



DOI: 10.22363/2312-8631-2024-21-2-209-226

EDN: NRCWKR

UDC 373

Research article / Научная статья


The use of animation tools in the media space of the “Library Night” for the development of master’s students’ teamwork skills

Ekaterina A. Mamaeva¹, Dmitry N. Gribkov²,
Vladimir V. Matveev², Tatyana V. Masharova³

¹*Vyatka State University, Kirov, Russian Federation*

²*Orel State Institute of Culture, Orel, Russian Federation*

³*Moscow City University, Moscow, Russian Federation*

 mamaevakathy@gmail.com

Abstract. *Problem statement.* The modernization of library education involves the ability to use information tools, in particular computer animation, in working on projects. The maturity of teamwork skills largely determines the professional self-realization of multifunctional librarianship specialists. The study aimed at substantiating the effectiveness of using animation tools in the media space of the “Library Night” event to develop the teamwork skills of master’s students. *Methodology.* Theoretical and methodological analysis and generalization are used to determine the content and problems of developing teamwork skills in library and information education, and the inclusion of animation tools in the implementation of media projects. The Renderforest platform is used to develop didactic animation. The study involved 68 undergraduates from the Orel State Institute of Culture. The study of animation tools and their use for designing the media space of the library is implemented within the framework of classes in the discipline “Information Technologies in Science and Education”. The authors use V. Stefanon’s methodology to assess the level of teamwork skills of master’s students. With its help, the levels of their development, interconnected with personality qualities, are determined. For statistical processing, Pearson’s chi-square test and Fisher’s method (angular transformation) were used. *Results.* The ideas of a methodological approach are formulated, reflecting the necessary changes in the system of training specialists in library science, taking into account the digitalization of library and information services. The didactic potential of animation tools for improving the quality of library education, and, in particular, for developing the teamwork skills of undergraduates has been clarified: developing the ability to listen to the alternative opinions of other team members, accept the standards and values of the group, and follow the social and moral-ethical norms of the team. Statistically significant differences in the qualitative changes that occurred in the didactic system were determined. *Conclusion.* The use of animation tools in the media space of the “Library Night” event contributes to the development of teamwork skills among master’s students: new opportunities for collaboration and project activities, innovative work experience, etc. However, some factors complicate the process of team building in the media space of libraries: the lack of clear leadership in the library, the lack of communication between employees, the weak motivation, and low social status of the profession.

© Mamaeva E.A., Gribkov D.N., Matveev V.V., Masharova T.V., 2024



This work is licensed under a Creative Commons Attribution 4.0 International License
<https://creativecommons.org/licenses/by-nc/4.0/legalcode>

Keywords: library and information services, information technology, joint activities, reading literacy, digital library, media project, Renderforest

Author's contribution. The authors contributed equally to this article.

Conflicts of interest. The authors declare that there is no conflict of interest.

Article history: received: 9 September 2023; revised 11 December 2023; accepted 17 December 2023.

For citation: Mamaeva EA, Gribkov DN, Matveev VV, Masharova TV. The use of animation tools in the media space of the “Library Night” for the development of master’s students’ teamwork skills. *RUDN Journal of Informatization in Education*. 2024;21(2):209–226. <http://doi.org/10.22363/2312-8631-2024-21-2-209-226>


Применение средств анимации в медиапространстве акции «Библионочь» для развития навыков командной работы обучающихся магистратуры

Е.А. Мамаева¹  , Д.Н. Грибков² , В.В. Матвеев² , Т.В. Машарова³ 

¹*Вятский государственный университет, Киров, Российская Федерация*

²*Орловский государственный институт культуры, Орел, Российская Федерация*

³*Московский городской педагогический университет, Москва, Российская Федерация*

 mamaevakathy@gmail.com

Аннотация. *Постановка проблемы.* Модернизация современного библиотечного образования предполагает умения применять средства информатизации, в частности компьютерной анимации, в работе над проектами и навыки командной работы. Их сформированность во много определяет профессиональную самореализацию многофункциональных специалистов библиотечного дела. Исследование направлено на обоснование эффективности использования средств анимации в медиапространстве акции «Библионочь» для развития навыков командной работы обучающихся магистратуры. *Методология.* Применяется теоретико-методологический анализ и обобщение при определении содержания и проблем развития навыков командной работы в библиотечно-информационном образовании, включения средств анимации в реализацию медиапроектов. Для разработки дидактической анимации используется платформа Renderforest. В исследовании задействовано 68 магистрантов Орловского государственного института культуры. Изучение средств анимации и применение их для проектирования медиапространства библиотеки реализовано в рамках занятий дисциплины «Информационные технологии в науке и образовании». Для оценки сформированности навыков командной работы обучающихся магистратуры использована методика В. Стефансона. С ее помощью определены уровни их развития, взаимосвязанные с качествами личности. Для статистической обработки применены критерий хи-квадрат Пирсона и метод Фишера (угловое преобразование). *Результаты.* Сформулированы идеи методического подхода, отражающего необходимые изменения в системе подготовки специалистов библиотечного дела с учетом цифровизации библиотечно-информационного обслуживания. Уточнен дидактический потенциал средств анимации для повышения качества библиотечного образования, в частности для развития навыков командной работы магистрантов: умений прислушиваться к альтернативному мнению других членов команды, принимать стандарты и ценности группы, следовать социальным и морально-этическим нормам коллектива. Определены статистически достоверные различия в

качественных изменениях, произошедших в дидактической системе. *Заключение.* Использование средств анимации в медиапространстве акции «Библионочь» способствует формированию навыков командной работы обучающихся магистратуры: новые возможности коллаборации и проектной деятельности, инновационный опыт работы и т. д. Однако существуют факторы, осложняющие процесс командообразования в медиапространстве библиотек: отсутствие четкого лидерства в библиотеке, недостаток коммуникации между сотрудниками, слабая мотивация, низкий социальный статус профессии.

