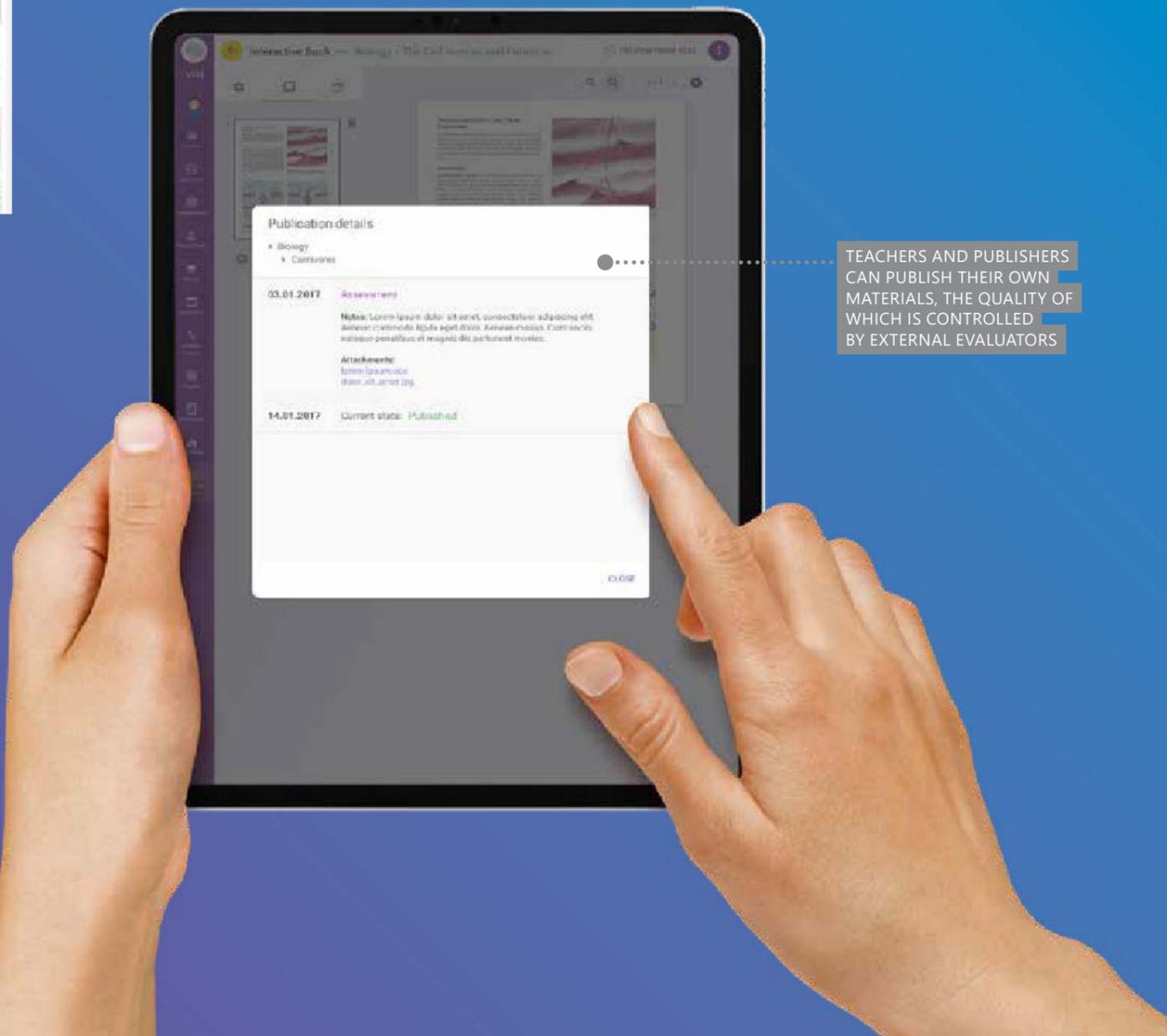
Publishing

Viki is a platform that promotes the distribution and sharing of high-quality content created by users, which increases productivity. Teachers and publishers can publish their own materials on the platform, and integrate them into educational structures for other users.

The platform uses the Dublin Core metadata standard for clear cataloguing and subsequent easy content navigation, which must be filled in for each published material.

In order to ensure that high-quality content is published on the platform, publication is subject to an evaluation process. Before publishing on Viki, external evaluators assess the quality of content through an integrated system. This can be done either by individual evaluators or by a committee of several evaluators.

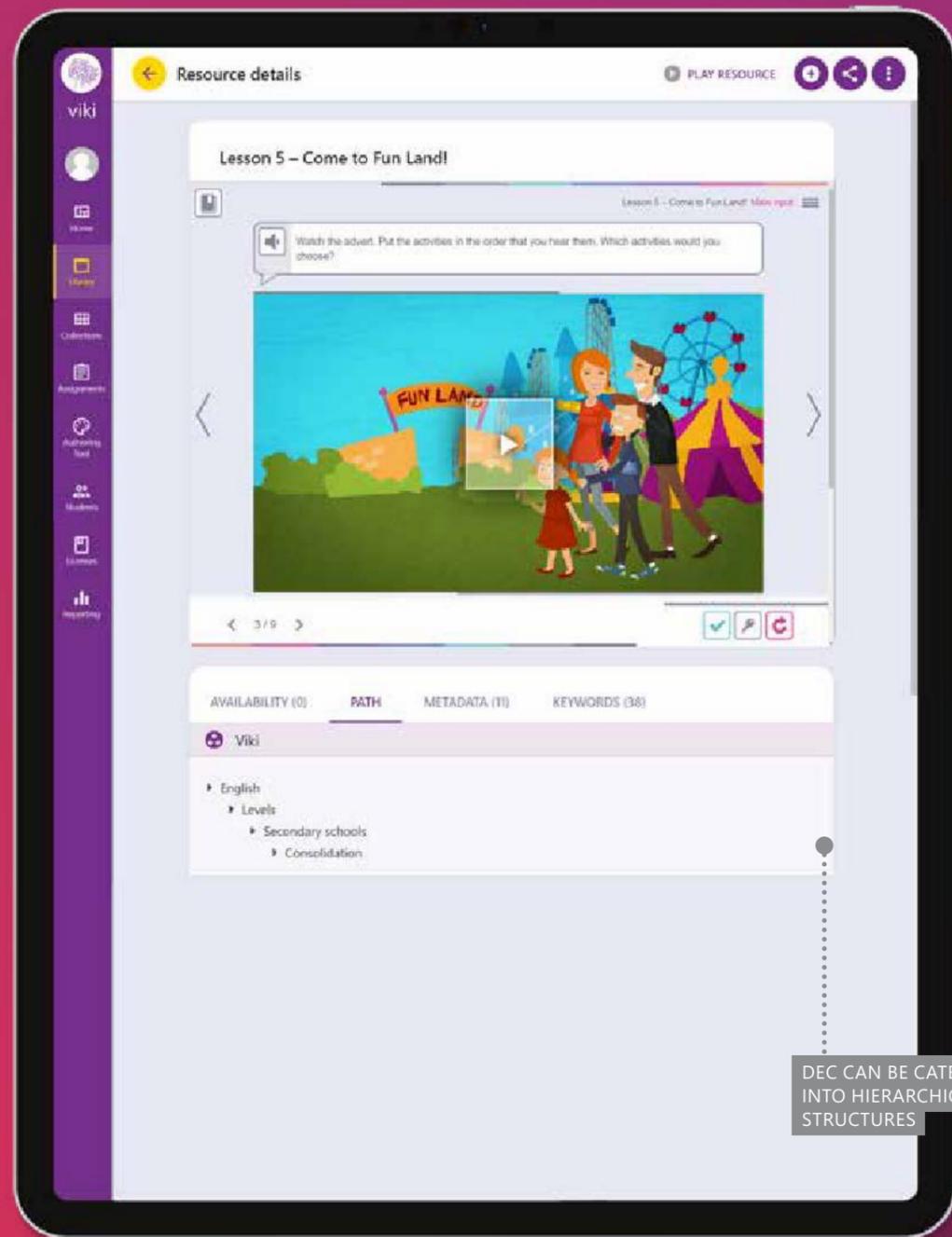
TEACHERS AND PUBLISHERS CAN PUBLISH THEIR OWN MATERIALS, THE QUALITY OF WHICH IS CONTROLLED BY EXTERNAL EVALUATORS



Interactive books

Viki also provides support for book and textbook publishers. They can enrich their printed or electronic books with multimedia and interactive components to increase their attractiveness and range of use. They can add any DEC from the content library, as well as image galleries, videos, audio, internet resources, explanations, etc.

