

METHODS OF TEACHING JAPANESE HIEROGLYPHS USING COMPUTER SIMULATION MODELS BASED ON THE TYPE OF READING

Lutfilloeva Fakhriniso,

Associate Professor of Samarkand state Institute of foreign languages, Uzbekistan

Abstract

The article highlights the issues related to the search for new forms and methods of teaching Japanese characters, updating the content of education. It indicates the forms of teaching Japanese characters based on a computer simulation model that creates the opportunity to increase the level of knowledge and skills of students.

The main purpose of the experimental work is to study the didactic possibilities of forming morphemic units of hieroglyphs in the national context as phonetic pronunciation, form, semantics and spelling (based on the rules of spelling) in the teaching of Japanese hieroglyphs to students at the primary level. is to develop methodological recommendations.

Key concepts: *education, innovation, simulation model, student's personality, knowledge, skills, development, mnemonics, hieroglyphs.*

The relevance of the task. In addition to studying the achievements of Japan in the socio-economic and political spheres, one of the most pressing issues is the study of the Japanese language and methods of teaching Japanese on the basis of comparative-typological, scientific-theoretical, pedagogical analysis. Therefore, in the Republic of Uzbekistan, special attention is paid to improving the methods of teaching and learning the Japanese language. In order to master the Japanese language and apply it in practice, it is necessary to improve the methodology of teaching Japanese hieroglyphs using multimedia (action, sound and image), android applications, computer simulation models, and this shows the relevance of research.

Today a lot of attention is paid to learning and teaching foreign languages. Today, much attention is paid to teaching and learning foreign languages. P.A. for teaching Japanese characters in mnemonic style around the world can be seen in the works of Katyshev, E.A. Martemyanov, M.A. Tikhonenko, E.V. Lazine, D.A. Zelenyak, M.A. Ziganov, K. Yoko, L.V. Raziban, S. Alexander, S. Kaiser, M.Yu. Lou, M. James, J. Kaisig, J. In the studies of David, as well as on the method of teaching hieroglyphs based on mnemonics using computer simulation models G. Vorobyov, V. Vorobyov, N. Lin, Sh. A. Shinjo, S. Tomizawa, K. Matsumoto, M. Endo, O. Velek, C.L. Liu, I. Hideaki's work is also widely publicized.

Research and development on foreign language teaching methods show that there are two approaches to teaching hieroglyphs in Japanese: visual-intuitive and academic analytical analysis. There is no research on the methodology of teaching Japanese and the problem of teaching Japanese to foreigners, in particular, for Uzbek students on the formation of morphemic units of the type of reading hieroglyphs in a foreign language in a national context and teaching methods using computer imitation models based on mnemonics. methodological aspects have not been sufficiently studied.

When the Japanese recognized the hieroglyphic script, they could not distinguish it from the Chinese. That is why the first Japanese manuscripts were in Chinese. Over time, the Japanese nation began to write Chinese hieroglyphs in their native language texts, to express them in accordance with the requirements of the national language, and to read Chinese texts in ways appropriate to their language based on the rules of the Japanese reading method. For example, the hieroglyph 春 – haru for "spring" was originally pronounced "shun" or "xun" in Chinese, but later this word was translated into Japanese (大和言葉 - Vago, "Japanese word" is an ancient Japanese word. They are called "vago" and "yamato kotoba". Ancient Japanese lexicon mansub.ru.wikipedia.org ›wiki), meaning "haru", which is close to the ancient Japanese word "wago"[7.P.28] (yamato) (kotoba)". Thus, texts written in Chinese-Kango were translated orally based on Japanese lexicon. This process led to the formation of the lexical layer of 2 different languages in Japanese, Vago and Kango (漢語 - Kango, Chinese words in Japanese. The main part of the existing layer in the Japanese lexicon. Words learned from Chinese. ru.wikipedia.org ›wiki).

In the late eighth and early ninth centuries, two morpheme writing systems were created based on the simplification and schematization of hieroglyphic symbols: hiragana and katakana. Therefore, as a result of a long historical process, a division of tasks between hieroglyphic, hiragana, and katakana writing types gradually emerged. The hieroglyphs began to be written in the core of the word, the grammatical structure and auxiliary words in hiragana, and the mastered words in katakana. As a result, the term "kanjikanamajiribun" (kanji, a text in which the letters kana are successive) appeared in the modern writing system. By the Middle Ages, the writing system consisted of simple Canadian text types as well as complex hieroglyphic text types. In the Japanese writing system,

three forms of writing can be used in a single sentence (e.g., 私はアメリカの大学で勉強したいです). The use of a single alphabet in a sentence is rare in sentences.

