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# OPPORTUNITIES TO INCREASE THE VOCABULARY OF FOREIGN LANGUAGE LEARNERS USING WEB-BASED TECHNOLOGY (ON THE EXAMPLES OF THE FIRST MONGOLIAN WEB-BASED TEXTBOOK "MONGOLIAN LANGUAGE AND CULTURE")

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## **ABSTRACT**

The main basis of existence of any society is language, and it is not only a tool of communication, it is an inseparable value of the heritage, history and culture of the nation and people, and a guarantee of independence. Every nation cherishes, develops and protects its mother tongue in order to preserve and transmit its experience and knowledge to spread information, to develop the material and spiritual culture of society, and to pass down its history and culture to future generations. It is important for us Mongolians living in the era of high development of science and technology and globalization to preserve, develop and protect our mother tongue and pass it on to future generations. On that account, we set forth the following issues in this article such as "What is web-based learning technology? What types are there? Is it possible to use web-based technology in teaching Mongolian as a foreign language?". These are related problems of applied linguistics and eco-linguistics, and the first part of the article describes what web-based technology is used in education during the fourth industrial revolution, or the rapid development of technology, and its features and types. But in the next part, when we talk about how to use web-based technology to increase the vocabulary of students of Mongolian as a second language, we will show the possibility of using the e-textbook "Mongolian language and culture" for Mongolian language learners living abroad to increase the students' vocabulary. As a result, we will educate the public, researchers, and teachers about web-based learning technologies while promoting language ecology, Mongolian culture, and customs in their use. It is also important to increase students' Mongolian vocabulary using web-based technology.

The valuable and innovative aspect of this article is that applied linguistics, methods of teaching foreign languages, and the guarantee of the existence of each nation are lovingly protecting one's mother tongue, which are the focus of global linguists' attention today.

## **KEY WORDS**

Bilingual education, Mongolian language, language ecology, Mongolian as a second language learners, teaching materials

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## **INTRODUCTION**

### **Purpose of the study**

In the globalized society, the main source of development of any country and individual is based on information in accordance with the rapid development of technology. Language is the key to finding and acquiring this information, which is the key to modern progress.

In today's globalized world, every nation is trying to protect and preserve its mother tongue in order to preserve its history, culture, heritage, national identity and customs. Therefore, one of the important issues facing us is to protect and develop our native language.

Due to the above reasons, our main goals are on the one hand to touch the issues of teaching Mongolian as a second language to foreigners, and on the other hand, using web-based e-textbooks to increase the vocabulary of children living abroad and learning Mongolian as a bilingual language, and to attract the attention of academicians. In addition, when choosing the course content, it is important to choose a complex and source that reflects the characteristics of ancient Mongolian culture and customs, and to use the opportunities of modern technology to spread the Mongolian language, culture, and history to the world.

### **Research question**

In this article we tried to reply in the following questions What is a web-based e-textbook? Why do we need to know about it? How can web-based materials be linked to language content and used in foreign language teaching?

### **Research methods**

In order to achieve the purposes of the research work, we conducted theoretical research and applied practice, using methods such as analysis, summarization, modeling, visualization, and the use of web-based electronic tools.

### **Research materials**

The e-textbook "Mongolian Language and Culture" for students who are learning Mongolian as a second language and are engaged in bilingual education, as well as academic articles, experiments, and research related to the topic.

## **THEORETICAL PART**

This article was written for foreigners learning Mongolian as a second language and Mongolian children living abroad. Mongolia's first web-based e-textbook "Mongolian Language and Culture" describes the basic structure of the textbook, its principles and content, also the methodology is explained using the structure of the textbook as an example.

Following the rapid development of technology, e-learning, textbooks and materials have been created in Mongolian education, and various electronic materials are used, but this textbook is the first, web-based, official textbook among them. We have written this textbook based on the study of many web-based textbooks from foreign countries (you can see Bibliography), and it is not possible to mention all of them here.

The textbook aims to study the Mongolian language from the elementary, intermediate and advanced levels, to preserve and develop the immunity of the mother tongue, and to introduce the Mongolian language and culture.

