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**MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)**



PARTNER 13 STATE POWER ENGINEERING INSTITUTE OF TURKMENISTAN

**REPORT
OF ACTIVITY BY PACKAGES
WP1, WP2, WP3, WP4, WP5, WP6, WP7**



PROJECT MAIN TASKS:

Participating in a Google Forms Survey.

WHAT HAS BEEN DONE?

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Modernisation of Higher Education in
Central Asia through New Technologies
(HiEdTec)

Role	Count	Percentage
Professor / Dozent	10	13.1 %
Peşşer	9	9 %
PhD student / Ph.D	6	6 %
Lecturer / Dozent	81	41.6 %
Student / Student	7	5.1 %
Other / Other	1	0.7 %
Student	18	13.1 %
Lecturer	13	9.5 %
Other	1	0.7 %
Professor	1	0.7 %

Figure 1. - Structure of respondents

The questionnaire includes 19 questions and consists of 6 parts:

- A. Teaching methods, approaches and techniques;
- B. Educational technologies;
- C. Educator qualities;
- D. Status of innovative teaching in higher education classrooms;
- E. Quality assurance of the teaching and learning process;
- F. Continuous professional development of teaching staff;

Let's go to the description of the survey results.

SECTION A. "TEACHING METHODS, APPROACHES AND TECHNIQUES."

1. Question: "How important are teaching methods and/or approaches for ideal results in education for you?" Mark only one oval.

1 2 3 4 5

Not important ☐ ☐ ☐ ☐ ☐ Vey important

Recommendations for Adapting the Central Asian HE System to the Needs of Digital Learners (Turkmenistan)

14

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Modernisation of Higher Education in
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RECOMMENDATIONS FOR ADAPTING THE TURKMEN HE SYSTEM TO THE NEEDS OF THE DIGITAL GENERATION

We recommend that technology will be made available on an equitable basis for use in improving student learning and enhancing teacher's professional development in the country.

Technology includes computers, tablets, smartphones, and other learning tools that can help students with a diversity of learning needs and preferences. In addition, technological tools provide teachers with an enhanced array of strategies for instruction.

For technology to reach its full potential to engage and empower learning, education stakeholders must focus on using it to improve learning outcomes, create new types of transformative learning experiences and delivery systems that better serve students of different circumstances, and collaborate across institutions, educational providers, and other key stakeholders to ensure that system and ecosystem-wide goals are achieved.

Promote Excellence in Learning

Instructors should use formative and summative data available to them to systematically and continuously study how students are learning in their courses. This data can be used to diagnose the learning experience and identify both effective practices that have led to successful learning as well as identify underlying causes of failure, so they can diagnose areas where the learning experience can be improved. This data can be made available through existing course management systems, or generated in real-time through student activities.

Institutions should encourage instructors and department leaders to review courses with large failure and withdrawal rates, especially large first-year required courses, and employ technology-based applications, tools, and resources to redesign these courses to support student success. Student success in these courses is especially important because they often have a significant impact on a student's retention or time to completion. Because of their large size, technology can be used to complement the instructor interaction and the available academic and non-academic support.

Educational technology developers should build tools and capabilities into educational technology solutions that can provide diagnostic insights into student learning and generate real-time, actionable data that can be used by students, instructors, and other stakeholders to improve learning outcomes. When developing software or digital content, developers will benefit by providing greater transparency about their software's accessibility features and alignment with standards.

The Internet should be available to all schools and higher education institutions. The Internet has potential value for networking students and teachers, and to disseminate valuable materials. At the proper level, technological opportunities for professional cooperation and growth of teachers and for creation, based on professional interests.

As the survey reveals, students like the teaching styles that include "multimedia elements in the presentations" and "using mini videos in lectures". Therefore, educational bodies should foster their teachers to do so. In fact, in addition to preparing lecture notes or presentations, instructors,

Recommendations for Adapting the Central Asian HE System to the Needs of Digital Learners (Turkmenistan)

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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)




PROJECT MAIN TASKS:

Developing a Sustainable Academic Network for sharing experience and exchange of good practices in the field of innovative education technologies and didactic models – concluding contracts with other universities and organization's for developing a SAN.

WHAT HAS BEEN DONE?

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Modernisation of Higher Education in
Central Asia through New
Technologies (HiEdTec)



**SUSTAINABLE ACADEMIC NETWORK
FOR SHARING EXPERIENCE AND
EXCHANGE OF GOOD PRACTICES IN
THE FIELD OF INNOVATIVE
EDUCATIONAL TECHNOLOGIES AND
DIDACTIC MODELS**

Project: Modernisation of Higher Education in Central Asia through New
Technologies (HiEdTec)

Project No: 598092-EPP-1-2018-1-BG-EPPKA2-CBHE-SF

Project Coordinator: ANGEL KANCHEV UNIVERSITY OF RUSE

Sustainable academic network for sharing experience and exchange
of good practices in the field of innovative educational technologies
and didactic models

HiEdTec

1

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Модернизация высшего
образования в Центральной Азии
через новые технологии (HiEdTec)



**УСТОЙЧИВАЯ АКАДЕМИЧЕСКАЯ СЕТЬ
ДЛЯ ОБМЕНА ОПЫТОМ И
ПЕРЕДОВЫМИ ПРАКТИКАМИ В
ОБЛАСТИ ИННОВАЦИОННЫХ
ОБРАЗОВАТЕЛЬНЫХ ТЕХНОЛОГИЙ И
ДИДАКТИЧЕСКИХ МОДЕЛЕЙ**

Проект: Модернизация высшего образования в Центральной Азии через
новые технологии (HiEdTec)

Проект №: 598092-EPP-1-2018-1-BG-EPPKA2-CBHE-SF

Координатор проекта: АНГЕЛ КАНЧЕВ РУССКИЙ УНИВЕРСИТЕТ

Устойчивая академическая сеть для обмена опытом и
передовыми практиками в области инновационных
образовательных технологий и дидактических моделей

HiEdTec

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PROJECT MAIN TASKS:

Participating in inter-project coaching –
analysis of similar projects and connections with them.

WHAT HAS BEEN DONE?

Reference number	44601-TEMPUS-1-2013-1-DE-TEMPUS-SMGR		
Project dates (year started and completed)	September, 2013 - December, 2016	Programme or initiative	TEMPUS-SMGR
Title of the project	Introduction of Quality Management in eLearning at Central Asian Universities (QAMEL)		
Coordinating organisation	Fashhochschule des Mittelstands (FHM) GmbH – University of Applied Sciences (Mag. Olga Zubikova, zubikova@fh-mittelstand.de)		
Website	http://www.fh-mittelstand.de		
Password / login if necessary for website			
<i>Please summarise the project outcomes and describe (a) how the new proposal seeks to build on them and, (b) how ownership / copyright issues are to be dealt with (limit 1000 characters).</i>			
<p>Main purpose of the project was to establish an e-Learning centre at the universities of partner countries. As a result, in State Power Engineering Institute of Turkmenistan, there have been opened an e-Learning centre. The centre serves as a medium through which students can connect to the local area network system and obtain necessary materials that were already uploaded to the server by instructors. These materials include lecture notes, quizzes, presentations and most importantly video lectures.</p> <p>The e-Learning <u>centre</u> can be upgraded through <u>HiEdTec</u> project, because following points are lacking at the moment:</p> <ul style="list-style-type: none">• widening the network area and connecting to the internet which will develop “everyone – any time – any place” strategy;• launching cloud-based open sources available for teachers and students of each partner countries;• conducting real-time online lectures, e-lessons;• testing and evaluating students through online examinations;• organizing chats available to all students and instructors through which questions can be asked and feedbacks can be supplied; <p>In conclusion, it is inevitable to establish a global digital educational system, especially, in higher educations in order to prepare highly trained specialists for the industrial sector. At the end of the project named as “MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)”, we heartily believe that the points stated above can be achieved and the project will help us reach those goals.</p>			



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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS:

Developing concept of adapting the education system to the digital generation by taking into consideration the specific conditions of Turkmenistan.

