



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

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



**SUSTAINABLE DEVELOPMENT  
PLAN  
OF THE CONCEPT FOR ADAPTING  
THE HIGHER AND POST-GRADUATE EDUCATION SYSTEM  
TO THE DIGITAL GENERATION  
TAKING INTO ACCOUNT THE SPECIFIC CONDITIONS  
IN TAJIKISTAN**

**Erasmus + program project in Tajikistan  
Modernisation of Higher Education  
in Central Asia  
through New Technologies  
(HiEdTec)»**

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



### Main Authors:

Saifullaeva Olga - Khorog State University

Abdullo Mamadamon - Tajik Technical University named after Academician M. Osimi

Anvarova Gulnora - Tajik Technical University named after Academician M. Osimi

Jafarov Akhror - Technological University of Tajikistan

Kamolzoda Ilkhom – Ministry of science and education of RT

### Contributing partners

No.	Country	University name
P8	Tajikistan	Khorog State University
P9	Tajikistan	Tajik Technical University named after Academician M. Osimi
P10	Tajikistan	Technological University of Tajikistan
P22	Tajikistan	Ministry of science and education of the Republic of Tajikistan

This document has been prepared with the support of the European Commission under the ERASMUS + program, KA2- Capacity Building in the Field of Higher Education: 598092- EPP-1-2018-1-BG-EPPKA2-CBHE-SP. It reflects only the opinions of the authors, and the commission cannot be responsible for any use of the information contained therein.

No part of the record may be reproduced, stored in a search engine, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording; and may not be quoted or quoted without the prior written permission of the project coordinator.



## INTRODUCTION

Education in the modern world is becoming the most important resource for the economic and social development of countries, improving the well-being and individual development of citizens.

The President of the Republic of Tajikistan, paying special attention to the development of the education system and the implementation of education reform programs, notes that "...In this process, one important point has to be taken into account: in the modern world that country achieves remarkable progress which gives a particular attention to the level of literacy and successfully introduces new technology."

Over the years of independence, the Republic of Tajikistan, while maintaining rich traditions, has achieved certain successes in the field of education through various reforms, including the following:

- developed and adopted a regulatory framework for the national system
- education of the Republic of Tajikistan;
- a new legal framework was created;
- new state educational standards for preschool, general secondary, primary, secondary and higher vocational education have been developed and adopted, a two-level system of higher professional education has been introduced (bachelor's and master's degrees, while retaining specialty in some cases), new curricula and programs have been developed and introduced into practice at all levels of education;
- concepts for the use of information technologies in the process of managing the education system and educational activities were developed and adopted;

Thus, the project "MODERNIZATION OF HIGHER EDUCATION IN CENTRAL ASIA THROUGH NEW TECHNOLOGIES (HiEdTec)", which purpose is to introduce innovative technologies into the higher education system of Central Asian countries, will contribute to the development of the education sector of the Republic of Tajikistan.

For sustainability of the Concept of adaptation of the education system to the digital generation, as well as the introduction and adaptation of the acquired skills and knowledge in the Higher Education System of the Republic of Tajikistan, together with the Republican Center for Information and Communication Technologies of the Ministry of Education and Science of the Republic of Tajikistan, a draft of Sustainable Development Plan has been developed.

The development of a Plan for the dissemination and use of project results is part of Work Package 2 "Development of a concept for adapting the education system to the digital generation, taking into account the specific conditions of each PC" and involves the creation of an academic network, joint work on the implementation of the main points of the Concept.

This Plan is aimed at introducing of innovative educational technologies into the educational process in institutions of higher and postgraduate education. The implementation of this Plan will be carried out with the support of the Ministry of Education and Science of the Republic of Tajikistan.

The main goal of the Concept is to adapt the educational system to the digital generation through the development and effective use of innovative educational technologies and didactic models in teaching, thereby providing the opportunity for EVERYONE to study at ANY time



and in ANY place with the help of ANY teacher, using ANY end device - a computer, laptop, tablet, phablet, smartphone, etc.

Key ideas of the Concept for adapting the system of higher and postgraduate education to the digital generation:

- preserving and guaranteeing the leading role of the teacher;
- development of traditional education;
- development of electronic, mobile and ubiquitous learning;
- development of blended learning and recognition of non-formal learning outcomes;
- use of other innovative educational technologies;
- using innovative educational technologies in teaching students with special educational needs;
- using innovative educational technologies to attract and teach students from all over the world;
- use of innovative didactic models;
- introduction of a research approach to education;
- analysis of the results from the implementation of innovative educational technologies and didactic models;
- Popularization and enhancement of results and best practices.

Currently, within the framework of the project, partner universities have carried out a certain amount of work to disseminate and implement the Concept. Thus, the Concept in 2019 was agreed with the Ministry of Education and Science of the Republic of Tajikistan, replicated and distributed among the rectors of 39 universities of the Republic of Tajikistan for use.

In partner universities, the Concept was discussed at meetings of Academic and Scientific and Methodological Councils, and workshops for the teaching staff. In all partner universities, the Concept is included to the university roadmap.

Partner universities train their teachers according to the HiEdTec project curriculum.