In this way, publishers will expand their activities, and pupils and teachers will receive more valuable and engaging educational content. Such interactive books can be subject to licensing policies used to manage access for different users on Viki.



Content management

Administrators have many options to manage content on the platform. The platform allows the bulk uploading of large content volumes, as well as the individual management of educational materials. Emphasis is placed on entering detailed Dublin Core metadata as well as additional keywords, making it easy for users to find the right content.

Content is displayed in hierarchical navigation structures, which can be created according to the national curriculum as well as own educational programmes.

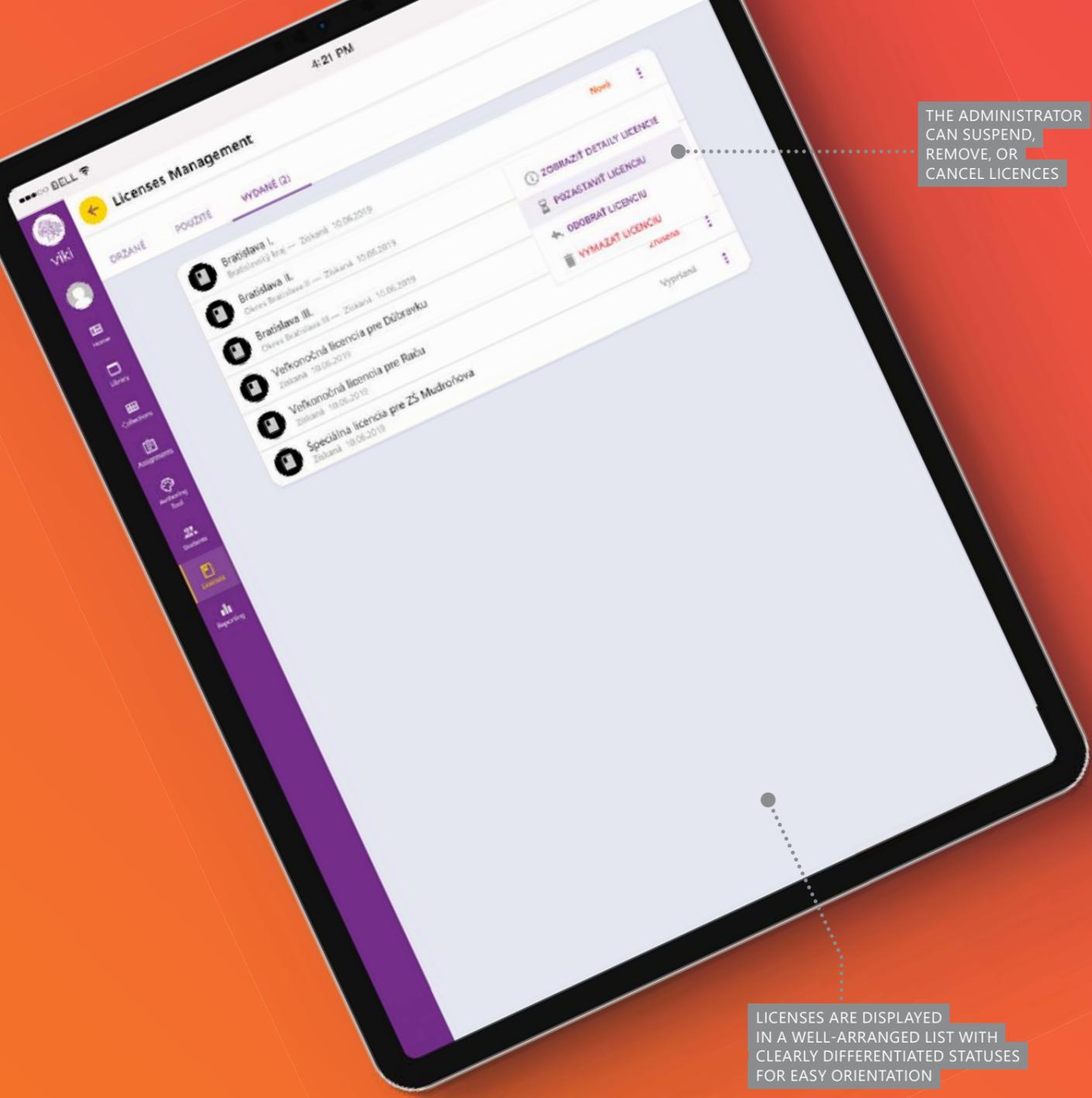
Management of organizational structure

The platform is implemented at the national level, where all users and organizational units are managed in a hierarchical structure comprising individual regions, districts and schools.

So on Viki, each organizational unit can have its own users, as well as own content library, tasks, licenses, etc. Here, for example, it can be ensured that educational content is only made available to selected regions in accordance with the requirements of projects funded by European Structural Funds.

Schools have the option to grant licenses for specific content to their pupils or only selected classes. From the materials posted on the platform, they can create their own educational programme and curriculum, etc.





