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

# CLOUD-BASED
# VIRTUAL LIBRARY
# OF THE DIGITAL  EDUCATIONAL
# RESOURCES
# EVALUATION REPORT
# IN KAZAKHSTAN

**Project: Modernization of Higher Education in Central Asia though New
Technologies (HiEdTec)**

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

**Project coordinator: RUSE UNIVERSITY NAMED AFTER ANGEL KANCHEV**

**Pavlodar – 2022**

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**CONTENTS**

**Abstract**

Cloud-based Virtual Libraries of the digital educational resources is being developed in accordance with strategic goals of the "Modernization of the Higher Education System in Central Asia though new technologies" HiEdTech project. Cloud-based Virtual Library is a curation of free educational resources and tools to assist students, educators, parents and the community. Evaluation Questionnaire Report of the Cloud-based Virtual Library of the digital educational resources was prepared in partner universities from Kazakhstan. The quality and use of the Cloud-based Virtual Library of the digital educational resources were assessed taking into account the specific conditions in Kazakhstan. Evaluation Report of the Cloud-based Virtual Library of the digital educational resources in Kazakhstan will reflect the views of the participants. This Questionnaire should be the source for the evaluation report of the Cloud-based Virtual Library of the digital educational resources for the deliverable 4.5. The purpose of this assessment is to determine if the Cloud-based Virtual Library of the digital educational resources have been properly established in accordance with the requirements. This evaluation report will be attached to the records of the work done.

**INTRODUCTION**

Cloud-based Virtual Library of Kazakhstan has been created with digital educational resources based on the distance learning environment Moodle LMS. The main server is located in ATU. Through the means of HiEdTec project, communication equipment was supplied to the universities of the consortium of Kyrgyzstan, on the basis of which a virtual library was created. The virtual library is developed 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. Moreover, on the main page of our virtual library there are categories of courses. These are courses of the following universities:  Almaty Technological University (P2), Eurasian National University (P3), Innovative University of Eurasia (P4).

**PROJECT OVERVIEW**

 The Cloud-based Virtual Library of the digital educational resources is designed to provide access to educational courses in the open space 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 end device.

The main goal of the project is to adapt the education system in the partner countries to the digital generation by introducing and effectively using innovative educational technologies and didactic models (IET & DM) based on ICT in the educational process. The consortium consists of 24 full partners - universities from 4 EU countries and 5 PCs. The project will help transform partner higher education institutions into innovative universities and improve the quality of trained specialists needed to carry out the digital transformation of industries (Industry 4.0). The Project acknowledges the use of technology in transforming learning, developing collaboration solutions, enhancing the role of educators in innovative technology-supported learning environments allowing them to be engaged in professional learning experiences that will prepare to apply research-based approaches to didactic teaching.

**HiEdTech SURVEY RESULTS**

**General information**

We received a total of 80 responses to our questionnaire:

4.5_Questionnaire for evaluating the cloud-based virtual library of the digital educational resources n Kazakhstan



A total of 79 responses were received. The geography of participants is shown in Figure 1. (100%) of the respondents were from Kazakhstan. An analysis of the responses regarding cloud-based virtual library of the digital educational resources n Kazakhstan was provided in two languages.
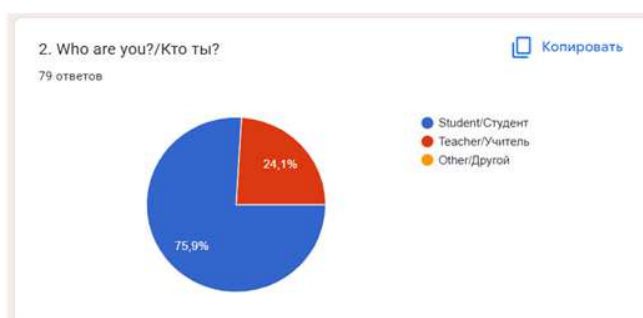


60 (75,9%) were students, whereas 19 (24,1%) were teachers.

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.

3. Пожалуйста, скажите, насколько хорошо структурирована облачная виртуальная библиотека цифровых образовательных ресурсов - 1 означает, что она не совсем хорошо структурирована, а 5 означает, что она очень хорошо структурирована.

