



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

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



**REPORT
ON THE QUESTIONNAIRE
FOR THE EVALUATION
OF THE CLOUD-BASED VIRTUAL
LIBRARY OF THE DIGITAL
EDUCATIONAL RESOURCES
IN UZBEKISTAN**

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**

Tashkent – 2022



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

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



Editor

<i>Deliverable number:</i>	5.10
<i>Title:</i>	EVALUATION REPORT OF THE CLOUD-BASED VIRTUAL LIBRARY OF THE DIGITAL EDUCATIONAL RESOURCES OF THE REPUBLIC OF UZBEKISTAN
<i>Type of nature of deliverable:</i>	Report
<i>Dissemination level:</i>	National level
<i>Status/Version:</i>	Final
<i>Date:</i>	November, 2022

Main authors

BOBOJONOV AZIZJON – TASHKENT STATE UNIVERSITY OF ECONOMICS
KUCHAROV ABORORJON – TASHKENT STATE UNIVERSITY OF ECONOMICS

Contributing persons

STEFANIE OESTLUND – UNIVERSITY OF LUXEMBOURG
STOYANKA SMRIKAROVA – UNIVERSITY OF RUSE
TZVETOMIR VASSILEV – UNIVERSITY OF RUSE

This document has been produced with the support of the 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.

No part of the report may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording; and may not be quoted or cited, without prior permission in writing from the Project Coordinator.



Contents

EXECUTIVE SUMMARY	4
INTRODUCTION.....	5
PROJECT OVERVIEW.....	5
HiEdTec QUESTIONNAIRE RESULTS.....	6
1. Which country are you from?	6
2. Who are you?	6
3. Overall, please tell us how well structured the Cloud-based Virtual Library of the digital educational resources is - 1 means not at all well-structured and 5 means extremely well structured.....	7
4. Please tell us how you rate the quality using a 1 to 5 scale where 1 means very bad and 5 means extremely good.....	7
5. Please tell us how you rate the search function of the library using a 1 to 5 scale where 1 means very bad and 5 means extremely good.	8
6. Does the library have the following promised features?	8
7. How would you rate the search functions mentioned in question 6?.....	9
8. Now we have a few questions about the objectives of the Cloud-based Virtual Library of the digital educational resources. Please tell us your level of agreement with the following statements about the Cloud-based Virtual Library of the digital educational resources, using a 1 to 5 scale, where 1 means you strongly disagree and 5 means you strongly agree. If a statement does not apply to you, please select "NA."	9
9. We would also like to get your feedback on the outreach of the Cloud-based Virtual Library of the digital educational resources. Please tell us your level of agreement with the following statements using a 1 to 5 scale, where 1 means you strongly disagree and 5 means you strongly agree?.....	12
10. If the cloud-based Virtual Library of the digital educational resources was not what you expected, what would you have expected?.....	14
11. If you disagree with any of the point above in No.8 or 9, please comment here mentioning the reasons.....	14
12. Was the installation of the cloud-based Virtual Library of the digital educational resources done on time?.....	15
13. Did you get the chance for comments and criticism?.....	15
14. If the answer to question 13 was no, what comments or criticism would you have on the open educational resources?.....	17
15. Any other comments.....	16
16. CONCLUSION.....	17



Executive summary

The report on the Questionnaire for the evaluation of the Cloud-based Virtual Library of the digital educational resources was prepared in accordance with the implementation plans of the HiEdTec project.

This will be an evaluation of the Cloud-based Virtual Library of the digital educational resources. The quality and benefits of the Cloud-based Virtual Library of the digital educational resources were evaluated taking into account the specific conditions in UZBEKISTAN.

The assessment of the Cloud-based Virtual Library of the digital educational resources reflects the opinions of the participants only. The purpose of this assessment is to determine whether the Cloud-based Virtual Library of the digital educational resources was properly organized in accordance with the requirements. This evaluation report will be attached to the final report.