### **Sustainable development plan for the concept of adapting the system of higher and postgraduate education to the digital generation, taking into account the specific conditions in the Republic of Tajikistan for 2020-2025.**

The main objectives of the sustainable development plan are:

a) At the national level

Creation of a national network of centers for innovative educational technologies.

b) At the institutional level

Introduction of innovative educational technologies into the traditional educational process. Active use of centers of innovative educational technologies and active classes for teaching innovative educational technologies.

An action plan to ensure the sustainable development of the concept of adapting the system of higher and postgraduate education to the digital generation, taking into account the specific conditions in Tajikistan, is given in Table 1.



Table 1. - PLAN OF ACTIONS for the implementation of the Concept for adapting the system of higher and postgraduate education to the digital generation in the Republic of Tajikistan

№ p / p	Name of events	Period of execution	Performers	Completion form
<b>At the national level</b>				
<i>1 Creation of a national network of centers for innovative educational technologies</i>				
1.1	Development of a unified Regulation on the Centers for innovative educational technologies	2020-2021	Center for Information and Communication Technologies of the Ministry of Education and Science of the Republic of Tajikistan	unified Regulation on the Centers for innovative educational technologies
1.2	Inclusion of measures for the implementation of the Concept for adapting the system of higher and postgraduate education to the digital generation in the State Program for the Development of Education and Science of the Republic of Tajikistan until 2030	2021 – 2022	Ministry of Education and Science of the Republic of Tajikistan	Additions to the State Program for the Development of Education and Science of the Republic of Tajikistan until 2030
1.3	Development and distribution of a practical guide to digitalization of the sphere of higher and postgraduate education	2020-2021	Center for Information and Communication Technologies of the Ministry of Education and Science of the Republic of Tajikistan	A Practical Guide to Digitalization of Higher and Postgraduate Education
1.4	Dissemination of the Concept of Adaptation of the System of Higher and Postgraduate Education to the Digital Generation among the universities and colleges of the Republic of Tajikistan	2020	Ministry of Education and Science of the Republic of Tajikistan	Distribution list
1.5	Conducting national conferences, Olympiads, workshops in the online format on the basis of the Centers.	2021-2023	Ministry of Education and Science of the Republic of	Carrying out reports



			Tajikistan	
1.6	Monitoring and analysis of the use of interactive, distance, mixed learning technologies in the educational process at the universities of the Republic of Tajikistan	2022-2025	Department of Higher and Postgraduate Education MES RT	Monitoring report
<i>2 Dissemination of project results at the national level</i>				
2.1	Training and retraining of teachers in areas of development and application of digital educational technologies	2021-2025	Center for Information and Communication Technologies of the Ministry of Education and Science of the Republic of Tajikistan, Universities of the country	Reporting information
2.2	Encouragement of teachers using innovative educational technologies in the educational process	2021-2025	Ministry of Education and Science of the Republic of Tajikistan, Universities of the country	Reporting information
2.3	Creation of a single republican base of scientific and educational materials, between the university network	2021-2025	Ministry of Education and Science of the Republic of Tajikistan, Universities of the country	Unified republican base of scientific and educational materials, inter-university network
<b>At the institutional level</b>				
1	Introduction of the main sections of the Concept into the "Roadmap" of universities	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Road map
2	Implementation of digitalization tools of the highest complexity: digital analytics based on Big Data technologies, Blockchain, Artificial Intelligence, Data Science in the educational process	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Reporting information
3	Creation of a platform for the exchange of information on the achievements within the framework	2020-2025	TUT, KhSU, TTU named after acad. M.Osimi	University website, academic network



	of the project, constant updating and filling with content of the Platform for the Academic Network			
4	Connection to the academic network of universities, training of teachers under the HiEdTec program	2020-2025	TUT, KhSU, TTU named after acad. M.Osimi	Academic network, materials of training workshops, final indicators of courses
5	Organization and holding of conferences, workshops on digitalization of higher and postgraduate education. Project publications	2020-2025	TUT, KhSU, TTU named after acad. M.Osimi	Materials of workshops, conferences publications
6	Stimulation and encouragement of university staff for the development and implementation of digital educational resources and technologies in the educational process	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Internal regulations
7	Improving the qualifications of teaching staff of universities in the field of innovative methods and technologies of teaching, the development of a digital educational center, distance learning, the use of cloud technologies.	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Professional development plan for teaching staff
8	Equipping classrooms with interactive equipment, Feedback system implementation during training sessions	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Audience passports
9	Development and acquisition of digital educational resources, e-courses	2021-2025	TUT, KhSU, TTU named after Acad. M.Osimi	Implementation acts in the educational process
10	Improving the e-learning platform.	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	E-learning platforms
11	Participation in the creation of a public virtual interuniversity library	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Links
12	Development and implementation of innovative educational technologies and didactic models, blended and distance learning, promoting the implementation of a research approach to education.	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Implementation acts



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

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



13	Internal monitoring of the implementation of innovative educational technologies and didactic models in order to improve educational activities.	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Report
14	Dissemination of the received experience through the media, regional and national workshops and conferences, social networks, etc.	2021-2025	TUT, KhSU, TTU named after acad. M.Osimi	Publications, materials of workshops, conferences