WHAT HAS BEEN DONE?

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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)

TURKMENISTAN

	MINISTRY OF EDUCATION OF TURKMENISTAN
	INTERNATIONAL UNIVERSITY FOR THE HUMANITIES AND DEVELOPMENT
	OGUZ HAN ENGINEERING AND TECHNOLOGY UNIVERSITY OF TURKMENISTAN
	STATE POWER ENGINEERING INSTITUTE OF TURKMENISTAN

**PROGRAMME
for Adapting Higher Education
to the Digital Generation**

With the support of the Erasmus+ programme
of the European Union

Ashgabat, 2019

Programme for Adapting Higher Education to the Digital Generation HiEdTec 1

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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)

Editor: Prof. Angel Smirnov, Habib Halmamedov
Number of the outcome: WP2.2
Title: Programme for Adapting Higher Education to the Digital Generation, considering the specific conditions in Turkmenistan
Type of the outcome: Product
Dissemination level: National level
Status/Version: Final
Date: 22.11.2019

The main compilers of the Programme:

1. Habib Halmamedov
2. Aliak Agayev
3. Bayram Jumayev

Officials contributing to the development of the Programme:

1. Rahman Rahmanov
2. Dovid Saryyev
3. Rejep Agayev

The Programme was adopted by the Academic Councils of:
International University for the Humanities and Development
(Meeting minutes No 3 dated 05/11/2019),
Oguz Han Engineering and Technology University of Turkmenistan
(Meeting minutes No 3 dated 28/10/2019), and
State Power Engineering Institute of Turkmenistan
(Meeting minutes No 2 dated 29/10/2019),
and agreed with the Ministry of Higher Education of Turkmenistan.

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Programme for Adapting Higher Education to the Digital Generation HiEdTec 2



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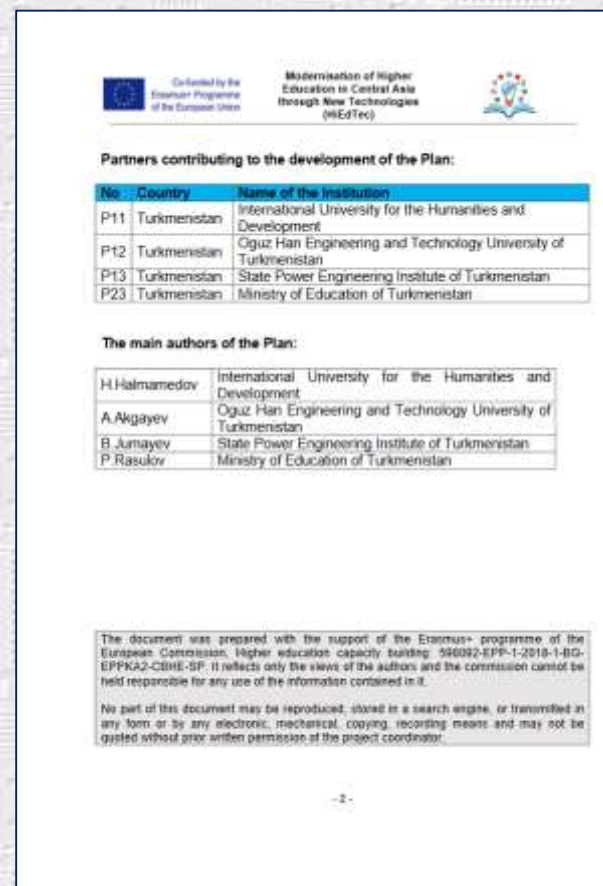
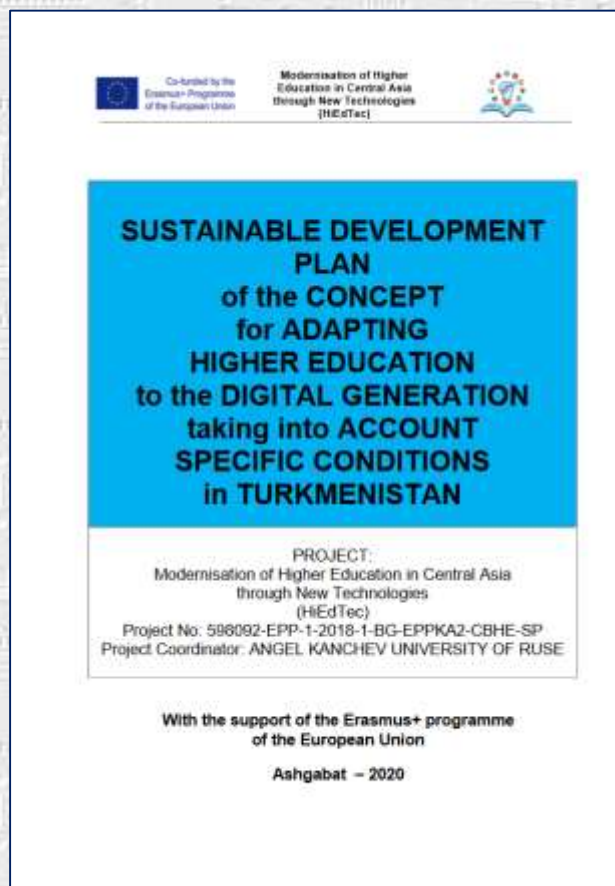
MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS:

Developing a sustainable development plan of the concept
for adapting the education system to the digital generation in Turkmenistan

WHAT HAS BEEN DONE?





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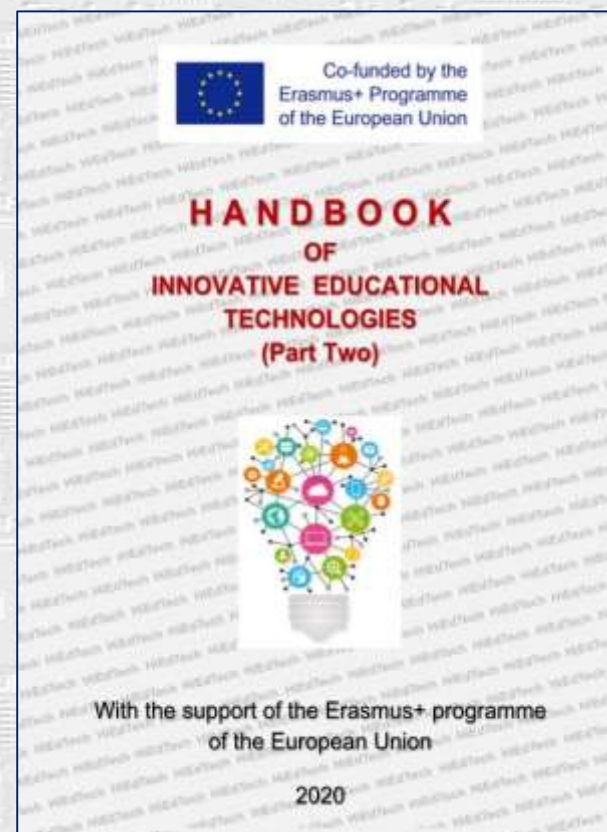
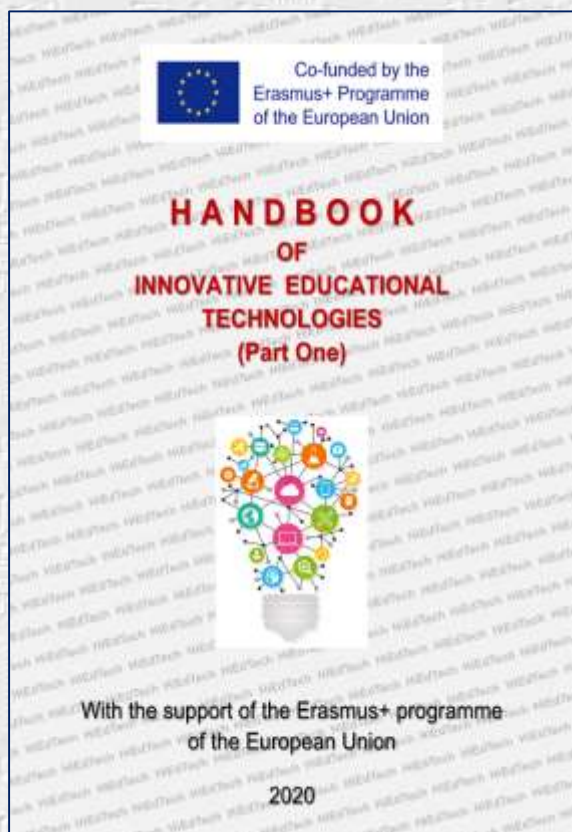
**MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)**



