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Virtual museums utilization for intercultural communicative competences' development of future translators

Використання віртуальних музеїв для розвитку міжкультурної комунікативної компетентності майбутніх перекладачів

Summary. *The article is devoted to the aspect of using a virtual museum for studying Japanese language and culture by future translators. This paper aims to explore the benefits and applications of virtual museums (VMs) for the development of intercultural communicative competences (ICCs) of graduate students while they are studying Japanese language and literature. To achieve the goal of our research, as well as to clarify the specifics of the use of virtual museums for the development of intercultural communicative competence of future translators of the Japanese language, the following methods were used: a comparative analysis of methodological, pedagogical and special literature on the usage of virtual museums in teaching of Japanese language by teachers to students of a philological profile; study of pedagogical experience regarding the usage of virtual museums during the teaching of the Japanese language by teachers of higher educational institutions (HEIs) to students of a philological profile during the implementation of educational projects; analysis of the pedagogical experience of using virtual museums at Educational and Scientific Institute of Philology of Kyiv Taras Shevchenko National University; analysis of research results by surveying students who participated in educational projects using virtual museums to study Japanese language and culture. The survey results revealed that VMs have a positive impact on students' learning experience, in particular, on understanding the Japanese culture, literary creativity and communication. The majority of respondents consider VMs as motivational tools and an integral part of university life. However, some students were unsure about the specific benefits, pointing to areas where VMs' implementations could be improved for more consistent and efficient use. Encouraging greater discussion and structured student interaction with VMs can further enhance their educational value.*

Key words: *virtual museums, language education, cultural memory, memory study, ICC, teaching and learning Japanese, philology students, methodological aspects.*

Анотація. *Стаття присвячена аспекту використання віртуальних музеїв для вивчення японської мови та культури майбутніми перекладачами*

східних мов. Ця стаття має на меті вивчити переваги застосування віртуальних музеїв для розвитку міжкультурної комунікативної компетентності студентів-перекладачів під час вивчення японської мови та літератури. Для досягнення мети нашого дослідження, а також задля з'ясування особливостей використання віртуальних музеїв для розвитку міжкультурної комунікативної компетентності майбутніх перекладачів японської мови були використані методи: порівняльного аналізу педагогічної, методичної та спеціальної літератури щодо використання віртуальних музеїв при викладанні викладачами японської мови студентам філологічного профілю; вивчення педагогічного досвіду щодо використання віртуальних музеїв під час викладання японської мови викладачами вищих навчальних закладів студентам філологічного профілю під час реалізації освітніх проєктів; аналіз педагогічного досвіду використання віртуальних музеїв у Навчально-науковому Інституті філології Київського національного університету імені Тараса Шевченка; аналіз результатів дослідження шляхом анкетування студентів, які брали участь у освітніх проєктах з використанням віртуальних музеїв для вивчення японської мови та культури. Результати анкетування показали, що віртуальні музеї мають позитивний вплив на навчальний досвід студентів, зокрема на розуміння японської культури, літературної творчості та міжкультурного спілкування. Більшість респондентів розглядають віртуальні музеї як мотиваційні інструменти та як невід'ємну частину університетського життя. Деякі студенти не впевнені щодо конкретних переваг, вони вказують на характерологічне коло актуальних проблем пов'язаних з реалізацією віртуальних музеїв, вирішення цих проблем може покращити сучасний стан з використанням музеїв та стати основою для більш послідовного та ефективного їх використання. Заохочення до обговорення в ширшому міждисциплінарному колі, пов'язаному з вивченням артефактів пам'яті, ідеї структурованої взаємодії студентів із віртуальними музеями має тенденцію до підвищення їхньої освітньої цінності.

Ключові слова: віртуальні музеї, мовна освіта, культурна пам'ять, вивчення пам'яті, викладання та вивчення японської мови, студенти-філологи, методичні аспекти.

