EVALUATION
OF THE DEVELOPED HANDBOOK
OF INNOVATIVE
EDUCATIONAL TECHNOLOGIES
IN TURKMENISTAN

Project: Modernization of higher education in Central Asia through new technologies (HiEdTec)

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CONTENT

EXECUTIVE SUMMARY

Evaluation of the developed handbook of innovative educational technologies based on data from an audience study by three universities participating in the project in Turkmenistan. Evaluation of the developed handbook of innovative educational technologies is based on the ideas of applicants who have accomplished their online course on attaining knowledgeable and innovative teaching and educational methods with digital skills. The object of this manual is to determine the practicality of a manual developed on innovative educational technologies for teachers of higher education institutions of Turkmenistan. In addition to this assessment report, a development report is also attached. The manual of innovative educational technologies was developed in accordance with the project "Modernization of the higher education system in Central Asia through new technologies" (HiEdTec), WP5.5. Evaluation of the developed manual of innovative educational technologies in Turkmenistan.

INTRODUCTION

The object of this study was to define the quality of the content of the developed manual of innovative educational technologies, the degree of assimilation of the existing materials and the satisfaction of students. The evaluation methodology comprised of gaining feedback on the developed manual of innovative educational technologies from participants of online courses on digital skills acquisition and innovative teaching and learning methods, their analysis and findings about the results with an aim to make possible modifications in future.

PROJECT OVERVIEW

The paper prints of the educational technology innovation handbooks were delivered. The electronic version will be posted on the web site in the virtual library of the project.

The main object of the project is to adapt the education system in partner countries to the digital generation by introducing and efficient usage of 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 partner countries. The project will assist to transform higher education institutions into innovative universities and develop the quality of trained professionals required for the digital transformation of industries (Industry 4.0).

SURVEY RESULTS HIEDTEC

GENERAL INFORMATION

The total number of respondents is 160.

1. Which country are you from?
160 answers
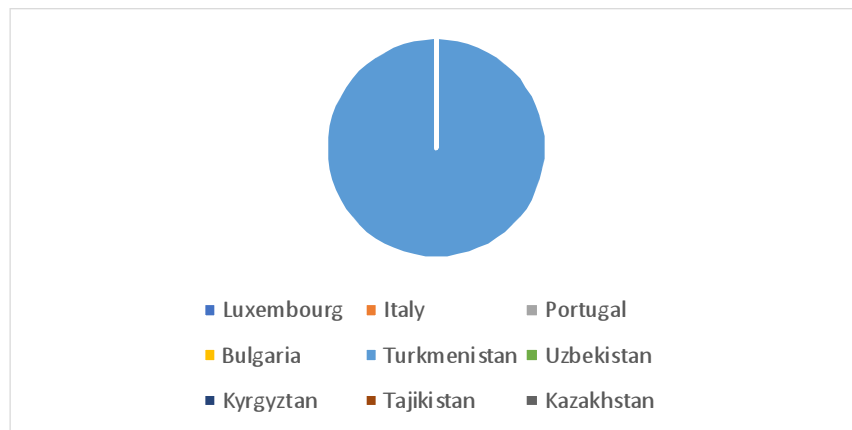
Diagram 1. - Results of the answers to the question "Which country are you from?" (In% of the total number of answers). All 160 respondents represented Turkmenistan.

2. Overall, please tell us how well structured the handbook is. 1 means not at all well structured and 5 means extremely well structured.