79 ответов

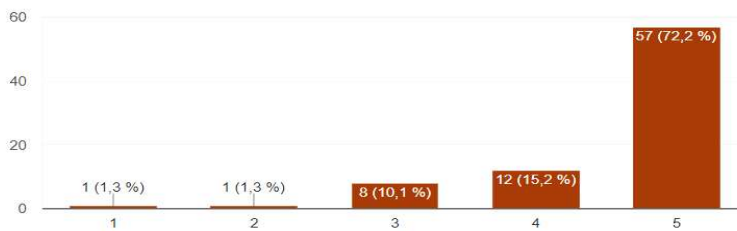Respondents evaluate the cloud-based virtual library of the digital educational resources in Kazakhstan as follows:

| Value | Number |
|-------|--------|
| 1 | 1 |
| 2 | 1 |
| 3 | 8 |
| 4 | 12 |
| 5 | 57 |

An analysis of 79 answers on this question shows that 1 ( 1,3%) of the respondents think that the cloud-based virtual library of the digital educational resources is not very well structured, 57 (72.2%) of respondents say that the cloud-based virtual library of the digital educational resources is well and very well structured.

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.
\Пожалуйста, расскажите нам, как вы оцениваете качество по шкале от 1 до 5, где 1 означает очень плохо, а 5 - очень хорошо.

80 ответов

Respondents evaluate the quality of the cloud-based virtual library of the digital educational resources in Kazakhstan as follows:

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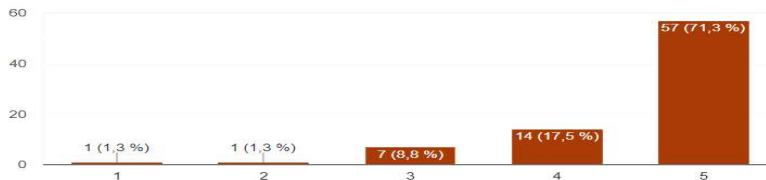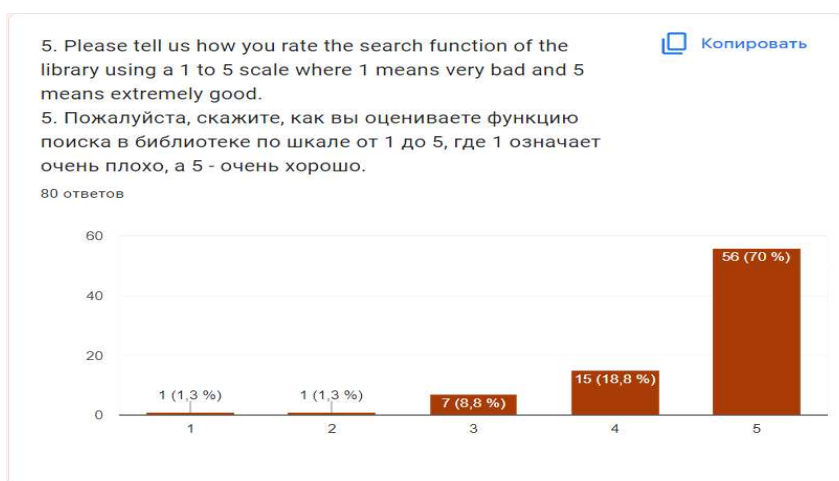| Value | Number |
|-------|--------|
| 1 | 1 |
| 2 | 1 |
| 3 | 7 |
| 4 | 14 |
| 5 | 57 |

An analysis of 79 answers on this question shows that 1 ( 1.3%) of the respondents think that the quality of cloud-based virtual library of the digital educational resources is not very good, 57 (71,3%) of respondents say that the quality of cloud-based virtual library of the digital educational resources is extremely good.



Respondents evaluate the search function of the library using a 1 to 5 scale as follows:

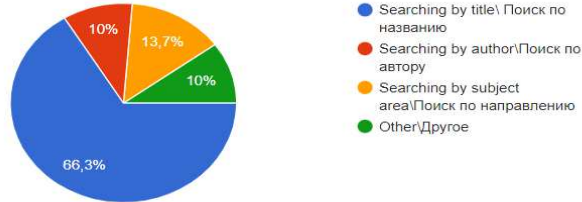| Value | Number |
|-------|--------|
| 1 | 1 |
| 2 | 1 |
| 3 | 7 |
| 4 | 15 |
| 5 | 56 |

An analysis of 79 answers on this question shows that 1 ( 1.3%) of the respondents think that the search function of the cloud-based virtual library of the digital educational resources is not very good, 56 (70%) of respondents say that the search function of the cloud-based virtual library of the digital educational resources is extremely good.

6. Does the library have the following promised features?
6. Имеет ли библиотека следующие обещанные функции?

80 ответов

- Searching by title\ Поиск по названию
- Searching by author\Поиск по автору
- Searching by subject area\Поиск по направлению
- Other\Другое

An analysis of 80 answers on this question shows that 53 ( 66.3%) of the respondents think that the cloud-based virtual library of the digital educational resources has the function search by the title. 11 (13,7%)  of the respondents search by subject.  8 (10%) of the respondents think that  the cloud-based virtual library of the digital educational resources has the function search by the author.