PROJECT MAIN TASKS:

**Publishing a handbook of innovative educational technologies in two versions –
paper and internet based.**

WHAT HAS BEEN DONE?





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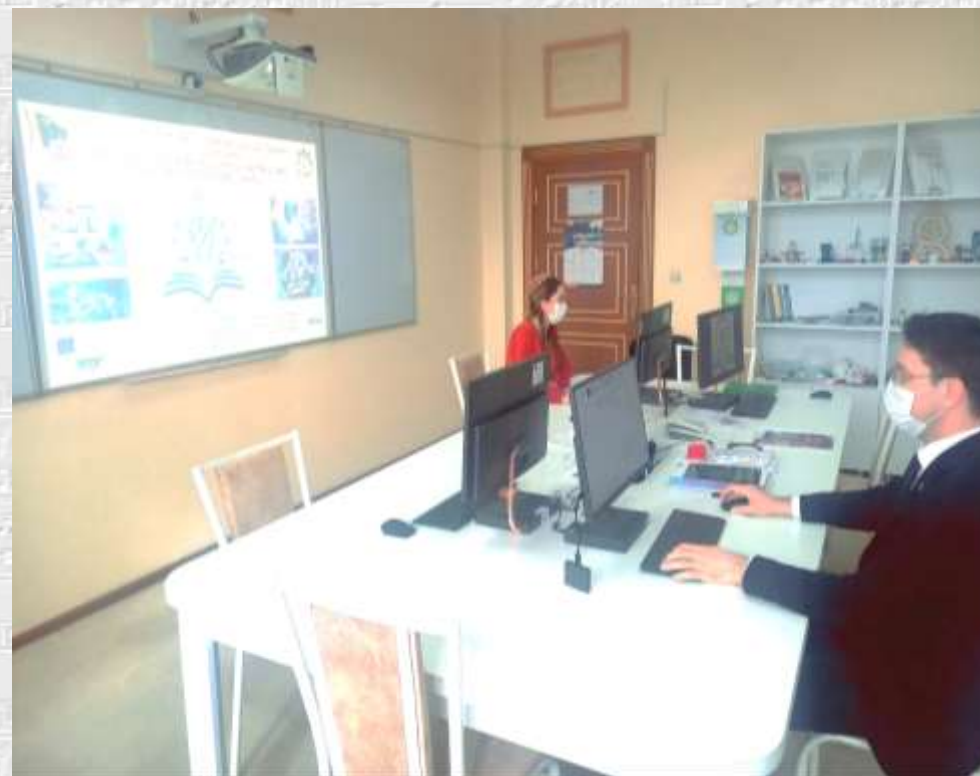
MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS:

Creating a center for innovative educational technologies.

WHAT HAS BEEN DONE?





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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS: Equipping 3 active learning classrooms. **WHAT HAS BEEN DONE?**





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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS:

Selecting and using of virtual classroom software in the university.

WHAT HAS BEEN DONE?

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MODERNISATION OF HIGHER EDUCATION
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THROUGH NEW TECHNOLOGIES
(HiEdTec)

Şkala
purzın
Demir
Gozganmaýan tegekler
purzın

$$M = \frac{d(LI^2/2)}{d\alpha}$$

Ters täsir ediji moment (M) maýyşgak purzın bilen döredilendigi sebäpli, $M_t = W \cdot a$ bolar.

Elektromagnit ulgamly ölçeg abzaly

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Avaza öňdäki elektrik stansiýasy





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**MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)**



PROJECT MAIN TASKS:

**Organizing courses for lecturers for the acquisition of digital skills
and innovative teaching and learning methods.**

WHAT HAS BEEN DONE?





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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS:

Creating 5 web-based courses.

WHAT HAS BEEN DONE?

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**MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES (HiEdTec)**

**TÄZE TEHNOLOGIÝALAR ARKALY MERKEZI AZIÝADA ÝOKARY
BILIMINË KÄMILLEŞDIRILMEGI**



<https://hiedtec.ecs.uni-ruse.bg/?cmd=gsIndex>



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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS: Creating virtual library with digital educational resources. WHAT HAS BEEN DONE?

http://hiedtec.turkmen.gov.tm/ English

HiEdTec Virtual Library Turkmenistan

Dashboard / Courses / HI

Turn editing on

HiEdTec Virtual Library - Turkmenistan

Co-funded by the
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MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)

VIRTUAL LIBRARY of DIGITAL EDUCATIONAL TECHNOLOGIES (HiEdTec-TM)

The European Commission has signed the contract of a new project on the modernization of education in 15 universities from Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan and in 4 European universities from Bulgaria, Italy, Portugal and Luxembourg. The universities from Turkmenistan represented in the project consortium are: State Power Engineering Institute of Turkmenistan, International University for the Humanities and Development, Oguz Han Engineering and Technology University, as well as the Ministry of Education of Turkmenistan. The initiator of the project and project coordinator is the University of Ruse.

The main project aim is to modernise the higher education system in Central Asia through the use of new technologies.

This Virtual Library has been created with the support of European Commission under the Erasmus+ Programme.

KA2 - Capacity Building in the field of Higher Education: 598092-EPP-1-2018-1-BG-EPPKA2-CBHE-SP

It reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Language of "Modernisation of Higher Education in Central Asia through New Technologies (HiEdTec)"

http://hiedtec.turkmen.gov.tm/ English

Web-based courses developed by the lecturers of the institution (PI3)

1. Control-measurement devices

Course creator: Bayram Janyayev, bayram.janyayev@hiady.tm

Course description:

This course is related to types and working principles of sensors and measuring devices. The course is intended for the discipline called "Automation and control in technical systems". In the course curriculum, there are topics related to electromechanical and digital measuring devices, sensors of various physical quantities and smart systems. At the end of the course, students are expected to describe and explain types of measuring instruments and their working principles of sensors and they are expected to find out smart solutions to the instrumentation of industrial sectors.