160 answers

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

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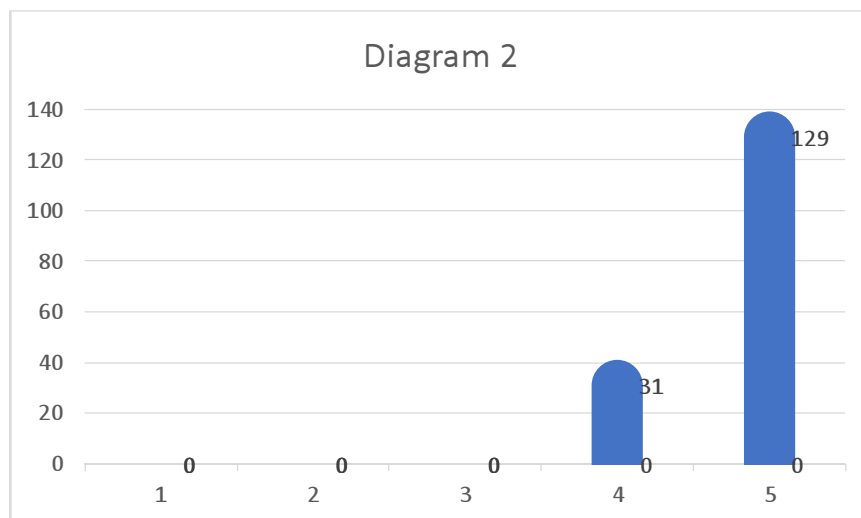
Analysis of the results of the answers to seconde question showed Diagram 2. From 129 (80, 6%) respondents were evaluated in 5 points, while 31 (19.3%) respondents were evaluated in 4 points.

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

160 answers

Diagram 3

Scale	1	2	3	4	5
Value	0	0	0	26	133
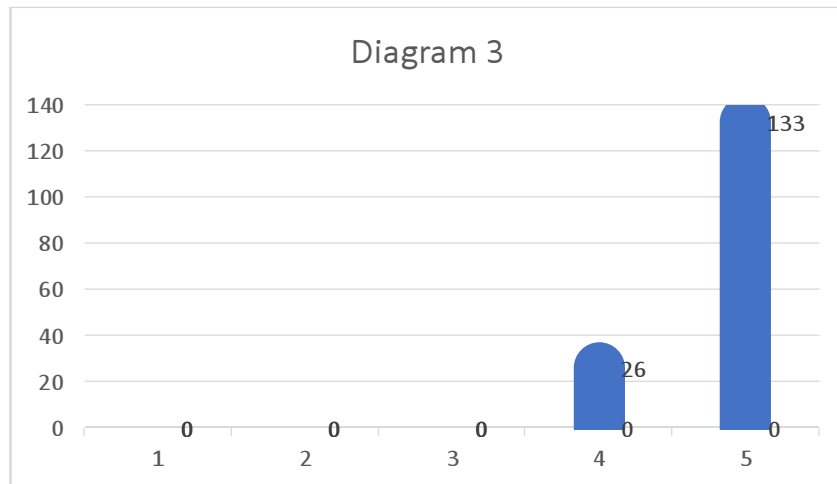
Analysis of the results of the answers to seconde question showed Diagram 3. From 133 (83 %) respondents were evaluated in 5 points, while 26 (19.3%) respondents were evaluated in 4 points.

4. Now we have a few questions about the layout and content. Please tell us your level of agreement with the following statements about the handbook, 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."

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	The Handbook objectives were clearly communicated	The objectives were met	The handbook serves well as source for Innovative Educational Techn...	The Handbook was well understandable	The technical intruments (electronic and paper version) used for the handb...	The documents are practical and dynamic	The Handbook adds a sense of accomplishment and a feeling of progress for...	The language used was appropriate	The documents had the appropriate length	The documents were well structured	The documents were well understandable
Strongly Disagree	0	0	0	0	0	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0	0	0	0
Neutral	5	1	2	0	0	1	2	0	1	1	1
Agree	38	33	46	25	27	27	27	21	24	21	23
Strongly Agree	90	85	89	96	96	86	86	96	93	93	91
N/A	27	41	24	39	37	46	45	43	42	45	45

This section contains 11 statements and a scale by which you can determine the degree of agreement with these statements. 160 respondents responded as follows:

4.1. The Handbook objectives were clearly communicated

90 (56.2%) respondents absolutely agree with this statement, 38 (23.7%) respondents were agree, 5 (3.1%) respondents were neutral, 27 (16.8%) "no answer".

