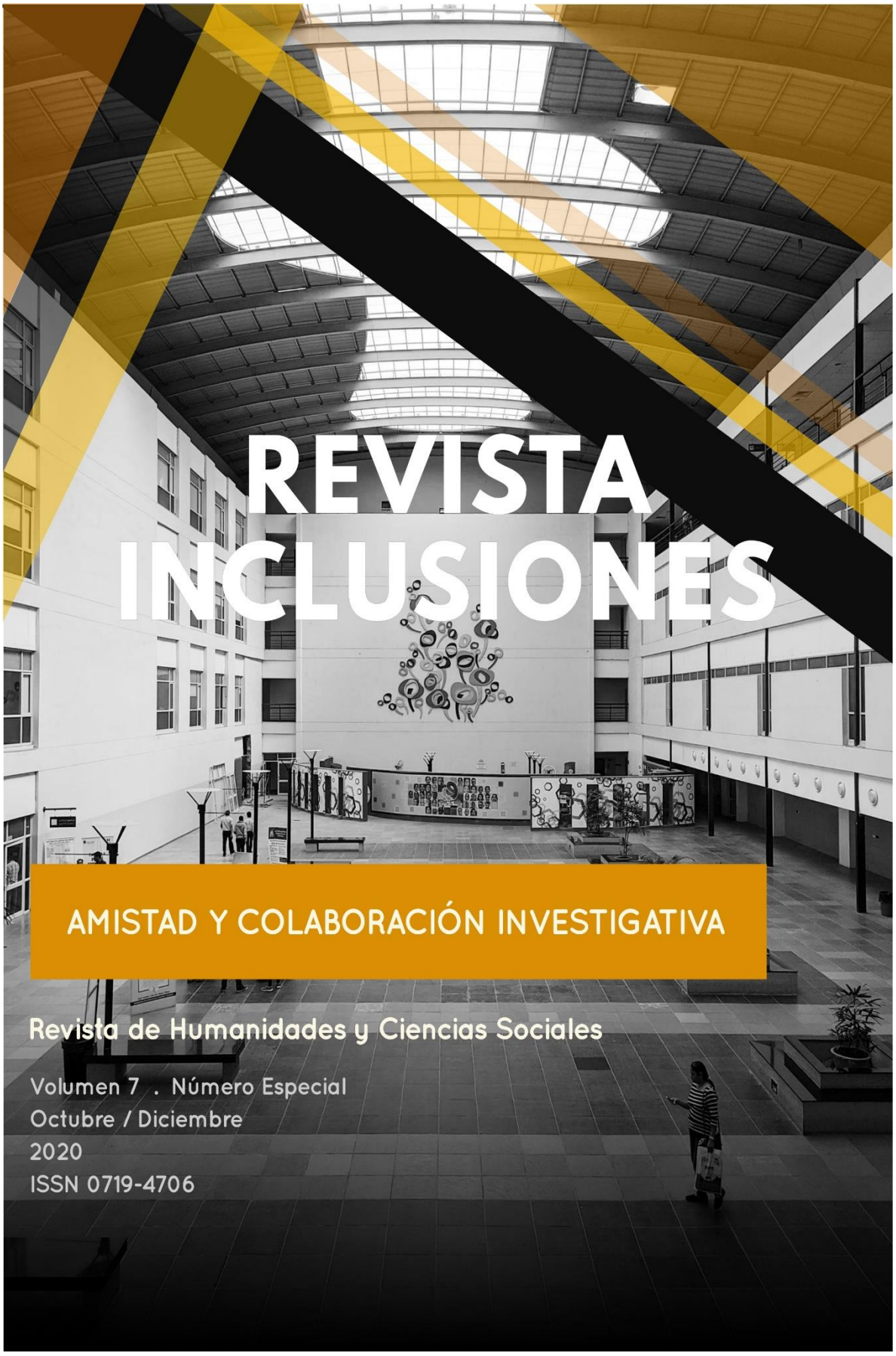

REVISTA INCLUSIONES

AMISTAD Y COLABORACIÓN INVESTIGATIVA

Revista de Humanidades y Ciencias Sociales

Volumen 7 . Número Especial
Octubre / Diciembre
2020
ISSN 0719-4706

REVISTA
INCLUSIONES M.R.
REVISTA DE HUMANIDADES
Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA
EDITORIAL

CUERPO DIRECTIVO

Director
Dr. Juan Guillermo Mansilla Sepúlveda
Universidad Católica de Temuco, Chile

Editor
OBU - CHILE

Editor Científico
Dr. Luiz Alberto David Araujo
Pontificia Universidade Católica de Sao Paulo, Brasil

Editor Europa del Este
Dr. Aleksandar Ivanov Katrandzhiev
Universidad Suroeste "Neofit Rilski", Bulgaria

Cuerpo Asistente

Traductora: Inglés
Lic. Pauline Corthorn Escudero
Editorial Cuadernos de Sofía, Chile

Portada
Lic. Graciela Pantigoso de Los Santos
Editorial Cuadernos de Sofía, Chile

