



# Modum Education

## Virtual reality classroom

Digital materials for fascinating lessons  
in school

# Modum Education

We create spectacular digital materials that make the educational process more instructive, interactive, and exciting.



For interactive boards and panels



For VR headsets and AR glasses



For smartphones and tablets



For personal computers



✔ Best IT solution for schools

Modum Education Platform won the national Digital Summits 2021 award



✔ Approbation from the Far East Federal University National Technological Initiative

We've passed the nationwide approbation program for educational VR/AR applications from the Far East Federal University National Technological Initiative Center



✔ Digital transformation of education

Runner up in the Education Digitalization category at the CIPR DIGITAL 2022 awards



✔ Scientific assessment by the Russian Academy of Sciences

Our solutions are recommended for use in educational institutions

# Advantages of our solutions



## Visibility

Can reveal complex and hidden processes.



## Immersiveness

The whole class is engaged in the interactive educational process.



## Simplicity

No technical skills are required to use our solutions.



## Adaptivity

Perfectly integratable into lesson structures as an additional asset.



## Compatibility

Materials into account both the school's educational program, and the Federal Educational Standard requirements.

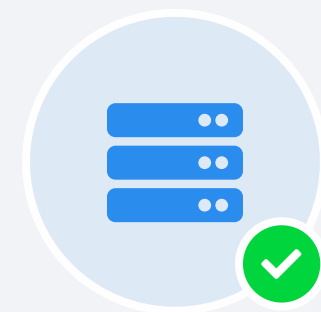


## Expert-provided materials

The materials have been developed by leading pedagogues and training specialists in our country.

# End-to-end solution

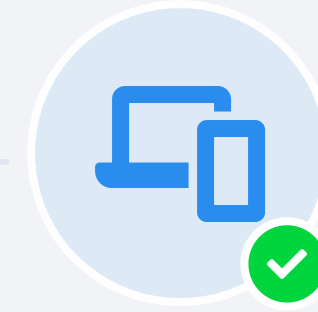
Modum Education virtual classroom comprises a digital content management system, a catalog of interactive materials that can be played or run during lessons, and a range important equipment.