Ключевые слова: библиотечно-информационное обслуживание, средство информатизации, совместная деятельность, читательская грамотность, цифровая библиотека, медиапроект, Renderforest

Заявление о конфликте интересов. Авторы заявляют об отсутствии конфликта интересов.

История статьи: поступила в редакцию 9 сентября 2023 г.; доработана после рецензирования 11 декабря 2023 г.; принята к публикации 17 декабря 2023 г.

Для цитирования: *Мамаева Е.А., Gribkov D.N., Matveev V.V., Masharova T.V.* The use of animation tools in the media space of the “Library Night” for the development of master’s students’ teamwork skills // Вестник Российского университета дружбы народов. Серия: Информатизация образования. 2024. Т. 21. № 2. С. 209–226. <http://doi.org/10.22363/2312-8631-2024-21-2-209-226>

Problem statement. According to UNESCO experts, books play a key role in ensuring the accessibility, dissemination and development of education, science, culture, and information throughout the world¹. Supporting the development of reading literacy and the introduction of digital technologies in library and information activities, UNESCO advocates creativity, diversity and equal access to knowledge in all areas of its activities: from global actions (for example, the “Network of Creative Cities”, the exhibition “Russia in World Heritage”: cultural monuments registered with UNESCO”, etc.) to promoting the spread of library and information interaction using mobile devices.

Under these conditions, in 2012, the “Library Night” project was launched. Looking at the successful experience of holding a “Night at Museums,” the library community and the Association of Cultural Managers initiated a similar campaign for libraries to attract as many visitors as possible. And also, to create new formats of communication with the younger generation. The date of the first “Library Night” is April 20. It was chosen for World Book and Copyright Day on April 23rd. Now the action is traditionally held on the last Friday of April.

Another example of the active involvement of information technology in library services is the Russian State Library. It works as a real cultural and information center: lectures and master classes, “digital exhibitions” and concerts are held here. It is obvious that the main library of the country not only preserves traditions but moves with the times, which means that the organization of its media space is a guideline for other libraries.

¹ IFLA/UNESCO Public Library Manifesto – 2022. Russian State Library. Available from: <https://www.rsl.ru/ru/about/partners/profororganisations/ifla/manifest-ifla-yunesko-o-publichnoj-biblioteke-2022> (accessed: 10.12.2023).

X. Zheng, A. Lang, and D. R. Ewoldsen note the need to develop the creative skills of readers based on creative laboratories created in libraries using their library and information resources [1].

On September 21, 2021, on the website “novayabiblioteka.rf” of the Ministry of Culture of the Russian Federation, a new project for public municipal libraries within the creative industries “Genius of Loci” was launched. The project is aimed at improving modern infrastructure for the development of the creative economy and digitalization of regions, preserving cultural heritage and unique features of Russian territories, and creating new intellectual products. N.I. Gendina, E.V. Kosolapova, D.D. Rodionova, and L.N. Ryabtseva analyze the relevant experience when, as part of information projects, master classes are held on creating postcards and photo frames using the technique of scrapbooking, topiary, and decorating bouquets from sweets and fruits using the suite design technique, creating media resources (blogs, video films, audio recordings) [2].

A. Dolgireva, T. Balina, and A. Levitskaya point out that video materials developed to support the work of libraries make it possible to reveal the main periods and facts related to history, highlight the contribution of prominent residents of a particular city to its formation, and contribute to solving current problems. development issues in the tourism and cultural spheres through the creation of high-quality media content [3].

According to the conclusions of N.E. Mikhalechuk, the main goal of a library in the emerging digital society is to become more accessible to readers. People increasingly trust the recommendations of their contacts and the data of their subscriptions from social networks [4].

J. Onunga points out that there is a need to take libraries to a new level [5]. Nowadays, it is not enough for a library to simply offer its services in a traditional format. Bender, S.M. concludes that in conditions when readers are massively turning into remote users; when there is a global alienation of the audience from the book, teams of librarians need to find a new model of interaction with readers. It is necessary to actively position libraries, and thereby promote their services, reading, and books on various media platforms. Including with the help of artificial intelligence [6].

The implementation of all the above projects is successful largely because it was possible to create and develop a creative media space in the libraries and form a team of like-minded people (readers, employees of information and bibliographic departments, representatives of state and municipal structures, sponsors).

As noted, by E. Grakova, M. Maslakova, and T. Dalganova, relying on the principle “from simple to complex,” a novice librarian (and then a team of like-minded people) will eventually be able to reach library heights, turning the library into a single information space [7].

The substantiation of the thesis that, in addition to teachers, teaching media and information literacy to children, adolescents and young people can be taught, with additional training, by representatives of such a popular profession as librarians, is presented in the work of I. N. Gendina [8]. The author highlights both the strengths and weaknesses of librarians in designing and directly working in the media space. Librarians are well-versed in the variety of information resources, know the tech-

niques of information retrieval in traditional and electronic communication environments, and are proficient in methods of data analysis and synthesis.

In the conditions of the predominance of Internet communications, communication with a “real” person is beginning to be valued more and more highly. That is why cultural institutions today are developing new forms of working with visitors in real time. However, librarians lack their psychological and pedagogical training, knowledge of the principles and algorithms for working with software for creating audio and video materials. In addition, many specialists do not have sufficient experience in project management, including those based on modern digital technologies.

N.E. Belyaeva and A.L. Esipov make a well-founded conclusion that the increasing trends in the digital transformation of society determine the need to modernize the professional training of library personnel [9]. Library education is faced with the task of preparing a multifunctional specialist who has a confident command of printed and digital materials, combining work with content and services.

According to N.S. Redkina, professional training of library specialists requires the development of the following competencies: digital literacy, or technical knowledge; working with information and cognitive overload; flexibility and adaptability; continuous learning and personal development; emotional intelligence and social skills; skill to work in a team; understanding the generation gap; high-level digital ethics [10].

N. Saratovtseva, O. Kozlova, O. Vaganova, O. Chernei, and Zh. Smirnova make a reasonable conclusion that “the ability to work in a team” is a professional competence. The ability to work in a team, in their opinion, acts as a general cultural, universal, professional, supraprofessional, and systemic competence [11].

