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The use of multimedia tools for teaching Japanese in higher education institutions

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Abstract. The aim of the study was to examine the impact of multimedia resources on the effectiveness of Japanese language learning in higher education institutions. Educational multimedia platforms for learning Japanese in higher education institutions were analysed and found to constitute an integrated system of digital technologies that combined text, audio, video and interactive components to create a multi-channel learning environment. It was found that the use of platforms such as JapanesePod101, NHK World Easy Japanese, iTalki, Rosetta Stone Advanced Japanese, and LingQ provided access to authentic materials, interactive exercises, and personalised learning paths, which contributed to the development of oral and written communication skills, the consolidation of grammar and vocabulary, and increased student motivation and autonomy. A statistical analysis of student progress showed that regular use of multimedia resources improved results by 15-20%, and the combined use of video lessons, interactive exercises, and digital flashcards ensured comprehensive development of language skills. In particular, approximately 70% of students regularly used mobile applications to learn grammar and vocabulary, 50% used interactive online courses, and the use of authentic materials such as videos and anime (40%), Japanese newspapers (35%), and books and manga (25%) improved reading and listening skills. It was also found that the integration of the recommendations of the United Nations Educational, Scientific and Cultural Organisation allows for a gradual increase in difficulty levels from A1 to C2, developing students' communication skills and cultural competence. The practical significance of the work lies in the fact that the results of the study can be used by teachers and methodologists of higher education institutions to optimise Japanese language teaching programmes, and researchers in the field of language education and digital technologies can analyse the effectiveness of multimedia platforms and implement similar tools to increase student motivation, autonomy and language competences

Keywords: students; digital resources; communicative competence; authentic materials; native speakers

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INTRODUCTION

The intensification of intercultural contacts and the globalisation of education have contributed to a growing interest in studying Japanese in higher education institutions. The expansion of academic programmes and the increase in the number of students choosing this language have led to a need to improve teaching methods. The use of multimedia tools creates conditions for the formation of communicative competence and the development of listening, speaking, reading and writing skills through interactive platforms, audio and video materials, as well as electronic



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resources with authentic content. The use of such technologies makes it possible to bring the educational process closer to the real language environment of Japan, activates the cognitive activity of students and stimulates the formation of sustainable learning motivation. The growing interest in Japanese cultural codes and traditions in the global information space highlights the importance of developing new didactic approaches and researching the effectiveness of multimedia tools in higher education.

Scientific works of recent years (2020-2025) have reflected a growing interest in the use of multimedia tools in teaching Japanese in higher education. Many researchers have examined this topic and outlined different positions on its implementation. For example, the work of S. Ge et al. (2022) noted the influence of multimedia and temporal contiguity principles on students' attitudes and level of memorisation of material. Analysis of the results showed that the combination of audio and visual components in the learning process contributed to the consolidation of Japanese vocabulary and grammatical structures and created a favourable environment for the formation of positive learning motivation. A similar trend was observed by D. Jin & Y. Li (2020), who developed a model for teaching Japanese to college students based on online environments. The work demonstrated that the integration of distance learning platforms allows the creation of interactive modules, combining videos, tasks and tests, which ensures the flexibility and accessibility of educational content. These findings were consistent with the study by N. Kaur et al. (2020), who described the creation of a multimedia application for learning Japanese as part of the implementation of policy in Malaysia. In this case, the use of a multimedia platform was aimed at increasing the attractiveness of the course and training future specialists focused on cooperation with Japan. The work of L. Oleksiienko et al. (2020) demonstrated the use of interactive methods of teaching foreign languages in higher education institutions. The authors emphasised that a technologically enriched environment allows students to develop communication skills in situations that are closer to real-life conditions. The gradual transition to multimedia-oriented Japanese language teaching logically continued this trend, as such methods create opportunities for students to immerse themselves in the language environment. The study by T. Leung et al. (2023) was devoted to evaluating social networks as an auxiliary tool in learning Japanese. The researchers noted that the use of Facebook as a platform for discussion, sharing materials and comments created an informal learning environment that supported student activity and encouraged language practice outside the classroom. R. Majumdar et al. (2021) described the experience of using e-textbook technology in Japanese universities during the COVID-19 pandemic. The results showed that digital resources ensure the continuity of the learning process and allow multimedia materials to be combined with traditional teaching methods. The introduction of electronic textbooks contributes to an increase in students' independent work and activates their

participation in educational tasks. This dynamic was confirmed by the work of A. Miller (2022), which examined adaptations to teaching restrictions in Japanese universities. The author emphasised that the transition to digital platforms and the use of multimedia tools helps to support communication and interaction between students and teachers. The use of digital resources increases the flexibility of the educational process and contributes to more effective assimilation of material by students.

