comprehend new implemented visualization methods. Overall, the findings underscore the importance of visualization in promoting meaningful engagement and comprehension in country studies education.

Key words: lecture; country studies; cognitive visualization; cognitive load; multimedia; students' engagement.

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ОТ КАРТ ДО УСТАНОВОК: ИСПОЛЬЗОВАНИЕ ВИЗУАЛЬНЫХ СРЕДСТВ НА ЛЕКЦИЯХ ПО СТРАНОВЕДЕНИЮ

Данная статья рассматривает эффективность использования приемов визуализации на лекциях по Страноведению и ее влияние на запоминание материала. Исследование показало, что визуализация значительно повышает уровень вовлеченности студентов и улучшает как понимание, так и запоминание информации. Результаты тестирования выявили, что студенты, более экспонированные к визуальным стимулам, успешнее запоминают материал. Однако некоторые студенты испытывали трудности в запоминании, что может быть связано с индивидуальными особенностями или неготовностью студентов к восприятию новых методов визуализации.

Ключевые слова: лекция; страноведение; когнитивная визуализация; когнитивная нагрузка; мультимедиа; вовлеченность студентов.

Introduction. Lectures serve as fundamental components of the educational experience, offering valuable opportunities for knowledge dissemination and interaction between educators and students. While lectures remain a cornerstone of education, their effectiveness in the modern university setting hinges on adaptation to contemporary learning needs [1, p. 72]. In an era characterized by information overload and limited attention spans, visual materials have become indispensable for engaging students, fostering comprehension, and facilitating effective learning.

Main part. Despite longstanding debates over the efficacy of traditional lectures, proponents argue their value in imparting foundational knowledge, while critics question their ability to truly engage students and promote creativity.

On the one hand, proponents of the lecture format argue that it is an efficient way to disseminate information to large groups of students. Lectures can also be used to cover a lot of material in a short amount of time. Additionally, lectures can be a cost-effective way to teach students, as they do not require the use of expensive equipment or materials. Despite the use of active teaching methods in the learning process, the lecture still occupies a leading position among them, as it is considered to be more dynamic. According to L. Nesterova, the material is better absorbed by students if presented by an experienced lecturer rather than studied independently using a textbook [2, p. 29]. Moreover, in certain cases, especially for newly introduced disciplines, textbooks may be absent [3, p. 11].

On the other hand, critics of the lecture format argue that it is a passive learning experience that does not engage students. Lectures can be boring and monotonous, and they can lead to students disengaging from the learning process. There are several challenges associated with lecturing, e.g. it can be difficult to keep students engaged for long periods of time, and lectures can be difficult to follow, especially for students who have learning disabilities or who are not native speakers of the language in which the lecture is being given. Lectures do not allow students to interact with the material or with each other, which can stifle creativity and critical thinking [3, p. 278].

A. Rhett emphasizes that the traditional lecture model is outdated because it does not meet the goal of teaching methodology, to make learning more attractive [4]. It is important to note that the discussion is centered on the traditional lecture model, which is indeed outdated and has been widely acknowledged as such. However, it should not be forgotten that any form of learning organization is not static, but rather flexible and adaptable to new demands and evolving conditions.

In essence, while lectures remain invaluable in the dissemination of knowledge, their delivery methods require transformation. Amidst this debate, multimedia presentations emerge as a promising method. Multimedia learning is a complex process that involves the interplay of

multiple cognitive processes, encompassing the integration of words and pictures and serves as a central component of technology-based educational delivery. Embracing multimedia approaches that prioritize visual stimuli alongside textual content can revitalize lectures, making them more engaging, impactful, and conducive to student learning and success [2, p. 12].

Researchers have drawn on a rich history of scholarly work at the intersection of memory and cognitive processing to understand how multimedia learning works [3, p. 363; 5, p. 878]. At the current state, the reliance on text-heavy presentations in lectures presents significant drawbacks, primarily due to the concept of cognitive load. Cognitive load theory suggests that the combination of words and images enhances learning more than words alone. Traditional lectures often favor text over images, resulting in an overload of verbal information and underutilization of the visual channel.

The cognitive load theory developed by J. Sweller asserts that reducing extraneous cognitive load leads to better learning outcomes. By adopting a visual-centric approach, the cognitive load on students is lightened, allowing them to focus on understanding and connecting concepts rather than processing excessive text-based information. This aligns with the principle that minimizing cognitive load promotes effective learning [3, p. 248].