Learning outcomes:

- know measurement errors and their reasons
- measure physical quantities including those used in power industry
- differentiate the sensors and explain their working principles
- design smart solutions based on control and measurement devices
- solve problems related to measurement and instrumentation

2. Econometrics

Course lecturer: Atajan Baidinov, abaidinov@hiady.tm

Course description:

The main aim and central issue of Econometrics course is to determine the possibilities of constructing economic models and using them in describing, analyzing, and forecasting real economic processes. For this reason, the program focuses on the regression analysis, which is widely used in estimating the parameters of equations that describe the economic processes under control. Equations obtained in this way allow us to predict the future behavior of economic processes. The Econometrics course is of great importance for the training of professionals in the energy sector. The future economist and manager should be able to fully understand the processes taking place at various economic levels. To do this, he/she must be able to use analytical, predictive, and planning methods to manage economic processes. Therefore, the main purpose of the course is to comprehensively teach and introduce the basic concepts and laws needed to gain a deeper understanding of other theoretical and practical subjects to be studied by experts in the field of energy.

Learning outcomes:

- to know the purpose and objectives of the econometrics course
- study statistical concepts and distributions
- study various linear regression
- exploring ways to eliminate autocorrelation
- to know the history and modern trends in the development of econometrics

3. Fundamentals of Nanotechnology

Course lecturer: Ravshan Chelbasov, rchelbasov@gmail.com

Course description:

The « Fundamentals of Nanotechnology» course introduces students to the medical, energy, chemical, food, transport and communication sectors, smart products manufacturing, and nanomaterials used in nanotechnology. The course also covers nanotechnology equipment and their performance features. The study of «Fundamentals of Nanotechnology» is based on the concepts of «General Chemistry», «Physics», «Technical Thermodynamics» and «Electronics».

The purpose of the «Fundamentals of Nanotechnology» course is to introduce future students to the concept of nanotechnology, a new type of technology that is of great importance today, to teach students their types, their transition conditions, the features of technological processes and equipment in it. It also includes introducing students to the results of research activities in this area.

Learning outcomes:

- interconnection of nanotechnology with other sciences



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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS:

Creating virtual library with digital educational resources.

WHAT HAS BEEN DONE?

Creating of internal regulations of cloud based virtual library of digital educational resources

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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)

РЕКТОР
С. Назаров
2021

ПОЛОЖЕНИЕ
О ВИРТУАЛЬНОЙ БИБЛИОТЕКЕ
ЦИФРОВЫХ ОБРАЗОВАТЕЛЬНЫХ РЕСУРСОВ
«ПОРТАЛА HIETEC»

1. Общие положения

1.1. Виртуальная библиотека цифровых образовательных ресурсов создана в рамках проекта «Модернизация высшего образования в Центральной Азии через новые технологии (HiEdTec)» и при поддержке программы «Эразмус+».

1.2. Настоящее положение определяет назначение, цели, задачи и организационную основу виртуальной библиотеки цифровых образовательных ресурсов «Портал цифровых образовательных ресурсов» (далее Портал).

1.3. Положение регламентирует порядок наполнения Портала ссылками на электронные информационно-образовательные ресурсы и определяет правила его администрирования.

1.4. Портал продолжит функционировать и после завершения проекта HiEdTec.

1.5. Портал будет курировать администрация Государственного энергетического института Туркменистана (далее ГЭИТ).

2. Цели и задачи Портала

2.1. Целью Портала является обеспечение функционирования академической сети вузов-партнеров, созданного в рамках проекта HiEdTec, через поддержку единой точки доступа к цифровым образовательным ресурсам, в том числе к электронным онлайн курсам, а также распространения передового опыта.

2.2. Основными задачами Портала является накопление, хранение и систематизация метаданных цифровых образовательных ресурсов вузов-партнеров, используемых в учебном процессе, а также обеспечение доступа к ним участников учебного процесса через сеть Интернет.

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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)

Ректор
S. Nazarov
2021

STATE ENERGY INSTITUTE OF TURKMENISTAN
REGULATIONS OF THE VIRTUAL LIBRARY
OF DIGITAL EDUCATIONAL RESOURCES OF
"HIETEC PORTAL"

1. General regulations

1.1. The virtual library of digital educational resources was created within the framework of the project "Modernization of higher education in Central Asia through new technologies (HiEdTec)" and with the support of the "Erasmus+" program.

1.2. These regulations define the purpose, goals, objectives and organizational basis of the virtual library of digital educational resources of "HiEdTec Portal" (hereinafter, The Portal).

1.3. The Regulations regulate the procedure for filling The Portal with links to electronic information and educational resources and determines the rules for its administration.

1.4. The Portal will continue to function after the completion of the HiEdTec project.

1.5. The Portal will be supervised by the administration of State Energy Institute of Turkmenistan (hereinafter, SEIT).

2. Goals and objectives of The Portal

2.1. The goal of The Portal is to ensure the functioning of the academic network of partner universities, created under the HiEdTec project, through the support of a single point of access to digital educational resources, including electronic online courses, as well as the dissemination of best practices.

2.2. The main tasks of The Portal are the accumulation, storage and systematization of metadata of digital educational resources of partner universities used in the educational process, as well as providing access to them for participants in the educational process via the Internet.



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**MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)**



PROJECT MAIN TASKS:

Hosting a project meeting.

WHAT HAS BEEN DONE?



1-2 фотографий



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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



PROJECT MAIN TASKS:

Participating in project meetings.

WHAT HAS BEEN DONE?





PROJECT MAIN TASKS:

Participating in the implementation of the project dissemination and exploitation plan.
(Dissemination and visibility of the project results)

MEETING MINUTES

The virtual meeting of the Working Group (P11, P12, P13 universities) in the framework of the project 598092-EPP-1-2018-1-BG-EPPKA2-CBHE-SP Modernization of Higher Education in Central Asia through New Technologies (HiEdTec)

Meeting Location: Skype platform

Meeting Date/Time: 20.11.2019

Attendees: Representatives of P11 university Habib Halmamedov, Rahman Rahmanov (International University for the Humanities and Development), P12 (Oguz Han Engineering and Technology University of Turkmenistan), P13 university Bayram Jumayev, Rejepdurdy Agayev (State Power Engineering Institute of Turkmenistan)

Agenda items:

Issues for consideration

1. Final discussion of "The Programme for Adapting Higher Education to the Digital Generation" within the framework of HiEdTec project

Attendance Check and Approval of the Agenda

Participants of the virtual meeting were welcomed by Habib Halmamedov, who declared the meeting open. After checking the number of presence, Habib Halmamedov announced to all participants the agenda, inquiring the members about agreement with it. It was agreed on their consent with the agenda. Thereby, the meeting proceeded with the consideration of the approved agenda' items.

Agenda point 1: Final discussion of "The Programme for Adapting Higher Education to the Digital Generation" within the framework of HiEdTec project

Habib Halmamedov, IUHD Coordinator of HiEdTec project (P11) contributed the following to agenda point 1. The Digital Transformation of Industries (Industry 4.0), which also required digital transformation of education with overtaking pace, the consortium, H. Halmamedov stated, developed programme of adapting the educational system to the digital generation, considering the specific conditions of each of the partner countries, which was was one of the requirements of the international project to give the opportunity for everybody to learn at any time and at any place with the help of any

lecturer, using any device – computer, laptop, tablet, phablet, smart phone, etc. Thereafter, Ahal Akgayev (P12), noted that the consortium would create Centers for innovative education technologies. In its turn, this activity would be one of the indicators for the implementation of "The Concept for the Development of the Digital Education System of Turkmenistan" approved by the Decree of the Esteemed President of Turkmenistan Gurbanguly Berdimuhamedov, as well as the study of international experience in this direction.