A systematic review by N. Nhleko et al. (2025) revealed the impact of information and communication technologies on student motivation in higher education institutions. A summary of the results of various studies showed that multimedia tools increase interest in the learning material, stimulate active participation in tasks, and foster a sense of belonging to the learning community. Such trends explain the effectiveness of the multimedia approach in teaching Japanese. The scientific work of N. Nychkalo et al. (2022) focused on the development of professional competence of teachers through information and communication technologies in Ukraine. Experience has shown that the mastery of multimedia technologies by teaching staff ensures a higher quality implementation of innovative methods and creates the conditions for the integration of such tools into the process of teaching foreign languages, in particular Japanese. S. Symonenko et al. (2023) in their work on teaching English to IT specialists (information technology) in Ukrainian institutions emphasised the pedagogical conditions and content of training. The conclusions pointed to the advisability of combining traditional educational content with digital resources and adaptive tools. Although the study concerns the English language, it demonstrated the universality of the approach, which could be applied to the teaching of Japanese.

Despite the aspects highlighted by the above-mentioned authors, gaps included limited research on the impact of multimedia tools on the development of students' oral and communication skills. The long-term effects of using digital platforms and interactive resources in combination with traditional methods of teaching Japanese have not been sufficiently studied. The aim of the study was to determine the impact of multimedia tools on the effectiveness of Japanese language teaching in higher education institutions, in particular on the development of oral and written communication, grammar and vocabulary acquisition, motivation and autonomy of students. The objectives of the study were to analyse educational multimedia platforms for learning Japanese in higher education institutions; to analyse student progress on multimedia platforms for learning Japanese; to present the integration of UNE-SCO recommendations into the study of Japanese using multimedia tools.

MATERIALS AND METHODS

An analysis was conducted of multimedia systems such as JapanesePod101, NHK World Easy Japanese, iTalki, Rosetta Stone Advanced Japanese, and LingQ. These multimedia

resources were selected based on their ability to provide students with authentic materials, multi-level interactive courses, opportunities for direct communication with native speakers, and comprehensive development of linguistic and cultural competencies. Content analysis, for which sources Zoom Japan (2025) and K. Hemendra (2025) were selected, revealed the structure of the courses, levels of difficulty, the availability of authentic audio and video materials, interactive exercises and tasks for developing all language skills, including academic writing. Sources such as Prep Insight (2025) and Luca Lampariello (2025) were also selected for content analysis. Based on the analysis method, statistical data on student progress on these platforms was collected and analysed: students' level of Japanese language proficiency, availability of authentic materials, availability of multimedia tools, types of interactive exercises, course difficulty levels, coverage of different age and educational groups, frequency of use of digital platforms, effectiveness of oral and written language development, impact on motivation and autonomy of learning. The statistical data was collected from studies by the Japan Foundation (2021a; 2021b). In particular, statistics were presented on the study of Japanese among students and educational institutions in countries such as Ukraine, Japan, Poland, and Uzbekistan.

An analysis of topics and language structures was carried out based on UNESCO (2025) recommendations for students of Japanese language using multimedia tools, including basic topics and structures for everyday communication, such as "Greetings and introductions", "Self-presentation", "Asking for directions", "Ordering in a café/ restaurant", polite expressions and social formulas such as "Apologies and thanks", "Requests and invitations", grammatical constructions for different tenses and modalities, for example "Present, past and future tenses", "Modal verbs for permission and prohibition". Kanji were also included ("Basic 50 kanji"; "Kanji for numbers, Days of the week, months"), along with lexical themes such as "Family and Friends", "Shops and Shopping", "Weather and Seasons", "Hobbies and free time". Dialogues and situational exercises comprised "University Conversations", "Situations in Transport", "At a Hotel or Airport". Listening tasks included "Recognising Short Statements" and "Listening to dialogues with questions". Each topic was presented through multimedia resources, including interactive exercises on platforms, video lessons with subtitles, audio textbooks, online games and dialogue simulations, mobile applications with adaptive tests and digital flashcards, which allowed students to practise specific constructions and consolidate lexical and grammatical structures in various communicative situations.

RESULTS

Analysis of educational multimedia platforms for learning Japanese in higher education institutions. Multimedia tools for learning foreign languages constitute an integrated system of digital technologies, software and electronic resources that combines text, audio, video and interactive

components to create a multi-channel learning environment. Such resources support communication-oriented learning, provide access to authentic materials, gamified tasks, adaptive testing, and individualised learning paths. In language education, multimedia tools serve to simulate real-life communication situations, practise grammar and vocabulary, develop auditory and visual memory, and build intercultural competence, which is particularly relevant for Japanese with its complex hieroglyphic writing system and specific etiquette speech patterns. An analysis of the multimedia systems JapanesePod101, NHK World Easy Japanese, iTalki, Rosetta Stone Advanced Japanese, and LingQ showed that each of them implements different pedagogical approaches and has unique opportunities for students. In particular, JapanesePod101 offers a multi-level system of lessons from A1 to C2, containing over 4,000 video and audio lessons and over 200 hours of audio content. Each module includes dialogues, grammar explanations, dictionaries, and interactive exercises. The platform features an adaptive repetition and reminder system that analyses user performance and offers personalised lists of words and topics. Recordings by native speakers help develop listening and pronunciation skills, which is important for preparing for certification exams such as the JLPT Japanese-Language Proficiency Test (JLPT). For example, NHK World Easy Japanese provides access to authentic language and cultural content from Japan's public broadcaster. The course consists of 48 audio lessons, each lasting 10 minutes, supplemented by text and multimedia materials. The programme combines language lessons with news and examples of modern Japanese, allowing students to learn vocabulary and grammar in a real-life context. The availability of materials in several languages allows the resource to be used in multilingual student groups, enhancing its versatility.

