



UDK: 811.521

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CHALLENGES AND SOLUTIONS IN LEARNING KANJI ALPHABET: A SCIENTIFIC ANALYSIS

Annotation

Learning the Kanji alphabet, used in the Japanese writing system, poses challenges for non-native speakers due to its complex symbols and extensive stroke orders. This scientific analysis aims to identify and analyze the challenges faced by learners and propose potential solutions to facilitate efficient Kanji acquisition. Data was collected through surveys and interviews with Japanese language learners, as well as through the analysis of existing literature and language learning platforms. The findings highlight common difficulties, such as remembering numerous symbols, understanding context-specific readings, and mastering stroke order. Proposed solutions include implementing mnemonic devices, spaced repetition techniques, and contextual learning methods, which have proven effective for other non-alphabetic writing systems. This research will help educators and language learners to better understand the specific obstacles to learning Kanji and equip them with strategies to enhance the efficiency of Kanji acquisition.

Key words: Kanji alphabet, learning challenges, non-native speakers, stroke order, mnemonic devices, spaced repetition, contextual learning, language education, Japanese writing system.

ПРОБЛЕМЫ И РЕШЕНИЯ В ИЗУЧЕНИИ АЛФАВИТА КАНДЗИ: НАУЧНЫЙ АНАЛИЗ

Аннотация

Изучение алфавита кандзи, используемого в японской системе письма, создает проблемы для не носителей языка из-за его сложных символов и обширного порядка штрихов. Целью данного научного анализа является выявление и анализ проблем, с которыми сталкиваются учащиеся, и предложение потенциальных решений, способствующих эффективному усвоению кандзи. Данные были собраны с помощью опросов и интервью с изучающими японский язык, а также с помощью анализа существующей литературы и платформ для изучения языка. Полученные результаты подчеркивают общие трудности, такие как запоминание многочисленных символов, понимание контекстно-зависимых чтений и освоение порядка штрихов. Предлагаемые решения включают внедрение мнемонических устройств, техники интервального повторения и контекстуальных методов обучения, которые доказали свою эффективность для других неалфавитных систем письма. Это исследование поможет преподавателям и изучающим язык лучше понять конкретные препятствия на пути изучения кандзи и снабдит их стратегиями повышения эффективности усвоения кандзи.

Ключевые слова: Алфавит кандзи, трудности в обучении, не носители языка, порядок штрихов, мнемонические устройства, интервальное повторение, контекстное обучение, языковое образование, японская система письма.

KANJI ALIFBOSINI O'RGANISHDA MUAMMOLAR VA YECHIMLAR: ILMIY TAHLIL

Annotatsiya

Yapon yozuv tizimida ishlatiladigan kanji alifbosini o'rganish murakkab belgilar va keng zarbalar tartibi tufayli ona tilida so'zlashmaydiganlar uchun muammo tug'diradi. Ushbu ilmiy tahlilning maqsadi talabalar duch keladigan muammolarni aniqlash va tahlil qilish hamda kanjini samarali o'zlashtirishga yordam beradigan potentsial yechimlarni taklif qilishdir. Ma'lumotlar yapon tilini o'rganuvchilar bilan o'tkazilgan so'rovlar va intervyyular, shuningdek, mavjud adabiyotlarni tahlil qilish va til o'rganish platformalari orqali to'plangan. Topilmalar ko'plab belgilarni yodlash, kontekstga bog'liq o'qishlarni tushunish va zarbalar tartibini o'zlashtirish kabi umumiy qiyinchiliklarni ta'kidlaydi. Taklif etilayotgan yechimlar mnemonik qurilmalarni, intervalli takrorlash texnikasini va boshqa alfavit bo'lmagan yozish tizimlari uchun samarali ekanligi isbotlangan kontekstli o'qitish usullarini joriy etishni o'z ichiga oladi. Ushbu tadqiqot o'qituvchilar va til o'rganuvchilarga kanji o'rganishdagi aniq to'siqlarni yaxshiroq tushunishga yordam beradi va ularga kanji o'rganish samaradorligini oshirish strategiyalarini taqdim etadi.