S.U. Salynina also points to the potential of animation and didactic animation to improve the quality of training of specialists in the socio-cultural sphere [12].

E.R. Sukiasyan actively reflects on the difficulties of training modern librarians for bachelor’s and master’s degrees [13]. The scientist, diagnosing the situation in universities and libraries, points to the crisis in the field of library education and personnel problems affecting digital libraries. The author notes that they are interconnected. And, another failure of universities is reflected in the work of the country’s library system. On the other hand, there must be support and trust of the library staff in the application of innovations. Innovative technologies, in particular supported by information technology, and teamwork should be taught at a professional level within the framework of master's studies.

Analysis of the above scientific works allows us to identify a problem associated with the need for additional study of the development of teamwork skills of master's students using animation in the media space of the “Library Night” event.

The article presents a study aimed at substantiating the effectiveness of using animation tools in the media space of the “Library Night” event to develop the teamwork skills of master’s students.

Methodology. A theoretical analysis of approaches to clarifying the essence of teamwork has been carried out, the problems and advantages of joint information activities have been studied, as well as methods for its implementation and prospects for the automation of library services.

The experience of organizing and conducting the Russian event “Library Night” in different cities of the country was studied: Moscow (Russian State Library), Kirov (Regional Library named after A. I. Herzen), Orel (Orel Regional Library named after I. A. Bunin), etc. The following types of media resources have been identified that are involved by libraries to enhance information interaction: websites and social networks; blogs; forums; dating websites; virtual games; geosocial services, didactic animation, etc. All of these can be considered elements of the media space, including those that construct it.

Animation is actively used in the activities of libraries, the media spaces of which were analyzed. Not a single meeting with readers or conference is complete without a visual presentation of information and data.

Animation tools analyzed: TVPaint, Blender, Krita, OpenToonz, Multator, Renderforest, Animatron. Criteria for comparison: cost (availability of a free period of use) and the ability to pay with a card from Russian banks; interface complexity; software requirements; creation of 2D/3D animation, diagrams, and presentations; quality of designed rollers; possibility of use in the media space of the library.

Based on these criteria and taking into account the capabilities of the Orel State Institute of Culture (hereinafter referred to as OGIC), the Renderforest service was selected. The study involved 68 undergraduates in the field of study – 51.04.03 Social and cultural activities. Profile: Project management in the socio-cultural sphere. The study of animation tools and their use for designing the media space of libraries is carried out both in classes in the discipline “Information Technologies in Science and Education” and as part of industrial practice.

To assess the level of teamwork skills of master's students, the methodology of V. Stefanson was used². With its help, the levels of their development, interconnected with personality qualities, were determined. The technique consists of 60 statements that are grouped into 6 main tendencies of human behavior in a real group: dependence, independence, sociability, unsociability, acceptance of “struggle” and “avoidance of struggle.” Testing time on average: 20–30 minutes. Tendencies are calculated for each of the paired pairs (dependence – independence, sociability – unsociability, acceptance of “struggle” – avoidance of “struggle”).

Personality qualities: dependence/independence from the opinion of the group, sociability/unsociability, acceptance of “struggle”/avoidance of “struggle”.

According to the first and second criteria, the level is “high” if the master’s student scores from “+20” to “+10” points; level “average” – from “+9” to “–3”; and from “–4” to “–20” the level is “low”.

For the third criterion, the level is “medium” if the undergraduate receives from “+9” to “–9”, and “low” – from “–10” to “–20”.

The average age of the respondents was 24 years (60% girls and 40% young people).

Statistical processing of the results was performed using Pearson's χ^2 (chi-square) test.

²The “Q-sorting” technique (V. Stefanson's questionnaire). Available from: http://www.kgau.ru/distance/mf_01/psi-ped/pril_21.html (accessed: 01.02.2024).

The assessment of team projects created using animation tools and aimed at inclusion in the “Library Night” media space was carried out by a group of 5 experts: the head of the department of digital technologies, a teacher of the discipline, 3 representatives of city libraries supervising the Russian event. Team projects were assessed according to the following criteria: compliance with the “Library Night” theme (5 points), use of digital technology resources (8 points), uniqueness of the results (7 points), presentation of the project in the form of a report and video demonstration (5 points), reflection of the contribution of each participant teams working on animation (5 points). The final result of the project is the arithmetic average according to the estimates of all experts.

Thus, based on the results of the expert discussion, master’s students could receive from 0 to 30 points for a team animation project. The final result was determined as follows: “passed” – from 16 to 30 points, if less than 16 points, then “failed”.

Statistical processing of the design work results was carried out using the Fisher criterion (angular transformation).

Results and discussion. In the modern world, professional skills have long been not limited only to technical knowledge. Soft skills are becoming increasingly important for a successful career in any field, including library and information science. R.B. Pagore and U.K. Singh note that soft skills can be developed and improved through practice and training. They are not innate abilities, but rather skills that can be developed and applied in one's work and daily life [14].

N.S. Redkina analyzes the importance of soft skills for a librarian [10]. N.I. Gendina, E.V. Kosolapova, D.D. Rodionova, and L.N. Ryabtseva highlight the reasons for which specific soft skills are important for a librarian and why [2]:

1. Ability to work with information. Look for it, analyze it, and draw informed conclusions. This also includes computer literacy.

2. Communication. Librarians need to have good communication skills. They must be able to explain information clearly, help visitors find the materials they need, and answer their questions. In addition, librarians must be willing to listen and understand patrons' needs and requests.

3. Leadership. Librarians may hold leadership positions in the library and should have leadership skills. They must be able to organize and lead a team, delegate tasks and motivate colleagues to achieve common goals.

4. Time management and work organization. Librarians must be organized and be able to manage their time effectively. They should be ready to prioritize tasks and plan their work. Be prepared for unexpected changes in schedule or priorities.

5. Teamwork. Librarians often work in teams with other colleagues. They must be able to collaborate effectively, share information and ideas, solve problems together, and achieve common goals.