4.2. The objectives were met

85 (53.1%) respondents absolutely agree with this statement, 33 (20.6%) respondents were agree, 1 (0.6%) respondents were neutral, 41 (25.6%) "no answer"

4.3. The handbook serves well as source for Innovative Educational Technologies

89 (55.6%) respondents absolutely agree with this statement, 46 (28.7%) respondents were agree, 2 (1.2%) respondents were neutral, 2 (1.2%) "no answer"

4.4. The Handbook was well understandable

96 (60.0%) respondents absolutely agree with this statement, 25 (15.6%) respondents were agree, 39 (24.3%) "no answer"

4.5. The technical instruments (electronic and paper version) used for the handbook was easy to access

96 (60.0%) respondents absolutely agree with this statement, 27 (16.8%) respondents were agree, 37 (23.1%) "no answer"

4.6. The documents are practical and dynamic

86 (53.7%) respondents absolutely agree with this statement, 27 (16.8%) respondents were agree, 1 (0.6%) respondent were neutral, 46 (28.7%) "no answer"

4.7. The Handbook adds a sense of accomplishment and a feeling of progress for the project

86 (53.7%) respondents absolutely agree with this statement, 27 (16.8%) respondents were agree, 2 (1.2%) respondents were neutral, 45 (28.1%) "no answer"

4.8. The language used was appropriate

96 (60.0%) respondents absolutely agree with this statement, 21 (13.1%) respondents were agree, 43 (26.8%) "no answer"

4.9. The documents had the appropriate length

93 (58.1%) respondents absolutely agree with this statement, 24 (15.0%) respondents were agree, 1 (0.6%) respondent were neutral, 42 (26.2%) "no answer"

4.10. The documents were well structured

93 (58.1%) respondents absolutely agree with this statement, 21 (13.1%) respondents were agree, 1 (0.6%) respondent were neutral, 45 (28.1%) "no answer"

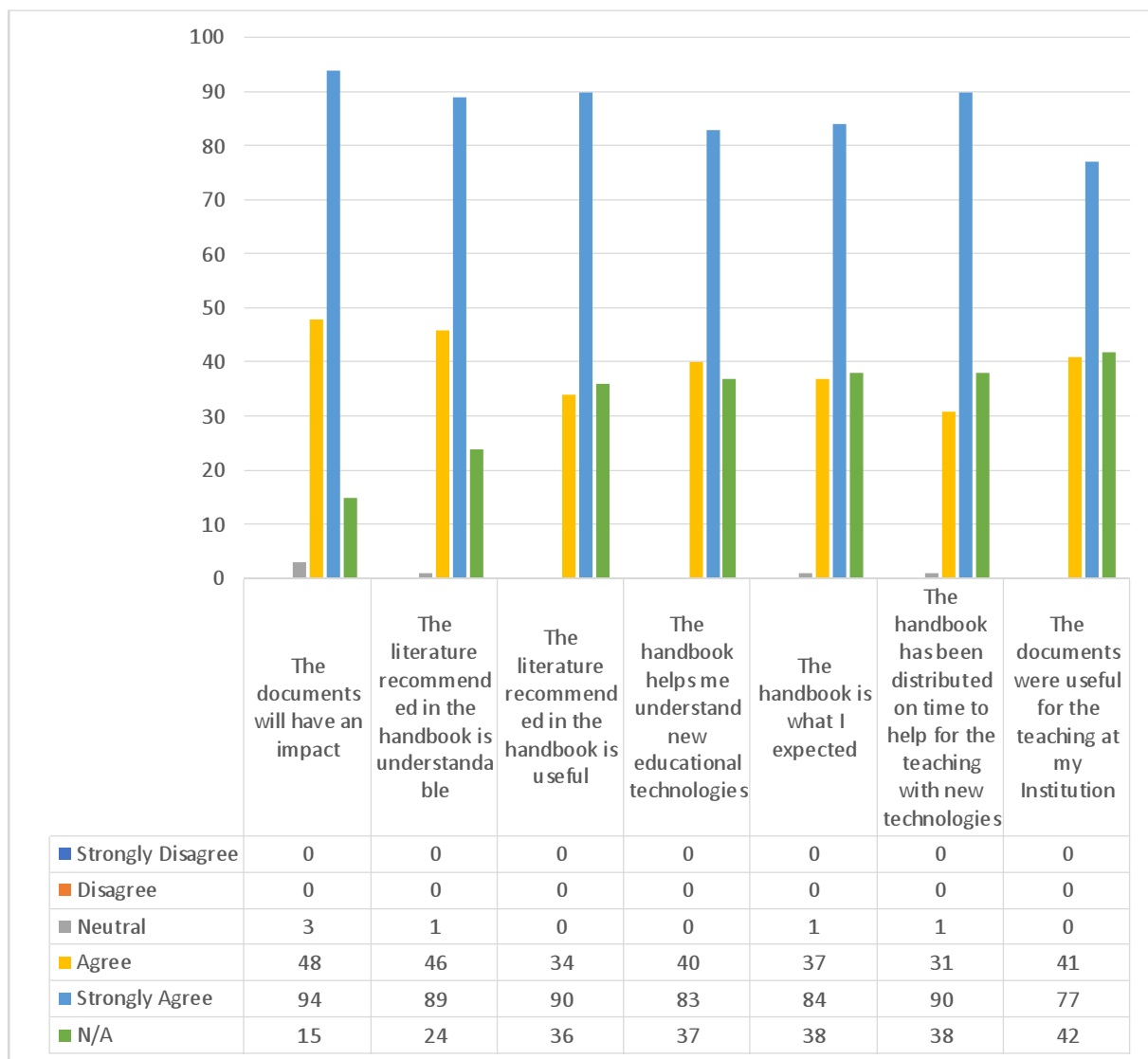### 4.11. The documents were well understandable