7. How would you rate the search functions mentioned in question 6?
7. Как бы вы оценили функции поиска, упомянутые в вопросе 6?

80 ответов

- Excellent\Отлично
- Very good\Очень хорошо
- Good\Хорошо
- Fair\Средне
- Poor\Слабо
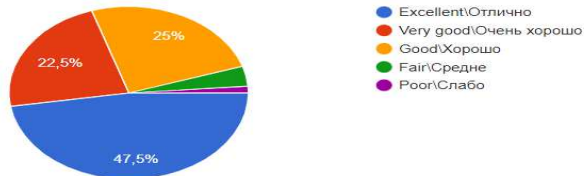
Respondents evaluate the search function of the library as follows:

| Value | Number |
| --- | --- |
| poor | 1 |
| fair | 3 |
| good | 20 |
| very good | 18 |
| excellent | 38 |

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."

8. Теперь у нас есть несколько вопросов о целях Облачной виртуальной библиотеки электронных образовательных ресурсов. Пожалуйста, скажите, насколько вы согласны со следующими утверждениями о виртуальной библиотеке облачных цифровых образовательных ресурсов, используя шкалу от 1 до 5, где 1 означает, что вы категорически не согласны, а 5 означает, что вы категорически согласны. Если какое-либо утверждение к вам не относится, пожалуйста, выберите "NA".

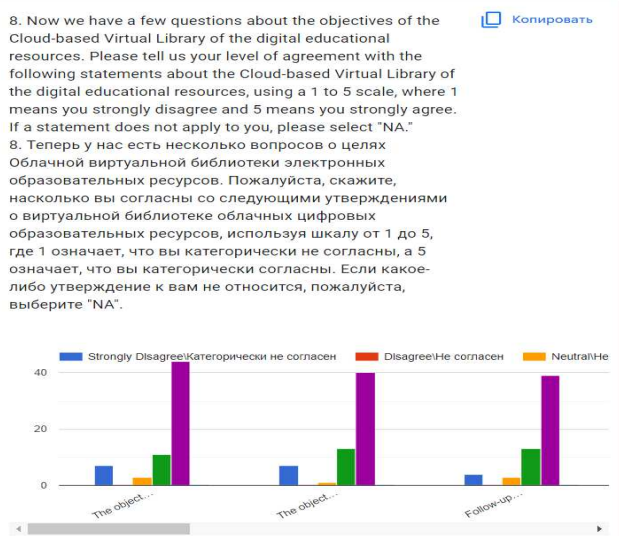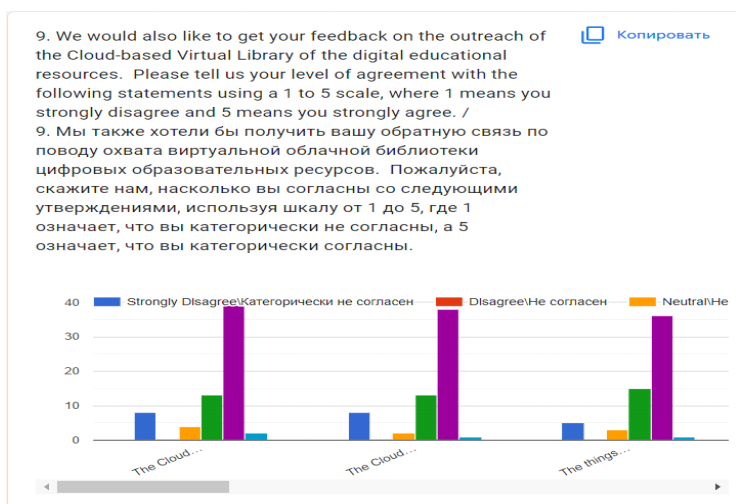We received answers to the question about the objectives of the Cloud-based Virtual Library of the digital educational resources, where the agreement with the statements about the training courses  was evaluated on a scale of 1 to 5, where 1 - means that you strongly disagree, 2 - disagree 3 – neutrality 4 – agree 5 - completely agree NA (not agreed) - If it has nothing to do with the issue.