Information and communication technology is the basis for successful organization of e-learning. In other words, due to the rapid development of information technology, there is a need for essential reforms in the field of education, the learning environment is rapidly changing, and the new generation of students are demanding the use of innovative environments, methods, and tools based on the electronic environment. The high development of today's information technology gives us all kinds of opportunities for online learning and teaching materials, such as the Internet, cloud technology, computers, tablets, and mobile phones. Related to this, it is important to implement ICT in real life, to improve the quality of e-learning, to train in the use of active learning methods, and to prepare electronic materials that meet the didactic requirements of psychology and teaching methods.

Electronic materials are materials that are designed to meet the requirements of modern e-learning teaching methods and are used for teaching and reaching students with the help of the Internet, computers and other technologies. One of the most important components of this application is the e-textbook. There was a time when we converted paper books to PDF format and thought of them as e-books. But now it's time to understand electronic textbooks in a different way.

As for our country, we have been switching to e-learning for the past 2 years and are weighing up our mistakes. Looking at the materials used in this course, the textbook has been digitized in the following 3 main forms. It includes:

- Convert paper-based textbooks to PDF (Portable Document Format - documents in adobe format that can be used on different operating systems that can be linked to each other and to information on the website in addition to image storage) and turn the pages for reading.
- Tele-course as a video recording
- Placed and used as an interactive lesson on the website of the Ministry of Education and Culture <http://econtent.edu.mn>.

Before we talk about how to use web-based learning materials in second language teaching, we must address the issue of "web-based learning". eb-based learning is called differently like "Internet learning, web-based learning, e-learning, online learning". It is a form of e-learning that allows modern learners to learn anytime, anywhere. This course features unlimited opportunities for instructor-led virtual learning, independent learning, or a combination of both.

Web-based training can be classified into several types. It includes:

#### 1. Synchronous web-based training.

This course is a course where the teacher on one side and the student on the other hand directly interact with each other under the direct supervision of the teacher (face-to-face training), similar to our traditional course. The main feature is that the teacher can communicate with students who are in different several locations at the same time. For example: E-learning, lectures, meetings and conferences can be mentioned. For example, we can use this method to teach the topic "Literacy culture of Mongolians".

#### 2. Asynchronous web-based training.

This type has no specific time limit, users study at their own possible time. All course content can be studied online and remotely. These include e-learning, video lessons, pre-recorded readings, podcasts, and webinars. For example: a team of scientists from the Ministry of Education, Culture, Sports, Science and Technology of Mongolia and National Institute of Education have created the first web-based e-textbook in Mongolia, which we can access and study at

tsahim.reader.mn. We can use the web-based "Mongolian Language and Culture" e-textbook to study basic, intermediate and advanced courses.

### 3. Blended Learning.

This means using a combination of the above two courses. A combination of self-directed and teacher-led learning from the above models is interesting and effective for students to learn.

In modern times, the approach to foreign language learning has become an innovative approach that relates the language to the needs of everyday life, not only from a theoretical point of view, but also from a practical point of view. When an approach based on the principles of language use began to emerge in foreign language learning, the All American Foreign Language Teaching Association began to study "How can foreign language knowledge and skills be used and tested in practice?" and conduct experiments, and in 1986 the "Foreign Language Proficiency Guidelines" (ACTFL Proficiency Guidelines) were developed. Also, in 1996, the national standards (Standards for Foreign Language Learning: Preparing for the 21st Century) were announced as a result of the (National Standards Collaborative Project) of ACTFL professional commission members. It has a strong impact on foreign language teaching, and the world, for example, in Japan, is experimenting with the 5C principle in foreign language teaching. It includes:

1. Communities
2. Communication
3. Cultures
4. Connections
5. Comparisons etc. is the opinion that it is ineffective when used alone in language teaching, and better results can be achieved by joining together.

Therefore, we are using the web-based e-textbook "Mongolian Language and Culture" to increase the vocabulary of foreign citizens and students who are studying Mongolian while living and working abroad, and studying bilingual education and the above e-textbook is a technological solution that reflects the above concepts.