In Japanese, each hieroglyph has several reading types. The first is the ON - type of reading, the hieroglyphs that are mastered by distorting the real Chinese pronunciation, and the second is that the KUN - reading type means the Japanese meaning of the hieroglyph. Each hieroglyph can have several types of ON and DAY readings. For example, 「生」 hieroglyph KUN - in the Japanese means "ikiru" - "to live", "umu" - "to give birth", "nama" - "raw", "haeru" - "grow", ON - Chinese sound The meaningless morphemic unit in the pronunciation is read as "sey", "syo".

The formulation of the problem. In Japan, the idea of abandoning hieroglyphic writing by a people adapted to Western culture has also been raised. Because it takes a very long time to learn Japanese writing. In several schools in Japan, it can be observed that this process is mastered over a period of 12 years. For example, a 2015 study found that 84.5% of 5th graders were able to read hieroglyphs correctly and 52% were able to write. This shows that the hieroglyphs that form the basis of Japanese writing are complex not only for the native Japanese themselves, but also for foreign students studying Japanese [1.P.28].

It is known that Japanese is considered to be one of the most complex languages among the world languages. Its complexity lies in the presence of hieroglyphic words in the language. Although a number of innovations have been developed by Japanese language experts on the effective teaching of hieroglyphic words, there is a need to improve the system of teaching it. According to U.P. Strijak's dissertation, the unit of language is not considered separately in the methodology of teaching Japanese hieroglyphs. Therefore, paying attention to this problem, he recommended to pay attention to the following issues in order to effectively study hieroglyphs as a single language unit in the methodology of teaching Japanese hieroglyphs:

1. To develop students' morpheme skills in ON reading types and KUN reading types of each hieroglyph and their correct use.
2. Remember that the semantic meaning of each hieroglyph can be expressed independently, combined with other hieroglyphs to form a single word, and the meaning of the existing hieroglyphic word can be interpreted.
3. Develop the ability to write each hieroglyph and use it in writing.

Tsuda University teacher S. In the study of Japanese hieroglyphs in Mayumi's work, he initially considered it expedient to continue the study of Japanese by forming an existing morphemic concept in hieroglyphs from an early stage. This is because teaching hieroglyph-kanji morpheme unit skills from an elementary level helps students make the process of understanding hieroglyphs more interesting and understandable. So far, the teaching of hieroglyphs has focused on its semantic part, and a number of scientific advances have been made in this area. which he hoped would increase his passion once again.

There are three main directions in the practice of teaching hieroglyphs today. These are [5.P.2]:

1. Academic approach. Based on theoretical factors, it will be necessary to pay attention to who conducted the research on the teaching method.
2. An integrated approach. According to this method, N. Kitani, N Erofeeva, M. Rouli, Dj. Xeysig, K. Xenshal, Yo. The cavaliers did their research. The result of this method is also important. Because hieroglyph learners use this method to accept each hieroglyph as a symbol with full semantic meaning.
3. Structural analysis. Proponents of this method are A. Tollini, M. Flagerti, M. Noguti, Dj. Kess, Yu. Miyamoto, V. Smolenskiy, A. Researchers like Talyshkhanov. The uniqueness of this method is that each hieroglyph character is analyzed with a synthetic-analytical approach.

Problem solving methods In Japanese, each hieroglyph has two or more reading types. It is difficult to remember and put into practice the existing morpheme units in language hieroglyphs. Therefore, using the mnemonics method, it is expedient to show the logical origin of each hieroglyph on the basis of computer imitation models and the existing morphemic units in it by making a meaningful sentence in combination with a word similar to pronunciation in the national context. For example, the hieroglyph Yama which means-mountain has two different types of YAMA and SAN readings. The first type of reading, YAMA, is a morphemic unit meaning "mountain" in Uzbek. The second SAN morphemic unit consists of a meaningless sound. This process can be illustrated figuratively using a computer simulation model to make it easier to explain to students. We will show this process in detail.