THE ADMINISTRATOR CAN SUSPEND, REMOVE, OR CANCEL LICENCES

LICENSES ARE DISPLAYED IN A WELL-ARRANGED LIST WITH CLEARLY DIFFERENTIATED STATUSES FOR EASY ORIENTATION

Content licensing

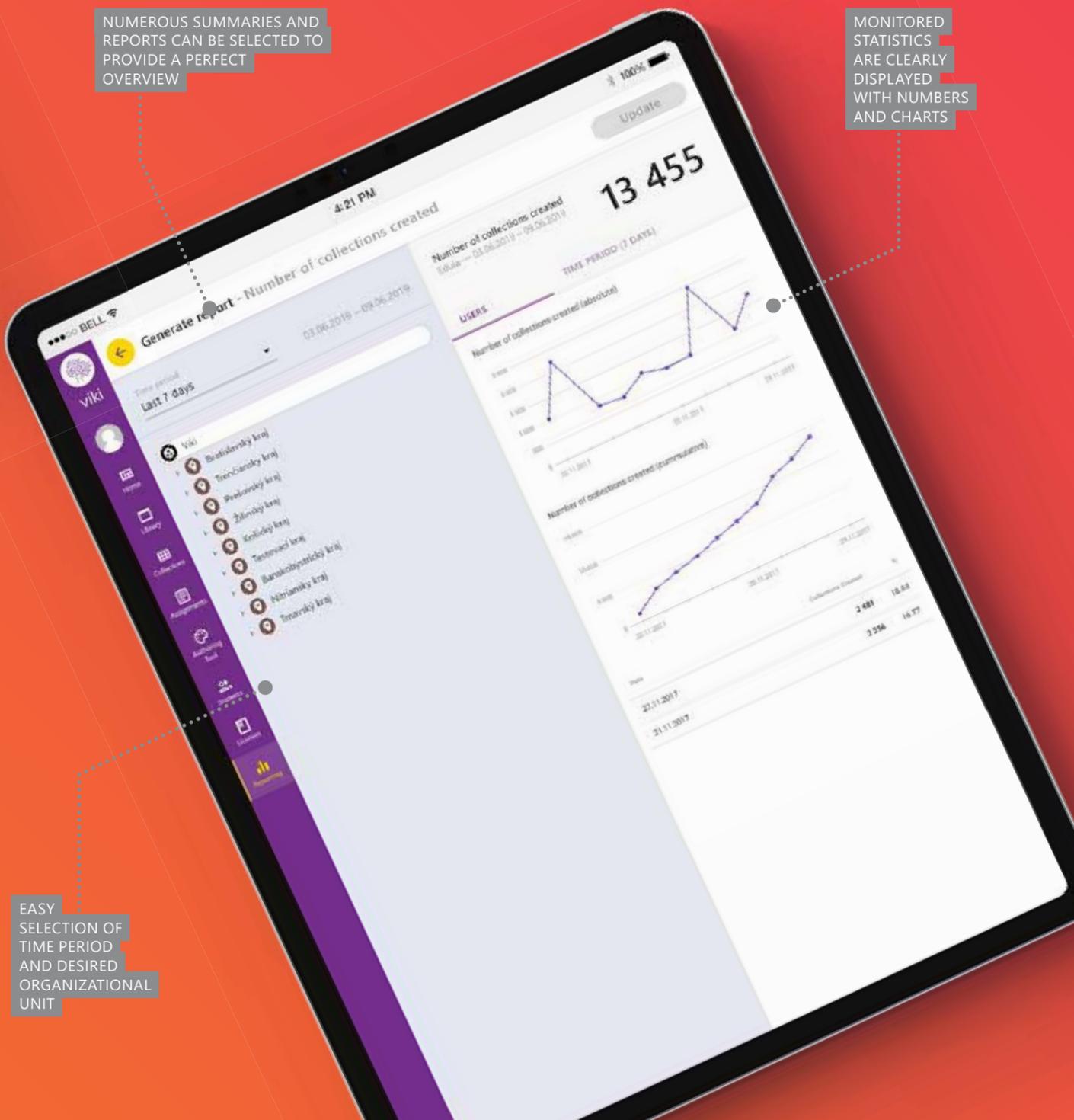
A comprehensive licensing module allows to grant and manage access to each content individually or in bulk. Licenses can be granted to specific users, entire institutions, or even territorial units to create content packages, set time limits, and so on.

The platform also allows publishing and licensing from various publishers and third parties, bringing new possibilities and business opportunities.

Reporting and analytics

Viki's detailed reporting tools provide an overview of all its activities. Various statistics and reports are available for individual users, according to their roles in the system.

They provide an overview of user activity, content usage, student assignments and results, etc. Summaries can be generated for different time periods for individual users, schools, regions, or the entire platform.



NUMEROUS SUMMARIES AND REPORTS CAN BE SELECTED TO PROVIDE A PERFECT OVERVIEW

MONITORED STATISTICS ARE CLEARLY DISPLAYED WITH NUMBERS AND CHARTS

EASY SELECTION OF TIME PERIOD AND DESIRED ORGANIZATIONAL UNIT



THE MOBILE APP REMEMBERS LOGIN DETAILS, AND MAKES USING VIKI EVEN EASIER

Mobile apps

Users can install and use Viki mobile apps for iOS or Android.

They are easy to use, with design and user interface optimised for tablets and mobile phones.





viki

Educational content

WHAT CAN YOU FIND ON VIKI TODAY?

Curriculum for nursery schools

Viki contains extensive digital content designed for pre-primary education. It makes educational content available to children in several languages, and provides the means and incentives for learning and exploring the surrounding world. In interactive activities, children listen to instructions and audio recordings. Interactive education increases the level of knowledge of children and pupils, and through an intense experience develops their emotions and creativity. The content is suitable for an interactive whiteboard, as well as smaller screen sizes such as laptops and tablets.



THE LESSONS ARE ENGAGING, AND HAVE INTUITIVE INTERFACE SUITABLE FOR CHILDREN



IN SLOVAK LANGUAGE



IN ENGLISH LANGUAGE



IN HUNGARIAN LANGUAGE



160
LESSONS

3
LEVELS

337
TEACHER GUIDES AND WORKSHEETS

2,000
FLASH MATERIALS

The content consists of 150 lessons, divided into 3 levels, each with 10 topics. A separate unit of 10 lessons is dedicated to the topic of emotions. For each lesson there is a methodological guide for teachers and several worksheets, 337 in total. This content is available in Slovak, English and Hungarian.

The Viki platform also includes 2,000 very popular materials for nursery schools, created using Flash technology. It can only run on browsers that support this technology after approval. Most of the content is in Slovak or English. In the Ikatika pilot project, over 60 lessons have also been translated into Hungarian, Roma and Rusyn language.

FOR PRIMARY AND SECONDARY SCHOOLS

English

The Methodology and Pedagogy Centre provided modern didactic resources for teaching English as part of the national project New Trends in Education of English Language Teachers at Primary Schools (EnglishOne). The DEC for teaching English at secondary schools and grammar schools was provided within the EnglishGO project. On the Viki platform, DEC is available as hundreds of interactive English lessons of varying difficulty according to age, with authentic recordings, exercises and animations.

The digital educational content is in compliance with the terms of the National Curriculum, ISCED 1, ISCED 2 and ISCED 3, and is linked to secondary school-leaving exam topics. As an extension to the existing portfolio of English textbooks approved or recommended by the Ministry of Education, teachers can use the DEC regardless of the textbook they use. The digital educational content is in line with the long-term goal of the Slovak government to achieve the B1/B2 communication level in English for pupils finishing secondary school, while also supporting the government's concept of computerisation and digitisation of the education sector.

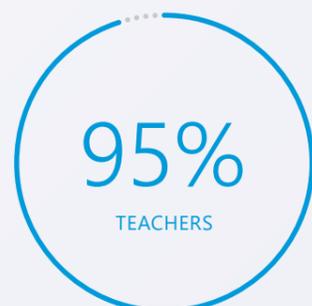
The quality of materials is evidenced by the high satisfaction of teachers using them. A survey showed that pupils had a more positive attitude towards language, and their activity in lessons and motivation to learn also increased. In 96% of classes involved, the pronunciation of pupils improved, and 95% achieved more learning progress.