Introduction. In the rapidly evolving digital age, educational methods and tools are constantly being redefined to meet the demands of a globalized world. One such innovative approach is the utilization of virtual museums (VMs) in the educational process, particularly for the development of ICC among graduate students – future translators and interpreters. VMs offer immersive, interactive experiences that can transcend geographical boundaries, providing access to a vast array of cultural artifacts and historical contexts. This makes them a potent tool for fostering intercultural understanding and enhancing the educational experience of students majoring in translation techniques.

ICC development is crucial for translators, as it enables them to navigate and mediate between different cultural contexts effectively.

Traditional classroom settings often fall short in providing the depth and breadth of cultural exposure required for this level of competency. VMs, however, offer an unparalleled opportunity to explore diverse cultural landscapes, historical periods, and artistic expressions from around the world. They provide a dynamic and engaging platform for students to experience and interact with cultural content, thereby enriching their learning process and broadening their cultural horizons.

Also important is the study of memory, which examines how societies remember and honor the past, and finds unique application in language education, particularly in the teaching of Japanese literature. Museums, with their rich collections and engaging environments, are exceptional resources for language and literature learning. This research explores how memory studies and museums can be integrated into the curriculum to enhance Japanese language and literature teaching by offering students a deeper understanding of both the language and the cultural context.

The problem statement. Nowadays when artificial intelligence, WEB-Internet development, immersive technologies are rapidly developing, VMs have particular importance for ICC development of students – future translators, that eliminate geographical barriers, allowing student translators to explore a vast array of cultures from anywhere in the world. They can access exhibits at their own pace and revisit them as needed.

Analysis of recent studies and publications. The problem of using virtual museums in the educational process was studied by many scientists investigating different aspects of using virtual museums of the educational process in general education institutions, namely: Arabacioglu, S. & Okulu, H. Z. (2021) who focused on the examination of activity plans on how activities can be conducted in virtual museums in pre-service teacher education, and reveals pre-service teachers' understanding of an inquiry-based teaching process through the collection of ideas and concepts of virtual museums through activity plans [1]; Christina Tsita, Maya Satratzemi, Charalabos Georgiadis, Evi Papavergou, Syrago Tsiara, Dionysios D. Kehagias, Dimitrios Tzovaras (2023) during research Virtual Reality Museum to Reinforce the Interpretation of Contemporary Art and Increase the Educational Value of User Experience [2]; Dr. Heba Mustafa Abdullah (2024) during the study of virtual language museums for teaching and learning foreign languages and, in particular, the development of students' intercultural competences [3], etc.

Developing of ICCs traditionally involves physical travel and immersion in different cultures. However, this approach is often limited by cost, time constraints, and logistical challenges. Additionally, traditional methods often focus on a single culture at a time, limiting exposure to the richness of global diversity.

VMs provide a compelling alternative, offering several advantages, including the following:

- eliminate geographical barriers, allowing student translators to explore a vast array of cultures from anywhere in the world, showcases a wide range of cultural artifacts, traditions, and customs, that allows student translators to learn about different social norms, values, and communication styles;
- offer interactive features such as 360-degree tours, audio guides in multiple languages, and gamified learning experiences.

The purpose is to study the advantages and applications of virtual museums for the ICCs' development of students translators in their study of the Japanese language and literature.

According to the Law of Ukraine "On Museums and Museum Matters", a museum is a scientific-research and cultural-educational institution, created for the study, preservation, use and popularization of museum objects and museum collections for scientific and educational purposes, attracting citizens to the national and world cultural assets, heritage [4].

According to their profile, museums are divided into natural (anthropological, biological, botanical, geological, zoological, mineralogical, paleontological), historical (general historical, religious history, historical-domestic, archaeological, ethnographic), literary, artistic (fine, decorative-applied, folk, modern art), artistic (theatre, music, film museums), scientific and technical, complex (local history, ecomuseums), industry, etc. All these types of museums have unique material for ICC development of students – future translator in accordance to their curriculum (<https://philology.knu.ua/osvitni-prohramy/bak-opysy-op-ta-prohnd/035-069-b-jaml/rpnd-035-069-b-jaml-ok/>).