Initially, in step 1, the Uzbek translation of the Yama-mountain hieroglyph is indicated by a word (see Figure 2.1).

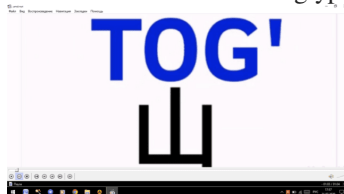


Figure 1. Yama-mountain hieroglyph is an Uzbek translation of the word.

The two different readings of the mountain hieroglyph are then demonstrated and explained by the Japanese letters YAMA and SAN morphemic units (Look figure 2.2).

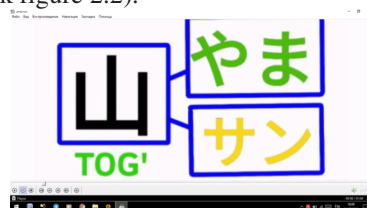


Figure 2. Yama, Japanese Interpretation of San Mofems,

Phase 2 mnemonics is a figurative imagery in which the Japanese YAMA morpheme is combined with the Uzbek word YAMAN and the SAN morpheme is combined with the words SANATORIUM. Using this process, the concept of morphemic pronunciation of a hieroglyph is illuminated by meaningful words in a national context. Then, using KIM, a mnemonic image is displayed in the mountains of YAMA, and the SANATORIUMs are transformed into a landscape that corresponds to many words.

The main purpose of the experimental work is to study the didactic possibilities of forming morphemic units of hieroglyphs in the national context as phonetic pronunciation, form, semantics and spelling (based on the rules of spelling) in the teaching of Japanese hieroglyphs to students at the primary level. is to develop methodological recommendations. In the process of experimental work, the following scientific hypothesis was tested and proved:

- formation of creative thinking skills in the requirements by mnemonics;
- The process of teaching morphemic units of hieroglyphs in the national context through the simulation of a computer simulation model was studied, its shortcomings, their causes were identified, and ways and means of overcoming them were developed;
- Methodologically correct application, understanding the importance and didactic possibilities of teaching hieroglyphic characters that are difficult to read and write
- The content, form, methods and tools for teaching students hieroglyphic characters that are difficult to read and spell have been developed;
- Developed scientific and methodological recommendations aimed at developing students' creative thinking, the ability to express their ideas correctly and fluently in various forms, as well as the level of effectiveness.

A total of 300 students participated in the experiment. Of these, 150 were taken to the test group and 150 to the control group. In the early days of the experiment, questionnaires were obtained from both control groups and experimental groups. We found that both groups had almost the same level of mastery of the lessons. The experimental methodology was developed and implemented based on the theoretical concept of the research. According to it, the amount of experimental sample in the experimental work of the study was 300 participants at the beginning of the experiment (Look table 3.3): Table 3.3

Number of participants in the test sites

Experimental areas	The first stage		The final stage	
	Control group	Experimental group	Control group	Experimental group
Tashkent State University of Oriental Studies	20	25	20	25
Samarkand State Institute of Foreign Languages	30	32	30	32
Uzbekistan State University of World Languages	20	23	20	23

Total	70	80	70	80
-------	----	----	----	----

Within the framework of the problem under study, the level of difficulties encountered in the process of teaching Japanese hieroglyphs to Uzbek students was identified. The following classification relates to the difficulties present in the study of Japanese hieroglyphs. (See Table 1):

Table 1. Identified difficulties in learning Japanese hieroglyphs.

Identified factors	The total respondents are 300 people	
	Number of answers	% Amount
The style of writing hieroglyphs	57	19
The meaning of hieroglyphs is confusing	52	17
Type of reading hieroglyphs	88	29
Graphic view	43	14
Confusing the graphic appearance of hieroglyphs	60	20

The results obtained by the students who participated in the experimental test according to the above evaluation criteria are shown in the table.