IMPROVED THEIR PRONUNCIATION



MADE GREATER LEARNING PROGRESS

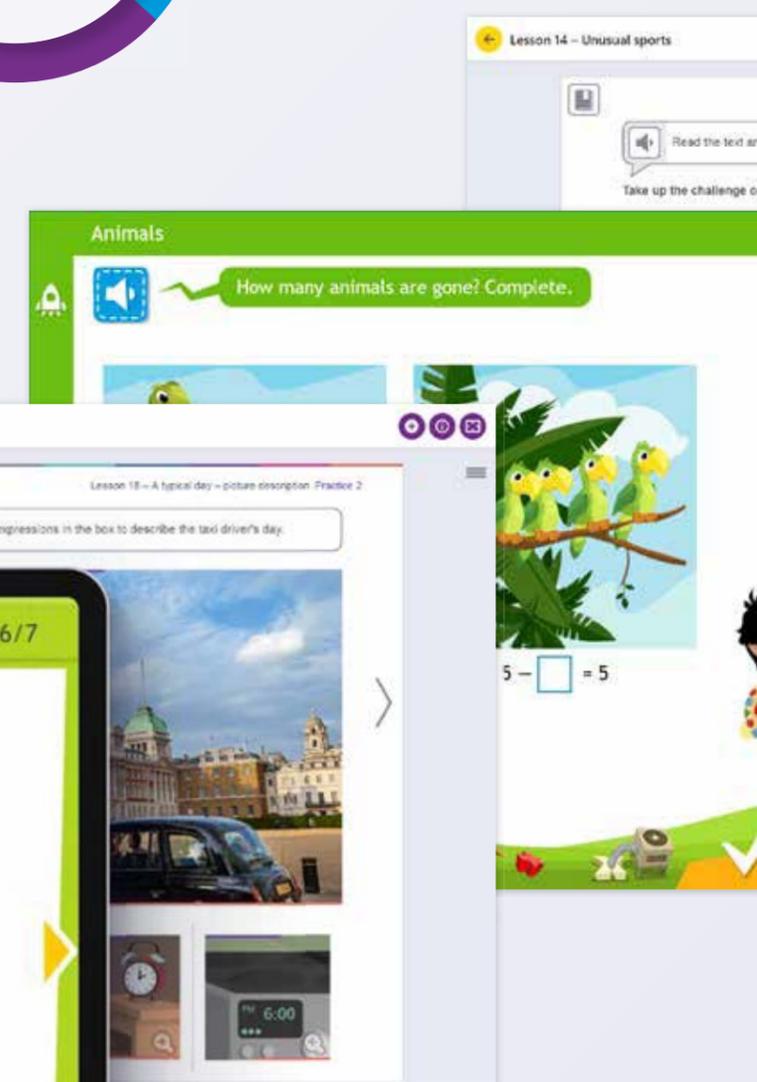


CONSIDER DEC A SIGNIFICANT BENEFIT

PROJECT PARTICIPANTS:



AUTHENTIC MATERIALS, BBC VIDEO MATERIALS AND LESSONS NARRATED BY NATIVE SPEAKERS



- AUTHENTIC AUDIO AND VIDEO
- INTERACTIVE EXERCISES
- NARRATED BY NATIVE SPEAKERS
- LINKED TO TEXTBOOKS



FOR PRIMARY AND SECONDARY SCHOOLS

Natural sciences

The digital educational materials from natural science subjects are designed for the 1st and 2nd stage of primary schools, as well as secondary schools. Viki has over 1,000 educational lessons in Mathematics, Physics, Chemistry, Biology, and Natural science. They were selected by teachers based on criteria such as content compliance with the National Curriculum, being age-suitable, clarity, as well as the overall usability of material for a topic.

Teachers selected the most varied digital materials, comprising multimedia content as videos, animations, simulations, presentations, illustrations, 3D models, images, photos, interactive exercises and lessons. These educational materials have received a recommendation from the Ministry of Education.

PROJECT PARTICIPANTS:



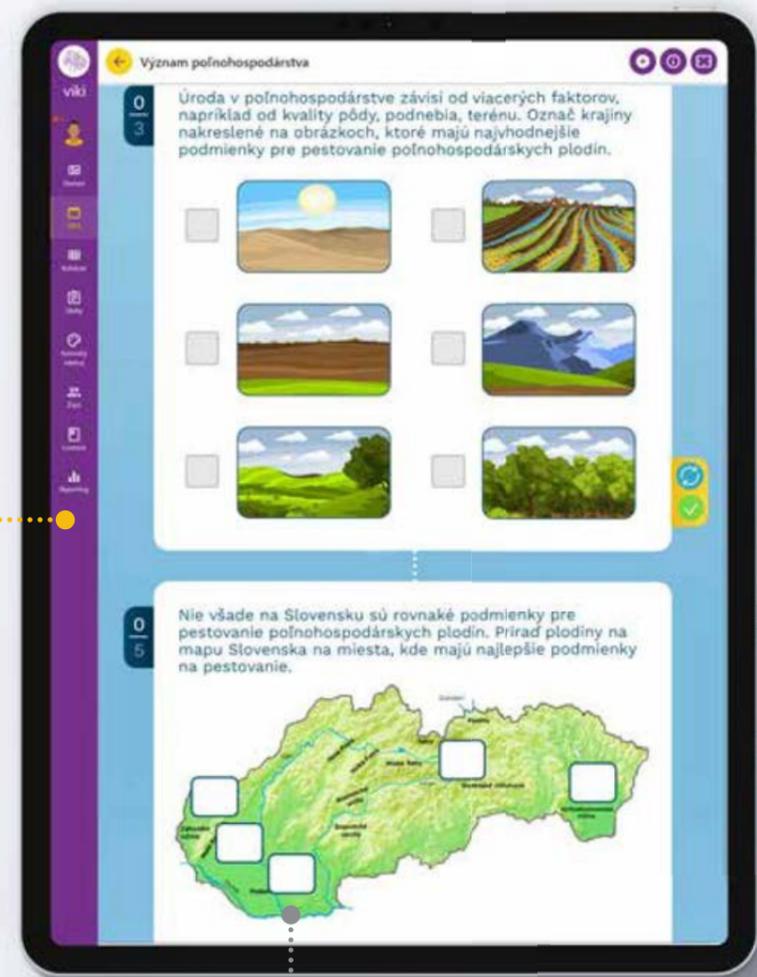
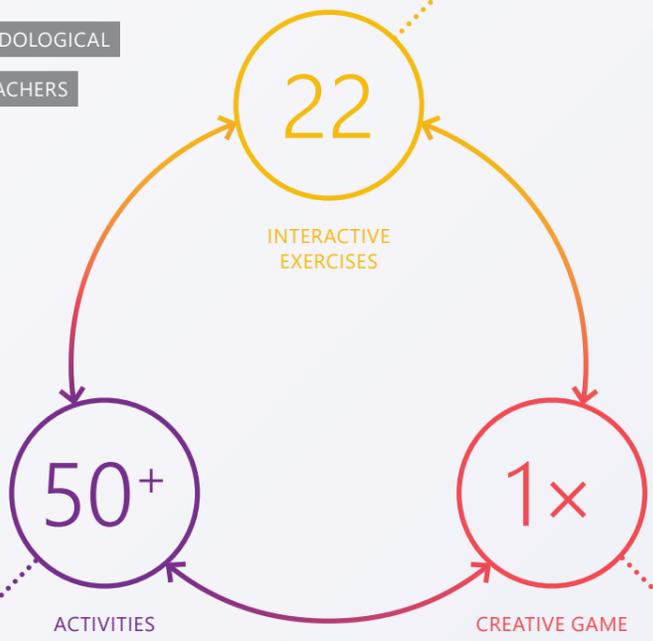
FOR LOWER PRIMARY SCHOOLS

Environmental education

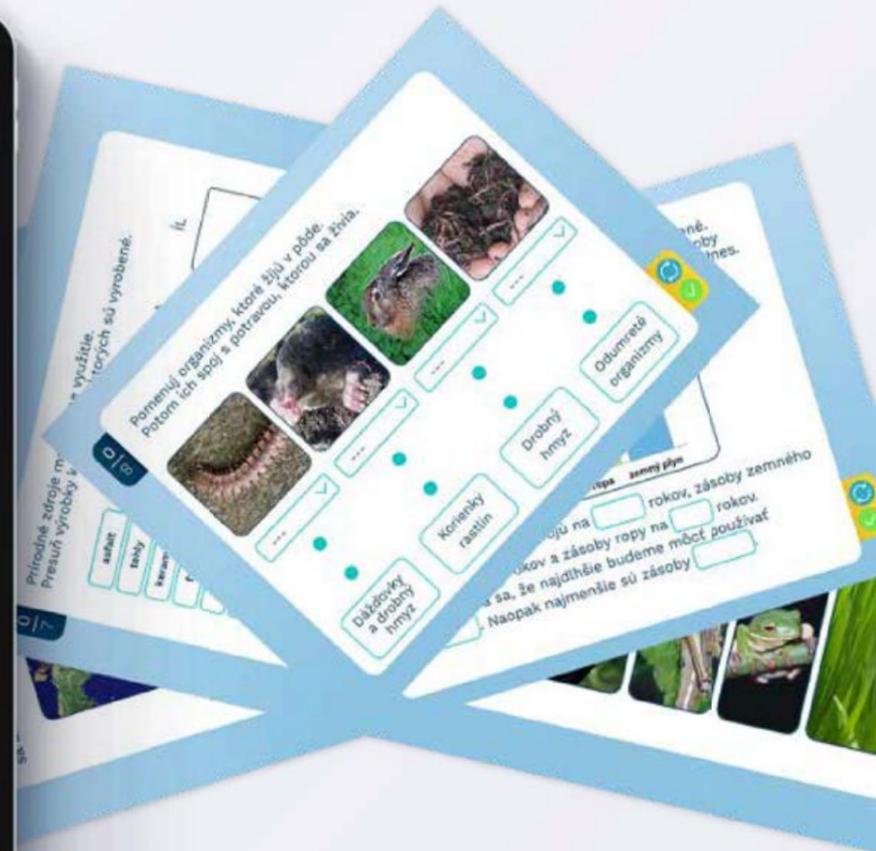
The teacher is provided with all the necessary materials for teaching the cross-curricular topic of Environmental Education for lower primary education. The project combines school and field activities with a creative game and interactive exercises. This is an example of innovative teaching that is motivating and fun for pupils. The inspiration is the Finnish approach to thematic teaching, which combines several subjects into one topic.