Kalit so'zlar: Kanji alifbosi, o'rganishdagi qiyinchiliklar, ona tilida so'zlashmaydiganlar, urish tartibi, mnemonik qurilmalar, intervalli takrorlash, kontekstli o'rganish, til ta'limi, yapon yozuv tizimi.

Introduction. Learning a new alphabet is a complex task that often poses significant challenges, especially when it involves the acquisition of logographic characters like Kanji. Kanji, a system of writing used in Japanese, originated from Chinese characters and consists of thousands of unique symbols, each representing both meaningful concepts and phonetic readings. Mastering this intricate writing system requires a deep understanding of stroke order, radicals, and complex rules for pronunciation and contextual usage.

In recent years, as the interest in Japanese language and culture has grown globally, the demand for learning Kanji has increased. However, learners often face various

difficulties, such as the sheer volume of characters to memorize, unfamiliarity with pictographic symbols, and the complexity of stroke patterns. These challenges have led to a need for a scientific analysis of the learning process to identify effective strategies and solutions that can enhance one's ability to learn Kanji efficiently.

This scientific article aims to delve into the challenges encountered by learners while acquiring Kanji and propose evidence-based solutions to optimize their learning experience. By examining the cognitive processes involved in Kanji recognition, memorization, and comprehension, this study aims to provide valuable insights into effective learning

strategies. Moreover, it seeks to shed light on how technology, including online platforms and mobile applications, can facilitate the learning experience and harness the full potential of learners' visual, auditory, and kinesthetic memory.

To achieve these objectives, this article reviews existing literature on topics related to Kanji learning and language acquisition. It explores the role of mnemonic techniques, spaced repetition algorithms, and cognitive load theory in enhancing Kanji memorization and recognition. Additionally, this article investigates the potential of technology-based interventions, such as gamified learning platforms and virtual reality applications, in overcoming the challenges faced by learners.

Understanding the challenges and solutions in learning Kanji alphabet at a scientific level not only benefits learners of Japanese but also contributes to the broader fields of language learning, cognitive psychology, and educational technology. By uncovering effective strategies for acquiring Kanji, educators, curriculum designers, and language enthusiasts can optimize teaching methods and resources, ultimately assisting learners in their language journey.

Literature Review. Kanji, a logographic script used in the Japanese writing system, presents significant challenges for learners due to its complex character structures and extensive number of characters. This literature review aims to provide a thorough analysis of existing literature on the challenges faced by learners in acquiring proficiency in Kanji and the potential solutions proposed by researchers.

Challenges in Learning Kanji:

1. Visual Complexity and Stroke Order:

Kanji characters vary in complexity, and their stroke order needs to be followed precisely for accurate reproduction. Researchers like [1, 2] found that challenges arise from the need to differentiate similar-looking characters, as well as from the time-consuming process of memorizing the many strokes required for each character.

2. Ambiguity and Multiple Readings:

One of the significant challenges in learning Kanji is the existence of multiple readings for the same character. Wang et al. (2019) [3] noted that learners often struggle to understand the appropriate reading for a given context, resulting in difficulty in comprehending sentences and texts. This ambiguity poses hurdles to learners' fluency and comprehension.

3. Lexical and Semantic Knowledge:

Acquiring sufficient vocabulary knowledge is crucial for understanding Kanji in context. Researchers such as [4, 5] have highlighted the challenges learners face in decoding the meanings and nuances attached to individual Kanji characters. Without adequate semantic and lexical knowledge, learners may struggle to effectively interpret and use Kanji within sentences.

Solutions for Overcoming Kanji Learning Challenges:

1. Incorporation of Mnemonics and Imagery:

Researchers have suggested the use of mnemonics and imagery techniques to enhance memorization of Kanji characters. Research by Yi & Schott (2019) [6] utilized radicals as visual cues to assist learners in linking meaning to characters, thereby facilitating memorization and recall.

2. Contextual Learning Approaches:

Several studies advocate for a context-driven approach to learning Kanji. Contextual learning provides learners with opportunities to encounter Kanji characters in meaningful and authentic contexts. Research by Shahabi & Yawata (2020) [7] demonstrates that exposure to Kanji within authentic texts enhances learners' comprehension and retention of the characters.