91 (56.8%) respondents absolutely agree with this statement, 23 (14.3%) respondents were agree, 1 (0.6%) respondent were neutral, 45 (28.1%) "no answer"

5. We would also like your feedback on the outcome of the handbook. 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 documents will have an impact	The literature recommended in the handbook is understandable	The literature recommended in the handbook is useful	The handbook helps me understand new educational technologies	The handbook is what I expected	The handbook has been distributed on time to help for the teaching with new technologies	The documents were useful for the teaching at my Institution
■ Strongly Disagree	0	0	0	0	0	0	0
■ Disagree	0	0	0	0	0	0	0
■ Neutral	3	1	0	0	1	1	0
■ Agree	48	46	34	40	37	31	41
■ Strongly Agree	94	89	90	83	84	90	77
■ N/A	15	24	36	37	38	38	42

This section contains 7 statements and a scale by which you can determine the degree of agreement with these statements. 160 respondents responded as follows:

5.1. The documents will have an impact
94 (58.7%) respondents absolutely agree with this statement, 48 (30.0%) agree, 3 (1.8%) respondents were neutral, 15 (9.3%) respondents chose "no answer".

5.2. The literature recommended in the handbook is understandable
89 (55.6%) respondents absolutely agree with this statement, 24 (15.0%) agree, 1 (0.6%) respondents were neutral, 46 (28.7%) respondents chose "no answer".

5.3. The literature recommended in the handbook is useful
90 (56.2%) respondents absolutely agree with this statement, 36 agree, 36 respondents chose "no answer".

5.4. The handbook helps me understand new educational technologies

83 (51.8%) respondents absolutely agree with this statement, 40 (25.0%) agree, 37 (23.1%) respondents chose "no answer".

5.5. The handbook is what I expected

84 (52.5%) respondents absolutely agree with this statement, 37 (23.1%) agree, 1 (0.6%) respondents were neutral, 37 (23.1%) respondents chose "no answer".

5.6. The handbook has been distributed on time to help for the teaching with new technologies

90 (56.2%) respondents absolutely agree with this statement, 38 (23.7%) agree, 1 (0.6%) respondents were neutral, 31 (19.4%) respondents chose "no answer".