## EXPERIMENTS AND RESULTS

Now let's briefly introduce the web-based e-textbook "Mongolian language and culture". The web-based e-textbook "Mongolian Language and Culture" was created based on the "Mongolian Language and Culture Standard Curriculum" of the Minister of the Ministry of Education and Culture of August 21, 2017 and "To support children living abroad in learning the Mongolian language, writing, national culture, art, customs, and heritage, to be proud of their motherland, to value their native language, history and culture, to study, to protect, to develop their Mongolian land and to contribute and support the formation of patriotism.



Picture 1. "Mongolian Language and Culture" web-based e-textbook

### 1. Course content delivery package:

This e-textbook is a comprehensive e-textbook for beginner, intermediate, and advanced levels, with web-based, interactive tasks that allow students to learn on their own, with guided instruction for specific learning activities with in-depth content at each level. Beginner, intermediate, and advanced content each have different features. It includes: At the initial stage: "Greetings", "Numbers", "Colors" etc., with the content of 10 topics, each topic aims to memorize 200-250 new words based on dialogue, develop speaking-listening skills, and increase vocabulary.



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үгсийн сангаа  
баяжуулна.



### Model 1. Basic content and purpose of beginning level

**Intermediate level:** The main goal is to decipher the Cyrillic alphabet, read micro-text, understand the meaning, write down what you understand, and express your ideas orally and in writing.



Монгол хэлээр  
зөв, сайхан  
бичиж, уншиж,  
ярьж сурна.



### Model 2. Basic content and purpose of intermediate level

**At the advanced level:** Students will be taught knowledge and skills in the context of "My Country is Mongolia"(Mongolian language, scriptures, borders, territories, state symbols, heritage), "Mongolian customs" (traditional customs, symbols, festivals, lunar month), "Mongolian household" (Mongolian home, clothing, animal husbandry, traditional games and festivals), "Mongolian history and historical people" (history, historical people, notable events) in order to have basic knowledge and basic understanding of the language and history of the Mongolian nation.



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эзэмшинэ.



### Model 3. Basic content and purpose of advanced level

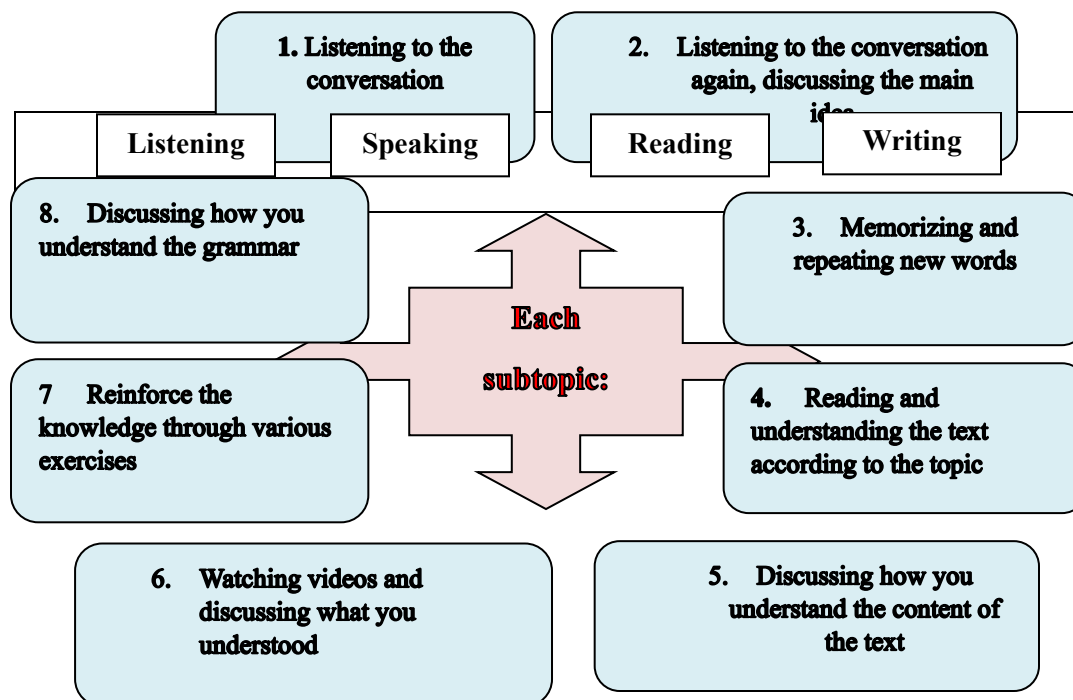
Each of these packages contains multimedia content. In other words: In addition to the usual information, multifaceted information including images, animations, and sounds have been created and presented to students, and elaborated in a detailed structure that breaks down beyond the general.