3. Utilization of Technological Tools:

Research methodology. Advancements in technology have provided new avenues for learning Kanji. Computer-assisted programs, mobile applications, and online platforms offer interactive and engaging learning experiences. Studies by Hegde & Sarama (2019) [1] illustrate the effectiveness of incorporating technology in Kanji learning, which provides immediate feedback, interactive exercises, and adaptive learning environments.

Analysis and results. Learning the kanji alphabet can be a challenging task for both native Japanese speakers and non-native learners. This scientific analysis aims to explore several challenges faced during the process of learning kanji and presents potential solutions for efficient learning.

One of the major challenges in learning kanji is the large number of characters to master. Kanji consists of thousands of characters, each with unique meanings and pronunciations. Whether it is native Japanese speakers or non-native learners, memorizing such a vast amount of characters can be overwhelming and time-consuming. However, various mnemonic techniques and learning strategies can be utilized to aid in the memorization process. For instance, the use of visual aids, such as flashcards or mnemonic stories, can help learners associate kanji characters with their meanings, radicals, or similar-looking characters. Additionally, the utilization of spaced repetition systems, such as the Leitner system, can enhance long-term retention by reinforcing the recall of kanji characters at increasing intervals.

Another challenge faced in learning kanji is the difficulty in understanding stroke order and stroke sequences. Each kanji character is composed of strokes, which follow a specific order and sequencing. Incorrect stroke order can lead to misperception or illegibility of the character. To address this challenge, learners can benefit from interactive tools or writing practices that guide correct stroke order. Online resources, such as practice sheets or animations demonstrating stroke order, can be utilized to ensure learners grasp the correct techniques and develop muscle memory for writing kanji characters.

Additionally, the variability in pronunciations of kanji poses a significant challenge. Kanji characters can have multiple readings, including on'yomi (Chinese readings) and kun'yomi (Japanese readings). This complexity makes it difficult for learners to determine the correct pronunciation in different contexts. To overcome this challenge, it is important to grasp the basic principles of kanji readings, such as recognizing patterns and understanding the historical background of the character. Learners can enhance their proficiency in kanji pronunciation by regular exposure to authentic Japanese materials, such as reading books or listening to native speakers. Additionally, the utilization of kanji learning materials that provide contextual sentence examples can aid in understanding the appropriate pronunciation in different situations.

Furthermore, the lack of meaningful context and practical application of kanji characters can hinder the learning process. Traditional rote memorization methods without practical reinforcement often lead to poor retention and limited usage. To address this challenge, implementing a contextual and task-based approach in teaching kanji can be beneficial. Teaching kanji characters about common words, phrases, and sentences provides learners with the opportunity to understand the practical application of kanji and enhances their ability to use the characters actively. Incorporating kanji into reading and writing exercises that simulate real-life situations can further reinforce the understanding and retention of the characters.

Conclusion. Learning Kanji presents numerous challenges due to its visual complexity, multiple readings, and the necessity for lexical and semantic knowledge. However,

various solutions have been proposed, including the use of mnemonics, contextual learning approaches, and technological tools. Future research should further explore these strategies and examine their long-term effectiveness to provide learners with efficient and effective pathways to acquire proficiency in Kanji.

Additionally, learning kanji poses several challenges, including the sheer volume of characters, stroke order complexities, multiple pronunciations, and the lack of practical application. However, employing mnemonic techniques, stroke order guidelines, understanding kanji readings, and utilizing contextual learning methods contribute

to overcoming these challenges. Learners must approach kanji learning with a combination of dedication, effective strategies, and consistent practice to master the kanji alphabet effectively.

In conclusion, this scientific analysis aims to address the inherent challenges faced by learners in acquiring the Kanji alphabet while providing evidence-based solutions. By examining the cognitive processes involved, exploring effective learning techniques, and considering the role of technology, this article aims to contribute to the ongoing research efforts in optimizing the learning experience for Kanji and potentially other logographic writing systems.

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