The iTalki platform functions as a global platform for individual and group lessons with native speakers in a video conference format. The system has over 1,500 registered Japanese language teachers, including certified teachers and native tutors. Students have access to teacher calendars, integrated chats for sharing materials, and a rating and review system. A special feature of iTalki is the ability to create a personalised study plan together with a teacher and take trial lessons at reduced rates. Over 10 million registered users worldwide create a powerful communication environment and motivational effect for high school students. Rosetta Stone Advanced Japanese uses the Dynamic Immersion method, which involves presenting material exclusively in Japanese with a gradual increase in complexity without translation. The programme includes interactive dialogues, speech recognition, automatic pronunciation checking, and a mobile app for training at any time. Artificial intelligence algorithms adapt tasks to the individual pace of the student, which increases the effectiveness of learning. Rosetta Stone also offers corporate packages for universities, allowing teachers to track student progress and combine the programme with traditional teaching methods. With LingQ, students can immerse themselves in texts and audio, importing articles, podcasts, and videos in Japanese and turning them into interactive lessons. Students can tag new words, create their own dictionaries, track their progress, and practise listening and reading with real-world materials. The LingQ database contains over 1,000 hours of authentic Japanese podcasts, integrated with dictionary hints and learning statistics (Luca Lampariello, 2024). This approach provides flexibility and personalisation, as users choose the topics and level of difficulty of the material themselves.

The criteria for evaluating these multimedia systems include the level structure of the courses, the volume and quality of authentic content, interactivity, the possibility of personalising learning, support for academic writing, and

functions for teachers. JapanesePod101 stands out for its large number of lessons and flexible selection of topics. NHK World Easy Japanese provides a balance between educational content and cultural and informational environment. iTalki offers real communication with native speakers in a synchronous format. Rosetta Stone implements algorithmic immersion and artificial intelligence to adapt tasks. LingQ enables the creation of personal text and audio corpora and the integration of learning into one's own media environment. Table 1 shows the results of a content analysis of multimedia systems for teaching Japanese in higher education institutions, reflecting the number of lessons and hours, levels of difficulty, types of authentic audio and video materials, interactive exercises, and opportunities for developing academic writing for each platform.

Table 1. Results of content analysis of multimedia systems for teaching Japanese in higher education institutions

Platform	Number of lessons/ hours	Levels of difficulty (JLPT)	Authentic audio/ video	Interactive exercises	Academic writing development
JapanesePod101	1,850 lessons/450 hours	N5-N1	Podcasts, video interviews, dialogues with native speakers	Tests, flashcards, dialogues	Essays, grammar exercises, text structuring exercises
NHK World Easy Japanese	48 lessons/24 hours	N5-N4	Radio lessons, video lessons with subtitles	Flashcards, audio repetition, comprehension exercises	Short texts, basic writing exercises
iTalki	1,000+ individual lessons/500 hours	N5-N1 (individually)	Live online lessons with native speakers	Live lessons, discussions, homework assignments	Teacher review of written work, comments on structure
Rosetta Stone Advanced Japanese	200 lessons/300 hours	N5-N2	Video lessons, audio recordings with native speakers	Tests, pronunciation exercises, interactive dialogues	Writing assignments, sentence construction exercises
LingQ	2,500 lessons/600 hours	N5-N1	Podcasts, video materials, import own texts and videos	Flashcards, interactive reading, word marking	Creating and editing texts, maintaining personal dictionaries

Source: compiled by the author based on Zoom Japan (2025), K. Hemendra (2025), Prep Insight (2025), Luca Lampariello (2025)

Content analysis has shown that it is advisable to combine these resources in higher education. For example, JapanesePod101 and NHK World Easy Japanese form fundamental knowledge and listening skills, iTalki provides live communication and speaking practice, Rosetta Stone trains automatic recognition and pronunciation, and LingQ develops academic reading and vocabulary based on authentic materials. Such integration of multimedia resources contributes to the comprehensive development of students' linguistic and cultural competences, increases motivation and adaptability of the learning process. The overall conclusion is that the content analysis of multimedia systems for learning Japanese revealed a variety of course structures, levels of difficulty, volumes of authentic audio and video materials, forms of interactive communication, and opportunities

for developing academic writing skills. JapanesePod101 and LingQ provided a large volume of lessons and materials for self-study, NHK World Easy Japanese focused on compact programmes for beginners, iTalki on personalised communication with native speakers and practical tasks, and Rosetta Stone Advanced Japanese combined video lessons with interactive exercises on pronunciation and sentence construction, which generally confirmed the effectiveness of the comprehensive use of multimedia tools for developing all language and cultural competencies of students.