The following step, continued Bayram Jumayev (P13), would be the distribution of the final printed versions the Programme to the higher educational institutions of Turkmenistan in Turkmen, English and Russian language. With the ultimate consent it was agreed upon distribution of the Programme via the Ministry of Education of Turkmenistan. After familiarization with the Programme for Adapting Higher Education to the Digital Generation the meeting participants made its essential comments and agreed on the following decision.

Decision: Approval of "The Programme for Adapting Higher Education to the Digital Generation" within the framework of HiEdTec project, and its subsequent distribution to all higher educational institutions of Turkmenistan via the Ministry of Education of Turkmenistan

Vote: Unanimous approval

Announcements

Summarizing the meeting, Habib Halmamedov thanked the participants for all discussions and stressed further essence and needs of developing partner universities' efforts in successful implementation of all HiEdTec program's objectives.

Chairman,
SEIT Coordinator of HiEdTec project

B. Jumayev





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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



Developing a strategy for upscaling and extending the project's impact to the national level

Co-funded by the
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Modernisation of Higher Education
in Central Asia
through New Technologies
(HiEdTec)



STRATEGY for UPSCALING and EXTENDING the PROJECT'S IMPACT to the NATIONAL LEVEL in TURKMENISTAN (DURING the PROJECT LIFETIME and AFTER)

PROJECT:
Modernisation of Higher Education in Central Asia
through New Technologies
(HiEdTec)
Project No: 598092-EPP-1-2018-1-BG-EPPKA2-CBHE-SP
Project Coordinator: ANGEL KANCHEV UNIVERSITY OF RUSE

With the support of the Erasmus+ programme
of the European Union

Ashgabat – 2020

Co-funded by the
Erasmus+ Programme
of the European Union

Modernisation of Higher Education
in Central Asia
through New Technologies
(HiEdTec)



Contributing partners:

No.	Country	Name of the Institution
P11	Turkmenistan	International University for the Humanities and Development
P12	Turkmenistan	Oguz Han Engineering and Technology University of Turkmenistan
P13	Turkmenistan	State Power Engineering Institute of Turkmenistan
P23	Turkmenistan	Ministry of Education of Turkmenistan

Main authors:

H.Halmamedov	International University for the Humanities and Development
A.Akgayev	Oguz Han Engineering and Technology University of Turkmenistan
B.Jumayev	State Power Engineering Institute of Turkmenistan
P.Rasulov	Ministry of Education of Turkmenistan

The document was prepared with the support of the Erasmus+ programme of the European Commission, Higher education capacity building: 598092-EPP-1-2018-1-BG-EPPKA2-CBHE-SP. It reflects only the views of the authors and the commission cannot be held responsible for any use of the information contained in it.

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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)




Training lecturers from other universities

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MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)

Shortly, realizing the national concepts at institutional or university level will lead to high quality e-resources which will serve as rich educational materials for undergraduate students. In fact, by completing the work packages of the project, intended goals of the project will be achieved and, meanwhile, the national conceptions related to developing education and digital economy will partially be realized at the institutional level. This shows an importance of carrying out the international educational project together with other universities, especially those in developed countries, and sharing their leading experiences in order to successfully realize the national conceptions at institutional level.



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MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)
2019-2022

COORDINATOR:
UNIVERSITY OF RUSE, BULGARIA

REASONS:
In order to respond to:

- the Digital Transformation of Industries (Industry 4.0), which also requires DIGITAL TRANSFORMATION OF EDUCATION with overtaking pace, **the consortium will develop Concepts of adapting the educational system to the digital generation**, considering specific conditions of each of the partner countries;
- the requirement of the EU to give the opportunity for EVERYBODY to learn at ANY time and at ANY place with the help of ANY lecturer, using ANY device – computer, laptop, tablet, phablet, smart phone, etc. **the consortium will create Centres for innovative education technologies.**



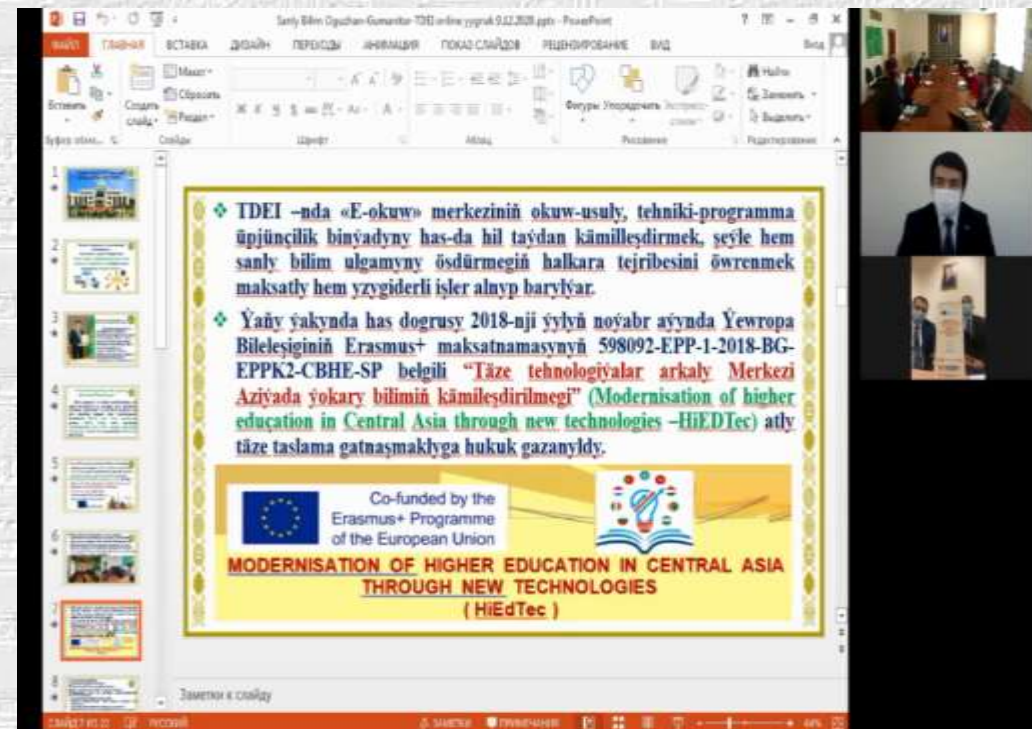


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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



Organizing and participating in round tables with presentations about the HiEdTec project





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**MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA
THROUGH NEW TECHNOLOGIES
(HiEdTec)**



Organizing and participating in workshops with presentations about the HiEdTec project

**ABOUT THE INNOVATIVE EDUCATIONAL TECHNOLOGIES
AT THE INSTITUTE**
(об инновационных образовательных технологиях в институте)

15.09.2023

Conception of "Improving education in Turkey" accepted

Концепция "Улучшение образования в Турции" принята

**INTERNATIONAL COOPERATIONS
(МЕЖДУНАРОДНОЕ СОТРУДНИЧЕСТВО)**

For more information: www.tdei.edu.tm



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Organizing and participating in seminars with presentations about the HiEdTec project



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Организаторы:

- Министерство образования и науки Кыргызской Республики
- Национальный офис Erasmus+ в Кыргызской Республики
- Национальная команда экспертов по реформе высшего образования
- Кыргызский государственный технический университет им. И.Раззакова

При поддержке:

- Проекта Erasmus+: «Модернизация высшего образования в Центральной Азии через современные технологии (HiEdTec)»

ИНФОРМАЦИОННОЕ ПИСЬМО

о проведении

**ВТОРОГО НАЦИОНАЛЬНОГО СЕМИНАРА ПО
СОВРЕМЕННЫМ ОБРАЗОВАТЕЛЬНЫМ ТЕХНОЛОГИЯМ
EduTech KG 2021**

18 мая 2021 года



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**MODERNISATION OF HIGHER EDUCATION
IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)**



TEACHER TRAININGS



Course developed for HiEdTec | Training of Trainers

Planning and Developing Courses in Distance Learning Environments



HiEdTec

Course >



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Organizing and participating in conferences with reports about the HiEdTec project

Управление информационными ресурсами : материалы XVII Междунар. науч.-практ. конф., Минск, 12 марта 2021 г. ; Акад. упр. при Президенте Респ. Беларусь ; редкол. : А. С. Лаптенок. – Минск : Академия управления при Президенте Республики Беларусь, 2021. – 394 с.
ISBN 978-985-527-588-0.

