CREATION OF WEBQUESTS FOR CULTURAL EDUCATION
AND REFUGEE INTEGRATION IN GERMANY:
ON THE EXAMPLE OF COLOGNE

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ABSTRACT

Purpose. This research aims to determine the methodology of creating and conducting web quests for people who have left their homes and settled in another country (especially emigrants and refugees). The study includes a clear definition of the sequence of creation and implementation of web quests for families who emigrated to Germany.

Methodology. The research was conducted in the format of a single case study with a description of the creation of a specific web quest for a seed audience of emigrants and refugees. The methodology presented in the study included a description of the process, principles and means necessary
for the organizer and other interested parties in case of reproduction of this web quest for a similar audience and in similar conditions.

**Results.** The main results presented in the study include a clear algorithm for conducting the WebQuest “Family creative and educational quest in Cologne”, aimed at cultural adaptation and education in the field of history and iconic places of Cologne; «excursion program»; communication between different generations of families; a simple divergent task, proposed at each station of the WebQuest to creatively reinterpret the received excursion information; increasing the level of digital literacy.

The article provides recommendations for increasing the effectiveness of WebQuest in the context of cultural adaptation of refugees and emigrants living in Germany.

**Conclusions.** It was determined that creating and conducting WebQuests is a complex and time-consuming process, the goal of which is to maximize interactivity and involvement of participants. Therefore, the creators of such a digital product need to consider a number of features of the participants and digital tools used in the process.

The format of web quests allows people to involve their whole family with the process, which significantly increases their cohesion in a new place and enables integration and adaption with not solely individual family members, but the whole family, which expands the level of awareness of the culture and history of their new home.

**KEYWORDS:** Adaptation, Digital Creativity, Media Literacy, Refugees, WebQuests.

**INTRODUCTION**

Changes in migration flows caused by unrest in various parts of the world, necessitate active cultural adaptation of immigrants and refugees in European countries (Qin et al, 2015; Sam et al, 2008). Cultural adaptation is a complex and dynamic process that requires adequate social and psychological support, as well as the use of modern digital technologies to facilitate this process (Kim, 2001).

Cultural adaptation is a complex process of acceptance and assimilation of a new cultural environment. Emigrants and refugees face changes in language, values, behavioral patterns, interaction patterns, and socio-cultural structures of the new country. Lack of adequate cultural adjustment can lead to feelings of isolation, psychological difficulties, and social marginalization. In this context, digital technologies are becoming increasingly relevant as a means of enabling the process of cultural adaptation.

Digital technologies are becoming an important factor in assisting the cultural adaptation (Ryan et al., 2011) of migrants and refugees in Europe (Alénar & Tsagkroni, 2019). First of all, access to the Internet and social media provides an opportunity to get acquainted with the culture, customs, and language of the country. Online resources such as language courses, multimedia content, and virtual tours allow them to effectively explore a new environment and reduce communicational barriers (Nteliou et al., 2021).
In addition, digital platforms enable social inclusion. Social networks and virtual communities bring together people with common interests and cultural affiliations, which helps to create a supportive environment and strengthen positive connections. Digital platforms also relieve the access to information about social services (Liang & Fung, 2020), health care, educational opportunities, and employment.

Cultural adaptation for migrants and refugees in Europe is a vital part of the process of their integration into the new environment. Digital technologies play a key role in this process by providing access to information, education, communication, and social inclusion (Gibson, 2006; Zheng et al., 2005; Zhernovnykova et al., 2020). It is important to ensure that digital resources are accessible to all segments of the population to provide equal opportunities and strengthen the diversity of cultural perspectives in the European society.

It is important to note that in the context of ensuring effective cultural adaptation for migrants and refugees in Europe, webquests have an important place as a tool to promote the in-depth understanding of the new environment. These digital educational tools provide an interactive learning experience (Abbitt & Ophus, 2008), allowing participants to actively interact with materials about local culture, customs, and history. WebQuests also promote intercultural competence by helping people to adapt to the diversity of values and practices inherent in the society they arrive (Zhukova, et al., 2021). Therefore, not only do webquests provide an educational component (Halat, 2008), they also contribute to the profound immersion in the cultural environment, supporting successful integration and creating a positive experience for expats and refugees.