Management system






Catalog of products



Classroom equipment

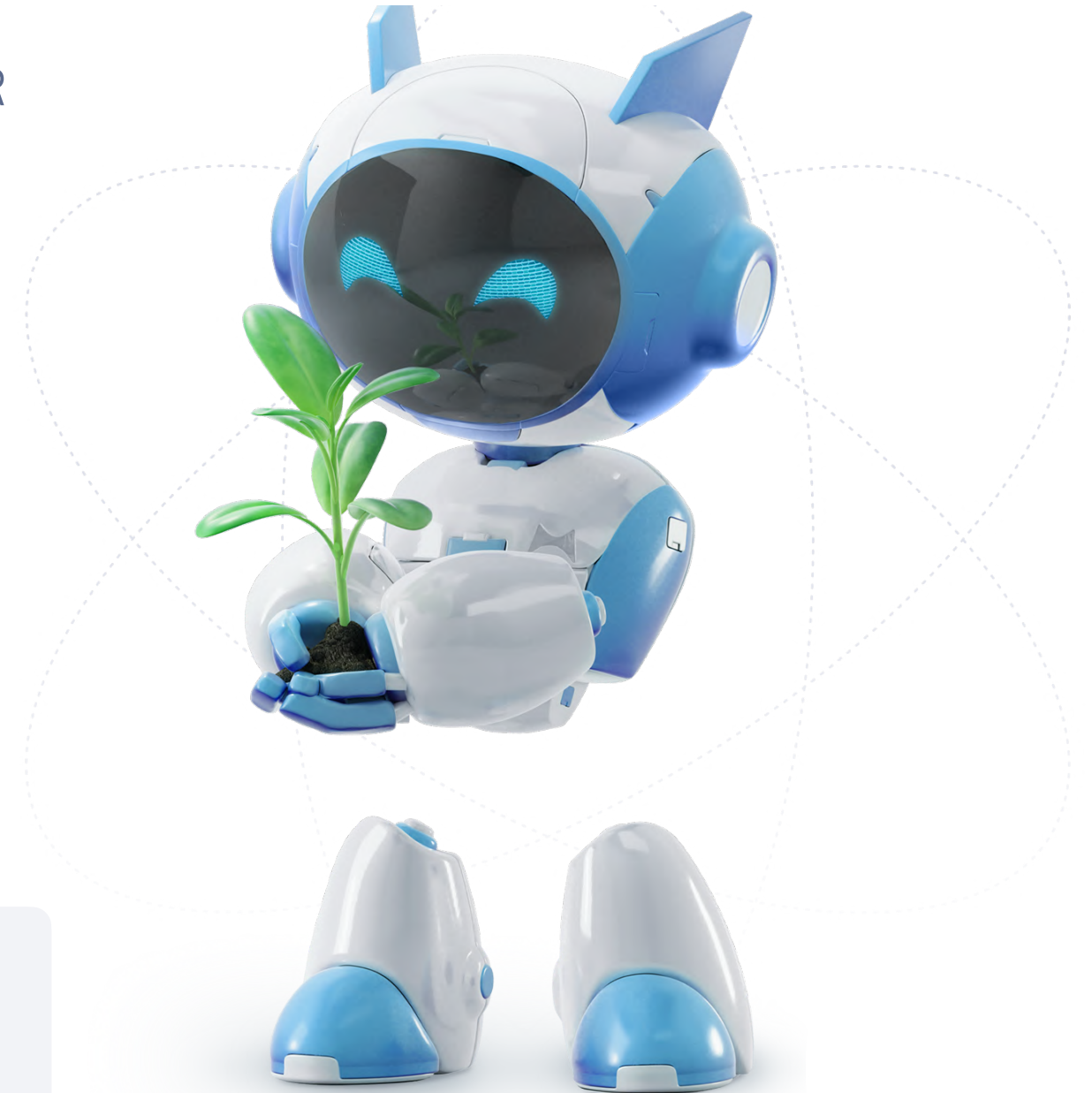
# Content management system

The system delivers, updates and controls the contents of VR equipment, computers, panels and mobile devices in the classroom.

-  Creation and management of user groups, management of access rights to educational materials
-  Assigning tasks for VR laboratories and 3D simulators, gathering walkthrough statistics
-  Classic formats support (long reads, slide courses, video, pdf, tests, etc.)

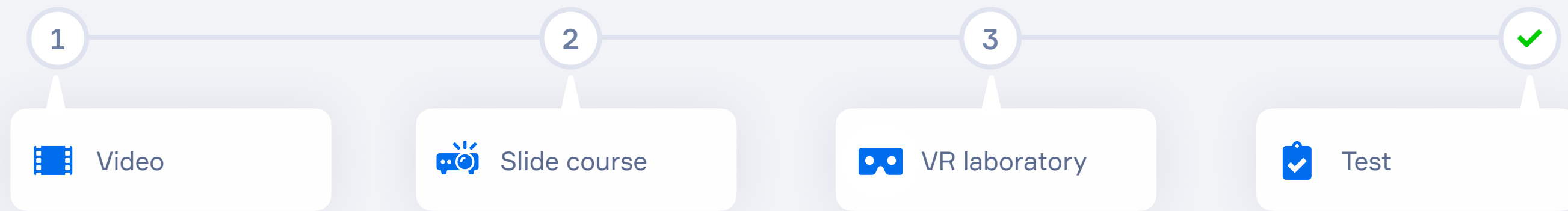
## Simple for students

Using Launcher (a special application compatible with PCs, mobile and VR devices) pupils and students can get access to all assigned courses, laboratories and simulators.



# Hybrid courses

The system allows for seamless education using all formats to develop numerous skills, knowledge and expertise.