VM is a subject of cultural and museum activity, created in the format of an online information platform and is a multifunctional complex in virtual space, which contains a system of digital products for familiarizing users with expositions and collections with the help of an info-technological form of an integrative nature [5].

Methodology/Methods. Research methods include analysis of methodological, pedagogical and special literature on the usage of VMs for ICCs development of students -translators in their study of the Japanese language; study of the pedagogical experience on the use virtual museums for ICC development of students translators whose with the implementation of educational projects; analysis of the pedagogical experience on the usage of VMs for ICC's development of students -translators at the Education and Research Institute of Philology of Kyiv Taras Shevchenko National University; analysis of research results by surveying students after the implementation of educational projects on the use VMs for the ICC's development of translators for learning Japanese culture.

Results and discussions. VMs can be used by educators to teach students for the following purposes:

- identifying and researching the peculiarities of the culture of the country whose language they are studying;
- understanding of historical events that contributed to the culture of the people;
- clarification of cultural and national traditions;
- study of folklore;
- comparison of different cultures of peoples of the world.

We will give examples of virtual museums that can be used by educators in the development of communicative international competence of students majoring in Japanese language translation.

Saitama Prefectural Museum of History and Folklore (Virtual Museum Link: <https://artsandculture.google.com/partner/saitama-prefectural-museum-of-history-and-folklore>). Saitama Prefectural Museum of History and Folklore (Fig. 1), established as the Saitama Prefectural Museum in 1971 and updated by integrating a history museum covering three main themes of history, folklore, and fine arts in Saitama life and culture. There are 10 exhibition halls with periodic updates. Plaza Fantasy "Yume-Taiken-Hiroba" consists of three different areas: Hands-On Room, Craft Room and Playing Field. They offer a variety of programs designed not only for children, but also for adults who study the history and culture of the Sites.

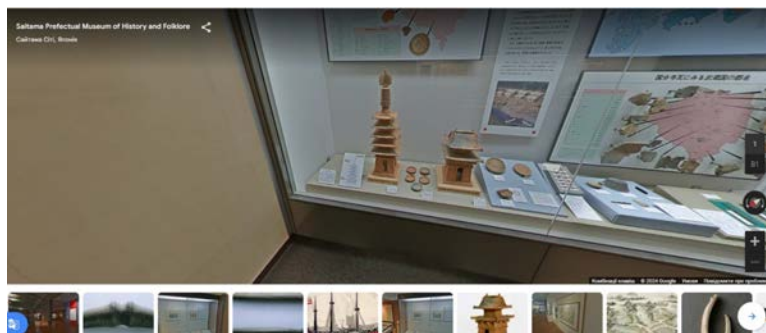


Fig. 1. Virtual room for Saitama Prefectural Museum of History and Folklore

Wajima Museum of Urushi Art (Virtual Museum Link: <https://artsandculture.google.com/partner/WajimaMuseumofUrushiArt>). This is the only museum in Japan that specializes in the art of lacquer (urushi). This spacious museum displays a number of lacquer works by various artists

belonging to different periods, some of whom are members of the Academy of Arts and individuals designated as "Living National Treasure". Visitors can also watch videos related to lacquer art (Fig. 2). The museum has a collection of not only Wajima's lacquer art, but also lacquer works from various regions of Japan, as well as from abroad. The museum gives an idea of lacquer art artefacts, its development and origin.



Fig. 2. Virtual room of Urushi Art Wajima Museum

Mission of the museum The Shohaku Museum (Virtual Museum Link: <https://artsandculture.google.com/partner/shohaku-art-museum>) was founded in March 1994 with donations from artists (Uemura Shoen, Uemura Shoko and Uemura Atsushi) and funds from Kintetsu Corporation. The museum collects, preserves, and exhibits the works by Shoen, Shoko, and Atsushi to introduce the artworks of Uemura family to visitors. In addition to that, the museum works to raise awareness of Japanese-style paintings through special exhibitions and publicly sponsored exhibitions, giving a chance to young artists. The museum provides visitors with an insight into the history of Japanese art, cultural values, and personalities of 20th century artists.