This paper will examine the importance of cultural adaptation and the role of digital technologies in ensuring successful integration of emigrants and refugees into the European Union.

The purpose of the study is to show the algorithm used for creating and conducting a web quest as a means of integrating emigrants and refugees into their new surroundings.

**METHODOLOGY**

The research method presented in the article was based on a single case study in the field of creating and applying a web quest aimed at studying and adapting to the cultural heritage of Germany and, in particular, Cologne by emigrants and refugees. The web quest is called “Family creative and educational quest in Cologne”. It was designed for children and teenagers as well as their families who use mobile phones and other devices to complete a web quest.

This web quest was created in the Spring 2022 throughout the periodic lockdowns due to the spread of the coronavirus as the best solution for an event with a large number of students from Creative Studio Cologne. Thus, this digital solution made it possible to hold a general meeting in the open air without violating the rules set during the period of restrictions (at the time of the first web quest in Cologne, close contact with representatives of other households, even outdoors, was prohibited).

For that group of Creative Studio students and their families, who are not native Germans and are emigrants from the countries of the former USSR (for example,
Kazakhstan, Ukraine, Moldova, Latvia and others), an event was planned as part of an excursion program, as well as communication different between generations of families, the creative process that increases the level of digital literacy (Martin & Grudziecki, 2006). Taking into account the characteristics of the target group (including the fact that not all participants of the event speak German or English sufficiently to complete the web quest in German).

The translation of this web quest into Ukrainian, German, English, French and Spanish is planned for the beginning of 2024, which will allow its availability for passing by native speakers of these languages for creative familiarity with the history of Cologne, and by local people as an additional material in mastering these languages (for example, classes that study French as a foreign language).

Moreover, translating a web quest into different languages opens up the potential for a simpler and more comfortable acceptance of a new culture in an understandable language for a migrant or refugee.

To achieve the goals set, the following tasks were used when creating the web quest:

- the task of cultural adaptation and education in the field of history and iconic places of Cologne;
- the task of an excursion program: a consultation was held with a certified guide, who majored in the history of Cologne;
- the communication task between different generations of families: students of Creative Studio with their families, including grandparents, were invited to complete the WebQuest. Each family was a team that went through the tasks of the WebQuest together;
- the creative process task: for creative rethinking of the received excursion information, a simple divergent task was offered at each web quest station;
- the task of increasing the level of digital literacy: based on the European Digital Competence Framework Dig Comp (Ronzes, 2021), the WebQuest was designed in such a way that in the process of its completion the participants developed such digital competence skills as communication and collaboration, working with information and data, security, digital content creation, problem solving.

Given the possibility of different levels of digital literacy among the participants, only public digital services which are installed or available by default in any smartphone or tablet, were provided for web quest passing, as they do not require additional installation of new applications or advanced digital experience.

Therefore, the following digital services were chosen:

- Google Maps to search for stations-locations of the web quest at the specified coordinates and (or) to complete the web quest along a pre-determined digital route;
- Web browser for downloading files stored on the cloud of Creative Studio on Google Drive using specified links – an audio tour to each station-location, as well as an interactive web quest file (optional);
- Camera and photo gallery on the participant’s mobile device to scan the QR code, take a photo, process it and send the image or video.
Headphones or speaker on the participant’s mobile device to listen to audio tours. The webquest was printed out and distributed to the participating teams. To listen to audio tours, it was necessary to navigate to the desired file by scanning a QR code. It was also possible to download an interactive file and follow the necessary links without scanning a QR code.

Three events were held to complete the web quest “Family creative and educational quest around Cologne”. They involved: in March 2020 – 18 family teams, June 2020 – 15 family teams, November 2020 – 14 family teams (with an average of three people each). The approximate number of participants in the web quest at common events was 80 people. In addition to general events, the web quest was held individually or in mini-groups by 48 students of the Faculty of Slavic Studies of University of Cologne in 2021.