## Formats supported by the platform:

Video

360-degree-video

Tests

Long reads

Slide courses

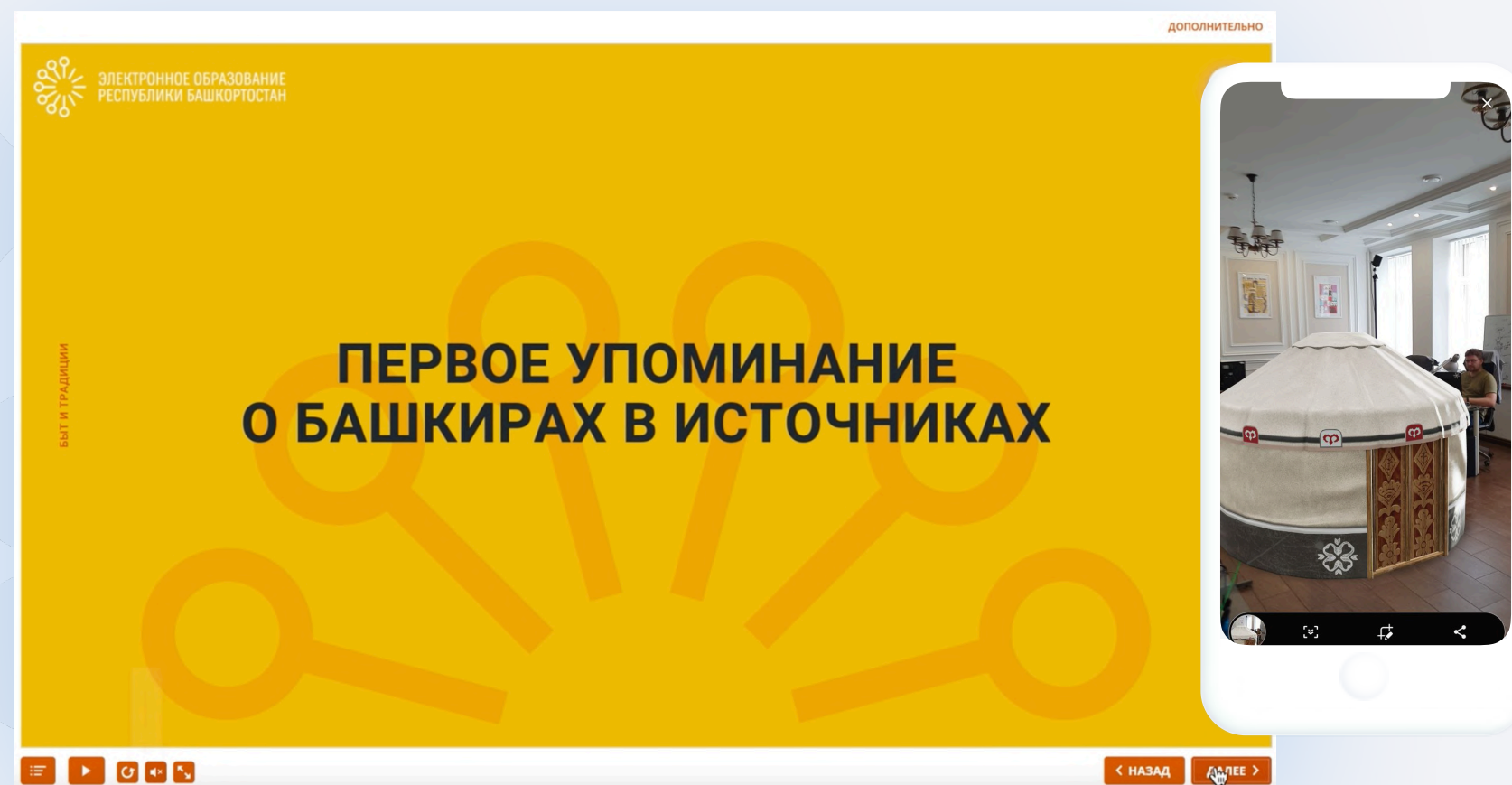
3D materials

VR laboratories

Web applications

# Example of a hybrid course

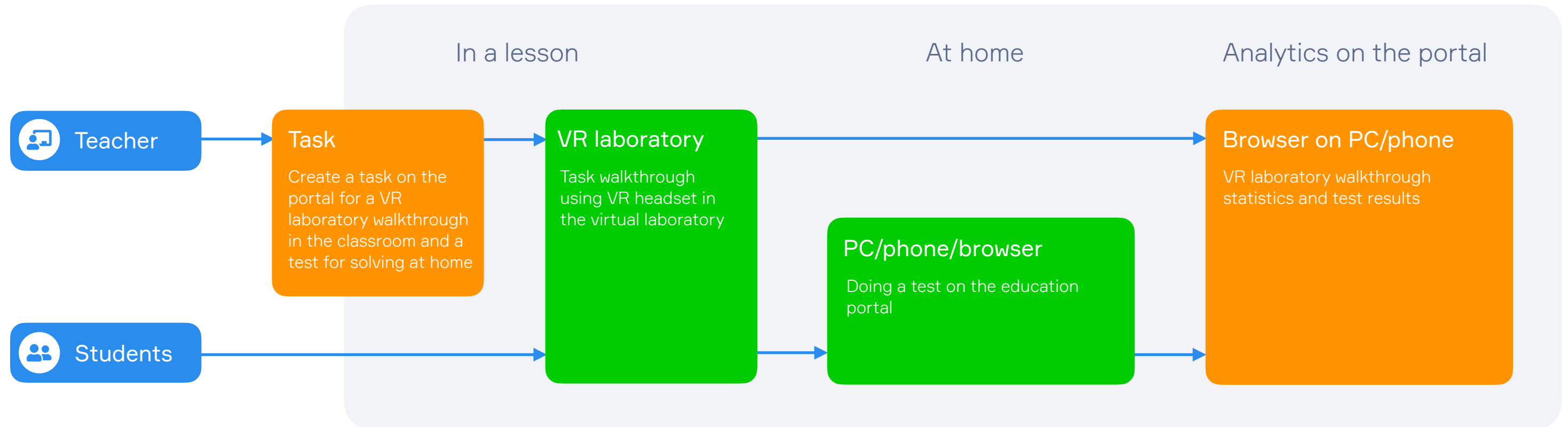
The Bashkortostan history and culture course comprises 103 topics, including interactive long reads, videos, virtual tours, and 3D models and animations viewable in a browser or in AR mode.



[Read more about the course](#)

[Watch](#)

# How it works in a classroom equipped with VR devices



1. The teacher uses the education portal to assign tasks to be done in the VR laboratory in the classroom and a test to be done at home.
2. The students in the classroom put on VR headsets and log in to their accounts to open the assigned task by going over to the laboratory and performing the task.
3. At home, the student logs in via a browser on PC or a smartphone and does the test on the education portal.
4. VR laboratory work and test statistics are shown in the virtual teacher's dashboard.



# Technical options



## Easy to customize

All you need is to install the application on the device and it'll be fully ready for work and to launch of educational materials



## Supported equipment

MEP supports a whole range of devices used in the course of training



## Working in poor internet connectivity conditions

The initial architecture of the platform takes into account the possibility of poor internet connection (content downloaded to target device, disconnect protection)



## Scalable

The platform was tested on projects of varying scope from thousands to tens of thousands users



# Catalog of finished products



## For interactive panels and computers

- Biology. Cytology
- Physics. Electricity



## For VR headsets

- Physics. Magnetism
- Physics. Circuit assembly
- Chemistry
- Fire safety
- Vocational training
- Communication simulators