METHODOLOGICAL GUIDE FOR TEACHERS



INTERACTIVE EXERCISES ARE FUN AND ALLOW KIDS TO LEARN IN A PLAYFUL WAY



The methodological handbook will provide every teacher with a good basis on which to build their preparation for teaching on this topic. It contains more than 50 activities, the unifying feature of which is our relationship to the environment. Each activity is directly linked to interactive exercises on the Viki platform via codes. The exercises test new knowledge, and practice reading and listening comprehension.



The creative game deepens acquired knowledge, and enables pupils to fully apply creativity in terms of environmental issues. In the Blue Planet Mission game, pupils in teams design and build a base on a new Earth-like planet, and solve four environmental missions. It is a great way to support teamwork, communication and presentation skills. The game combines classroom and field learning activities and interactive exercises into one unit.

FOR LOWER PRIMARY SCHOOLS

Financial literacy

The materials necessary for teaching Financial Literacy at the 1st stage of primary schools are available on Viki. The project combines activities at school and home with a creative game and interactive exercises. This is an example of innovative teaching that is motivating and fun for pupils.

The methodological guide is a source of inspiration for every teacher at the 1st stage of primary schools. It contains over 50 sets of activities for financial literacy development. The teacher will find a complete procedure for implementation, additional materials, and links to interactive exercises there. It complies with: National Financial Literacy Standard, version 1.1.

Our City is a creative board game in which pupils build the city of their dreams. It directs pupils to teamwork, encourages their creativity, and practical financial literacy. The game combines educational activities and interactive exercises into one unit. And most importantly, children enjoy it.



RSOV

Within the competence of the State Institute of Vocational Training, the national project Development of Secondary Vocational Education (in Slovak: Rozvoj stredného odborného vzdelávania, or RSOV) was implemented. Its strategic objective was to improve the quality of vocational education and training of students at secondary vocational schools, and the employability of secondary vocational school graduates in the labour market.

The project helped teachers of secondary vocational schools improve the quality of education by providing the latest information in an attractive way, and helped employers' associations get qualified graduates from secondary vocational schools. In this way it increased employment for this target group.

The national project focuses primarily on the following fields:

- Metallurgy, Obtaining of Natural Resources
- Engineering
- Electrical Engineering
- Technical Chemistry of Silicates
- Technical and Applied Chemistry
- Food Processing
- Woodworking
- Construction, Geodesy and Cartography
- Agriculture

THOUSANDS OF OBJECTS THAT CAN BE DIRECTLY USED IN COLLECTIONS, ASSIGNMENTS AND LESSONS, OR TO ENRICH INTERACTIVE BOOKS



PROJECT PARTICIPANTS:



Education

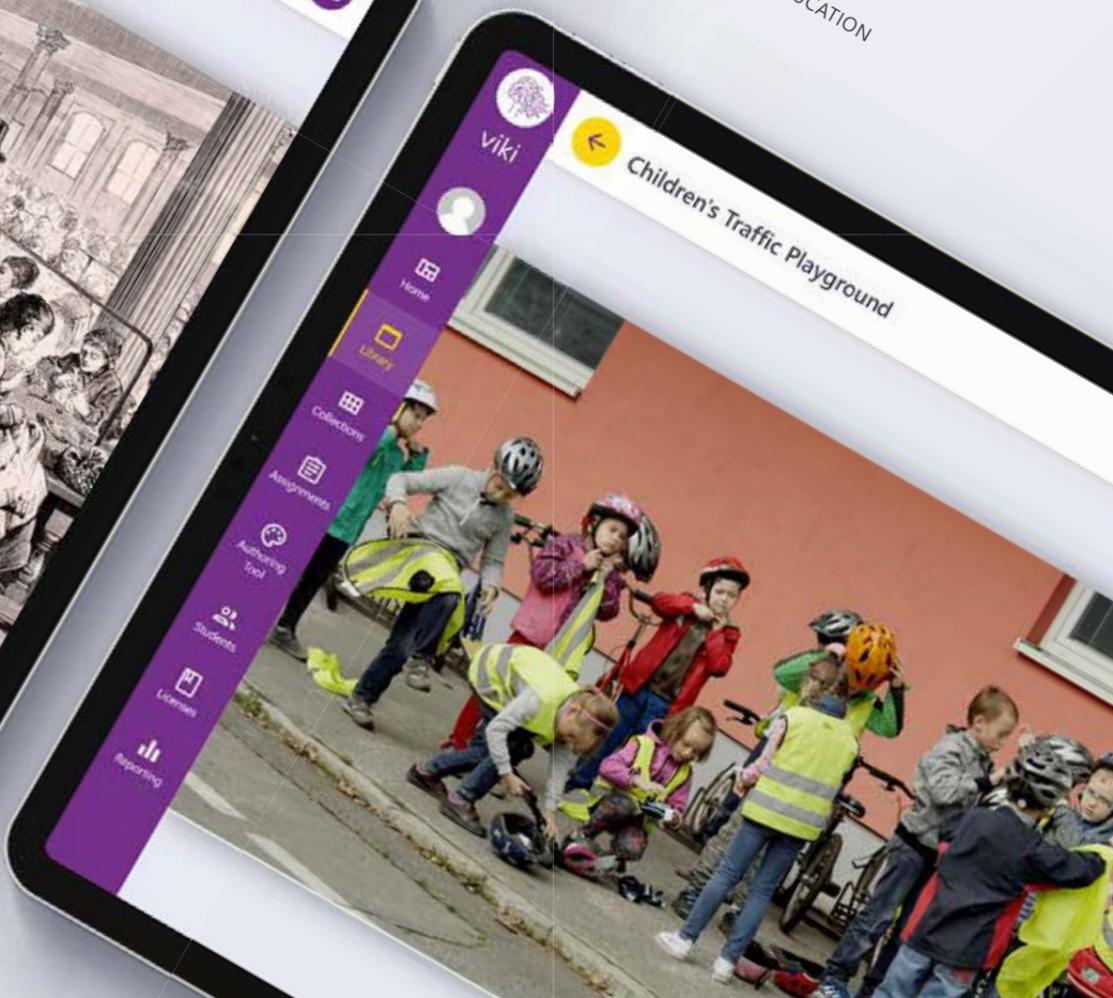
This educational content was created within the national project Activating Methods in Education under the guidance of the Methodology and Pedagogy Centre. The project is focused on changing forms and methods of education with regard to the perception and thinking of contemporary children and youth. The content of the project covers ethical, transport, health, and especially media education. The main target groups of the project are school clubs and school hobby centres, leisure centres, special schools for children with various disabilities, student hostels and educational institutions, nursery schools, primary art schools, secondary art schools, and conservatories.