| | Indicators | 1 | 2 | 3 | 4 | 5 | N/a |
|---|---|---|---|---|---|---|---|
| 1 | The objectives were clearly communicated | 7 | 0 | 3 | 11 | 44 | 0 |
| 2 | The objectives were met | 7 | 0 | 1 | 13 | 40 | 0 |
| 3 | Follow-up actions resulted from the Cloud-based Virtual Library of the digital educational resources | 4 | 0 | 3 | 13 | 39 | 0 |
| 4 | It is clear for what the Cloud-based Virtual Library of the digital educational resources is needed for | 4 | 0 | 2 | 11 | 41 | 0 |
| 5 | The right people were addressed with the use for the Cloud-based Virtual Library of the digital educational resources | 3 | 0 | 3 | 13 | 39 | 0 |
| 6 | The technical equipment has been explained sufficiently | 2 | 0 | 2 | 13 | 39 | 0 |
| 7 | The technical equipment is exactly the one necessary and working for this purpose | 2 | 0 | 2 | 12 | 40 | 0 |
| 8 | I can correctly use and explain what I have to do to use the Cloud-based Virtual Library of the digital educational resources | 4 | 0 | 2 | 10 | 40 | 1 |
| 9 | The Virtual Library is exactly what is needed | 2 | 0 | 2 | 13 | 40 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | in the Institution to advance the learning processes | | | | | | |
| 10 | The Library provided helps to develop the teaching in an innovative way | 6 | 0 | 2 | 11 | 42 | 0 |
| 11 | The students profit from the new innovative virtual library | 4 | 0 | 1 | 12 | 42 | 0 |

An analysis of the respondents' answers shows that the objectives of the Cloud-based Virtual Library of the digital educational resources there are about 3% who strongly disagree with the training material objectives. Those who agree and completely agree are 77%.
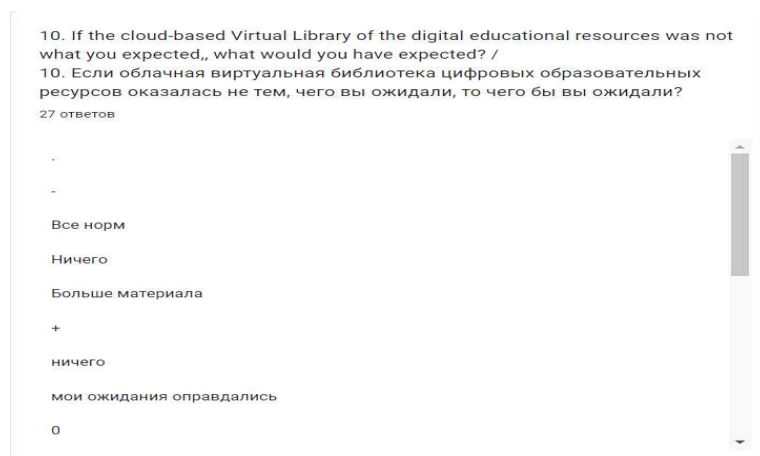


We received answers to the question about the outreach of the Cloud-based Virtual Library of the digital educational resources, where the agreement with the statements was evaluated on a scale of 1 to 5, where 1 - means that you strongly disagree, 2 - disagree 3 – neutrality 4 – agree 5 - completely agree NA (not agreed) - If it has nothing to do with the issue.

| | Indicators | 1 | 2 | 3 | 4 | 5 | N/a |
|---|---|---|---|---|---|---|---|
| 1 | The Cloud-based Virtual Library of the digital educational resources will have an impact | 2 | 0 | 4 | 19 | 39 | 2 |
| 2 | The Cloud-based Virtual Library of the digital educational resources is usful for the teaching/studying at my Institution | 3 | 0 | 2 | 7 | 38 | 1 |
| 3 | 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 | 5 | 0 | 3 | 15 | 36 | 1 |
| 4 | The Virtual Library will help to create more innovative teaching inside the institution | 4 | 0 | 2 | 12 | 38 | 2 |
| 5 | The Library and the information stored within helps teachers to hold more interesting classes | 4 | 0 | 1 | 14 | 37 | 2 |

| 6 | The virtual library helps teachers/the institution to please the needs of their students better | 4 | 0 | 3 | 13 | 37 | 2 |
|---|---|---|---|---|---|---|---|
| 7 | The virtual library delivers exactly the result that I expected when we started the project | 4 | 0 | 2 | 13 | 38 | 1 |
| 8 | The use of the virtual library makes my life as a teacher/student easier | 3 | 0 | 2 | 14 | 37 | 1 |
| 9 | The use of the virtual library makes teaching more fun | 4 | 0 | 2 | 13 | 37 | 2 |
| 10 | The usage of the virtual library makes students learn better | 3 | 0 | 3 | 10 | 39 | 2 |
| 11 | The students seem to have more fun during their studies when using the new virtual library | 4 | 0 | 2 | 12 | 38 | 1 |
| 12 | The use of the virtual library makes teaching/studying more effective | 5 | 0 | 2 | 12 | 37 | 1 |

An analysis of the respondents' answers shows that the outreach of the Cloud-based Virtual Library of the digital educational resources there are about 2% who strongly disagree with the training material objectives. Those who agree and completely agree are 74%.