## Digital workshops

- Digital workshop on Robotics in Technology lessons

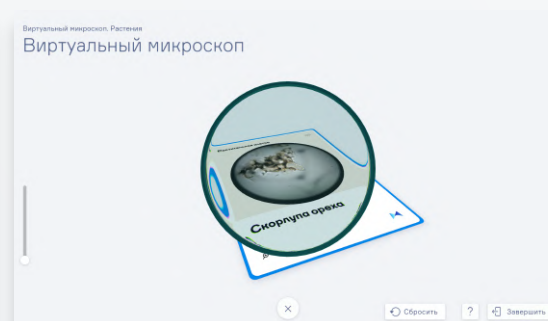
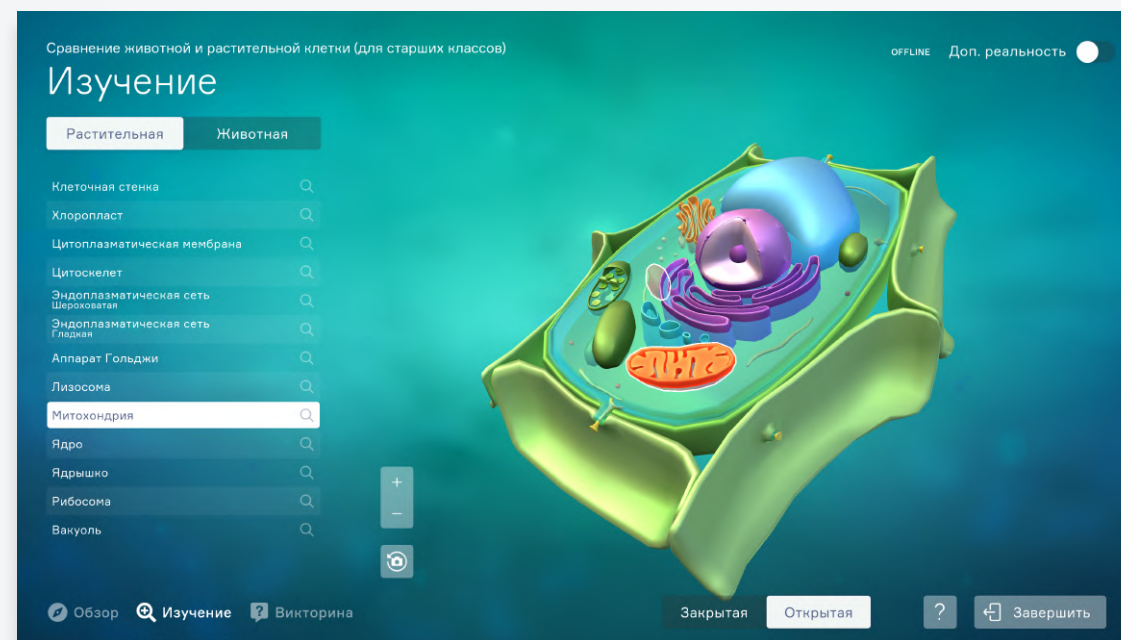


All Modum Education products are registered in the national software register

# For interactive panels and computers

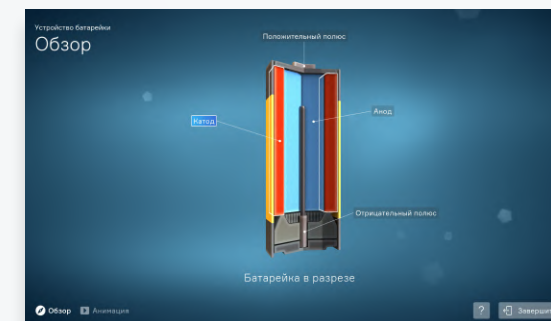
## Biology. Cytology

The 3D package of educational materials makes it easy to study the structure, functions and life span of cells from 5th to 11th grade.



## Physics. Electricity

Training package for introduction to electricity with a range of interactive animations and experiments for 8th grade.