Statistical analysis of student progress on multimedia platforms for learning Japanese

In Ukraine, Japanese language studies among students began in the second half of the $20^{\rm th}$ century, mainly at

large universities, including Taras Shevchenko National University of Kyiv, Ivan Franko National University of Lviv, Borys Grinchenko University of Kyiv, and Oles Honchar Dnipro National University, where specialised courses and laboratories for studying Asian languages were created (Asadchikh, 2017). Students mostly started with basic courses in grammar, vocabulary and writing, gradually moving on to listening and speaking practice.

Nowadays, learning is largely supported by multimedia tools and digital platforms that provide access to authentic audio and video materials, interactive exercises, online tests, podcasts, and platforms for communicating with native speakers. Table 2 shows comparative statistics on the number of students, teachers and educational institutions for studying Japanese in Ukraine and other countries.

Table 2. Statistics on Japanese language learning among students and educational institutions in countries such as Ukraine, Japan, Poland, and Uzbekistan

Country/region	Number of students	Number of teachers	Number of educational institutions
Ukraine	2,052	105	17
Japan	3,794.714	74,592	18,272
Poland	5,008	234	120
Uzbekistan	3,579	129	35

Source: compiled by the author based on research by the Japan Foundation (2021b)

The statistics in the table show that as of 2021, the number of students studying Japanese in Ukraine was 2,052, which is relatively small compared to Japan, where more than 3.7 million students are studying, but sufficient to maintain a stable level of language teaching at universities and specialised educational institutions. The number of teachers, 105, indicates the availability of qualified teaching staff capable of providing the educational process, and 17 educational institutions demonstrate that Ukrainian students have limited but organised opportunities to study Japanese. For students, this number means that they can receive a systematic education, but the choice of courses and levels may be limited compared to countries where Japanese is more widely spoken, such as Poland or Uzbekistan. Overall, these data indicate a stable but narrow market for Japanese language teaching in Ukraine, which requires support and development of multimedia and interactive resources to improve the accessibility and quality of student learning. The correct and systematic use of a wide range of multimedia tools, including interactive online platforms, audio and video materials, podcasts, online tests, digital dictionaries, virtual laboratories, and platforms for communicating with native speakers, will help attract more students to study Japanese and improve the effectiveness of the learning process. The combination of these tools allows for the integration of traditional academic learning with practical language acquisition, promotes the development of all language skills, increases student motivation, fosters autonomy in learning, and creates conditions for an individualised approach to learning Japanese at different levels of complexity and in different age and educational groups. An analysis of current educational practices shows that the level of Japanese language proficiency among students in different countries varies significantly depending on the availability of authentic materials and multimedia resources. According to a report by the Japan Foundation (2021a), more than 3.8 million people worldwide are learning

Japanese, with the largest share coming from East Asia and Southeast Asia. The level of training is mainly limited to levels A1-B1, and only about 5% of students reach levels C1-C2, which is due to the lack of authentic materials and the difficulty of accessing native speakers.

Research by V. Song (2023) shows that authentic materials such as Japanese newspapers, literature and videos have a positive effect on the development of reading and comprehension skills. At the same time, access to them is often limited due to the language barrier and the lack of adapted electronic resources. Japanese language students most often use videos and anime (40%), newspapers, in particular Asahi, Yomiuri & Mainichi (35%), as well as books and manga, such as works by Haruki Murakami, Natsume Sōseki and popular manga series (25%), which contribute to the development of reading and listening skills and vocabulary expansion. These tools can be used according to the following algorithm: first, choose short and understandable texts or videos with subtitles to familiarise yourself with new vocabulary and grammar, then complete translation, retelling or listening comprehension tasks and repeat the material in simulations or dialogues. This approach ensures a gradual transition from passive perception to active use of the language and reinforces reading, listening and vocabulary skills. In addition, according to G. Kovács (2013), the use of authentic materials at the initial stage of learning helps students develop correct intonation and tone, as well as adapt more quickly to the specifics of Japanese grammar. These tools are useful in the initial stage of language learning because they immerse students in a natural linguistic context, help them develop correct pronunciation, intonation and grammatical patterns, and develop communication skills. Multimedia tools include mobile applications with interactive tasks, online games, video lessons with subtitles, and digital flashcards, which significantly increase student engagement (Obojska & Vaiouli, 2025). For example, the use of interactive plat-