Competence “ability to work in a team” (team orientation), according to the findings of N. Saratovtseva, O. Kozlova, O. Vaganova, O. Chernei, Zh. Smirnova, is closely related to the readiness for joint creativity, the ability to interact, emotional intelligence, glocality, and adaptability [11]. Co-creation involves a combination of communication skills and the ability to co-create.

All of these soft skills help librarians to be successful in their work and provide quality service to library visitors. Developing and applying these skills helps librarians perform their duties effectively and create a positive atmosphere in the library.

All cultural institutions need to create and develop their digital content, and libraries are no exception. Often, small libraries in small towns and villages have limited resources and do not allow them to meet such requirements of the new time.

By media space, according to M. Tunay, we will understand the electronic environment, the interweaving of social networks, audio resources, visual images, and the focus of modern digital platforms and platforms [15]. In this space, people interact with each other, communicate, create and perceive a variety of types of content: text, audio, and visual. This space not only responds to events and phenomena of the real world, but also lives according to its internal laws, competing for the attention of a group subscriber, a site user, or a blog reader. The library also needs to discover these laws by presenting the essence and structure of the media space in a single, coherent system.

The all-Russian event “Library Night” is one of the options for organizing the corresponding media space. An annual reading festival that takes place throughout Russia. On this night, libraries, museums, galleries, bookstores, art spaces and clubs across the country open their doors to visitors beyond normal opening hours. “Library Night” offers new forms of professional cooperation between libraries and other cultural institutions and public organizations. The goal of “Library Night” is to show that a library is not only a place where you can borrow books, but also a cultural, information, and communication center for personal development.

Let's consider the features of organizing such a library media structure with the support of animation tools, which will allow the library to reveal its creative potential, attract and retain an audience, and use effective promotion tools. And based on the totality of all conditions, to promote the formation of teamwork skills, as one of the sought-after soft skills, among its employees.

Experimental work in teams on animation projects for the “Library Night” media space was organized among OGIC students. Master's program – 51.04.03 “Social and Cultural Activities”. The direction (profile) of training – “Project Management in the Socio-Cultural Sphere”. 68 undergraduates were involved in the study.

The study of animation tools and their use for designing the media space of libraries is implemented, first of all, in classes in the discipline “Information Technologies in Science and Education.”

To master the discipline, students use the knowledge and skills developed during the study of the subject area “Information and communication technologies in the activities of cultural institutions.” Mastering this discipline is the basis for subsequent master's research work. The main types of activities that a master's degree graduate should be able to perform at the proper level are systematic analysis of socio-cultural activities in the digital space; conducting independent research work, managing the research work of scientific teams; development of cur-

rent trends, organization, conduct and implementation of scientific research results in the media sphere and socio-cultural activities; conducting sociological and pedagogical research in connection with the tasks of improving the media space of cultural institutions, optimizing the processes of personal growth of participants in information activities; collecting empirical information, conducting experimental activities and diagnosing their pedagogical effectiveness in the process of activity.

Sample topics for classes preceding the study of media technologies: “Ways of development of information systems. Hardware and software in new information technologies. Computer technical means. Computer software. Operating system. Machine graphics. Technology for working with graphic documents. Processing text documents. Rules for working with spreadsheets. Technology for preparing and conducting electronic presentations.”

Sample topics for reports/abstracts, grades “passed/failed”, which will also be used for initial diagnostics: “Rules for the preparation, placement, and use of electronic publications on the Internet. Indexing documents on the Internet. Glossary of terms. Search engine files. Search languages. Relevance of the information found. Russian search engines and systems.”

The main goal of the experiment is to test the didactic potential of animation tools used in the media space of the “Library Night” event to develop the teamwork skills of master’s students.

At the first stage of the experiment, the essence of the “ability to work in a team” phenomenon, and the advantages and disadvantages of using ICT tools to enhance various areas of library services were clarified. The activities and results of the use of information technology in the work of libraries at various levels are analyzed. Russian and foreign experience in using animation tools to form the media space of cultural institutions has been studied.

During the analytical work, the Renderforest service was also selected. As a platform that best meets the criteria of an effective library media space and the capabilities of OGIK.

Here, an initial diagnosis was carried out on the level of development of teamwork skills of master’s students using the algorithm of V. Stefanson’s methodology. When assessing the educational achievements of respondents, grades on reports were taken into account (their topics were indicated earlier).

Thus, it was possible to select 68 undergraduates, from whom the control and experimental groups were formed. Each has 34 people.

At the second stage of the experiment, the stages and essence of organizing teamwork on animation projects for the “Library Night” media space were determined.

Stage I. Study of multimedia technology, examples of software, and socio-cultural projects based on multimedia. Including to support the format of the “Library Night” event.

Animation in the presented study is a technology that, with the help of inanimate and motionless objects, allows you to create the illusion of movement and life in the information library space. The concept of animation in multimedia includes programs for creating and processing video images and 3D graphics.

Studying a specific software tool. Next, we will present an algorithm for creating the first animation in the Renderforest service. It is a feature-rich cloud-based “design without a designer” platform. It is suitable for creating 2D/3D animations, diagrams, presentations, training and other videos. Renderforest functionality allows you to quickly create SVG/PNG logos based on machine learning algorithms, as well as design website designs.

There are ready-made video templates, and you can download personal layouts. With a large number of editable charts with animation effects powered by Renderforest, it's easy to create complex infographics. As you enter data, graphs and charts are updated. Advantages: cloud service, menu available in Russian; applications for Android and iOS; choice of the BBC and other reputable media. Disadvantages: simple, identical icons and illustrations (but there are many of them); You cannot render the video on another device/in a different size; You cannot combine or change animations.

1. Follow the link (<https://www.renderforest.com/ru/#Videos>) and get to the main page of the Renderforest website. Click on the “start for free” button.

2. A pop-up window appears where we see the following services for creating animation: video, website, logo, mockup, graphics. Select the “Video” service.