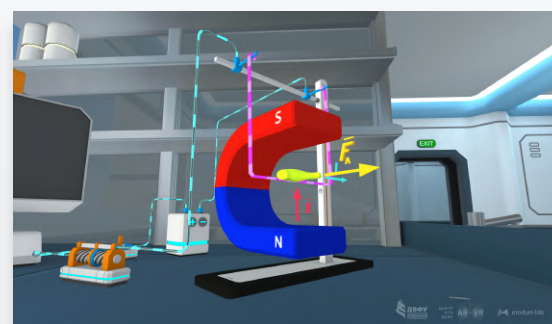
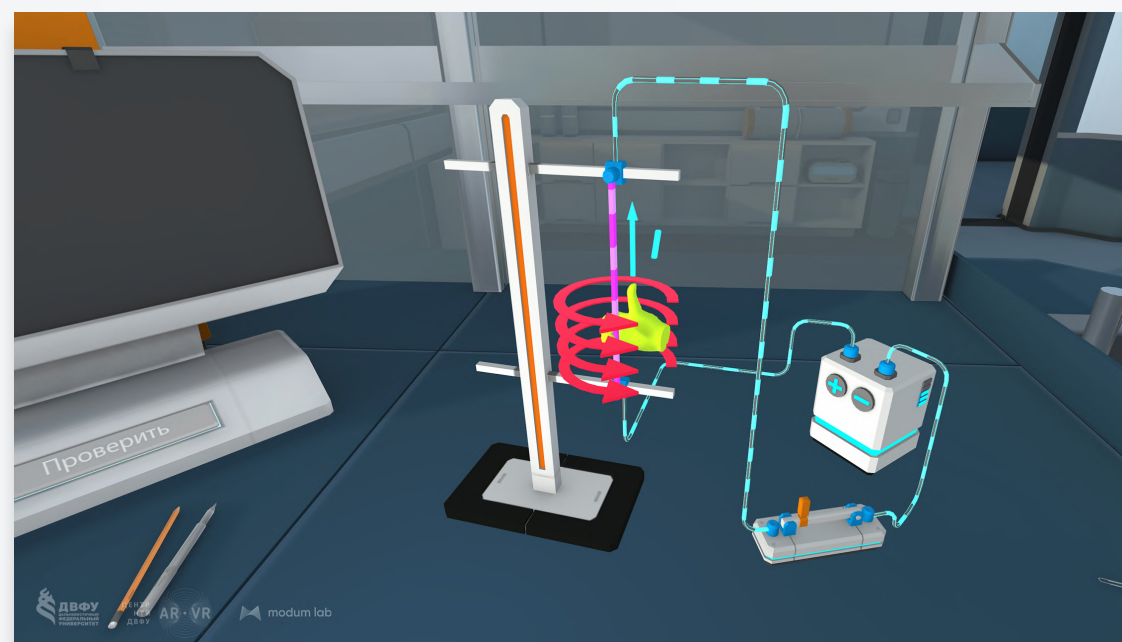




## For VR headsets

### Physics. Magnetism

VR package of educational materials for studying Magnetism and EM induction and preparation for the Basic State Examination.



### Physics. Circuit assembly

VR task book on circuit assembly for 8–9th grade.





## For VR headsets

### Chemistry

Virtual chemistry laboratory for teaching and conducting tests in grades 8–11.



### Fire safety

Practical training simulator for fire safety.





## For VR headsets

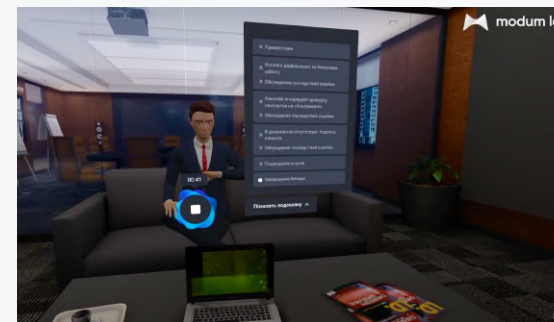
### Vocational training

You can try out the role of an employee at a working place and perform certain tasks.