SIGNIFICANCE OF INTERNATIONAL PROJECTS IN DEVELOPING DIGITAL EDUCATION

Jumayev B. A.

State Energy Institute of Turkmenistan (Mary, Turkmenistan)

Electronic educational materials, being prepared as a part of digital education, serve as significant and valuable resources for undergraduate students in order to study any subject individually. Therefore, it is important to develop video lectures, presentations, interactive educational programs and e-books in order to support digital transformation in education. In this regards, in 2017, there was accepted a Conception of developing digital education in Turkmenistan, in which significance of providing students with necessary educational and scientific materials through educational portal and carrying out online courses are being addressed [1]. Moreover, in the Execution Plan of this Conception, there were planned to continuously work out e-books, video-audio materials, handbooks, interactive programs and presentations. Likewise, in 2018, by the Decree of the Esteemed President of Turkmenistan, a Conception of developing digital economy in Turkmenistan in between 2019-2025 was also accepted. This conception is directly related to the implementation of information communication technologies and smart solutions in the economy. Therefore, in order to realize these tasks, reach intended goals successfully and train highly qualified engineers, in the State Energy Institute of Turkmenistan, there is being carrying out an international project called "Modernisation of higher education in Central Asia through new technologies (HiEdTec)" which is co-financed by European Union. The

«EDUCATION AND SPORTS IN THE PROSPEROUS EPOCH OF POWERFUL STATE»

Articles of the International Scientific Conference
(14-15 November, 2019)



Bayram Jumayev
(Turkmenistan)

PECULARITIES OF DIGITAL EDUCATION AND SIGNIFICANCE OF SHARING EXPERIENCE

Features of digital education and their main goals are in the article. The importance of the international project (HiEdTec) which is carried out for the improvement of digital education in our country in accordance with the global standards is explained.





Publishing articles in journals / conference proceedings about the project HiEdTec.

ACM Reference Format:

Serdar Nazarov and Bayram Jumayev. 2021. Introducing innovative educational technologies into the undergraduate curricula to promote individual work of students: Case of Turkmenistan. In *International Conference on Computer Systems and Technologies '21 (CompSysTech '21)*, June 18, 19, 2021, Ruse, Bulgaria. ACM, New York, NY, USA, 5 pages. <https://doi.org/10.1145/3472410.3472428>

Table 1: Elements and goals of key factors in developing undergraduate curricula aiming at ICT-based individual work of students

The Conception	The Guideline	The Charter	International project (HiEdTec)
Working out modern digital methodical complex	Individual learning	Integrating the course subjects with individual works	Learning the experience of the EU partners in the implementation of innovative educational technologies in higher education
Developing web-based programming part of digital education	Making calculations	Introducing innovative teaching methods	Developing Concepts of adapting the education system to the digital generation
Modernization of teacher training using new methods and technologies	Problem solving	Developing problem solving skills of students	Establishing a Centre of Innovative Educational Technologies at the institute
Implementing digital educational resources in education and training	Working out algorithms and circuits	Creating possibilities for individual learning	Acquisition of digital skills and innovative teaching and learning methods
Continuous digitalization of education	Preparing drawings	Fostering individual studying skills	Organizing training courses for lecturers for the acquisition of digital skills and innovative teaching and learning methods
Creating educational portal	Collecting scientific literatures		Experience exchange in the field of innovative educational technologies
Organizing courses in distance education	Preparing quizzes and tests		
	Selecting internet resources related to topic		
	Individual laboratory works		Creating sustainable academic network for sharing experience

ACM Reference Format:

Bayram Ashyrmiradovich Jumayev and Serdar Nazarov. 2022. Impacts of IT-related group tasks on capacity building of young scholars. In *International Conference on Computer Systems and Technologies 2022 (CompSysTech '22)*, June 17, 18, 2022, University of Ruse, Ruse, Bulgaria. ACM, New York, NY, USA, 5 pages. <https://doi.org/10.1145/3546118.3546122>

ACKNOWLEDGMENTS

Authors declare their thankfulness for benefiting from the possibilities and technologies installed at the Center for Innovative Education Technologies (IET) that was created in the framework of Erasmus+ project called “Modernisation of higher education in Central Asia through new technologies (HiEdTec)”. The research was carried out at the IET center.

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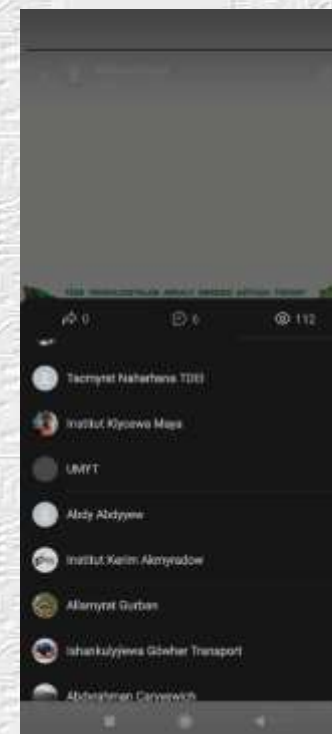
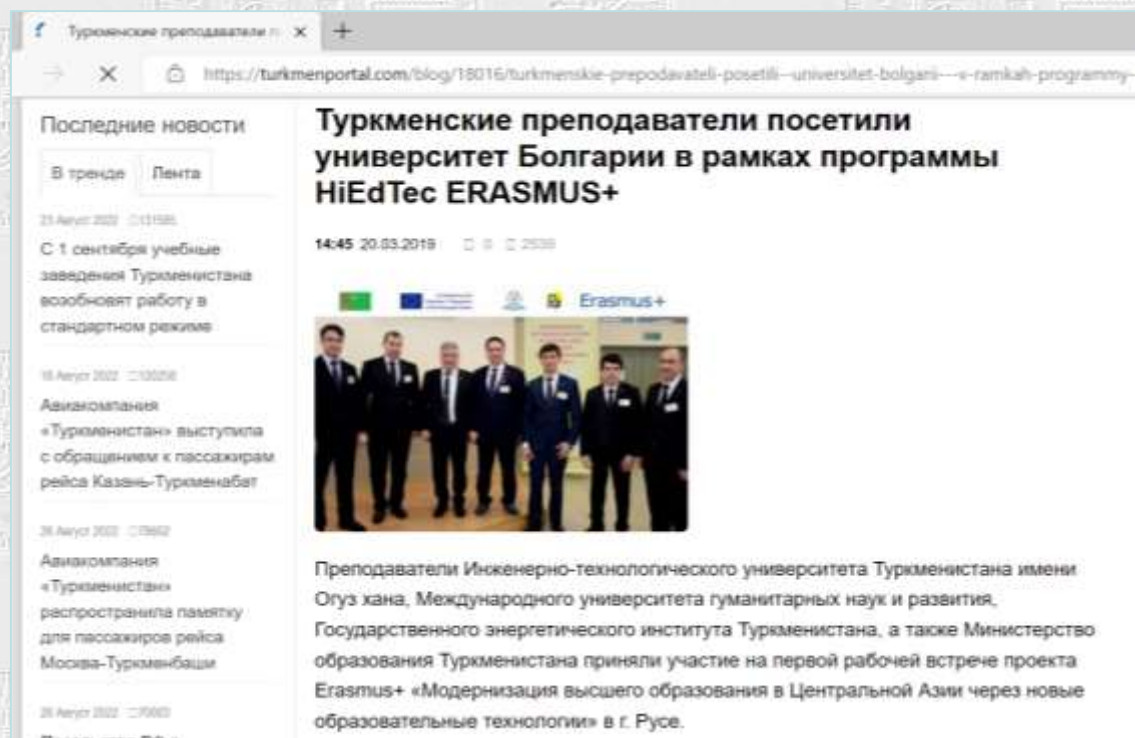