We received answers to the question about If the cloud-based Virtual Library of the digital educational resources was not what you expected,, what would you have expected? We got the following answers:

All is good
my expectations were justified
Everything is fine
turned out to be what was expected

Yes
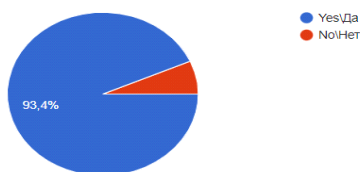will be better
waiting for an update
Library meets expectations



We received answers to the question If you disagree with any of the point above in No.8 or 9. We got the following answers:
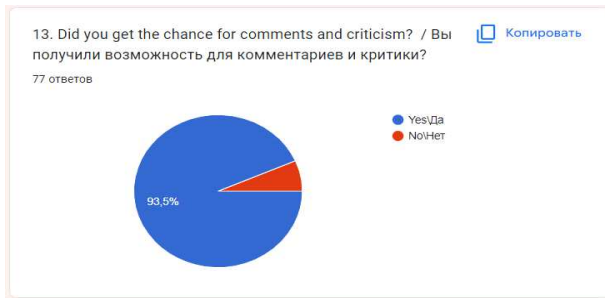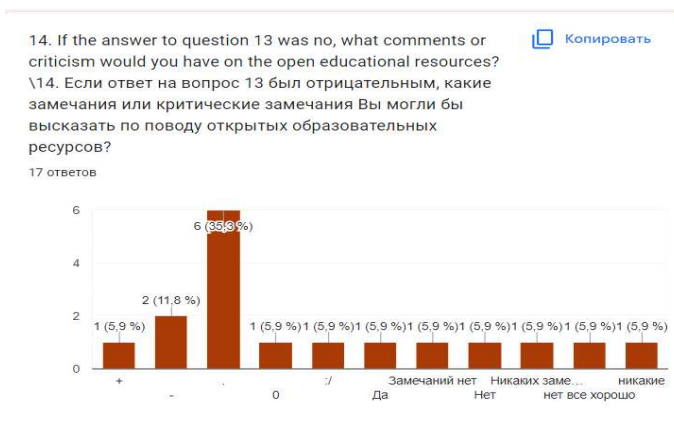
I agree
Don't know



An analysis of 76 answers on this question shows that 71 (93,4%) of the respondents report that the cloud-based Virtual Library of the digital educational resources done on time.

An analysis of 77 answers on this question shows that 72 (93,5%) of the respondents report that they get the chance for comments and criticism.



We received answers to the question about If the answer to question 13 was no, what comments or criticism would you have on the open educational resources. We got the following answers: 5 respondents (6,5%) say that they do not have comments.
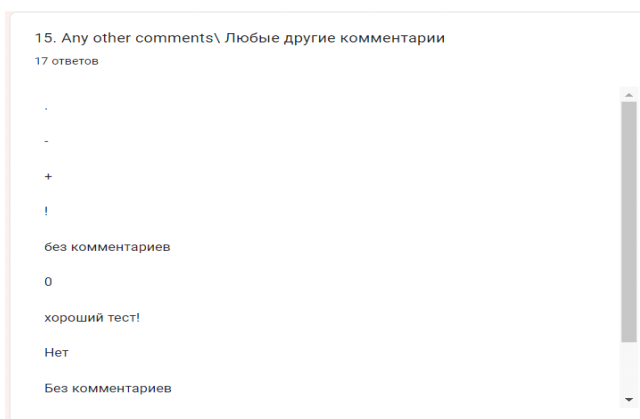


We got the following answer: no comments.

**CONCLUSION**

This report is an assessment of cloud-based virtual library of the digital educational resources in Kazakhstan.

As a result, lecturers/teachers learned how to use cloud-based virtual library of the digital educational resources, how to benefit from the Moodle learning management system, and how to use the search engine.

We chose the questionnaire as a methodology for assessing the quality of work and evaluating the results for future results.

**WE CAN CONCLUDE FROM ANSWERS THAT:**

- The structure of cloud-based virtual library of the digital educational resources is very well structured;
- The quality of cloud-based virtual library of the digital educational resources meets high requirements;
- The search function of the library is very good;
- Achieved learning objectives were at a high level;
- Cloud-based library make life easier for both teacher and student;
- Cloud-based virtual library of the digital educational resources help students learn better;
- Students enjoy learning more with the help of virtual library;
- There are good opportunities for comments, criticism and timing.