Introduction

The goal of the evaluation of the Questionnaire is to serve as the source for the evaluation report of the Cloud-based Virtual Library of the digital educational resources. The purpose of the evaluation was to collect feedback on the Cloud-based Virtual Library of the digital educational resources. The Cloud-based Virtual Library of the digital educational resources was developed in accordance with the project "Modernization of the system of higher education in Central Asia through new technologies" (HiEdTec). The Cloud-based Virtual Library of the digital educational resources aims to create the availability of educational courses in open access to all teachers, as well as students, thereby providing the opportunity for EVERYONE to study at ANY time and in ANY place with the help of ANY teacher, using ANY device.

Project overview

The main aim of the project is to adapt the education system in the partner countries in Central Asia (PCs or partner countries) to the digital generation through introduction and effective use of ICT-based Innovative Educational Technologies and Didactic Models (IET&DMs) in the teaching process.

This aim corresponds to the strategic priorities for development of education in each of the Partner Countries (PC), i.e. supporting the use of digital



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

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



technologies and online delivery to improve pedagogies and assessment methods. The project will help turn the partner's higher educational institutions (HEIs) into innovative Universities and will improve the quality of the trained specialists who are necessary to perform the Digital Transformation of Industries (Industry 4.0). The consortium comprises of 24 full partners – HEIs from 4 EU countries and 5 partner countries in Central Asia. The consortium includes two types of higher education institutions (HEIs): European HEIs with solid experience in the innovative educational technologies and HEIs from Central Asia which want to introduce these technologies and open pedagogies in the field of higher education in order to improve and extend the supply of high quality learning opportunities tailored to the needs of digital learners.

In the framework of project realization it was created 5 virtual libraries in each partner country. A virtual library of Uzbekistan has been created with digital educational resources based on the distance learning environment Moodle LMS. Address of library: <http://hiedtec.samtuit.uz/> .

Through the HiEdTec project, communication equipment was supplied to the universities of the consortium of the Republic of Uzbekistan, on the basis of which a virtual library of Uzbekistan was created. The main server is located in Tashkent University of Information Technologies(TUIT). The virtual library of Uzbekistan was created by the TUIT and TSUE team.

The virtual library is made in accordance with the requirements of the project, there are mandatory elements - the logo of the European Union, the logo of the HiEdTec project and information about the project.

Also on the main page of our virtual library there are 3 University pages with categories of courses. These are courses of the following universities: Tashkent State University of Economics, Tashkent University of Information Technologies, Andijan Machine-Building Institute. All courses were developed using elements and resources of the Moodle platform.



Developing Questionnaire for the evaluation of the Cloud-based Virtual Library of the digital educational resources. Analysing the results of Questionnaire.

ANALYSIS OF QUESTIONNAIRE FOR THE EVALUATION OF THE CLOUD-BASED VIRTUAL LIBRARY OF THE DIGITAL EDUCATIONAL RESOURCES OF THE REPUBLIC OF UZBEKISTAN

1. *Which country are you from?* 223 responses from Uzbekistan

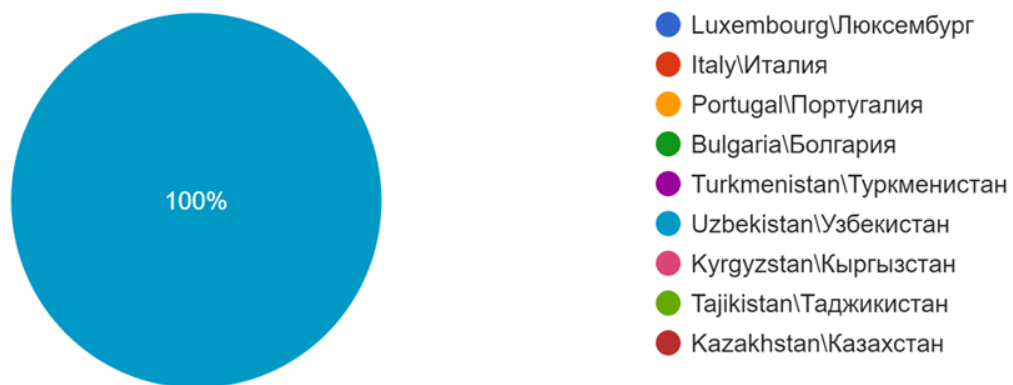


Figure 1.