The web quest was designed both for individual completing and for groups. Thus, the minimum allowed number of participants is 1, the maximum does not have a strict limit. However, with a large number of participants, for effective passage, it is recommended to break them into mini-groups of up to five people.

Teams can complete the web quest simultaneously. A competitive moment can also be engaged, where the criteria for successful completion can be either the speed of passage, or the level of creativity (Nalyvaiko & Ronzhes, 2021) of the participants’ answers, their flexibility and originality.

The full version of the web quest “Family creative and educational quest around Cologne” can be found here https://drive.google.com/file/d/1_mdWhn6W9_-GNky5VHas_01E__-ujFou/view?usp=drive_link. It is important to note that the study has some limitations due to the method of a single case study and the limited sample of participants.

RESULTS

Preliminary preparation included the development of an idea (a city tour with digital tools application) and the goal setting (creation of a WebQuest that combines an excursion program, elements of cultural education and adaptation to new cultural realities, a creative process and an increase in the level of digital literacy, which can be held both individually and in mini-groups as communication between different generations of families).

The creation of the web quest “Family creative and educational quest around Cologne” included the following steps:


2. Development of a route to familiar places in the city center. It was taken into account that a walk should take no more than three hours, provided that the stay at each of the stations-locations is maximum 15 minutes, and have a length of up to three kilometers, in order to be accessible to the elderly or small children as well. The route consisted of 12 stations-locations, had a length of two kilometers and provided for 1.5-2 hours of passing the web quest at an average pace. The route is digitized in Google Maps.
3. Preparation of written materials for each station, including the most significant facts from the history, the current state and purpose of this place and the legend about it (if any). The presentation of materials should be engaging, non-academic, cross-generational, include cultural or political references to relevant events, as well as evoke emotional or sensory experience and be presented in a simple language.

4. Voicing of text material and placement of audio files in a common format on the Internet (on Creative Studio cloud on Google Drive). Testing the quality of downloading and listening.

5. Creation of QR codes leading to each of the audio files and to the route of the WebQuest.

6. Creation and digitization of illustrations for each of the stations. Given the presence of creative tasks in this WebQuest and the specifics of the experience of students of Creative Studio, it was appropriate to make illustrations in one of the traditional techniques (acrylic on cardboard) as an example of inspiration of own interpretation of the excursion material. Therefore, photographs, diagrams or infographics have been excluded from the illustrative material.

7. Development of creative tasks for each station. Tasks were varied in formats and execution techniques. They were meant to develop imagination, fantasy, observation, verbal and pictorial creativity, figurative thinking (Nalyvaiko & Ronzhes, 2021).

8. Thinking through and preparing a channel for communication between participants and presenters, as well as for sending divergent answers to each of the tasks. The channel was chosen according to the preferences of the target audience. The most common messenger among the audience was WhatsApp.

The authors created a broadcast channel in the WhatsApp messenger, which allowed sending information to all participants individually, as well as receiving their answers and, if necessary, maintaining communication in personal correspondence. Thus, the privacy of data and contact numbers among the participants was maintained.

9. Layout of an interactive file consisting of a brief description of the project, a route and a QR code for its digital version, and 12 stations-locations. Testing all links. Uploading a file to Creative Studio cloud on Google Drive

10. Printing an interactive file in the form of a brochure on the number of families (mini-groups) that were registered for the web quest at common events.

The event with the passage of the web quest consisted of the following stages:

1. Sending an invitation to participants about the meeting point and the need to bring a smartphone or tablet with a dead battery, a camera and speakers (standard), as well as a stable Internet connection.

Short description: «The route through 12 iconic places in the old town of Cologne, where history through the centuries has come down to our days and has remained a part of our lives. A circular route of about two kilometers awaits us, the execution time is 1.5-2 hours» (see Figure 1).
2. General gathering, distribution of brochures with a WebQuest and a briefing of the participants: «The family receives a route and tasks. The family goes through twelve stations, scans QR codes at each and listens to the story to the illustration of the location. The family completes a creative task at each station and sends responses via leading WhatsApp message. After completing the route, the family receives a prize from the Creative Studio» (see Figure 2).