### Communication simulators

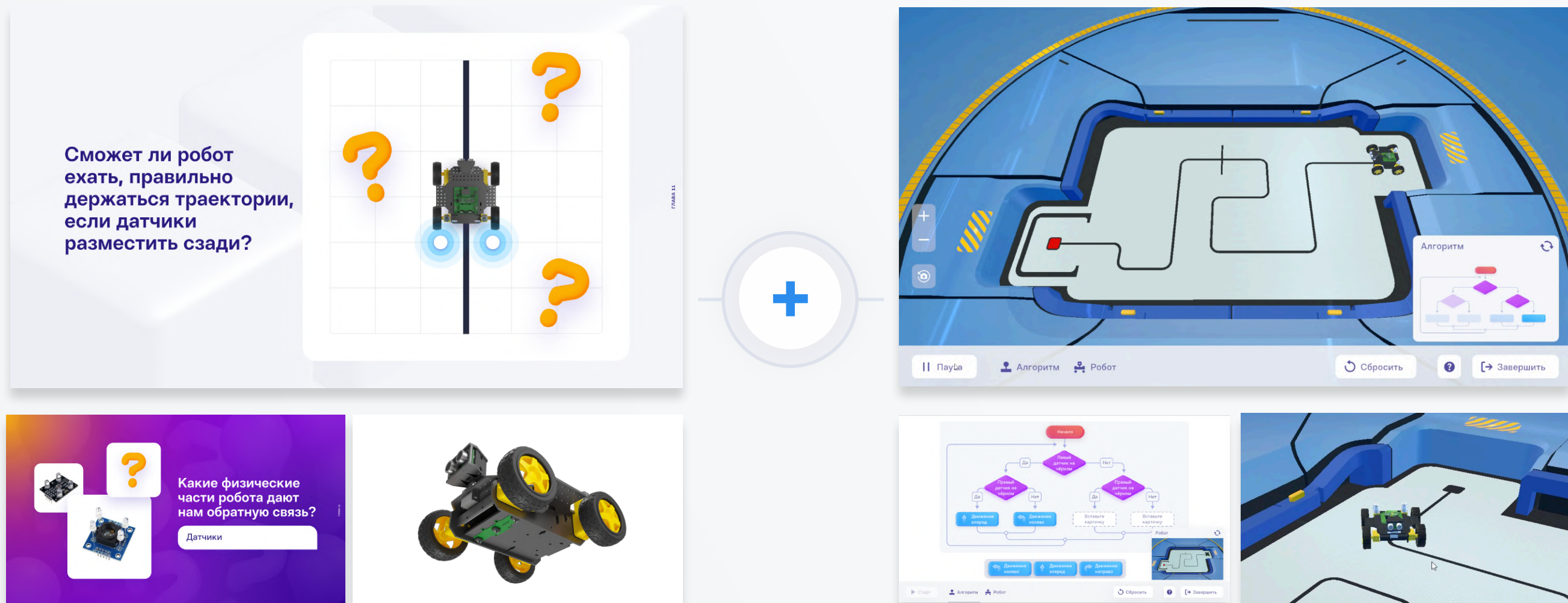
VR simulator for giving public speeches, and negotiation courses for conducting meetings and giving feedback to employees.



# Digital workshops

## Digital workshop on Robotics in Technology lessons

A range of interactive materials for conducting lessons and practical workshops in digital form, accounting for available equipment.



Сможет ли робот ехать, правильно держа траекторию, если датчики разместить сзади?

Платформа

Алгоритм

Пауза Алгоритм Робот Сбросить Завершить

Какие физические части робота дают нам обратную связь?