3. After we get to the page for creating a video, go to the top panel and select the “Animation” tab from the “Video” drop-down list.

There are ready-made templates on this page (some of them contain premium scenes, they are paid, so be careful). Various animation videos are grouped into categories. Scrolling a little lower, we select a set for creating educational videos.

4. Choose a template. Filters are organized by semantic groups (infographics, etc.) and categories.

Click the “Create now” button, after which a pop-up window with training will appear. If you do not want to spend a lot of time learning the service, then click on the “teach me” button, otherwise “no, thanks.”

When creating a new video, you can select a ready-made template and work with it, you can enter the history of your project, and the service will provide you with the best option, in its opinion, for the template. Alternatively, you can create a project from scratch.

5. Select the “Create a project from scratch” tab. Next, we select the scenes that will be in your video by simply clicking on them. Then click the “Insert” button.

Here you can get acquainted with various editing tools. There are not many of them, but they satisfy the basic tools.

You can add the desired text, edit its position, and change the view of the scene to a similar one.

In the “Style” tab, you can select the transition between scenes. Or leave them without transition.

In the “Color” tab, you can use other colors to decorate your scenes. They can be selected from color presets. You can also assign custom colors that you need (but there are only 4).

In the “Music” tab, you can insert a voice-over by downloading or recording online. In addition, you can add music from the library of this service.

In the “Preview” tab you can see your project. But you will have to wait for some time while the video is rendered.

6. The finished video can be saved in the Renderforest archive or exported.

All projects are saved in your account. Later you can return to editing them, if necessary.

The free version of the service has some disadvantages. For example, videos are saved in 360p quality and have a watermark (in the lower left corner), but it is not so noticeable.

Stage II. Distribution of master's students into teams (optional, using programs for generating random numbers, in a game form (name days of the week, parts of the day, favorite authors, seasons and divide into groups)). Presentation by library staff (from a group of experts) of topics for the “Library Nights” event. For example, “Bunin and Rachmaninov”, “Bibliquest”, “Reading Together”, etc.

The team's choice of theme for “Library Night”.

Stage III. Development of a script and its implementation in the form of an animated film.

Let us describe the rules that the undergraduates adhered to during teamwork.

Audience rule. Determining the target audience for which the animated video was created. Questions for discussion: What are these people interested in? What questions are they looking for answers to in the “Library Night” format? Which style of communication is closer to them: do they crave light, entertaining content with a personal touch, or are they ready for communication in an official business style and only accept such formal language?

Design rule. Thinking through a single style (avatar, principles of text presentation, key phrases). To what extent and with what frequency you will change texts, photos and videos?

Rule of content. Searching for reliable information, processing and presenting it in the form of a script for an animated story.

Let's give an example of a script that was selected by experts for “Library Night” 2023. And subsequently implemented at the Orel Regional Library named after I.A. Bunin.

Further, master's students, as part of their practical training, were involved in the design of the media space of libraries and organizations.

The animated film featured a virtual presenter and two virtual readers.

Presenter: in 1906, Rachmaninov wrote two romances based on Bunin's poems: “I'm Lonely Again” and “Sad Night”. The poems and music of the romance “Sad Night” convey languid sadness and a passionate impulse for happiness.

Next, the romance “Sad Night” was launched (recorded by Smetannikov).

Presenter: In Russia, before leaving to emigrate, Bunin and Rachmaninov did not see each other often, but they invariably responded to important creative events in each other's lives.

First reader: In 1912, when the whole country celebrated the 25th anniversary of Bunin's literary activity, Rachmaninov sent a telegram. The corresponding text appeared in the film: “Please accept sincere greetings from the Sukhodol musician. Rachmaninov”.

Second reader: and in 1915 Bunin sent his new book of stories and poems “The Cup of Life” to Rachmaninov, and he replied...

Again, the animated insert: “Dear Ivan Alekseevich! I always love you, I often remember our long-standing meetings with you. It's sad that they won't happen again anymore. Thank you very much for sending me your latest book. I was touched. 27 Apr 1915”.

Presenter: the writer and composer maintained their relationship in exile.

Animation: both leave their homeland. Rachmaninov left in 1917 and settled with his family in the United States. In 1920, Bunin said goodbye to Russia forever, whose future life would be connected with France. But both carried their love for the Motherland, for Russia, throughout their lives. This love fueled their creativity and inspired them to create new works.

Presenter: Rachmaninov spoke about his work...

First reader: “I am a Russian composer, and my homeland has left its mark on my character and my views. My music is the fruit of my character, and therefore it is Russian music...”

Second reader: “Can we forget our Motherland? Can a person forget his homeland? She is in the soul. I am a very Russian person. This doesn't disappear over the years.” These words belong to Ivan Bunin.

Presenter: I.A. Bunin has an amazing story “Mowers”, written in Paris in 1921. He feels an extraordinary love for his homeland, his people and their creativity.

Next, the plot of this story was retold in animation format.

After watching the animation, it was planned to conduct a quiz (on the main points of the work of I.A. Bunin and S.V. Rachmaninov) in the mobile application.