3. Passage of the route of the webquest “Family creative and educational quest around Cologne” concerned such stations of the route as Roman North Gate, Cologne Cathedral, Museum of Roman-German History, Rhine Embankment, Fish Market, Sünner Brewery “In the Whale”, Tünnes and Schel, Cologne Historical Town Hall,

4. Information about each station-location contained the following elements (see Figure 3): Number and name; Postal address and letter on the route; Geographical coordinates; QR code for an audio file with a history; Creative task; Illustration.

**Figure 3**  
Examples of stations-locations of the web quest and the information elements for them

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5. Sending completed tasks to the hosts immediately after completion at each station (see Figure 4) or after passing the web quest.

**Figure 4**  
Visiting one of the Web Quest stations and the moment of completing the creative task for this station: an audio recording of the comic rules Cologne, read in the local dialect «kölisch»
6. The final stage of the WebQuest was receiving a prize after completing all the tasks (books by Creative Studio for home inventive activities), the final farewell.

As a result of completing the WebQuest in mini-groups with families, the participants noted the following effects:

- convergence of generations – passing a common path and tasks under the condition of equality allowed everyone to show their strong points for a common result: attentiveness, orientation in space, knowledge of history or local traditions, creativity, knowledge of digital technologies;

- time together and shared memories for the future, also recorded as a digital footprint – participants noted that they rarely spent time together among different generations and they felt lack of positive joint experiences;

- improving digital literacy – this was especially noted by representatives of the older generation, whose younger relatives turned out to be instructors in using some functions in the WebQuest;

- enhancing adaptation in Cologne – thanks to the visual and auditory excursion materials, fixed by personal presence at the places (stations) mentioned in it, as well as the creative rethinking of the information in the tasks, the participants noted that the city and its inhabitants became clearer and closer.

Based on the results of this study, the following recommendations can be made for effective repetition and/or transformation of authors’ experience.

In today’s highly dynamic digital landscape, the spectrum of digital solutions is rapidly transforming. Therefore, the public services chosen by the authors as optimal public services can be replaced by others that will be effective at the time of creating new WebQuests.

Moreover, to communicate with the hosts of the WebQuest to clarify questions, solve problems and send divergent answers, it is not necessary to use instant messengers if you first create a chat bot. However, it is necessary to take into account the stability of the work and the prevalence of the selected digital tools. At the moment, we recommend choosing solutions for built-in hardware functions (camera and speakers), as well as large services that are common in most countries (for example, Google services).

To attract participants of older generations, as well as for the convenience of those who prefer interaction with a material carrier of information, we recommend a printed version of the WebQuest in the form of a brochure. In addition to access to a wider audience, it could have a hybrid format of the completion of the WebQuest, in which the interaction of the real world and the digital environment is combined into a single project.

If a large number of participants pass the web quest, individually or in mini-groups, it is recommended to make an exhibition of the answers-results – in an online format or in the form of an event with a physical presence. Such an exhibition will be not only a spectacular logical completion of the WebQuest as a project, but also a demonstration of the variety of options for solving divergent tasks, as well as digital creativity products.


DISCUSSION

Cultural adaptation is a very important process for any society, and especially for countries who face an influx of migration and refugees, namely, the EU countries and the countries that border them.

Digital technologies nowadays act as an accessible «window of opportunity» where everybody can find a tool to his/her liking for integrating into a new community or culture (Belk, 2013). We focused the research on the use of WebQuests as one of the many tools available for a person's soft adaptation to new realities. It is important to note that WebQuests are not a panacea and are not the only way to adapt migrants and refugees. Different scholars offer different ways to deal with this undoubtedly difficult challenge for any country.

We would like to briefly outline the role of Germany as the largest refugee hub in the entire EU. So, only from Ukraine to Germany went more than 1 million refugees forced to flee the hostilities on the territory of Ukraine. For successful adaptation to a new culture and social relations, it is necessary to develop effective mechanisms for working with different strata of the population, and especially with children, which require special attention when in new conditions. In this context, it is important to find the balance that will allow the younger generation and other categories of refugees to get acquainted with the cultural heritage of different regions of Germany with its rich and interesting history.