2. *Who are you?* This question was answered by 222 respondents. As can be seen in Fig. 2 - 38.7% of them are students and 59.5% of them are teachers, 1.8% are the rest.

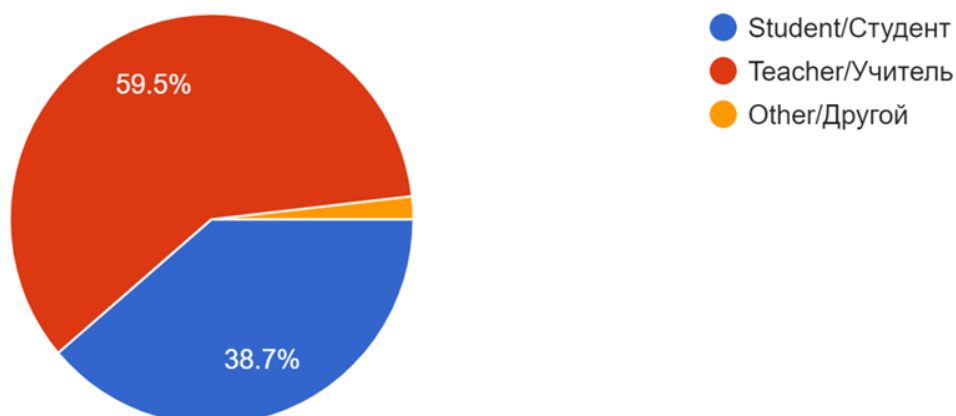


Figure 2.



3. Overall, please tell us how well structured the Cloud-based Virtual Library of the digital educational resources is - 1 means not at all well structured and 5 means extremely well structured.

Out of 223 responses, 58.3% of the respondents consider the structure of the training courses to be excellently structured, 40.8% to be well structured, and 0.9% to be medium structured.

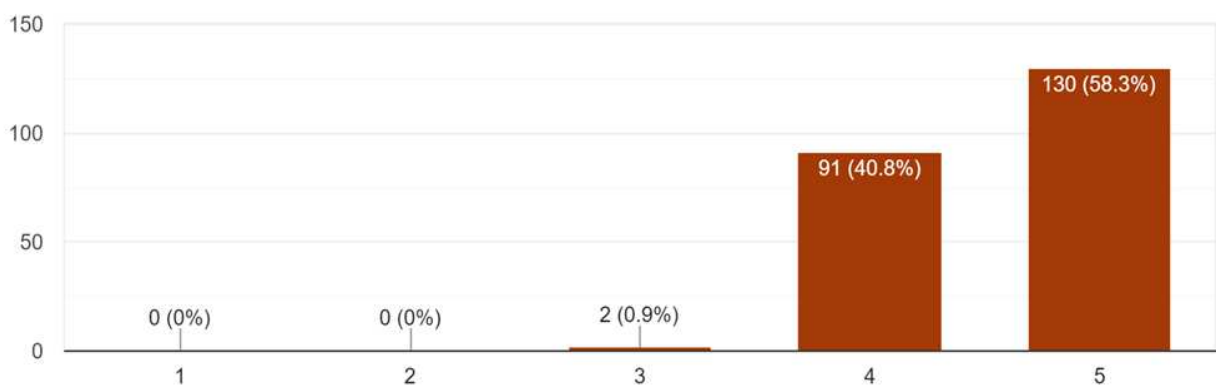


Figure 3.

4. Please tell us how you rate the quality using a 1 to 5 scale where 1 means very bad and 5 means extremely good.

There were 222 responses to this question, of which 62.2% considered the quality of the training course is excellent, 36.9% is good, and 0.9% is average.