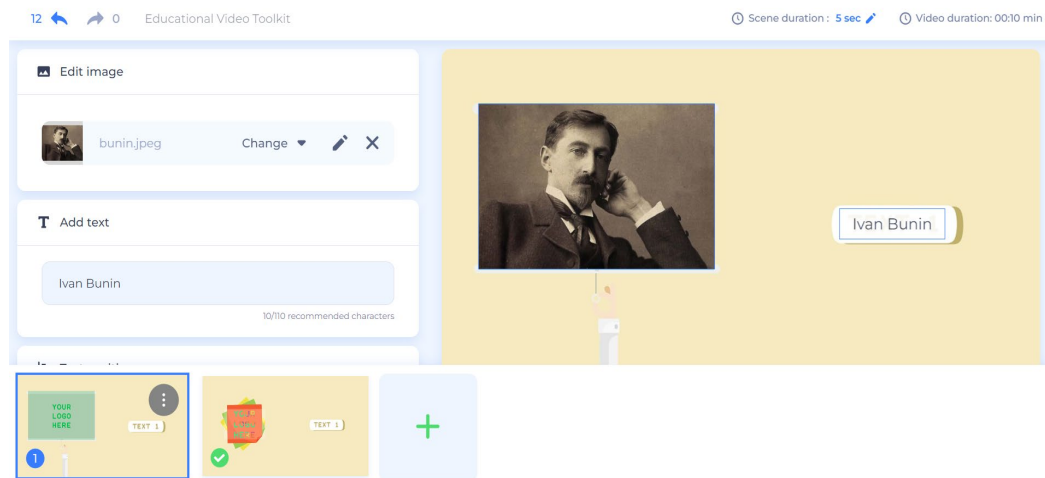
However, based on the results of defending the projects (*stage IV*), the experts recommended that undergraduates organize a game event through direct information interaction between the participants of the action. So that library users demonstrate physical, social, and mental activity. This was further implemented.

Stage V. In practice, to attract more people to the media space, after the animated film, participants in the information interaction were involved in the biblio-quest “The Mystery of Buninka's Book Treasures.” The quest was held in the style of a detective investigation, where four teams had to act as detectives. The players had to find out the name of the books that the Unknown had wished for, say the name of the Unknown, and collect 10 coins to buy the books from the provincial library and hand them over to the Postman to send to the Unknown. QR codes were used to move from one shelf (puzzle) to another. All tasks were in one way or another connected with the works of I.A. Bunin and S.V. Rachmaninov.

Participants in the control group also studied the materials of the discipline, and prepared reports and abstracts on digital technologies to support the information space of modern libraries, but were not purposefully involved in organized teamwork on the creation of animated films for “Library Night”. An example of a creative task that master's students complete using media technologies: prepare an essay (video essay) in which to comprehend the last poetic decade. In it, highlight and describe the main trends, events, books, and names. Essays were accepted in four categories: “How Russian Poetry has changed in ten years”; “Book of

the Decade”; “Poet of the Decade”, and “Library Night” in the Russian literary process. The application had to contain information about the author (full name, brief information, city, contacts), the name of the nomination in which the work is submitted, and application materials. Document format – any. But all information is sent in one file. Both individual undergraduates and their groups could submit essays for the nomination.

An example of developing a media project (Figure).



An example of a media project

Source: made by Ekaterina A. Mamaeva, Dmitry N. Gribkov, Vladimir V. Matveev, Tatyana V. Masharova.

At the fixing stage of the experiment, the development of teamwork skills of master's students was again assessed using the algorithm of V. Stefanson's methodology. The levels were calculated according to the following criteria:

- 1) team orientation (according to the indicator “dependence/independence on group opinions”) (Table 1);
- 2) sociability (according to the indicator “sociability/unsociability”) (Table 2);
- 3) contact (according to the indicator “acceptance/avoidance of “struggle”) (Table 3).

Table 1

The results of the assessment of the development of teamwork skills according to the criterion of dependence/independence from the opinion of the group

Level	Groups			
	Experimental (34 master's students)		Control (34 master's students)	
	Before the experiment	After the experiment	Before the experiment	After the experiment
High	5	16	5	5
Average	20	15	22	23
Low	9	3	7	6

Source: compiled by Ekaterina A. Mamaeva, Dmitry N. Gribkov, Vladimir V. Matveev, Tatyana V. Masharova.

Thus, $\chi_{2obs.1} < \chi_{2crit}$ ($0.345 < 5.991$), and $\chi_{2obs.2} > \chi_{2crit}$ ($6.730 > 5.991$).

Thus, the fact that after completing a team media project for the “Library Night” event, participants in the experimental group are ready to more actively accept group standards and values, social and moral-ethical norms, and are able to listen to the leader’s opinion, is not accidental.

Table 2

The results of the assessment of the development of teamwork skills according to the criterion of sociability/non-sociability

Level	Groups			
	Experimental (34 master’s students)		Control (34 master’s students)	
	Before the experiment	After the experiment	Before the experiment	After the experiment
High	5	15	6	6
Average	21	12	20	21
Low	8	7	8	7

Source: compiled by Ekaterina A. Mamaeva, Dmitry N. Gribkov, Vladimir V. Matveev, Tatyana V. Masharova.

Thus, $\chi_{2\text{obs.1}} < \chi_{2\text{crit}}$ ($0.115 < 5.991$), and $\chi_{2\text{obs.2}} > \chi_{2\text{crit}}$ ($6.312 > 5.991$).

Thus, the fact that after completing a team media project for the “Library Night” event, the participants in the experimental group became more sociable, strive to be open in communication, and are the initiators of establishing contacts in the team, is not accidental.

Table 3

The results of the assessment of the development of teamwork skills according to the criterion of acceptance of “struggle”/avoidance of “struggle”

Level	Groups			
	Experimental (34 master’s students)		Control (34 master’s students)	
	Before the experiment	After the experiment	Before the experiment	After the experiment
High	6	17	6	7
Average	16	12	17	18
Low	12	5	11	9

Source: compiled by Ekaterina A. Mamaeva, Dmitry N. Gribkov, Vladimir V. Matveev, Tatyana V. Masharova.

Thus, $\chi_{2\text{obs.1}} < \chi_{2\text{crit}}$ ($0.074 < 5.991$), and $\chi_{2\text{obs.2}} > \chi_{2\text{crit}}$ ($6.510 > 5.991$).

Thus, the fact that after completing a team media project for the “Library Night” event, participants strive to participate in the life of the team and achieve a higher status in the system of interpersonal relations is not accidental.

The reliability of the results of the control measurement event (media project) was checked using the Fisher criterion (Table 4).

Table 4

The results of the evaluation of media projects of the teams of master’s students

Level	Groups			
	Experimental (34 master’s students)		Control (34 master’s students)	
	Before the experiment	After the experiment	Before the experiment	After the experiment
Credited	24 (70,6%)	32 (94,1%)	25 (73,5%)	25 (73,5%)
Not credited	10 (29,4%)	2 (5,9%)	9 (26,5%)	9 (26,5%)

Source: compiled by Ekaterina A. Mamaeva, Dmitry N. Gribkov, Vladimir V. Matveev, Tatyana V. Masharova.