#### 2. A package to create an environment for practice and self-reliance

One of the main tasks of active learning is the process of creating knowledge by the student working independently. Therefore, it is important to create an environment for students to work independently in a complex e-learning system. In creating this environment, the textbook is based on methodological solutions and developed differently. The reason for choosing the teaching method is the mental characteristics of Mongolian children living abroad, as well as the best methods of teaching second languages, and the phonetic synthesis method and innovative methods of foreign language teaching were proposed in the teacher's book. Experienced educators and teachers know that any teaching method depends on many factors, such as the teacher's methodology, the student's receptiveness, and the learning environment. For example:

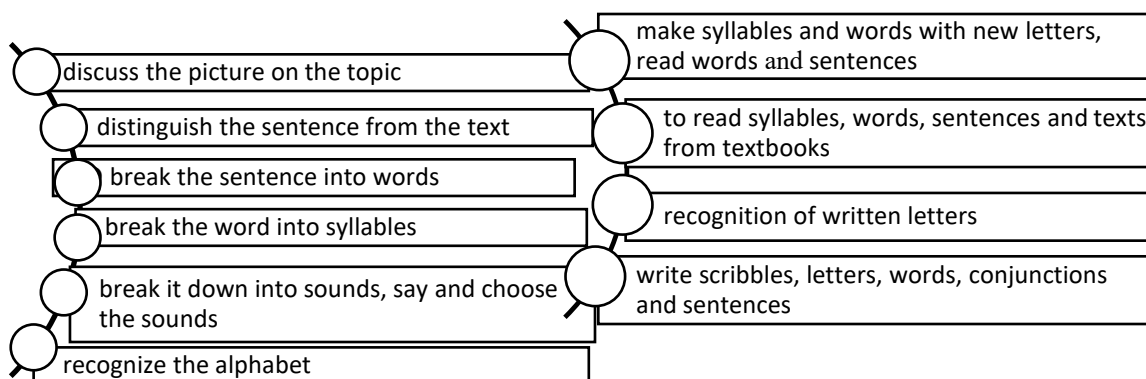
The elementary lesson is based on the "Repetitive Hierarchy Theory", which is the main basis for teaching a second language in modern times, and is especially used in children's language learning, taking into account the mental characteristics of Mongolian children. The main basis of the Repetitive Hierarchy Theory is based on how the human brain is involved in the language learning process, and the process of learning a language using a hierarchical structure of memory and a repetitive method.

A variety of patterned exercises and repetitions improve comprehension, sentence structure, and the ability to create meaningful chunks, and are key to developing speaking-listening, reading, and writing skills. Looking at the following picture, by developing these four skills equally, we can successfully acquire a second language. These activities, especially at the initial stage, listening-speaking will be the main ones with many repetitions. We will also work together on reading and drawing exercises.



#### Model 4. Basic skills to possess

**In intermediate level:** when teaching the Cyrillic alphabet, the methodology of using a combination of phonetic dissection and synthesizing methods was adopted, taking into account the characteristics of Mongolian children's age and thinking. Methods such as creating texts from pictures, sentences from texts, words from sentences, sounds from words, and reading open and closed syllables, words, conjunctions, sentences, micro-originals, using various game methods, reading words and sentences, writing, creating, songs, poems, riddles, memorizing proverbs, quick phrases, writing words and sentences by combining pictures, and speaking are used in this coursebook.