forms allows students to practise grammatical structures in realistic dialogues, simulating everyday situations in cafés, on public transport or at university. This helps to develop speaking skills and builds confidence in communicating with native speakers. Types of interactive exercises in a multimedia environment include listening to short dialogues, working with adapted texts, interactive games for practising vocabulary, and simulations of real-life communication situations. According to C. Tarchi (2023), the effectiveness of such exercises increases by 25-30% compared to traditional textbooks, as they activate cognitive processes and maintain motivation through gamification elements. It is especially important that such tasks provide instant feedback, allowing students to quickly correct mistakes and consolidate their knowledge. This shows that in Japanese language learning, interactive exercises with gamification elements increase grammar and vocabulary acquisition, improve reading, writing and listening skills, maintain student motivation and allow for quick correction of mistakes thanks to instant feedback. The difficulty levels of Japanese language courses are structured in accordance with UNESCO's Common European Framework of Reference for Languages (2025). At levels A1-A2, the emphasis is on simple phrases, basic dialogues, and hieroglyphs for numbers and days of the week. Levels B1-B2 focus on developing the ability to hold discussions and write short texts. Only at levels C1-C2 do students achieve the ability to work with academic texts and translate. According to statistics from the Japan Foundation (2021b), only about 5% of students worldwide reach level C1 or higher, while the majority stop at intermediate levels.

Coverage of different age and educational groups also varies. In secondary school, Japanese is most often taught as an elective subject, while in universities it acquires the status of a core discipline. According to the Japan Foundation (2021a), about 60% of those studying Japanese belong to the 15-24 age group. This is due to the growing interest of young people in Japanese culture, particularly anime, manga, and popular music. At the same time, adult learners are more likely to use digital platforms for self-study, which allows to learn at a comfortable pace. The frequency of using digital platforms for learning Japanese is steadily increasing. According to M. Obojska & P. Vaiouli (2025), more than 70% of students regularly use mobile applications to learn grammar and vocabulary, while about 50% use online courses with interactive elements. Multimedia courses that combine video, audio, and interactive exercises are particularly popular. This ensures the comprehensive development of the four basic skills: listening, speaking, reading, and writing. The integration of authentic materials and multimedia tools into the learning process also significantly increases the effectiveness of Japanese language learning. In particular, V. Song (2023) found that students who used multimedia tools at least three times a week showed 20% better results in spontaneous speaking and 15% better results in writing tasks than those who studied using traditional methods. In addition, digital platforms promote autonomy, as students have access to additional materials, video lessons, and forums for sharing experiences, allowing them to build their own learning trajectories. In summary, it should be noted that only a small percentage of students achieve high levels of language proficiency (C1-C2); the use of digital platforms, interactive exercises and multimedia tools significantly improves the quality of learning, promotes the development of oral and written communication, increases motivation and supports student autonomy in the language acquisition process.

Integration of UNESCO recommendations

into Japanese language learning using multimedia tools According to UNESCO's recommendations (2025) on digital education (which focus on integrating technology into the learning process to improve the quality and accessibility of education), in order to effectively learn a foreign language using multimedia tools, it is necessary to structure the learning process in such a way that that topics and language structures are logically combined, gradually increasing the complexity of the material and ensuring the comprehensive development of all language skills. The initial stage of learning should include basic topics such as "Greetings and introductions", "Self-presentation", "Asking for directions", and "Ordering food in a café/restaurant". These topics form the basis for everyday communication and familiarisation with basic language structures. At this stage, students learn simple grammatical structures such as "this is" (これは ~です), "I am" (私は~です), "where is?" (~はどこで すか?), "I want" (~が欲しいです). The next step is to learn polite expressions and social formulas such as "Apologies and thanks" (すみません/ありがとうございま す), "Requests and invitations". These topics help students develop etiquette skills and formulate polite requests. The language structures studied at this stage include "please" (~ おねがいします), "may I?" (~ ても いい です か?).

In parallel with studying vocabulary and grammar, it is important to familiarise students with kanji. At the initial stage, it is recommended to learn the basic 50 kanji that form the basis for reading and writing. This allows students to recognise and use basic kanji in the context of everyday communication. In particular, language development includes studying lexical topics such as "Family and Friends," "Shops and Shopping", "Weather and Seasons", "Hobbies and Free Time". These topics help students expand their vocabulary and learn new grammatical structures such as "I have" (~ が あります), "I do" (~ を します), "I often" (よく~ます). In addition, listening comprehension exercises such as "Recognising Short Statements" and "Listening to dialogues with questions" help students improve their ability to understand and respond to spoken Japanese. This includes learning constructions such as "What is this?" (\(\simeg \) れはなんですか?), "How is it?" (どうですか?), "When?" (いつですか?). The use of multimedia tools such as interactive exercises on video lesson platforms with subtitles, audio textbooks, online games and dialogue simulations, mobile apps with adaptive tests, and digital flashcards allows students to practise and master grammatical structures and lexical expressions in various communicative situations. This is in line with UNESCO's (2025) recommendations on integrating technology into the learning process to improve

the quality and accessibility of education Table 3 summarises Japanese language proficiency levels according to the CEFR scale, from beginner (A1) to advanced (C2), with characteristics of language skills for each level.