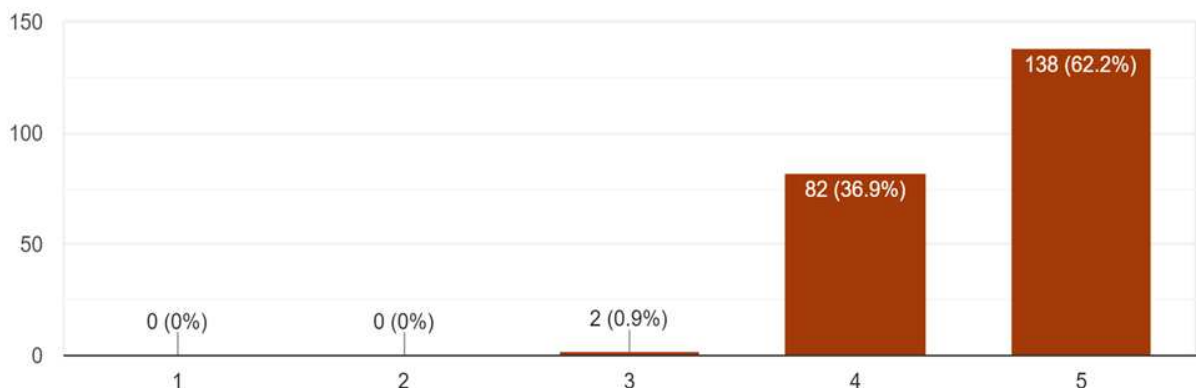


Figure 4.



5. Please tell us how you rate the search function of the library using a 1 to 5 scale where 1 means very bad and 5 means extremely good.

There were 223 responses to this question, of which 82.1% found the library search function to be excellent, 16.6% to be good, and 1.3% to be satisfactory.

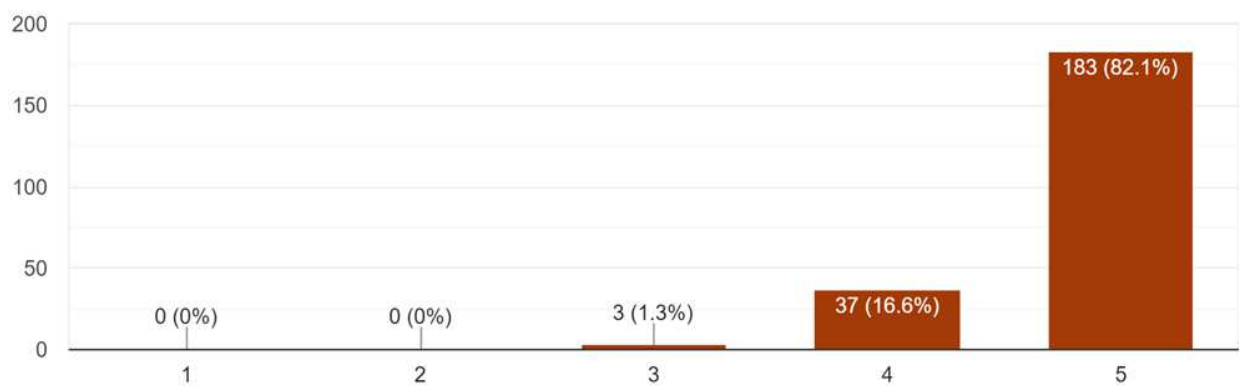


Figure 5.

6. Does the library have the following promised features?

221 answers were given to this question, of which 61.4% find search by title, 33.2% by author and 3.1% by direction, 2.2% other.