132
EDUCATIONAL VIDEO PROGRAMMES

7
INTERACTIVE DIGITAL AIDS

THE TOPICS ARE PROCESSED AS EDUCATIONAL VIDEOS AND DISCUSSIONS WITH EXPERTS FROM DIFFERENT AREAS

-  ETHICAL EDUCATION
-  MEDIA EDUCATION
-  TRANSPORT EDUCATION
-  HEALTH EDUCATION



PROJECT PARTICIPANTS:



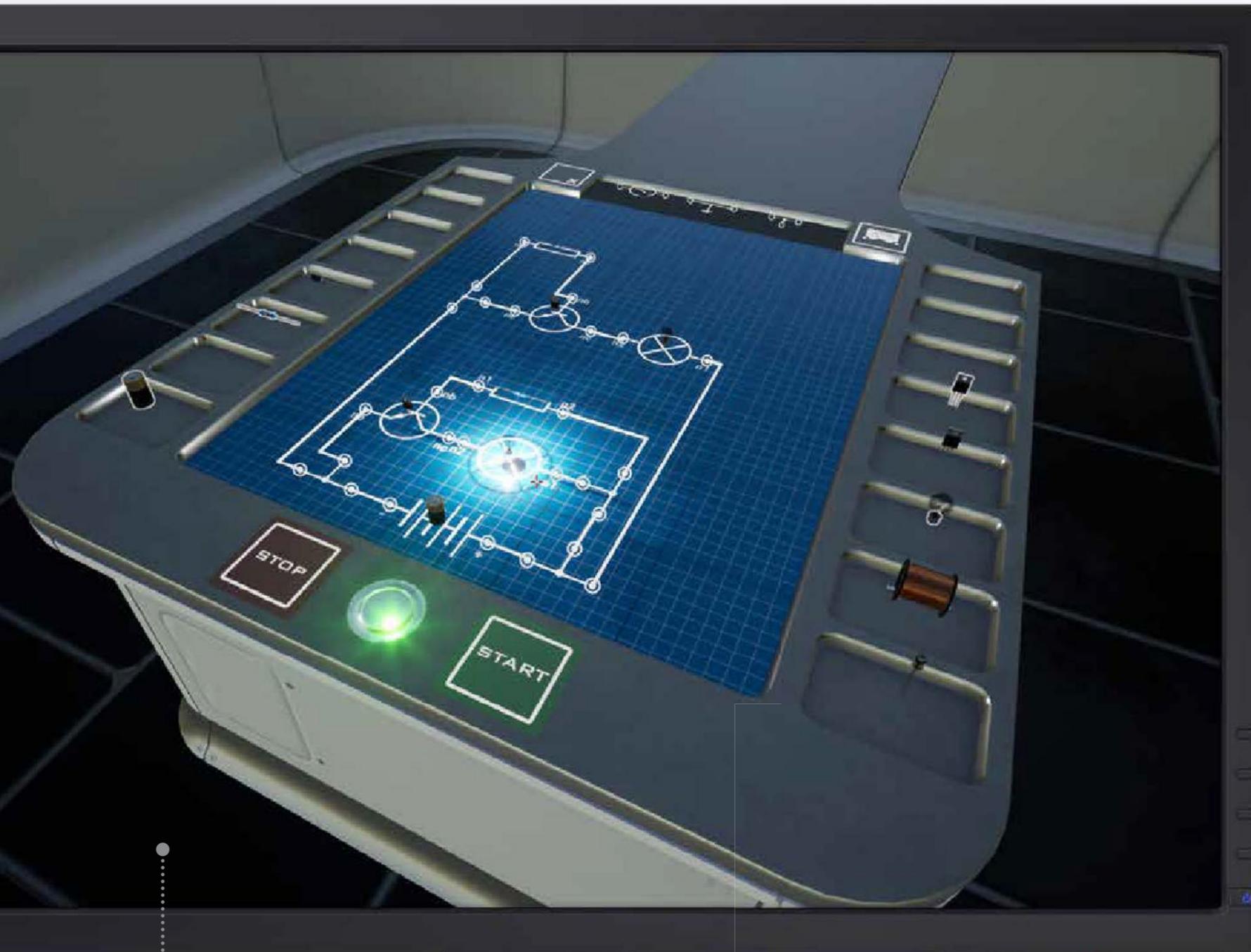
FOR PRIMARY AND SECONDARY SCHOOLS

Electrotechnical VR laboratory

This VR laboratory is designed for the interactive training of pupils related to creating electrical wiring.

The first part – the study room – is designed to revise and affirm theoretical knowledge of electrical components in combination with viewing 3D models. On a large panoramic interactive screen, pupils can select a specific electrical component, and then the component description with audio commentary is displayed. A 3D model can also be activated for the selected part and viewed from all sides.

The second part of the electrotechnical laboratory – the test room – is for practical training of electrotechnical diagram wiring. The laboratory's electrical components have electrical properties so that when connected, the digital laboratory simulates their behaviour just like in real-life conditions. After assembling and wiring components according to the diagram and connecting them to the power supply, pupils can monitor the functionality of the wiring and also measure the electrical quantities of individual electrical components at the measuring points.