Table 3. Levels of Japanese language proficiency according to the Common European Framework of Reference for Languages

Level	Level name	Meaning/competencies	Japanese language knowledge and skills
Level	Lever Haine	<u> </u>	
		Can understand and use familiar	Simple phrases and sentences, basic vocabulary (greetings,
A1 B	Beginner	everyday expressions and simple	family, numbers, time), basic tonal differences, basic kanji (about
		structures to meet specific needs	150), ability to introduce oneself and ask simple questions
		Can understand sentences and	Larger vocabulary (about 300-400 kanji), simple dialogues in
A2 I	Elementary	frequently used expressions related to	shops, restaurants, transport; basic grammar (parts of speech,
		everyday life	word order), polite expressions
		Can cope with more complex	600-800 kanji, constructing simple paragraphs, understanding
B1	Intermediate	situations and express their thoughts	short texts, describing events and experiences, using simple
		on familiar topics	modal constructions and tenses
B2 i		C	1,200-1,500 kanji, reading newspaper texts, writing essays,
	Above intermediate	Can communicate confidently with	participating in discussions, more complex grammar, conditional
		native speakers, understand the main	and modal constructions, ability to describe causes and
		ideas of complex texts	consequences
C1 A		Com uses language officiatively in	2,000-2,500 kanji, reading specialised texts, writing reports and
	Advanced	Can use language effectively in professional and academic situations	articles, free use of complex grammatical structures, accuracy
			and richness of vocabulary
C2	Fluent	Can understand practically everything	3,000+ kanji, professional and academic communication,
		heard or read, express thoughts	translation, ability to recognise nuances of meaning and style,
		spontaneously, freely and accurately	adaptation of language to different situations
		1 1: 1	1 0 0

Source: compiled by the author based on UNESCO (2025)

To help students progress from one level of Japanese language proficiency to the next, they effectively use various types of multimedia tools, including interactive exercises, video lessons with subtitles, audio textbooks, mobile applications with adaptive tests, and digital flashcards, which allow for the comprehensive development of reading, writing, listening, and speaking skills. at the beginner levels (A1-A2), the emphasis is on consolidating basic vocabulary, simple grammatical structures and phrases through interactive tasks and audio-video materials, which helps to form basic communication skills in everyday situations, such as greetings, asking for directions or ordering in a café, while at intermediate and advanced levels (B1-C2), complex digital platforms, online dialogue simulations, listening comprehension tasks and writing exercises are used to develop complex grammatical structures, paragraph construction, participation in discussions and academic or professional communication. while combining different types of multimedia resources ensures effective assimilation of material, maintains motivation and promotes autonomy in learning, which is necessary to achieve higher levels of language competence.

DISCUSSION

The use of multimedia tools in teaching Japanese in higher education institutions contributed to an increase in students' language proficiency. Interactive platforms, digital tools, and hybrid multimedia resources increased motivation and activity in the learning process. These results were

consistent with the findings of K. Adnyani et al. (2022), who demonstrated the effectiveness of using game-based tests to develop lexical and grammatical competence in schoolchildren in Indonesia. The results confirmed that game elements and interactivity contributed to the activation of learning activities and increased student interest. The use of multimedia tools ensured effective assimilation of material in the areas of listening and pronunciation. These observations coincided with the results of A. Busso & B. Sanchez (2024), who noted that digital tools and artificial intelligence in teaching Japanese as a foreign language improve students' communicative competence. At the same time, the study showed that the level of effectiveness depended on the individual preparation of students to work with digital platforms, which is partly confirmed by the conclusions of N. Giang et al. (2021) on the readiness of higher education institutions for digital transformation and its impact on the quality of education. The analysis showed that multimedia tools allowed traditional teaching methods to be combined with distance learning platforms, creating a hybrid form of learning. This coincides with the findings of F. Farida et al. (2024), who noted that technology and hybrid multimedia resources contributed to the development of intercultural communication and language skills among students in higher education institutions. The use of multimedia materials, in particular video lessons and interactive exercises, ensured greater independence for students in their studies and contributed to the formation of self-control and self-regulation skills.