(Look table 3.17):

Table 3.17

The results obtained at the end of the experiment according to the evaluation criteria

Educational Institutes	Control group					Experiment group				
	Number of students who took the test	Excellent- 5	Good- 4	Satisfactory- 3	Unsatisfactory- 2	Number of students who took the test	Excellent- 5	Good- 4	Satisfactory- 3	Unsatisfactory- 2
Tashkent State University of Oriental Studies	50	4	12	18	17	50	8	18	24	0
Samarkand State Institute of Foreign Languages	55	4	10	17	16	55	9	19	22	0
Uzbek State University of World Languages	45	4	11	20	17	45	8	17	25	0
Total	150	12	33	55	50	150	25	54	71	0

According to the results, statistical calculations were performed according to the generalized results for all educational institutions. The average mastering value of students in the experimental and control groups.

Based on the above data and theoretical analysis, it is no exaggeration to say that the relevance of today's demand for students to learn hieroglyphs is the result of changes in the methodology of teaching a foreign language in the

modern education system. The process of modernization in the education system today has led to a number of changes in the educational activities of students and has led to a change in the requirements for students.

Results This, in turn, requires new approaches in the methodology of teaching hieroglyphs in foreign language learning. In short, a comprehensive study of hieroglyphs, that is, focusing on its reading type, semantics, and spelling, will help to improve the use and application of computer simulation models in complex mastery. According to the experimental results, re-conducted questionnaires and test results showed that the performance of the experimental group was 13 percent higher than the control class.

As a result of the experimental work, a test site was created for the use of KIM, created from the hieroglyphs of the subject "Main Oriental language (Japanese)", developed and imitation models developed on this basis provided for the use of didactic opportunities (multimedia textbooks, electronic simulators, interactive posters and models, social networking resources) appropriate to the stages of development of science.

Mathematical and statistical analysis of the data obtained during the experimental testing of the presented methodology. From the results obtained, it was found that the indicator of assessing the effectiveness of training is suddenly larger and the assessment of the level of knowledge is greater than zero, that the level of mastery in the experimental group is higher than the level of mastery in the control group.

Consequently, the results of experimental work on the proposed curriculum in the proposed subject "Main Oriental Language (Japanese)" were found to be effective and reliable.

Based on the above data and theoretical analysis, the relevance of today's demand for students to study hieroglyphs can be said to be the result of changes in the methodology of teaching a foreign language in the modern education system. The process of modernization in the education system today has led to a number of changes in the educational activities of students and led to a change in the requirements put on them. This, in turn, requires new approaches in the methodology of teaching hieroglyphs in foreign language learning.

As a result of the experimental work, an experimental platform was created for the use of KIM, created from the hieroglyphs of the subject "Basic Oriental Language (Japanese)" and imitation models developed on this basis provide for the use of didactic opportunities (multimedia textbooks, electronic simulators, interactive posters and models, social networking resources, virtual laboratories) appropriate to the stages of development of science. Mathematical and statistical analysis of the data obtained during the experimental testing of the presented methodology. From the results obtained, it was found that the indicator of assessing the effectiveness of training is suddenly larger and the assessment of the level of knowledge is greater than zero, that is, the level of mastery in the experimental group is higher than the level of mastery in the control group.

So, the results of experimental work on the proposed curriculum in the proposed subject "Main Oriental Language (Japanese)" were found to be effective and reliable.

List of References

1. Alpatov V.M. Language and Society.-M.: Ant, 2003.–208 p.
2. Oomori M. 日本語教師の7つ道具シリーズ2 漢字授業の作り方編: - Tokyo: Alc Press Inc, 2013. -150p
3. Nur Alifah MD Yunus 「音符に焦点を当てた漢字学習ストラテジー指導—日本留学予備教育での非漢字系学習者を対象として—」 『日本語文化研究会論集』 - 2016. –P.110- 120.
4. Hamakawa Y. 日本語教師のための実践・漢字指導: The Japan Foundation., Japanese language center, -Tokyo: 2010. - 250 rubles.
5. Strizhak U.P. The system of teaching hieroglyphic writing (Japanese): Author's abstract of thesis ... Dr. Ped.Sci. - Moscow, 2005. - 32 p.
6. Mayumi S. Since when should one study morphemics as a strategy for learning hieroglyphs// Association of Japanese Language Teachers of the Kyrgyz Republic. No. 4. 2020-p.40-50.
7. Kazuaki Sudo. Japanese writing from the origins to the present day: - Moscow: AST, East-West, 2006. -139 p.
8. Ziganov M.A. Mnemonics. Memorization based on visual thinking. - Moscow: Science, School of Rational Reading, 2000. -170 p.