SIMULATION OF VARIOUS CONNECTIONS OF ELECTRICAL COMPONENTS



THE WIRING OF ELECTRONIC CIRCUITS IN VIRTUAL REALITY CAN BE DONE ON PC OR VIA VR HEADSET



viki

Implementation strategy

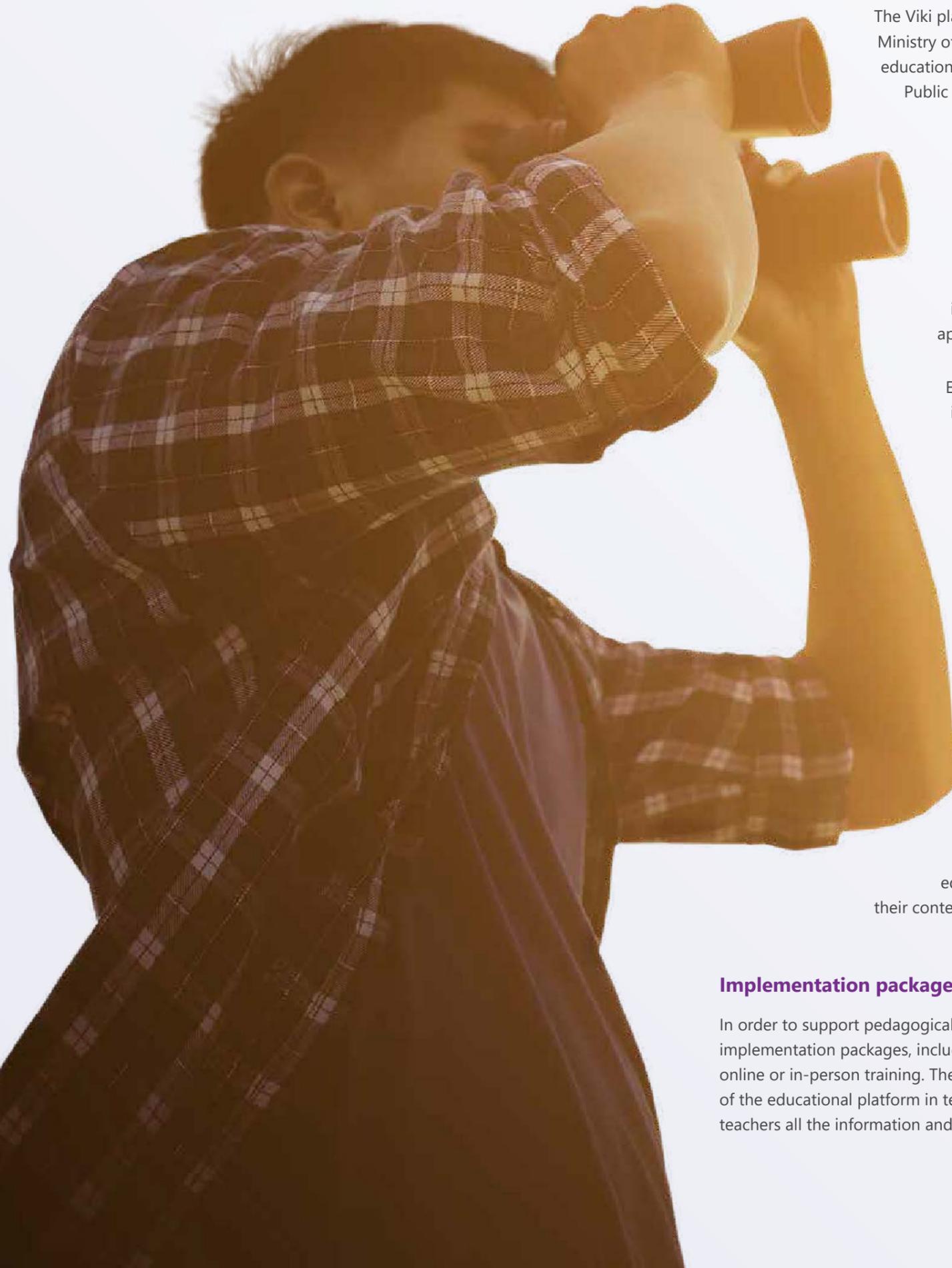
RELATED SERVICES

Promoting innovation and digital education

To ensure the continuous development and use of Viki, it is necessary to fill the platform with relevant content so that target groups are constantly motivated to use the platform in the educational process. If they find interesting and relevant content on the platform right from the start and in the initial implementation phase, the project will be successful and sustainable. Conversely, if the content is not developed further, usage and popularity will decrease. Through comprehensive implementation packages, innovations will be continually provided to both teachers and pupils.

Open educational resources with CC license

Open educational resources is a global theme that has been translated into the Open Government Initiative's Action Plan for 2017-2019 in Slovakia.



The Viki platform represents the CRDEC under the administration of the Ministry of Education. It is ready for the on-going accessing of open educational resources under the CC BY Creative Commons Attribution Public License.

Interactive textbooks

Existing textbooks provided to schools by the Ministry of Education can be published on Viki. Selected textbooks on the platform will be cross-linked, or more deeply integrated with existing DEC. The textbook will become an interactive material, increasing its attractiveness and extending opportunities for application.

Educational projects have shown that this has a clear positive impact on the educational process and on the use of materials. And children and parents can also use these textbooks at home.

DEC from new projects

DEC from several national projects is available on the Viki platform. The structure and architecture of the platform is ready for the on-going addition and publication of new DEC. The Ministry of Education will also make comprehensive DEC packages available, which are procured, for example, through projects of the European Structural and Investment Funds or in another form, managed by the Ministry of Education. The acquired and newly-created content will then be made available on the platform as one central DEC repository.

The platform also provides publishing and licensing support for commercial textbook, book and interactive educational content publishers who are interested in publishing their content.

Implementation packages

In order to support pedagogical innovations, the Ministry of Education will implement implementation packages, including methodological materials for teachers with the support of online or in-person training. The starter kit is a set of materials for the successful implementation of the educational platform in teaching activities. The idea behind the starter kit is to give teachers all the information and instructions needed to implement the platform at once.

Training courses

In order to increase the impact of the platform implementation, several types of training will be provided for the target group of teachers at all educational levels – from nursery schools to secondary schools.

Basic training is teachers' first contact with the platform, and focuses on initial skills related to platform use. Advanced training expands the context of using the educational platform with current trends in world didactics, and direct instructions on how to practically implement these trends in conjunction with Viki.

Workshops and conferences

As part of the implementation, various professional workshops and conferences will be organised for teachers and headmasters/headmistresses across Slovakia in cooperation with organisations directly managed by the Ministry of Education or by faculties of education.

Video tutorials and webinars

For the purpose of further education and to support all target groups, various video tutorials on platform functionality will be created, and webinars will be provided as an extension to in-person training.

Incentive programme for teachers

Teachers participating in the training will be involved in a motivational reward system for actively using Viki in their day-to-day teaching, and for implementing innovation in teaching. The system will include measurable criteria, the fulfilment of which will be linked to financial remuneration or other benefits for active teachers.



Building teacher communities

Raising awareness of Viki platform use in the learning process, sharing experience, recommendations and discussions will be supported by building digital communities for teachers on social networks and dedicated web forums.

These communities will facilitate mutual communication between teachers within their specialisations, with an emphasis on introducing modern approaches to teaching through digital educational materials. Selected DEC from the Viki platform will be placed onto the community websites. Teachers will get an overview of DEC, as well as tips, advice and recommendations for its effective use that they can share and distribute among themselves.

This community support will promote the increased use of modern technologies and the integration of DEC into the teaching process.

New content from publishers

Viki also provides support for textbook and book publishers, which can make them available on the platform and enrich them with DEC. With the tools that Viki makes available to publishers, they can create interactive books from their publications.

They can add DEC published on the platform, images, galleries, videos, audio recordings, captions or various links from the Internet.

Educational projects have shown that interactive books have a clear positive impact on the learning process and on the use of DEC.

Viki includes a comprehensive licensing module so publishers can grant and manage users' access to their books.