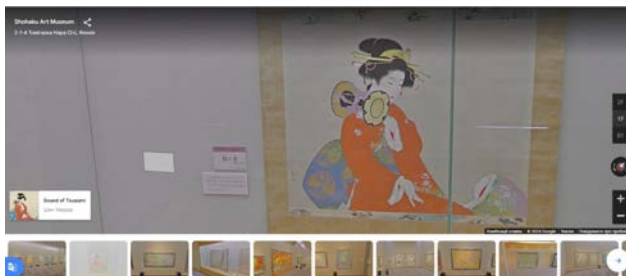


Fig. 3. The artwork "Sound of Tsuzumi" by Shoen Uemura in virtual room of the Shohaku Museum

Tokyo's National Museum of Western Art in Ueno (Virtual Museum Link: <https://artsandculture.google.com/partner/the-national-museum-of-western-art>) was established in April 1959 and was based on the Matsukata Collection focusing on the Impressionist paintings and Auguste Rodin's sculptures previously stored by the French government. The museum's purpose is to provide the public with opportunities to appreciate western art. This VM provides an opportunity for students to explore the art of different countries, compare and understand the diversity of cultures in certain years; in addition, it presents virtual rooms where students can look at works of art from different distances and directions, offers video recordings with tours in Japanese and English languages with subtitles.

The educator can use VR to arrange excursions with students while discussing the features of intercultural interaction between representatives of different cultures, or the features of cultural traditions, historical events, etc.

It should be noted that the educator is more efficient in conducting educational projects for students, which significantly increases the motivation of students to explore the culture of another country and learn a foreign language [6; 7; 8; 9].

We offered students to choose one of the project topics: "Cultural artifacts of Japan connected to Linguistic science"; "Literary Works and Museums"; "Etiquette Forms of Modern Japan and Museums"; "ICCs and its artifacts". 22 students of Education and Research Institute of Philology of Taras Shevchenko National University of Kyiv participated in projects during 2 semesters in 2021-2022.

We propose to consider these projects in more detail.

The project "Cultural artifacts of Japan connected to Linguistic science". The purpose of the project is familiarization with cultural and historical artifacts of Japan, that have following tasks: student must visit virtual exhibitions of various Japanese museums, such as the Tokyo National Museum, the Kyoto National Museum or the Museum of Contemporary Art in Tokyo, and choose three artifacts that interest him/her; explore the history and significance of those artifacts; translate descriptions of artifacts from Japanese into the native language while preserving the cultural and historical context; prepare a presentation about selected artifacts, their history and significance, using own translations.

The project "Literary Works and Museums". The purpose of the project is studying the work of famous Japanese artists, translating artistic terminology and determining their significance in the world dimension. Tasks of this project are: visit the virtual galleries of Japanese artists such as Katsushika Hokusai, Ando Hiroshige or Takashi Murakami; choose

one artist and several of his works; explore the style, technique and history of creation of selected works; translate articles and descriptions about the artist and his works from Japanese into Ukrainian language; write an essay about the artist, including an analysis of his work and translations, and prepare a virtual tour of his works.

The project "Etiquette Forms of Modern Japan and Museums". The purpose of the project is familiarization with modern aspects of Japanese culture and society. Tasks of this project are: visit virtual exhibitions of modern Japanese museums, such as the National Museum of Modern Art in Tokyo or the Museum of Modern Art in Nagoya; choose exhibits that reflect contemporary Japanese culture, technology, or social change; explore the meaning and context of selected exhibits; translate descriptions of exhibits and related articles from Japanese into Ukrainian language; create a multimedia presentation about modern Japan using own translations and research.