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Publishing information on social networks about the project HiEdTec



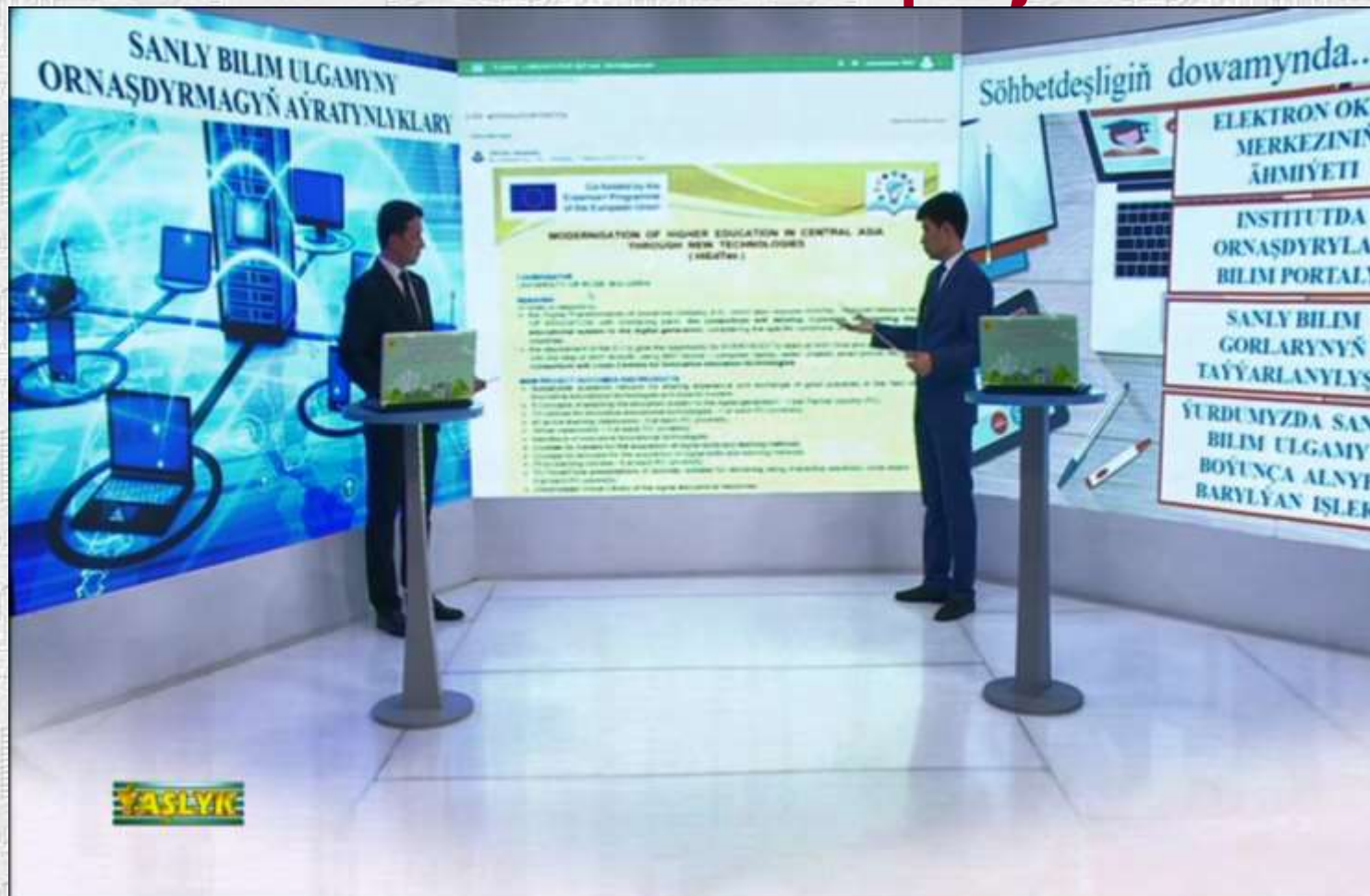


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Organizing radio and television broadcasts about the HiEdTec project



<https://youtu.be/8UeVGOumXiM>



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Making movie about the HiEdTec project



<https://youtu.be/o2LWjevuiDU>



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Sending the address and recommending the virtual library to all universities in Turkmenistan



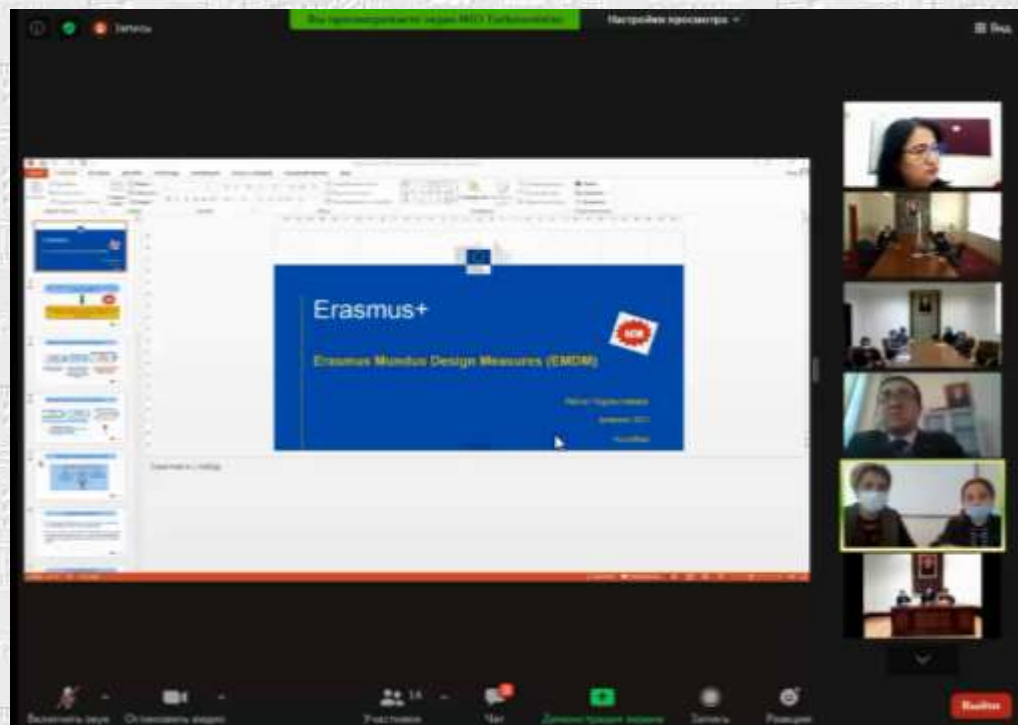


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Participating in Erasmus days