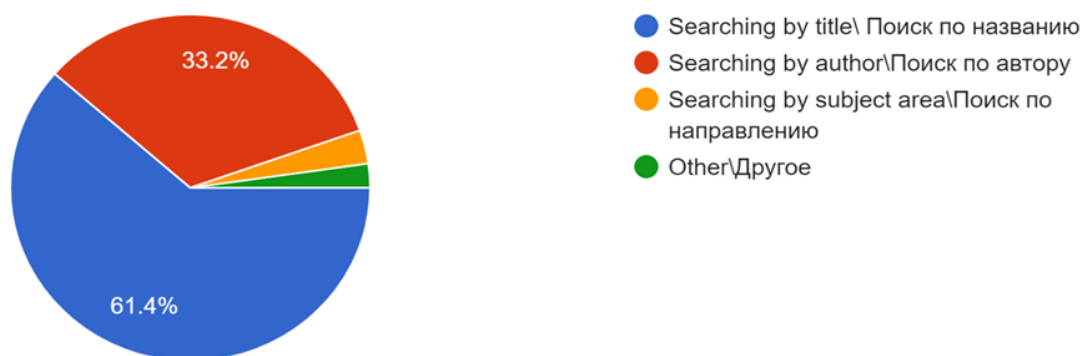


Figure 6.



7. How would you rate the search functions mentioned in question 6?

221 answers were given to this question, of which 43.5% answered excellent, 40.4% very good and 15.2% good, 0.4% average, 0.4% below average.

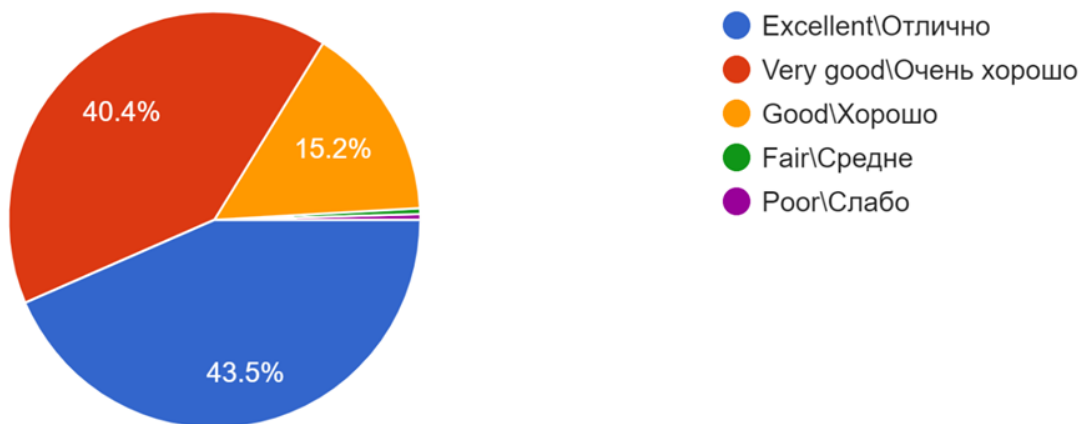


Figure 7.

8. Now we have a few questions about the objectives of the Cloud-based Virtual Library of the digital educational resources. Please tell us your level of agreement with the following statements about the Cloud-based Virtual Library of the digital educational resources, using a 1 to 5 scale, where 1 means you strongly disagree and 5 means you strongly agree. If a statement does not apply to you, please select "NA."

The structure of the questions were as follows:

- *Objectives were clearly communicated:*
 - ✓ 100 respondents strongly agreed
 - ✓ 75 respondents agreed
 - ✓ 44 respondents remained neutral
 - ✓ 4 respondents disagree
- *The objectives were met:*
 - ✓ 101 respondents strongly agreed
 - ✓ 76 respondents agreed