#### Model 5. Methodology of dissection and synthesis of sound

**In advanced level:** In addition to listening and reading the short text, it is important to explain the texts based on the pictures and videos, using words and sentences selected from the content of the text, explaining grammatical concepts, listening to conversations, teaching and developing knowledge through questions.

#### Model 6. The main structure of the advanced methodology

##### 3. Evaluation package

All forms of assessment, student self-assessment and learning assessment have an assessment pool. Each level is graded differently. Each level is graded differently. For example: in the intermediate level, each topic has a self-

assessment exercise. However, at the elementary level, it is characterized by the inclusion of a lot of evaluations and incentives to see the student's own progress. At the advanced level, assessments were made through various tests and remedial exercises. It includes:

Listening exercise	Speaking,
Writing exercise	Filling exercise
Matching	Memorizing
Choosing	Drawing, painting
Answering questions	Creating conjunctions and sentences with the given words

Listen to the dialogue, answer the questions, discuss and complete the exercise

Reading pictures, discussing the events of the picture series etc.

#### **4. System privacy protection package**

It is responsible for ensuring the integrity of the system, protecting against external attacks, setting the limits of the rights of the training participants, etc. It is controlled by software.

Creating a web-based e-textbook is not the work of a single program author, but an extensive team of e-textbook content authors, artists, sound artists, content and technical editors, directors, programmers, and consultants. These people will be experts in their field. After the author has created the content, the artist will draw the picture according to the requirements of the website, the director will design the composition, the operator will record the video and sound, and the multimedia designer will put them together according to the requirements of the training and create a model. These will be coordinated and provided by the training methodologist. Therefore, e-textbooks require a lot of preparation and take a long time. But after creating a quality e-textbook, it has the advantage of editing and improving it.

We use and test the following methods to increase the vocabulary of students learning Mongolian as a second language. It includes:

1. In order to promote Mongolia in foreign countries and to protect the ecology and immunity of the Mongolian language, we selected the texts that promote Mongolian history, culture, and customs. For example, cultural and natural themes, which are the supporting concepts of eco-linguistics, etc.

Culture is a multilateral, rich content concept that is closely related to human society. The problem of language and cultural worship was first developed in the early 20th century by famous American researchers E. Sapir and B. L. Whorf within the framework of their linguistic relativistic theory. They say, "Language, as the result of great intellectual work, defines the culture of the people. In other words, it does not exist outside of the social complex that has been passed down from generation to generation, the daily practices, customs, and ideas that determine the way of life of the people. Language has a direct impact on the formation and development of national culture. Culture includes everything in a society. So, the language is a manifestation of how the people of that society think. It is inextricably linked with language content and culture".

On the basis of the above, the e-textbook has selected a variety of small texts that reflect the national characteristics of Mongolia, culture, history, customs, and traditions. For example: the elementary level of the web-based e-textbook "Mongolian Language and Culture" let you listen to conversations with the above content and determine the pronunciation and naming of new words without learning Cyrillic according to a specific topic. Then you will increase your vocabulary by doing various exercises such as conversation, copying, and reading. In the elementary level, you will learn and understand the meaning of 30 new words in 11 groups with 20 contents in each group. Then you will increase your vocabulary by doing various exercises such as conversation, conversion, and follow-up reading. In the elementary level, you will learn and understand the meaning of 30 new words in 11 groups with 20 contents in each group. Also, you will learn to use it in conversation. In total, more than 200-250 new words will be available.

2. In order to increase the students' vocabulary, to be pronounced new words correctly, to explain and determine the meaning of words, each word is included in each topic of the web-based e-textbook on the principle of first listening and then saying it, then repeating it in the reinforcement lesson and listening again. This method of increasing vocabulary by following the principle was designed and tested to be repeated in all 3 main stages.

3. Nowadays, the "Four Strands" or "Four Strands Theory" of foreign language teaching method by scientist I.P.Nation has achieved great results and is used in foreign language teaching in any country. It is:

- Value-oriented input and reading, listening skills
- Value-oriented output and speaking, writing skills
- Grammar pronunciation and vocabulary
- Fluency (Ability to read and speak directly without stuttering). The idea is to learn a language by mastering the four main skills 25\*4 or equally.