5.7. The documents were useful for the teaching at my Institution

77 (48.1%) respondents absolutely agree with this statement, 41 (25.6%) agree, 42 (26.2%) respondents chose "no answer".
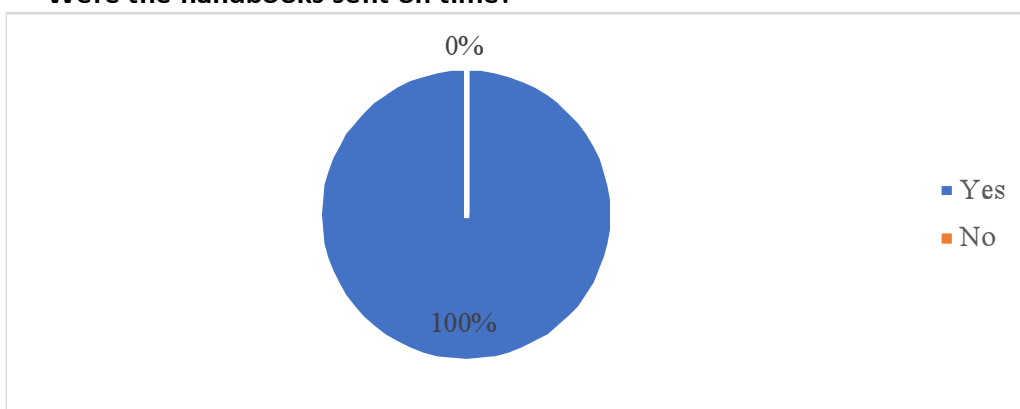
6. If the handbook was not appropriate in length, what would you have added or deleted?

Analysis of the results of the answers to this question has not been answered at all by respondents.

7. If you disagree with any of the point above in No.5, please comment here mentioning the reasons.

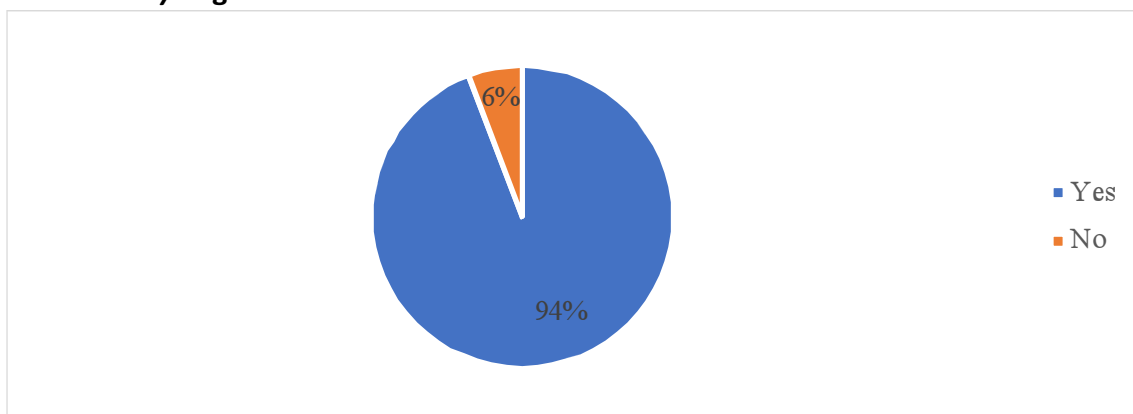Analysis of the results of the answers to this question has not been answered at all by respondents.

8. Were the handbooks sent on time?

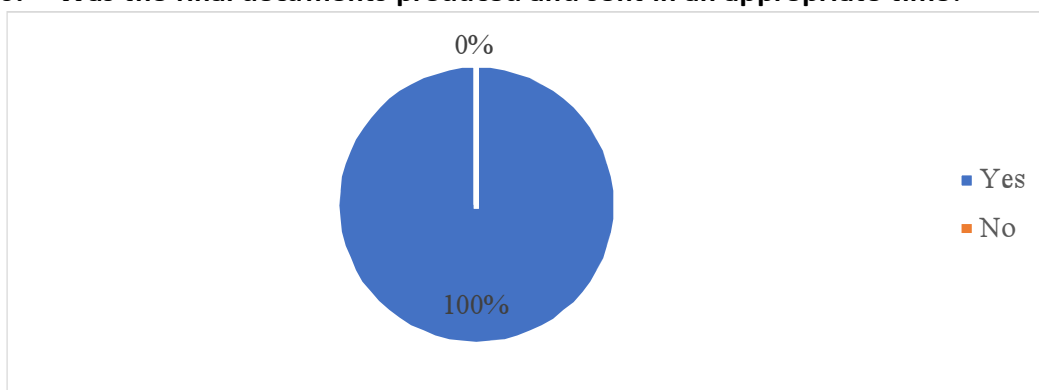To this question, 160 (100%) respondents answered "Yes" .

9. **Did you get the chance for comments and criticism?**

To this question, 146 (94%) respondents answered "Yes" and 9 (6 %) respondents answered "No".