- ✓ 43 respondents remained neutral
- ✓ 2 respondents strongly disagree
- *Follow-up actions resulted from the Cloud-based Virtual Library of the digital educational resources:*
 - ✓ 129 respondents strongly agreed
 - ✓ 45 respondents agreed
 - ✓ 45 respondents remained neutral
- *It is clear for what the Cloud-based Virtual Library of the digital educational resources is needed for:*
 - ✓ 100 respondents strongly agreed
 - ✓ 117 respondents agreed
 - ✓ 2 respondents remained neutral
 - ✓ 2 respondents strongly disagree
- *The right people were addressed with the use for the Cloud-based Virtual Library of the digital educational resources:*
 - ✓ 170 respondents strongly agreed
 - ✓ 11 respondents agreed
 - ✓ 2 respondents disagree
 - ✓ 8 respondents remained neutral
- *The technical equipment has been explained sufficiently:*
 - ✓ 128 respondents strongly agreed
 - ✓ 46 respondents agreed
 - ✓ 2 respondents remained neutral
 - ✓ 23 respondents disagree
- *The technical equipment is exactly the one necessary and working for this purpose:*
 - ✓ 143 respondents strongly agreed
 - ✓ 32 respondents agreed
 - ✓ 44 respondents remained neutral
- *I can correctly use and explain what I have to do to use the Cloud-based Virtual Library of the digital educational resources:*
 - ✓ 142 respondents strongly agreed
 - ✓ 75 respondents agreed



- ✓ 2 respondents remained neutral
- ✓ 2 respondents strongly disagree
- ✓ 3 respondents did not answer
- *The Virtual Library is exactly what is needed in the Institution to advance the learning processes:*
 - ✓ 141 respondents strongly agree
 - ✓ 34 respondents agreed
 - ✓ 44 respondents remained neutral
 - ✓ 2 respondents strongly disagree
 - ✓ 3 respondents did not answer
- *The Library provided helps to develop the teaching in an innovative way:*
 - ✓ 100 respondents strongly agree
 - ✓ 74 respondents agreed
 - ✓ 2 respondents remained neutral
 - ✓ 43 respondents disagree
 - ✓ 2 respondents strongly disagree
 - ✓ 3 respondents did not answer
- *The students profit from the new innovative virtual library:*
 - ✓ 170 respondents strongly agree
 - ✓ 4 respondents agreed
 - ✓ 43 respondents remained neutral
 - ✓ 1 respondent strongly disagree
 - ✓ 6 respondents did not answer



9. *We would also like to get your feedback on the outreach of the Cloud-based Virtual Library of the digital educational resources. Please tell us your level of agreement with the following statements using a 1 to 5 scale, where 1 means you strongly disagree and 5 means you strongly agree.*

The structure of the questions was as follows:

- *The Cloud-based Virtual Library of the digital educational resources will have an impact:*
 - ✓ 97 respondents fully agree
 - ✓ 77 respondents agree
 - ✓ 45 respondents remained neutral
 - ✓ 3 respondents disagree
- *The Cloud-based Virtual Library of the digital educational resources is useful for the teaching/studying at my Institution:*
 - ✓ 95 respondents strongly agree
 - ✓ 122 respondents agreed
 - ✓ 3 respondents disagree
- *The things I can learn on the Cloud-based Virtual Library of the digital educational resources will help me to attract better students to the institution:*
 - ✓ 126 respondents strongly agree
 - ✓ 91 respondents agreed
 - ✓ 3 respondents disagree
- *The Virtual Library will help to create more innovative teaching inside the institution:*
 - ✓ 96 respondents strongly agreed
 - ✓ 78 respondents agreed
 - ✓ 44 respondents remained neutral
 - ✓ 2 respondents disagree
- *The Library and the information stored within helps teachers to hold more interesting classes:*
 - ✓ 140 respondents strongly agreed
 - ✓ 34 respondents agreed