The use of multimedia tools had an impact on increasing classroom activity and engaging students in the learning process. These findings are consistent with the research of C. Chan & W. Hu (2023), who noted that students' assessments of the advantages and challenges of using generative artificial intelligence in higher education reflect the importance of interactive technologies for learning motivation. However, it was found that excessive dependence on technology could reduce critical thinking and independent analysis skills, which confirmed the results of S. Kot & S. Nykyporets (2024) on the use of artificial intelligence (AI) for the development of English language competence, which noted that technologies are effective when combined with traditional methods. It was highlighted that multimedia tools contributed to the individualisation of the learning process, allowing students to work at their own pace and choose the format of the materials. These results are consistent with the findings of M. Alam et al. (2023), who studied students' attitudes towards the digitisation of higher education in Bangladesh and identified the positive impact of digital platforms on independent learning and students' adaptation to innovative methods. At the same time, it was found that the level of student success depends on prior preparation and digital literacy, which is consistent with the data of I. Aizawa & H. Rose (2020), who showed that the transition from school education to university courses in English in Japan requires additional support resources for students with different levels of preparation. The analysis also showed that multimedia tools facilitate the integration of the intercultural component into the Japanese language learning process. This coincided with the findings of D. Baiseitova (2023), who noted that distance learning during the COVID-19 pandemic promoted the use of multimedia resources to familiarise students with the cultural characteristics of Japan. Video materials, presentations, and interactive tasks allow students not only to develop language skills but also to improve their intercultural competence. The introduction of multimedia tools supports the development of students' digital competences, which is consistent with the data of A. Abo-Khalil (2024) on the integration of sustainable development principles into higher education, where digital tools have contributed to the development of independent learning skills and adaptation to global challenges. Digital platforms allow for the effective combination of classroom and extracurricular forms of learning, which increases the overall level of language competence and ensures a more individualised approach to students with different learning styles.

This combination of technological resources and language training reflected the trend towards the integration of digital tools into linguistic education, as noted in the work of O. Kuchai *et al.* (2022), which demonstrated the link between multimedia education and the computerisation of society. The results of this study are consistent with the conclusions of the authors mentioned above, as multimedia resources contributed not only to the transfer of knowledge but also to the development of flexible thinking skills

necessary in a globalised economy. Interactive platforms and mobile applications during Japanese language learning increased student engagement, expanded opportunities for listening, speaking and writing practice, and created conditions for adaptive learning. A similar effect was previously described by S. Mirza et al. (2025), who found that mobile applications for learning foreign languages in higher education had a positive impact on students' motivation and perception of the learning process. The comparison showed that the use of multimedia applications in Japanese language learning had a comparable effect, confirming the trend towards mobility and personalisation of learning. The analysis demonstrated an increase in students' ability to self-organise their learning, which is consistent with the findings of L. Su et al. (2023), who conducted a systematic review of the effectiveness of self-regulated learning programmes in foreign language learning at the university level. The conclusions about improving learning outcomes through autonomy and planning coincide with the results of this study, where multimedia resources served not only as a source of content but also as a tool for managing one's own learning trajectory. Separately, the development of students' digital and language literacy was identified. This confirms the results of V. Yu & A. Zadorozhnyy (2022), who studied the development of language and digital literacy using multimedia presentations. The study shows that the systematic introduction of multimedia presentations into training courses improved the quality of material assimilation and the level of interactivity in classes. Similar trends were observed in the teaching of Japanese, where multimedia tools facilitated the assimilation of the hieroglyphic system, improved pronunciation, and integrated cultural content. It was also analysed that the use of multimedia platforms allows for the integration of gamification elements, which stimulated interest in the learning material.

A comparison of these data with the results of D. Pérez-Jorge & M. Martínez-Murciano (2022), who systematised the experience of gamification in higher education, revealed common patterns. In Japanese language studies, similar gamification proved effective for learning grammatical structures, vocabulary, and kanji, demonstrating the universality of this approach for different disciplines. The results obtained reflected the impact on the formation of students' intercultural competence. This observation correlates with the work of G. Poole et al. (2020), which investigated the transformation of the concept of global educational effect in Japanese higher education. The researchers showed that globalisation trends and technological support for educational programmes contributed to a broader understanding of cultural aspects. A similar effect was observed in this study, where multimedia tools integrated cultural texts, authentic video materials and audio resources, which formed sustainable intercultural communication skills. It was found that the introduction of multimedia platforms based on service-oriented architecture made it possible to adapt content to the needs of different groups of students. This was consistent with the findings of Y. Liu (2020), who designed and implemented multimedia platforms for teaching, emphasising the flexibility and scalability of such systems. Similarly, the multimedia platforms used in the article made it possible to vary the complexity of tasks, expand training modules, and integrate real-time feedback.

One of the components was the assessment of the quality of digital content and online courses. The results obtained correspond to the data of R. Wolniak & K. Stecuła (2024), who studied the quality of innovative e-learning at Polish universities. The researchers noted that evaluation by students and teachers made it possible to improve curricula and maintain high motivation to learn. A similar approach in the study of Japanese ensured increased satisfaction with the learning process and improved final test results. The use of multimedia tools activated the creative component of learning and stimulated the development of innovative methods of material assimilation. A comparison of these results with the work of S. Wang et al. (2023), which examined the role of artificial intelligence in higher education and its impact on students' self-esteem, creativity, and learning outcomes, showed similar patterns. In Japanese language research, the integration of artificial intelligence elements (e.g., adaptive chatbots for dialogue training) enhanced the effect of personalised learning and developed students' creative thinking. In addition, the results were compared with data from V. Marín et al. (2020), who studied national infrastructures for digital open educational resources in higher education. The researchers found that the availability of advanced digital systems supported the integration of multimedia into curricula. It was established that access to open multimedia resources (online dictionaries, interactive platforms, video archives) contributed to the flexibility of learning and faster content updates.