The following hypotheses were accepted: H0 – the levels of educational results in the control and experimental groups are statistically equal; H1 – the level of learning outcomes of master’s students in the experimental group is higher than the control level. In the online calculator environment³, it was determined that the empirical value before the experiment was 0.268 ($\varphi_{\text{emp}} = 0.268 < \varphi_{\text{crit}} = 1.64$). The obtained empirical value of φ is in the zone of insignificance. H1 is rejected. The empirical value after the experiment is 2.437 ($\varphi_{\text{crit}} = 1.64 < \varphi_{\text{emp}} = 2.437$). H0 is rejected and H1 is accepted.

The results of the study are in line with UNESCO's priorities in ensuring the accessibility, dissemination and development of education, science, culture and information throughout the world. The resulting media resources are aimed at supporting the processes of developing reading literacy and the introduction of digital technologies in library and information activities. The conclusions regarding the didactic potential of animation tools confirmed the results of the work of S.Yu. Salynina [12].

At the same time, they develop the conclusions of R.B. Pagore, U.K. Singh on the role of ICT in the work of cultural institutions [14]. In particular, the possibilities of expanding the information space were demonstrated: the use of multimedia resources; providing access to Internet resources; search, collection, and systematization of information from various sources; and creating digital resources.

A significant result is that the proposed option for organizing teamwork of master’s students on a media project can become one of the options for supporting library education on the way out of the crisis in the field of personnel problems described by E.R. Sukiasyan [13].

Conclusion. The results of the study revealed the following potential of animation tools for improving teamwork skills among library staff:

- developing the ability to listen to the alternative opinions of other team members, accept the standards and values of the group, follow the social, moral and ethical group standards;
- gaining experience in project management in the development of digitalization and artificial intelligence;
- transferring the “virtual” interaction experience of social networks into the environment of real “live communication” of library users;
- formation of creative group thinking.

Let us also note the educational potential of teamwork on a media project in terms of improving the quality of library education in general:

- gaining experience in analyzing and mastering modern visual culture;
- development of skills to evaluate the quality of visual information received through the media;
- development of critical, analytical, logical, creative and creative thinking;
- support for students in mastering the laws of perception or influence of mass media and media signals;

³ Fisher criterion. Available from: <https://www.psychol-ok.ru/statistics/fisher/> (accessed: 10.01.2024).

– developing the ability to perceive relevant visual information from the screen, recode the visual image into a verbal sign system, and prove the correctness of one’s interpretation of the visual image being studied;

– mastering computer animation technology for the creative realization of one’s artistic potential and the formation of general media literacy.

At the same time, the following problems of team building in information and library services have been identified: lack of clear leadership in the library; lack of communication between employees; and insufficient motivation.

In addition to internal factors influencing the process of team building in the media space of libraries, there are also external (socio-economic) factors: lack of funding and resources; ineffective organizational structure; low level of professional training; and low social status of the profession.

Since creating a media space and filling library information resources is also work, it is important: either to attract third-party specialists, if the library can do this, or to involve library staff competent in this area – or those who are ready and eager to learn and learn new things.

In addition, the purpose of this work on the formation of the media space should be clear to the entire team: this is an activity that is carried out to promote the library, to consolidate its position as an expert in certain issues, to popularize and effectively announce thematic, educational and entertainment events of the library: exhibitions, competitions, poetry evenings, etc.

This is how the library’s media communication system is formed. By updating information on the website, announcing events, recording thematic podcasts and training videos on working with the electronic catalog, the library is becoming closer to its readers, sensitively responding to their needs and desires. This approach is a marker of a modern, socially active library.

The created media projects have been put to real use to popularize the action “Library Night” in Russian society. The developed media resources, as well as recommendations for organizing teamwork in the information space, can be used to improve the professional training of a modern library worker in a higher education institution.

References

- [1] Zheng X, Lang A, Ewoldsen DR. *The measurement of positive and negative affect in media research*. Routledge; 2021. p. 48–66. <http://doi.org/4324/9780429465758-4>
- [2] Gendina NI, Kosolapova EV, Rodionova DD, Ryabtseva LN. Digitalization of museums and the need to form an information culture of museologists. *Tomsk State University Journal of Cultural Studies and Art History*. 2021;43:231–221. (In Russ.) <http://doi.org/10.17223/22220836/43/19>
Гендина Н.И., Косолапова Е.В., Родионова Д.Д., Рябцева Л.Н. Цифровизация музеев и необходимость формирования информационной культуры музеологов // Вестник Томского государственного университета. Культурология и искусствоведение. 2021. № 43. С. 231–221. <http://doi.org/10.17223/22220836/43/19>
- [3] Dolgireva A, Balina T, Levitskaya A. Multimedia Brochure Taganrog – the Cultural Capital of the Don (Virtual Open-air Museum). *International Journal of Media and Information Literacy*. 2022;7(1):48–59. <http://doi.org/10.13187/ijmil.2022.1.48>