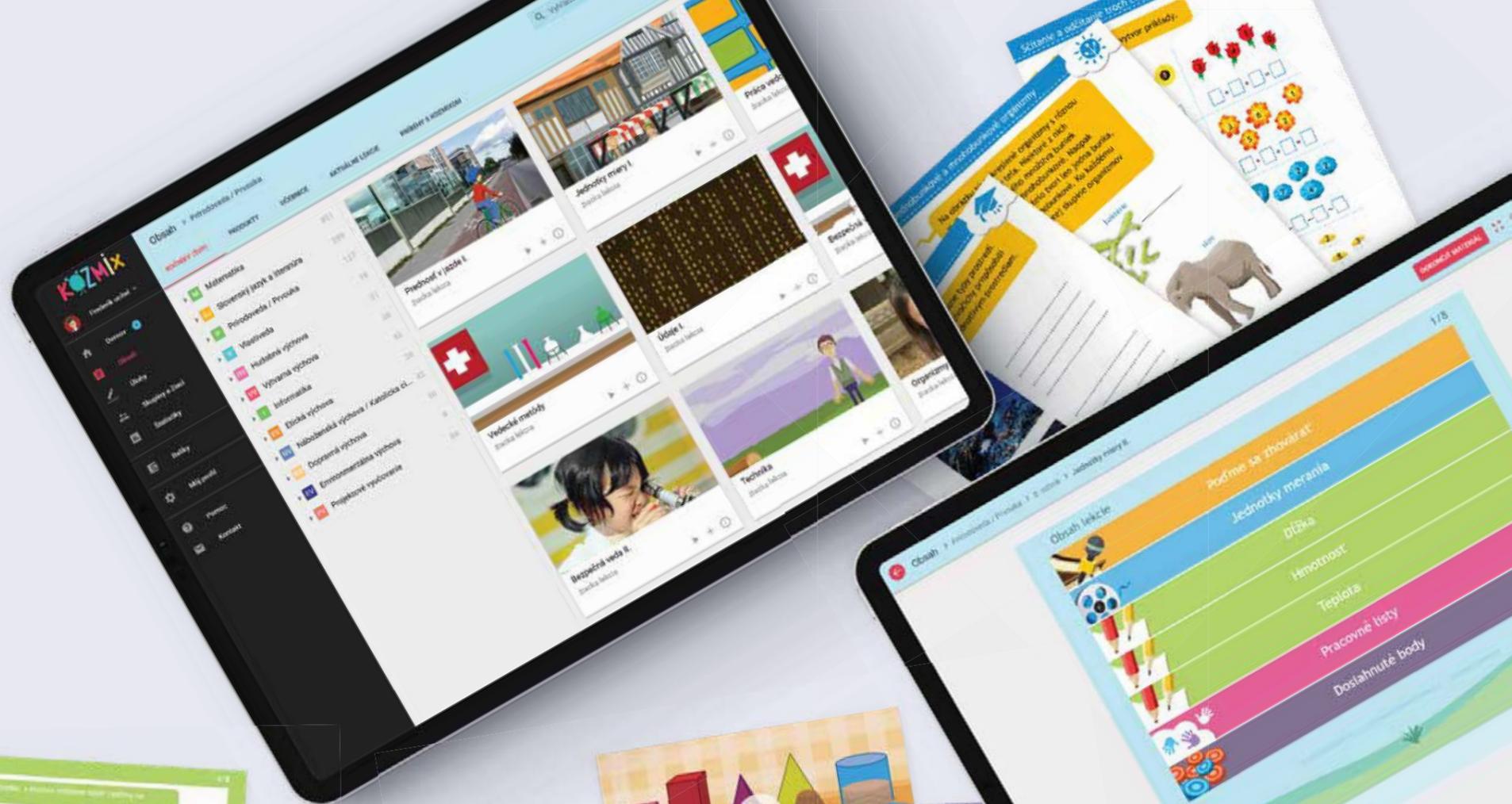
Other educational content

IN OUR OFFER

FOR PRIMARY SCHOOLS

KOZMIX

KOZMIX is an educational solution for primary schools consisting of an educational portal with more than 1,000 lessons for 11 subjects taught at primary school, methodology for teachers, gadgets, printed magazines, books and Edu boxes for the classroom. In addition, it contains more than 600 animations and simulations, approximately 1,400 digital interactive exercises, and more than 1,000 worksheets. A great benefit is that the content corresponds to the National Curriculum and generally-available textbooks for primary schools. The 11 subjects include Mathematics, Slovak Language and Literature, Natural Science, Homeland Studies, Informatics, Music Education, Art Education, Environmental Education, Transport Education, Ethics and Religious Education.



SUBJECTS

11

1,000+

LESSONS

600+

ANIMATIONS
&
SIMULATIONS

1,400+

INTERACTIVE
EXERCISES

1,000+

WORKSHEETS

KOZMIX



FOR UPPER PRIMARY SCHOOLS

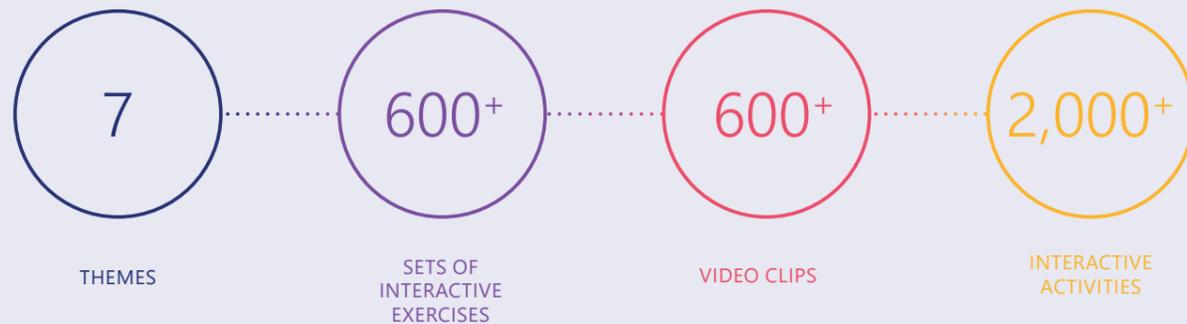
WORLD PHENOMENA

WORLD PHENOMENA is an educational solution for upper primary schools consisting of seven products (Water, Air, Sun, Culture, Communication, Human, Money) which offers teachers a new modern way of teaching contextually, emphasising the development of 21st century skills in the classroom, and motivating children to become engaged and active in learning.

WORLD PHENOMENA encourages and motivates students to become active learners through gamification and highly interactive content.

This multi-media rich solution supports blended-learning trends combining digital activities, videoclips from the BBC, printed modules for teachers, and a classroom board game for students.

WORLD PHENOMENA offers an innovative, comprehensive, ready-made, and standalone method with flexible usage scenarios.



Video Content Provided by:

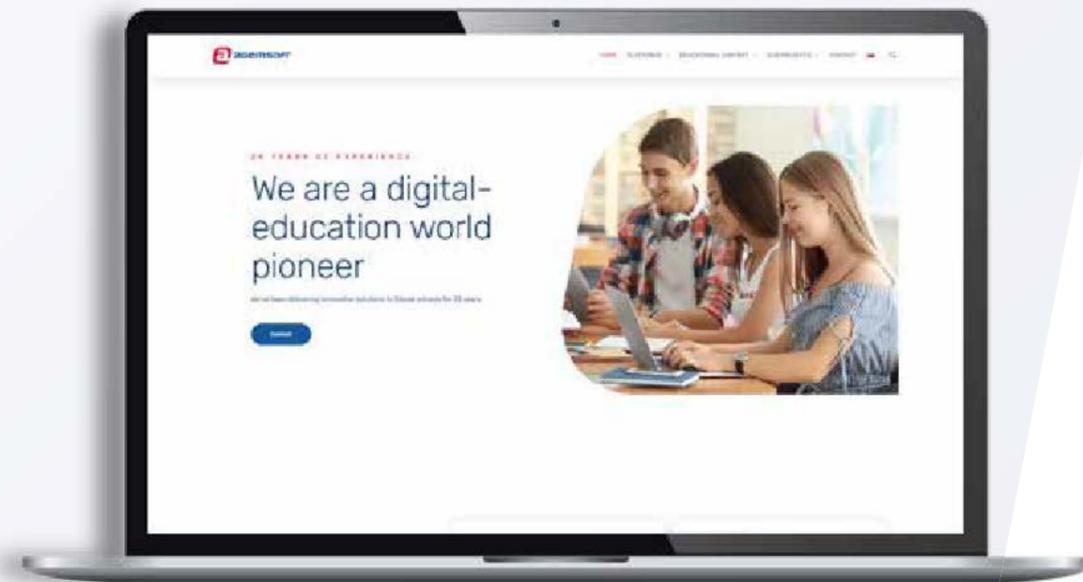


worldphenomena.eu



About AGEMSOFT

THE SPECIALIST IN DIGITAL EDUCATION



Who we are

- A company with over 20 years of experience in digital education, working with thousands of teachers and schools.
- The largest provider of digital content to the Ministry of Education in the Slovak Republic.
- The only digital education company on the Slovak market that covers from pre-primary through to secondary education.
- B2B, B2G and B2C solutions for digital education with a focus on innovation.
- The owner of the technology, content & implementation know-how.
- A marketing & communication strategy and campaign developer.
- Our partners: BBC, Ministry of Education of the Slovak Republic, Atos, Samsung, Tatra banka / Raiffeisenbank, EDULAB, IBM, Microsoft, Slovak Telekom, Sanoma Learning, The British Council, etc.

What we offer

OUR PRODUCTS, KNOW-HOW AND EXPERIENCE CAN HELP YOU DESIGN AND IMPLEMENT PROJECTS WHICH WILL:

- engage kids and develop their 21st century skills,
- bring innovation in pedagogy to every school,
- implement or support national strategies in digital education,
- bring significant added value to your products and services,
- make you unique in the market,
- help you develop new business models to accelerate your local business.

OUR PRODUCTS:

- Online content delivery platforms
- Digital education content
- Project based Edu boxes for the classroom
- Innovative methodology
- Teacher training and teacher guides
- Own branding and marketing tools
- Custom packages



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