CONCLUSIONS

An analysis of educational multimedia platforms for learning Japanese in higher education institutions showed that multimedia tools constitute an integrated system of digital technologies, software and electronic resources that combine text, audio, video and interactive components to create a multi-channel learning environment. Such resources support communication-oriented learning, providing access to authentic materials, gamified tasks, adaptive testing, and individualised learning paths. Content analysis of JapanesePod101, NHK World Easy Japanese, iTalki, Rosetta Stone Advanced Japanese, and LingQ revealed that each platform implemented different pedagogical approaches and provided unique opportunities for students.

JapanesePod101 offers a multi-level system of lessons from N5 to N1 with a large number of video and audio lessons, interactive exercises, and dictionaries, allowing students to practise listening, pronunciation, and preparation for certification exams. NHK World Easy Japanese provides access to authentic language and cultural content from Japan's public broadcaster, combining lessons with news and examples of contemporary language, thereby supporting the acquisition of vocabulary and grammar.

In particular, approximately 70% of students regularly used mobile applications to learn grammar and vocabulary, 50% used interactive online courses, and the use of authentic materials such as videos and anime (40%), Japanese newspapers (35%), and books and manga (25%) improved reading and listening skills. Students who worked with multimedia resources at least three times a week showed 20% better results in spontaneous speaking and 15% better results in writing tasks, while the integration of interactive exercises, video lessons with subtitles and digital flashcards contributed to the development of oral and written communication, the consolidation of grammar and vocabulary, and increased student motivation and autonomy. The data also showed that only about 5% of students achieved high levels of Japanese language proficiency (C1-C2).

An analysis of the implementation of UNESCO recommendations for learning Japanese using multimedia tools showed that the gradual integration of topics and language structures from basic (A1-A2) to complex (B1-C2) allows students to consistently develop communication skills, learn vocabulary and grammar, and develop reading, writing, listening and speaking skills. The study was limited to the analysis of selected multimedia platforms and sources that provided access to authentic materials and interactive exercises, and also covered statistical data from several countries and educational groups. Prospects for further research include expanding the scope of analysis of multimedia platforms and studying their impact on the development of language competences, incorporating statistical data on the study of Japanese in other countries, researching the improvement of individual language skills, etc.

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Застосування мультимедійних засобів для викладання японської мови у закладах вищої освіти

Анотація. Метою дослідження було вивчення впливу мультимедійних ресурсів на ефективність вивчення японської мови у вищих навчальних закладах. Було проаналізовано освітні мультимедійні платформи для вивчення японської мови у вищих навчальних закладах і встановлено, що вони становлять інтегровану систему цифрових технологій, яка поєднує текстові, аудіо-, відео- та інтерактивні компоненти для створення багатоканального навчального середовища. Було встановлено, що використання таких платформ, як JapanesePod101, NHK World Easy Japanese, iTalki, Rosetta Stone Advanced Japanese та LingQ, надає доступ до автентичних матеріалів, інтерактивних вправ та персоналізованих навчальних програм, що сприяє розвитку навичок усного та письмового спілкування, закріпленню граматики та лексики, а також підвищенню мотивації та самостійності студентів. Статистичний аналіз успішності студентів показав, що регулярне використання мультимедійних ресурсів покращило результати на 15-20 %, а комбіноване використання відеоуроків, інтерактивних вправ та цифрових флешкарт забезпечило всебічний розвиток мовних навичок. Зокрема, приблизно 70 % студентів регулярно використовували мобільні додатки для вивчення граматики та лексики, 50 % використовували інтерактивні онлайн-курси, а використання автентичних матеріалів, таких як відео та аніме (40 %), японські газети (35 %) та книги і манга (25 %), покращило навички читання та аудіювання. Також було виявлено, що інтеграція рекомендацій Організації Об'єднаних Націй з питань освіти, науки і культури дозволяє поступово підвищувати рівні складності від А1 до С2, розвиваючи комунікативні навички та культурну компетентність студентів. Практичне значення роботи полягає в тому, що результати дослідження можуть бути використані викладачами та методистами вищих навчальних закладів для оптимізації програм викладання японської мови, а дослідники в галузі мовної освіти та цифрових технологій можуть аналізувати ефективність мультимедійних платформ та впроваджувати подібні інструменти для підвищення мотивації, автономності та мовних компетенцій студентів

Ключові слова: студенти; цифрові ресурси; комунікативна компетентність; автентичні матеріали; носії мови