Датчики

Начало

Правый датчик на линии? Да Нет

Правый датчик на линии? Да Нет

Правый датчик на линии? Да Нет

Правый датчик на линии? Да Нет

Датчик вперед Датчик назад Датчик направо Датчик налево

Сбросить Завершить

Сбросить Завершить

# Didn't find the right solution for your purposes? We can:

Develop an individual project for you!

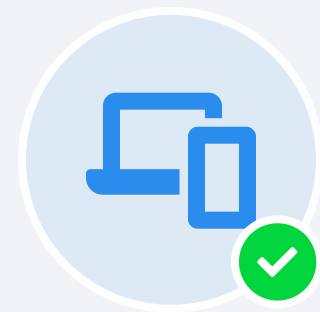
- ✓ Analyze your goals and challenges, and gather requirements
- ✓ Determine the optimum format and technology
- ✓ Go through the available scenarios
- ✓ Develop and integrate the solution
- ✓ Provide methodical materials and necessary support





# Equipment

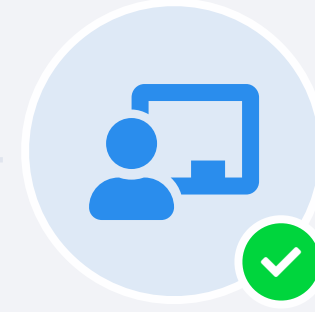
Along with our content management and product range, Modum Lab is ready to support you in procuring the necessary equipment for launching and running the interactive materials.



PCs and laptops for  
mobile classrooms







VR headsets



Interactive  
panels

# The institution will get

-  A range of easy-to-use visual VR and 3D materials for conducting lessons at school
-  Central access to virtual laboratories and simulators, as well as to completion statistics
-  Laboratories with simulators and methodological materials are all kept on a single platform
-  Software can be delivered with the necessary equipment



**Modum Lab** is a technological education company.

Our digital solutions help cultivate professional skills.

**15+**

years in the IT market

**250+**

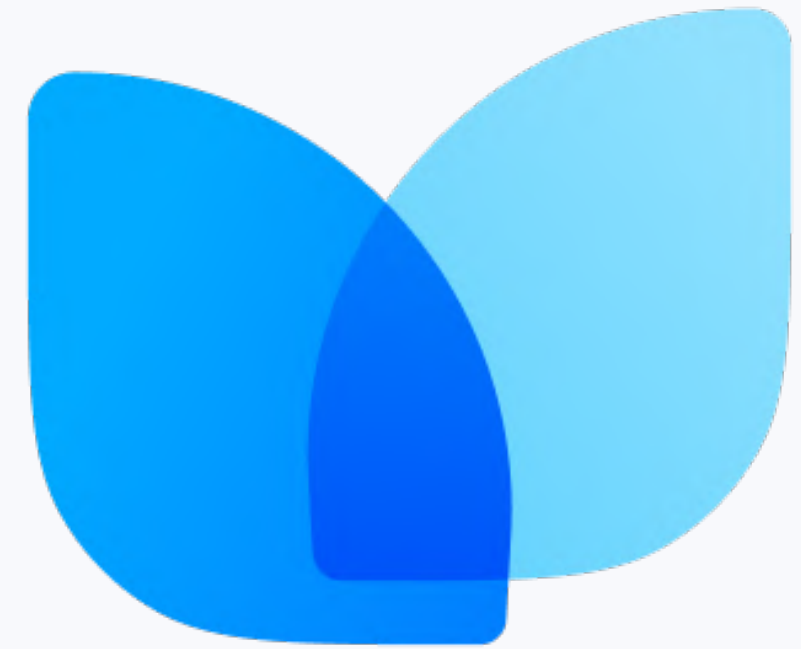
projects implemented

**8**

years in VR/AR

**60**

experts



**modum lab**

# Learn more about our solutions

Contact us via email or our site form:

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@ [edu@modumlab.com](mailto:edu@modumlab.com)

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 [modumlab.com/education](https://modumlab.com/education)

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