10. **Was the final documents produced and sent in an appropriate time?**
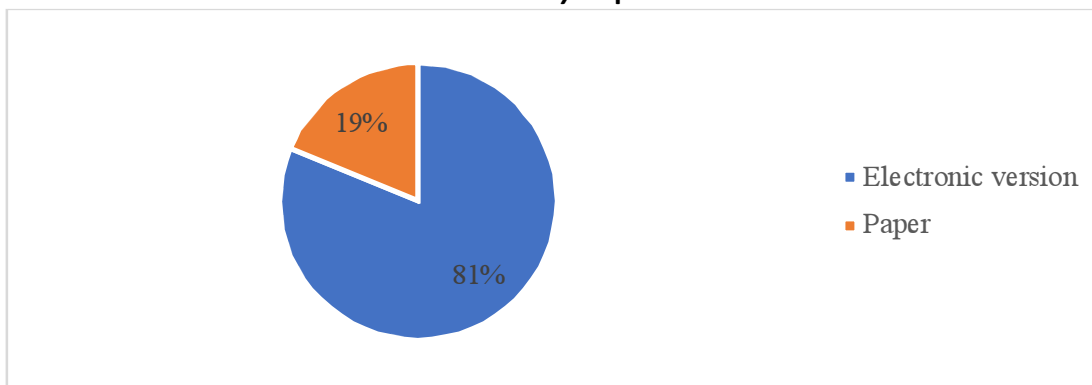

To this question, 160 (100%) respondents answered "Yes"

11. If the answer to question 9 was no, what comments would you have on the document?

Analysis of the results of the answers to this question has not been answered at all by respondents

12. **Which version of the handbook did you prefer?**

130 (81%) respondents preferred the electronic version of the handbook, 30 (9%) respondents chose the paper version.

13. Why did you prefer one or the other version (question 12)?
The majority of respondents justified their choice with the following comments:

- I can keep it in in my working place.
- I love to read only the paper books.
- Paper version is convenient for me.
- They can be delivered immediately.
- It is an old habit of mine.
- EBooks are portable
- Ba cause they are portable.
- It is very simple and easy to access the e-books
- I can port it on any device.
- shareable content
- EBooks can be free
- access at any time at any device
- To me it is easy and convenient to get the access.
- It is the way that I am used to.
- I can get the information very quickly.
- It is easy to use the e-version, access from any time.
- Accessible Everywhere
- EBooks make it easier to access at any time.
- It responds to the modern requirements.
- It is easy to use.
- I can use it from my gadgets.
- EBooks can be searched
- There are many advantages for accessibility.
- It is east to disseminate the content
- Because, it is easy to use for reference.
- I prefer it because I am used to it.
- The accessibility facilitates the exchange of ideas
- It is very comfortable for readers from distance
- Accessibility from any device and any time.
- I like the traditional way of reading.
- They are good from an environmental perspective
- It is easy to follow
- access
- It is very simple to use
- Well, of course its easy accessibility
- It has interactive aspects
- EBooks can include multimedia
- They are made for sharing
- E-version can be searched
- portable

- We can use electronic version at any time that we need.
- It is easy to search by word
- EBooks can be printed, which enables the reader to utilize most if not all of the advantages of the printed book
- They are easy for mobility.
- I am used for paper books.
- they are portable
- They are searchable
- readers get information on up to the minute topics and events
- read aloud feature
- Better reading

14. Any other comments or suggestions:

- Mostly positive reviews prevail without specific advice:
- Thank you for all authors and contributors.
- It was a good work of authors.
- We can use and port them one gadgets.
- It is easy for accessibility.

CONCLUSION

The methodology we have chosen for assessing the developed handbook of innovative educational technologies in the form of an anonymous survey allows us to obtain objective reviews, on the basis of which it is possible to understand the effectiveness of the work done.

A sample of 160 respondents testifies to the reliability of the results obtained.

Based on the analysis of the responses received, the following conclusions were drawn:
- Developed handbook on innovative educational technologies helps educators to independently cope with the problems and questions that arise in the learning process in the digital age.

- The developed handbook is very well structured.

- The quality of writing the handbook was very high.

- The content and size of the handbook were appropriate.

- The handbook was comprehensible and easily accessible, convenient to use in electronic form.