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THROUGH NEW TECHNOLOGIES
(HiEdTec)**



Participating in the Final dissemination conference in Uzbekistan



1-2 фотографий
после
конференции



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MODERNISATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)



Other activities related to dissemination and visibility of the HiEdTec project:



<p>TÜRKMENISTANYŇ MALIÝE WE YKDYSADYÝET MINISTRILIGI MINISTRY OF FINANCE AND ECONOMY OF TURKMENISTAN</p> <p>NETIJE CONCLUSION <i>Daşary ýurt çarjantarynyň kömek tästihmalarynyň döwlet tarapyndan hasaba alinmak barada</i></p> <p>“Täze tehnologiýalar arkaly Merkezi Aziýada ýokary bilimiň kämilleşdirilmegi” atly taslama</p>	
Taslamanynyň taraplary	Yewropa komissýasynyň Bilim, audiowizual serişdeleri we medeniýet bazarlary ýerine ýetiriji agentligi.
Uzlaşdyryjy	Angel Kançew, öňdöňky Rose uniwersiteti (Bolgariýa)
Benefisiar	Türkmenistanyň Döwlet energetika instituty
Esas	20.03.2019ý. seneli 2018-3331/001-001 belgili grant ýylagygy.
Taslamanynyň maksatlary	Maglumat kommunikasiýa tehnologiýalarynyň ösüşi bilimiň innowasion bilim tehnologiýalaryny ulanmak we okuw prosesine ornaşdyrmak arkaly hyzmatdaş ýurtlaryň bilim ulgamyňyň sanly eslede özgünleşdirmek, Yewropa döleşiginiň we hyzmatdaş ýurtlarynyň ýokary okuw tasawurlarynyň arasyndaky hyzmatdaşlygy, sanly pedagogika ulgamyndaky öňde barýyş tejribelerini alyş-çalyşy arkaly bitiriji taýýarlygy hüman-de bilimiň ulgamyň halkumy derjesinde ösdürmek.
Taslamanynyň büjeti	Taslamanyň umumy hüjje 988 773,00 ýewro. Türkmenistanyň Döwlet energetika instituty için – 43 716,00 ýewro.
Maliýeleýdiris çemesi	Yewropa komissýasynyň Bilim, audiowizual serişdeleri we medeniýet bazarlary ýerine ýetiriji agentligi
Taslamanynyň ýerine ýetiriliş möhleti	15.01.2019ý. -15.10.2021ý.
Taslamanynyň taraplary taslamanyň ýerine ýetiriliş barada Türkmenistanyň Maliýe we ykdysadyýet ministrligine hasabat taýsýrmalydyr.	
Taslama DYKÝDS-da 2020-nji ýylyň 17-nji noýabrynda EK –938/3 belgili hasaba alyndy.	
Netije 2020-nji ýylyň 24-nji noýabryndan – 2021-nji ýylyň 24-nji maýyna çenli berildi.	
Ministr	M.Serdarow



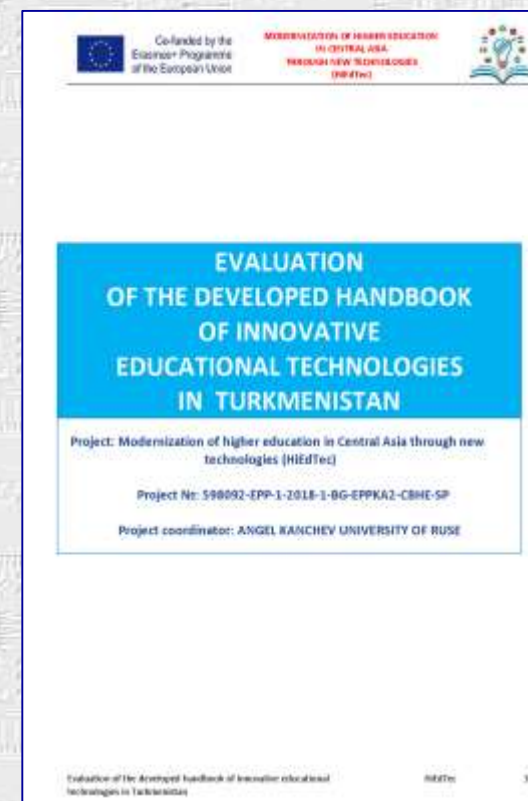
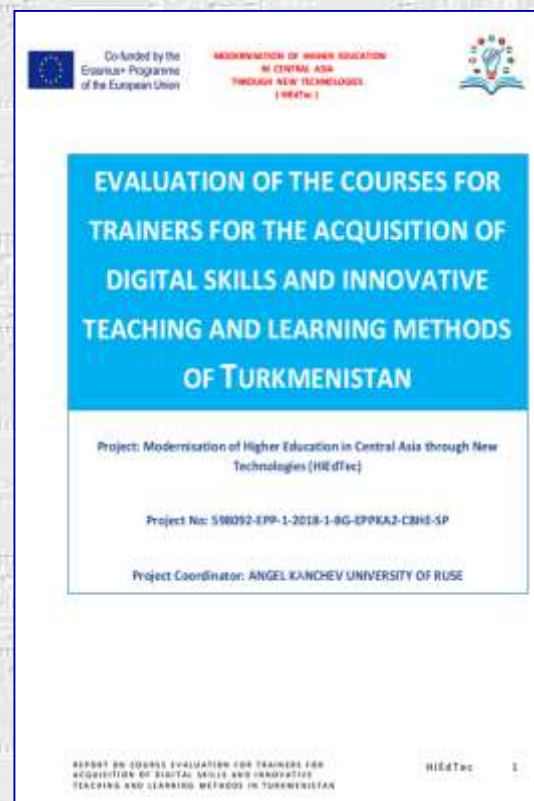
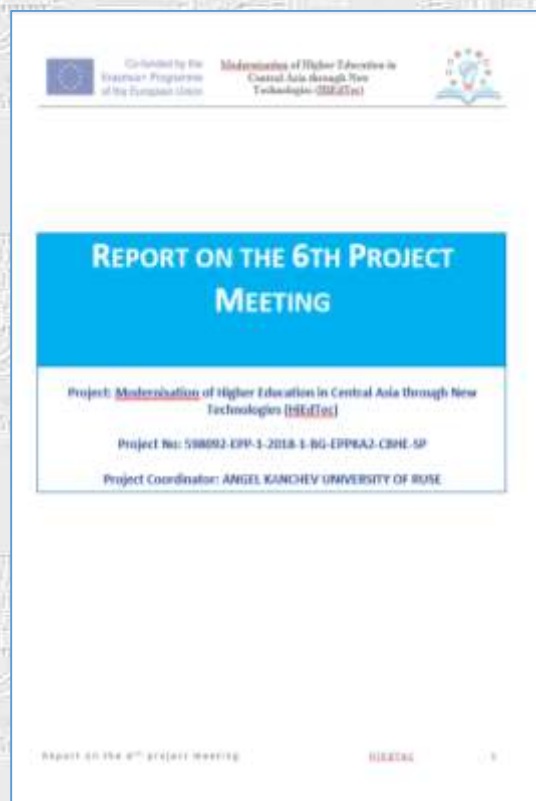
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Participating in the evaluation of the various activities of the HiEdTec project

(Concepts, Handbook, Centres, Active Learning Classrooms, Courses, Open Educational Resources, Meetings,)
and preparing the evaluation reports





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**THANK YOU
FOR YOUR ATTENTION !**