Moreover, text overload in lectures can overwhelm working memory, impairing processing and comprehension. However, images attract student interest, make complex concepts familiar, and improve brain efficiency by balancing visual and textual data. The strategic use of images, coupled with reduced text, has been shown to increase engagement and enhance learning outcomes. The picture superiority effect, rooted in Paivio's dual-coding theory, suggests that pictures have a higher likelihood of being encoded and remembered compared to words. Pictures undergo more extensive semantic processing and are categorized faster than words, leading to deeper levels of processing and more meaningful memorization [6, p. 36].

The purpose of reducing cognitive load dictates the importance of using the called cognitive visualization. Cognitive visualization represents a paradigm shift in education [7, p. 65]. *In simple terms, cognitive visualization in lecturing consists in the more sophisticated*

way of applying visual content that is aimed at engaging the students intellectually and emotionally. It is primarily based on enhancing students' ability to associate symbolic representations of various notions, facts, processes, etc. The immediate objective of cognitive visualization is to ensure that notions and/or facts are retained in long-term memory; the ultimate objective is to foster the ability to think creatively.

Let us present one example of our work in this area. The present writer engaged in the preparation of a visualized lecture on Country Studies (*The Discovery of America and the Puritan Experiment*). Drawing inspiration from the cognitive visualization principle, our lecture aimed to leverage the dual processing of verbal and visual information. The "picture superiority effect" (A. Paivio) became evident as students correctly answered questions during the recap stage. The deliberate effort to combine words and images was a key factor in enhancing students' comprehension and retention of intricate details.

One of the most notable outcomes was the heightened interest and active participation observed among the students. This approach to designing slides helped transform the lecture from an experience in passive reception of information into an interactive journey of exploration. During the reflective session, students consistently demonstrated a strong connection between the visual imagery and understanding of the subject matter. The cognitive load was effectively managed, allowing students to process information more meaningfully.

Following the delivery of this lecture, a test was administered to assess the students' retention of the information presented. During the test, 3 groups of students were provided with a series "frame game" slides that contained a recognizable visual element (see Figure 1 and Figure 2).

Students were allotted with one minute for each picture and their task was to recall the information about the event depicted in the slide.

Analyzing the students' grades allows us to assess the effectiveness of using visualization in country studies lectures and its impact on material retention.

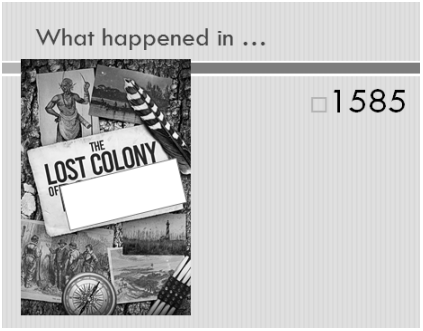

Figure 1 — Frame game for "Lost Colony"

Figure 2 — Frame game for "Jamestown"

Based on the test results, the following trends can be observed:

– Students in Group 1 had varied results. Most students received grades ranging from 5 to 7 points, indicating that they mostly remembered part of the material, but perhaps not all of it. The percentage of successful passes was 76.2 %, which is relatively high, but 9.5 % of students were unable to pass the test, suggesting insufficient effectiveness of visualization for them.

– Students in Group 2 showed also a variety of results, where most students received grades ranging from 5 to 8 points. The percentage of successful passes was 85.2 %, higher than in Group 1. However, 7.4 % of students were unable to pass the test, indicating some difficulties in remembering the material.

– The percentage of successful passes in Group 3 was the highest at 86.7 %. More than half of the students in this group scored 8 or 9 points. This indicates that visualization was particularly effective for this group of students, helping them successfully remember the material.

Overall analysis shows that the use of visualization in country studies lectures proved to be effective in stimulating material retention. Higher grades in Groups 2 and 3 indicate that the more students were exposed to visual stimuli, the better they remembered the material. However, some students in all groups experienced difficulties in memory retention, which may be due to various factors such as individual differences or insufficient effectiveness of specific visualization methods.

Conclusion. Upon analyzing results presented, it becomes evident that the visualization employed in the Country Studies course yielded notable effectiveness. The varying scores across the three groups illustrate the impact of visual aids on student comprehension and retention. Notably, higher scores in groups with greater exposure to visual aids underscore the efficacy of incorporating visual elements into the learning process. These findings highlight the importance of visualization in facilitating meaningful engagement and comprehension in country studies education.

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