The project "ICCs and its artifacts". The purpose of the project is studying Japanese folk culture and traditions through museum exhibits. Tasks of this project are: visit virtual museums that are dedicated to the folk culture and traditions of Japan, such as the Museum of Japanese Traditional Crafts or the Museum of Folk Culture in Osaka; choose traditional objects, costumes, tools or rituals presented in the museum; research the origin and meaning of selected objects or rituals; translate the descriptions of these objects and rituals from Japanese into Ukrainian language. The project outcome should be to prepare a short message about Japanese folk culture and traditions using own translations and research.

After conducting the educational projects, we offered a survey to the students to understand their attitude towards virtual museums while learning Japanese language and culture (Table 1).

The survey aimed to gauge the effectiveness and impact of Virtual Museums (VMs) on students' learning experiences, particularly in the context of Japanese culture and related educational aspects. The responses reveal significant insights into how students perceive and utilize VMs.

A vast majority (85.42%) of students agree that VMs help them learn more about Japanese culture, indicating that VMs are effective tools for cultural education.

Most students (83.8%) found that VMs enhanced their understanding of Japanese literary creativity. However, 16.22% of students are unsure, suggesting a need for more targeted content or additional instructional support.

Similar to literary creativity, 83.8% of students feel that VMs contribute to their understanding of ICC, emphasizing the role of VMs in fostering of ICCs.

Table 1

The results of students' answers to the questionnaire

Suggested answers	Yes (%) / number of respondents	No (%) / number of respondents	Don't know (%) / number of respondents
1. VMs help me to learn more about Japanese culture	85.42% / 15	14.58% / 7	-
2. VMs helped me to understand literary creativity of Japan	83.8% / 16	-	16.22% / 6
3. VMs contribute to my understanding of ICC	83.8% / 16	16.22% / 6	-
4. Watching VMs helps me to develop better communication skills for my future visit to Japan	100% / 22	-	-
5. VMs are essential part of my university life and my Oriental language learning	83.8% / 16	-	16.22% / 6
6. My motivation to study is getting higher because I am using VMs	100% / 22	-	-
7. My communication with educators are becoming more sufficient when we have possibility to watch VMs	59%/13	-	41%/9
8. Cultural aspect are clarified while using VMs	83.8% / 16	-	16.22% / 6
9. I use VM each time I have this opportunity	100% / 22		
10. I discuss with other students the possibility of VM usage for my studies	59%/13	41%/9	

All respondents unanimously believe that VMs will help in better communication in Japan, highlighting the perceived practical benefits of VMs for real-world application.

A significant majority (83.8%) consider VMs essential to their university life, though a small portion remains undecided, suggesting the potential for further integration and emphasis on VMs in the curriculum.

All students reported increased motivation due to the use of VMs, indicating a strong positive impact on student engagement and interest in the subject matter.

While a majority (59%) feel that communication with educators improves with VMs, a notable 41% are unsure. This suggests varying experiences and possibly points to the need for more structured use of VMs in all settings and interactions.

VMs are effective in clarifying cultural aspects for 83.8% of students, though there is room for improvement to address the uncertainties of the remaining 16.22%.

All respondents consistently use VMs whenever possible, indicating high acceptance and habitual usage of VMs in their learning process.

While 59% of students discuss VM usage with peers, 41% do not discuss, we suggest opportunities for encouraging more collaborative discussions about VMs' educational benefits for future.

The survey results highlight the positive impact of VMs on students' learning experiences, particularly in understanding Japanese culture, literary creativity, and ICCs. VMs are seen as motivational tools and essential parts of university life by most respondents. However, some students are unsure about specific benefits, pointing to areas where VMs' implementation could be enhanced for more consistent and effective usage. Encouraging more discussion and structured interaction with VMs may further improve their educational value.

Conclusions. In conclusion, integration of memory study and museum resources into the teaching of the Japanese language and literature offers a complex approach that enriches the learning experience. Virtual museums provide a wealth of authentic materials, cultural insights, and interactive opportunities that help students understand and appreciate the language in its historical and cultural context. By leveraging these resources, educators can create dynamic and immersive language learning environments that foster deeper engagement and understanding among university students.

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