- ✓ 43 respondents remained neutral
- ✓ 2 respondents disagree
- ✓ 2 respondents strongly disagree
- *The virtual library helps teachers/the institution to please the needs of their students better:*
 - ✓ 138 respondents strongly agreed
 - ✓ 36 respondents agreed
 - ✓ 44 respondents remained neutral
 - ✓ 2 respondents disagree
- *The virtual library delivers exactly the result that I expected when we started the project:*
 - ✓ 168 respondents strongly agreed
 - ✓ 49 respondents agreed
 - ✓ 3 respondents disagree
- *The use of the virtual library makes my life as a teacher/student easier:*
 - ✓ 94 respondents strongly agreed
 - ✓ 80 respondents agreed
 - ✓ 43 respondents remained neutral
 - ✓ 2 respondents disagree
 - ✓ 2 respondents strongly disagree
- *The use of the virtual library makes teaching more fun:*
 - ✓ 210 respondents strongly agreed
 - ✓ 7 respondents agreed
 - ✓ 2 respondents remained neutral
 - ✓ 2 respondents strongly disagree
- *The usage of the virtual library makes students learn better:*
 - ✓ 126 respondents strongly agreed
 - ✓ 47 respondents agreed
 - ✓ 45 respondents remained neutral
 - ✓ 2 respondents disagree
- *The students seem to have more fun during their studies when using the new virtual library:*
 - ✓ 140 respondents strongly agreed



- ✓ 33 respondents agreed
- ✓ 43 respondents remained neutral
- ✓ 2 respondents disagree
- ✓ 3 respondents strongly disagree
- ✓ 2 respondents did not answer
- *The use of the virtual library makes teaching/studying more effective:*
 - ✓ 171 respondents strongly agreed
 - ✓ 45 respondents agreed
 - ✓ 2 respondents remained neutral
 - ✓ 1 respondent disagree
 - ✓ 2 respondents strongly disagree
 - ✓ 2 respondents did not answer

10. If the cloud-based Virtual Library of the digital educational resources was not what you expected, what would you have expected?

Out of the 223 respondents, 11 wrote their opinion.

It was as expected

It's just as expected

.

I believe it will get more features in the future.

It's the hard work of teachers

Works well, I think it helps students work well with materials

Great resource

A good resource turned out and the courses are also relevant

Could do even better

Very interesting content, wish the content was always updated

Content update

11. If you disagree with any of the point above in No.8 or 9, please comment here mentioning the reasons.

Out of the 223 respondents, 8 expressed their opinion.

- Nothing to comment
- I agree, everything is fine
- I liked nothing, say
- Constantly need to improve



- Gamification needs to be added
- I agree with all points
- I agree

12. Was the installation of the cloud-based Virtual Library of the digital educational resources done on time?

Out of 223 respondents, 99.6% answered "YES"

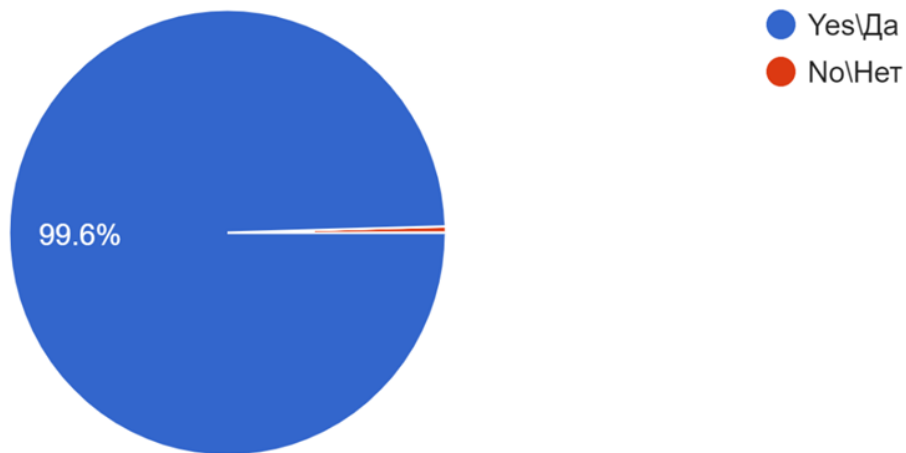


Figure 8.

13. Did you get the chance for comments and criticism?

Out of the 223 respondents, 98.2% answered "YES".