WebQuests (Segers & Verhoeven, 2009) combine all these elements and allow immersion, in the familiar combination of digital and real spaces, into the world of culture and understanding of the society and values of the German people and other citizens and values that are represented on the territory of Germany.

Furthermore, historians, culturologists, art critics in Ukraine are welcome to join the creation of WebQuests according to our proposed methodology for creating informative creative digital collections of WebQuests in different languages for cities and significant places in Ukraine. Such solutions can then be used both for local residents and for visitors from other cities and countries in the context of adaptation to Ukrainian cultural realities. Provided that WebQuests are created in different languages (Ukrainian, English, French, German, Spanish), it will be possible to pass both in the most understandable language for the user, and in foreign ones to support their study.

CONCLUSIONS

Thus, conclusions were drawn about the conducted research in the field of creating and conducting web quest. Creating and running a web quest is a complex and time-consuming process that aims to maximize the interactivity and involvement of participants. Therefore, the creators of such a digital product should consider a number of features of the participants and digital tools that are used in the process.

This article presents a methodology for creating and conducting a web quest for participants, who want to increase their level of awareness about the history, culture of Cologne and the region of Germany where the city is located. This format allows the whole family to be involved, which significantly increases the cohesion of people in a new place and allows the integration and adaptation of not only individual family members,
but the whole family, which significantly increases their level of awareness of the culture and history of their new place of living. The increase in digital literacy of web quest participants is also worth mentioning, because through the activity and use of gadgets and digital programs, participants can improve their understanding of the use of these devices not only in standard conditions, but also show their creativity and acquire new skills in using these devices.

In further research, it is planned to generalize the experience of conducting web quests in different parts of Germany and determine the level of digital competence of participants before and after the web quest.

CONFLICT OF INTERESTS

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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REFERENCES


АНОТАЦІЯ / ABSTRACT [in Ukrainian]:

СТВОРЕННЯ ВЕБ-КВЕСТИВ ДЛЯ КУЛЬТУРНОЇ ОСВІТИ ТА ІНТЕГРАЦІЇ БІЖЕНЦІВ В НІМЕЧЧІНІ НА ПРИКЛАДІ КЕЛЬНУ

Мета. Дослідження спрямоване на визначення методології створення та проведення веб-квестів для осіб, які покинули свої домівки та оселилися у іншій країні (особливо емігранти та біженці). Ціль дослідження включала чітке визначення послідовності створення та впровадження веб-квестів для сімей, які емігрували до Німеччини.

Методологія. Дослідження проводилося у форматі вивчення окремого кейсу з описом створення конкретного веб-квесту для початкової аудиторії емігрантів та біженців. Методологія, представлена у дослідженні, включає опис процесу, принципів та засобів, які будуть необхідні організаторам та іншим зацікавленим сторонам у разі відтворення цього веб-квесту для схожої аудиторії та у схожих умовах.

Результати. До основних результатів, представлених у дослідженні, можна віднести чіткий алгоритм проведення веб-квесту «Family creative and educational quest in Cologne», який направленний на: культурну адаптацію та освіту в галузі історії та знакових місць Кельну; «екскурсійну програму»; спілкування між різними поколіннями сімей. Для творчого переосмислення отриманої екскурсійної інформації на кожній станції веб-квесту було запропоновано просте дивергентне завдання з підвищення рівня цифрової грамотності.

У статті надані рекомендації щодо підвищення ефективності проведення веб-квестів у контексті культурної адаптації біженців та емігрантів, які проживають у Німеччині.

Висновки. Визначено, що створення та проведення веб-квесту є складним і трудомістким процесом, метою якого є максимізація інтерактивності та залучення учасників. Тому творцям такого цифрового продукту необхідно враховувати ряд особливостей учасників і цифрових інструментів, які використовуються в процесі. Формат веб-квестів дозволяє залучити всю родину, що значно підвищує згуртованість людей на новому місці та дозволяє інтегрувати та адаптувати не лише окремих членів сім’ї, а цілу родину, що підвищує рівень обізнаності з культурою та історією свого нового місця проживання.

Ключові слова: адаптація, біженці, медіа грамотність, цифрова креативність, веб-квести.

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