- [4] Mikhalechuk NE. The library QR-projects in digital space. *Scientific and Technical Libraries*. 2021;9:91-102. <http://doi.org/10.33186/1027-3689-2021-91-102>
- [5] Onunga J. Applications of information communication technology (ICT) in academic libraries: an overview of Turkana University College Library. *Open Journal for Information Technology*. 2021;4:35–40. <http://doi.org/10.32591/coas.ojit.0402.01035o>
- [6] Bender SM. Coexistence and creativity: screen media education in the age of artificial intelligence content generators. *Media Practice and Education*. 2023;24(1):1–16. <http://doi.org/10.1080/25741136.2023.2204203>
- [7] Grakova EV, Maslakova MV, Dolganova TG. Value orientations of generations of employees and library organizational culture. *Knowledge. Understanding. Skill*. 2020;(2):136–145. (In Russ.) <http://doi.org/10.17805/zpu.2020.2.12>
Гракова Е.В., Маслакова М.В., Далганова Т.Г. Ценностные ориентации поколений сотрудников и организационная культура библиотеки // Знание. Понимание. Умение. 2020. № 2. С. 136–145. <http://dx.doi.org/10.17805/zpu.2020.2.12>
- [8] Gendina NI. Media education in the library sphere: the basis for implementing of the new direction of training and learning media and information literacy of citizens in the library. *Media. Information. Communication*. 2017;(21):1–10. EDN SFCTED. (In Russ.)
Гендина Н.И. Медиаобразование в библиотечной сфере: основания для реализации нового направления подготовки кадров и обучения медийно-информационной грамотности граждан в библиотеке // Медиа. Информация. Коммуникация. 2017. № 21. С. 1–10. EDN SFCTED.
- [9] Belyaeva NE, Esipov AL. Library education in the context of digitalization. *Bulletin of the St. Petersburg State Institute of Culture*. 2023;(2):143–149. (In Russ.) <http://doi.org/10.30725/2619-0303-2023-2-143-149>
Беляева Н.Е., Есипов А.Л. Библиотечное образование в контексте цифровизации // Вестник Санкт-Петербургского государственного института культуры. 2023. № 2. С. 143–149. <http://doi.org/10.30725/2619-0303-2023-2-143-149>
- [10] Redkina NS. Digital competencies of librarians in the ecosystem of Open Science. *Bibliosphere*. 2023;(2):25–34. (In Russ.) <http://doi.org/10.20913/1815-3186-2023-2-25-34>
Редькина Н.С. Цифровые компетенции библиотекарей в экосистеме открытой науки // Библиосфера. 2023. № 2. С. 25–34. <https://doi.org/10.20913/1815-3186-2023-2-25-34>
- [11] Saratovtseva N, Kozlova O, Vaganova O, Chernei O, Smirnova Zh. Formation of bachelors' competence readiness to work in a team. *Propósitos y Representaciones*. 2021;9(SPE1):e807. <http://doi.org/10.20511/pyr2021.v9nSPE1.807>
- [12] Salynina SU. Innovative practices in animation activities of institutions for additional education for children. *International Research Journal*. 2023;(11):1–5. (In Russ.) <http://doi.org/10.23670/IRJ.2023.137.92>
Сальниина С.Ю. Инновационные практики в анимационной деятельности учреждений дополнительного образования детей // Международный научно-исследовательский журнал. 2023. № 11 (137). С. 1–5. <http://doi.org/10.23670/IRJ.2023.137.92>
- [13] Sukiasyan ER. Library magistrature. Its impact on the fate of library education in Russia. *Scientific and Technical Libraries*. 2017;(10):69–80. EDN ZKAOBT.
Сукиасян Э.Р. Библиотечная магистратура и судьба библиотечного образования в России // Научные и технические библиотеки. 2017. № 10. С. 69–80. <https://doi.org/10.33186/1027-3689-2017-10-69-80>
- [14] Pagore RB, Singh UK. Role of ICT in developing skills among library professionals with respect to digitalization of selected colleges and universities in Maharashtra. *IP Indian Journal of Library Science and Information Technology*. 2022;7(2):75–80. <http://doi.org/10.18231/j.ijlsit.2022.014>
- [15] Tunay M. A new approach model of e-visual career application in distance education. *American Journal of Science & Engineering*. 2020;1:9–15. <http://doi.org/10.15864/ajse.1402>

Bio notes:

Ekaterina A. Mamaeva, senior lecturer, Department of Digital Technologies in Education, Vyatka State University, 36 Moskovskaya St, Kirov, 610000, Russian Federation. ORCID: 0000-0002-7721-8820. E-mail: mamaevakathy@gmail.com

Dmitry N. Gribkov, Cand. Sci. (Educ.), Associate Professor, Head of the Department of Informatics and Records Management, Orel State Institute of Culture, 15 Leskova St, Orel, 302020, Russian Federation. ORCID: 0000-0002-3388-9526. E-mail: bibliotekar2005@mail.ru

Vladimir V. Matveev, Doctor of Economic Sciences, Professor, Acting Rector, Orel State Institute of Culture, 15 Leskova St, Orel, 302020, Russian Federation. ORCID: 0000-0003-2906-5716. E-mail: rector@ogik.ru

Tatyana V. Masharova, Doctor of Education, Professor, Professor of the Department of Pedagogy, Institute of Pedagogy and Psychology of Education, Moscow City University, 4 Vtoroy Selskhoziazjstvenny Proezd, Moscow, 129226, Russian Federation. ORCID: 0000-0001-5974-7748. E-mail: mtv203@mail.ru

Сведения об авторах:

Мамаева Екатерина Александровна, старший преподаватель, кафедра цифровых технологий в образовании, Вятский государственный университет, Российская Федерация, 610000, Киров, ул. Московская, д. 36. ORCID: 0000-0002-7721-8820. E-mail: mamaevakathy@gmail.com

Грибков Дмитрий Николаевич, кандидат педагогических наук, доцент, заведующий кафедрой информатики и документоведения, Орловский государственный институт культуры, Российская Федерация, 302020, Орел, ул. Лескова, д. 15. ORCID: 0000-0002-3388-9526. E-mail: bibliotekar2005@mail.ru

Матвеев Владимир Владимирович, доктор экономических наук, профессор, ректор Орловского государственного института культуры, Российская Федерация, 302020, Орел, ул. Лескова, д. 15. ORCID: 0000-0003-2906-5716. E-mail: rector@ogik.ru

Машарова Татьяна Викторовна, доктор педагогических наук, профессор, профессор департамента педагогики, Институт педагогики и психологии образования, Московский городской педагогический университет, Российская Федерация, 129226, Москва, 2-й Сельскохозяйственный пр-д, д. 4. ORCID: 0000-0001-5974-7748. E-mail: mtv203@mail.ru