Therefore, it is more effective to use a combination of traditional pedagogy as well as modern innovative methods in our basic teaching methods for Mongolian children. This is an even more important issue for Mongolian children living abroad. In the third stage, vocabulary is increased by running a variety of reinforcement exercises using many methods to simultaneously develop these four skills through reading the text according to the topics "My homeland

Mongolia", "Mongolian customs", "Mongolian culture", "Mongolian history", which are more in-depth in terms of content, and check whether the text is understood or not. For example:



**Picture 2. Intermediate Level**

4. Adding videos related to the content of each topic, increasing vocabulary through exercises and discussions. For example: After reading the topic about the fiddle music, which is an example of Mongolian symbolic thinking, we will watch the video and discuss it.



**Picture 3. Advanced Level**

5. In general, this web-based e-textbook is designed to increase vocabulary through various exercises such as reading pictures, memorizing proverbs, quick phrases, drawing pictures, color, filling in, showing pictures, answering questions, discussing, learning songs and poems, discussing meanings, riddles.

## CONCLUSION

To sum up, the creation of a web-based e-textbook "Mongolian language and culture" has the following significance. It includes:

1. E-books are a key component of technology-based education reform. Web-based e-textbooks are superior to traditional paper-based textbooks in many ways. For example: If the internet accesses, it is possible for students to use it from anywhere. It is environmentally friendly because it does not print on paper. If you get the right to use it, you can use it immediately without wasting time, etc.
2. The biggest advantage is that multimedia and interactive content can be placed together and used by students. For example: creating a virtual environment (teachers and students meet in different places at the same time and conduct training in the Internet environment) by providing information from many angles in the form of pictures, tables, explanations, images, sources, sounds, etc., interactive: videos, tests, sources, creates relationships while giving exercises. In other words, after giving the source and answering the test, the answer will come immediately, the result will be displayed graphically, etc
3. In addition, the e-textbook "Mongolian Language and Culture" can be freely used by people from all over the world who have the desire to learn the Mongolian language, as well as children living abroad who value their mother tongue and culture, using the high development of science and technology. It is important to know, to be proud of, and to cherish the customs and national heritage.
4. At the same time, it is unique for being the first experiment and initiative to create a web-based (using the Internet and computer-based) electronic textbook in Mongolia.
5. This textbook has not been written for a long time, and we cannot estimate the results of any training work for a few weeks or months and inform the public.
6. For learners of Mongolian as a second language, it is important to increase vocabulary. Because if you know enough words to communicate with others in writing and orally, it will be easier to understand.

7. In order to keep pace with global globalization and rapid development of ICT technology, we have started using web-based electronic applications. One of them is "Mongolian Language and Culture", the first official web-based e-textbook of Mongolia, and it is an important tool for increasing the vocabulary of foreign students of Mongolian language and Mongolian children living abroad.
8. The web-based e-textbook "Mongolian Language and Culture" has become an important tool for promoting Mongolian language and culture to the world.
9. Following the evolution of industry IV and technological progress, it is time for scientists and researchers to take into account the creation and use of web-based e-textbooks and then conduct research among users.

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"Observations on the poetry of B. Lkhagvasuren" (1998, 8 p.h.), "Time, Poetry, Reform" (2002, 4 p.h.) research book, help for students in the course "Introduction to Literary Theory" (2009, 10 pp.), book "Eco Linguistics" (2010.2013, 30.5 pp.) published books and worked in the team of authors of 24 middle school books. Out of a total of 66 papers discussed at international conferences, 26 papers were published abroad, namely in Russia, China, Japan, Halimag, and the Democratic People's Republic of Korea, and 37 papers were published at domestic and international academic conferences.

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Links:

1. [www.tsakhim.reader.mn](http://www.tsakhim.reader.mn)
2. [www.en.wikipedia.org/wiki/ecolinguistics](http://www.en.wikipedia.org/wiki/ecolinguistics)