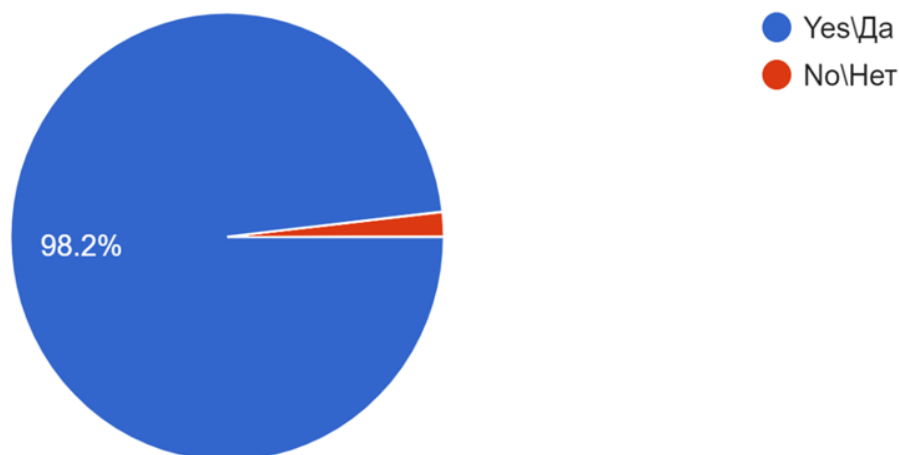


Figure 9.



14. *If the answer to question 13 was no, what comments or criticism would you have on the open educational resources?*

4 responses received:

- N/A
- There should be more subjects and lectures should be short videos
- I wish there were more courses, only few courses

15. *Any other comments.* 17 out of 223 respondents wrote the answers.

- ✓ Good resource for learners
- ✓ N/A
- ✓ Thank you
- ✓ Thank you for this result.
- ✓ The Virtual Library makes life easier for students and teachers: every resource stays in the cloud and is available anytime, anywhere. This will improve collaboration and progress in academic life between students and faculty.
- ✓ It's hard work and making these resources available to a wide audience. thank you
- ✓ Universities need more activities to attract students, and teachers need to make this resource more attractive and useful.
- ✓ Very good virtual library system
- ✓ Many thanks for the excellent work
- ✓ Everything is cool, I liked it
- ✓ Cool courses!
- ✓ More such courses and teachers
- ✓ I liked the course "Innovative Economics"
- ✓ You can still work on improving the resource
- ✓ Thanks for the resources, can make the video shorter and more interactive
- ✓ All super thanks!
- ✓ Thank you for interesting courses and content
- ✓ Thanks to colleagues, very good work



Conclusion

This report is based on survey developed by the HiEdTec project quality assurance team to get more insight on developed by Uzbekistan universities a cloud based virtual library.

The educational resource joins 3 local universities courses and educational materials based on methodology developed by project HiEdTec. Survey covers all the aspects of the implementation and use of virtual library. Moreover, answer indicates respondents openly expressed their thoughts and comments on the courses and resources and also virtual library functionality that includes educational resource.

This report is an evaluation of the Questionnaire is to serve as the source for the evaluation report of the Cloud-based Virtual Library of the digital educational resources. As a result, valuable information was acquired about the current state of the Cloud-based Virtual Library of the digital educational resources. Appropriate conclusions were made in order to improve the quality of digital educational resources.

This questionnaire was chosen as a methodology for assessing of the quality of the Cloud-based Virtual Library of the digital educational resources.

From the answers it can be concluded that:

- ✓ Main aim and objectives of virtual library are met and it was implemented widely considered HiEdTec project study and recommendations
- ✓ Resources are interesting for the students and audience they are built for. Resources carefully considered, meaningful, interesting and have wide coverage.
- ✓ The structure of the Cloud-based Virtual Library of the digital educational resources was well organized;
- ✓ The quality of the Cloud-based Virtual Library of the digital educational resources is very high;
- ✓ The level of goals achieved in the development of the Cloud-based Virtual Library of the digital educational resources was very high;



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

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



-
- ✓ of the Cloud-based Virtual Library of the digital educational resources is very useful for all users.