COMITÉ EDITORIAL

Dra. Carolina Aroca Toloza
Universidad de Chile, Chile

Dr. Jaime Bassa Mercado
Universidad de Valparaíso, Chile

Dra. Heloísa Bellotto
Universidad de Sao Paulo, Brasil

Dra. Nidia Burgos
Universidad Nacional del Sur, Argentina

Mg. María Eugenia Campos
Universidad Nacional Autónoma de México, México

Dr. Francisco José Francisco Carrera
Universidad de Valladolid, España

Mg. Keri González
Universidad Autónoma de la Ciudad de México, México

Dr. Pablo Guadarrama González
Universidad Central de Las Villas, Cuba

Mg. Amelia Herrera Lavanchy
Universidad de La Serena, Chile

Mg. Cecilia Jofré Muñoz
Universidad San Sebastián, Chile

Mg. Mario Lagomarsino Montoya
Universidad Adventista de Chile, Chile

Dr. Claudio Llanos Reyes
Pontificia Universidad Católica de Valparaíso, Chile

Dr. Werner Mackenbach
Universidad de Potsdam, Alemania
Universidad de Costa Rica, Costa Rica

Mg. Rocío del Pilar Martínez Marín
Universidad de Santander, Colombia

Ph. D. Natalia Milanesio
Universidad de Houston, Estados Unidos

Dra. Patricia Virginia Moggia Münchmeyer
Pontificia Universidad Católica de Valparaíso, Chile

Ph. D. Maritza Montero
Universidad Central de Venezuela, Venezuela

Dra. Eleonora Pencheva
Universidad Suroeste Neofit Rilski, Bulgaria

Dra. Rosa María Regueiro Ferreira
Universidad de La Coruña, España

Mg. David Ruete Zúñiga
Universidad Nacional Andrés Bello, Chile

Dr. Andrés Saavedra Barahona
Universidad San Clemente de Ojrid de Sofía, Bulgaria

Dr. Efraín Sánchez Cabra
Academia Colombiana de Historia, Colombia

Dra. Mirka Seitz
Universidad del Salvador, Argentina

Ph. D. Stefan Todorov Kapralov
South West University, Bulgaria

REVISTA
INCLUSIONES M.R.
REVISTA DE HUMANIDADES
Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA
EDITORIAL

COMITÉ CIENTÍFICO INTERNACIONAL

Comité Científico Internacional de Honor

Dr. Adolfo A. Abadía
Universidad ICESI, Colombia

Dr. Carlos Antonio Aguirre Rojas
Universidad Nacional Autónoma de México, México

Dr. Martino Contu
Universidad de Sassari, Italia

Dr. Luiz Alberto David Araujo
Pontificia Universidad Católica de Sao Paulo, Brasil

Dra. Patricia Brogna
Universidad Nacional Autónoma de México, México

Dr. Horacio Capel Sáez
Universidad de Barcelona, España

Dr. Javier Carreón Guillén
Universidad Nacional Autónoma de México, México

Dr. Lancelot Cowie
Universidad West Indies, Trinidad y Tobago

Dra. Isabel Cruz Ovalle de Amenabar
Universidad de Los Andes, Chile

Dr. Rodolfo Cruz Vadillo
Universidad Popular Autónoma del Estado de Puebla, México

Dr. Adolfo Omar Cueto
Universidad Nacional de Cuyo, Argentina

Dr. Miguel Ángel de Marco
Universidad de Buenos Aires, Argentina

Dra. Emma de Ramón Acevedo
Universidad de Chile, Chile

Dr. Gerardo Echeita Sarrionandia
Universidad Autónoma de Madrid, España

Dr. Antonio Hermosa Andújar
Universidad de Sevilla, España

Dra. Patricia Galeana
Universidad Nacional Autónoma de México, México

Dra. Manuela Garau
Centro Studi Sea, Italia

Dr. Carlo Ginzburg Ginzburg
Scuola Normale Superiore de Pisa, Italia
Universidad de California Los Ángeles, Estados Unidos

Dr. Francisco Luis Girardo Gutiérrez
Instituto Tecnológico Metropolitano, Colombia

José Manuel González Freire
Universidad de Colima, México

Dra. Antonia Heredia Herrera
Universidad Internacional de Andalucía, España

Dr. Eduardo Gomes Onofre
Universidade Estadual da Paraíba, Brasil

Dr. Miguel León-Portilla
Universidad Nacional Autónoma de México, México

Dr. Miguel Ángel Mateo Saura
Instituto de Estudios Albacetenses "Don Juan Manuel", España

Dr. Carlos Tulio da Silva Medeiros
Diálogos em MERCOSUR, Brasil

+ Dr. Álvaro Márquez-Fernández
Universidad del Zulia, Venezuela

Dr. Oscar Ortega Arango
Universidad Autónoma de Yucatán, México

Dr. Antonio-Carlos Pereira Menaut
Universidad Santiago de Compostela, España

Dr. José Sergio Puig Espinosa
Dilemas Contemporáneos, México

Dra. Francesca Randazzo
Universidad Nacional Autónoma de Honduras, Honduras

Dra. Yolando Ricardo
Universidad de La Habana, Cuba

Dr. Manuel Alves da Rocha
Universidade Católica de Angola Angola

Mg. Arnaldo Rodríguez Espinoza
Universidad Estatal a Distancia, Costa Rica

REVISTA INCLUSIONES M.R.
REVISTA DE HUMANIDADES Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA EDITORIAL

Dr. Miguel Rojas Mix
Coordinador la Cumbre de Rectores Universidades Estatales América Latina y el Caribe

Dr. Luis Alberto Romero
CONICET / Universidad de Buenos Aires, Argentina

Dra. Maura de la Caridad Salabarría Roig
Dilemas Contemporáneos, México

Dr. Adalberto Santana Hernández
Universidad Nacional Autónoma de México, México

Dr. Juan Antonio Seda
Universidad de Buenos Aires, Argentina

Dr. Saulo Cesar Paulino e Silva
Universidad de Sao Paulo, Brasil

Dr. Miguel Ángel Verdugo Alonso
Universidad de Salamanca, España

Dr. Josep Vives Rego
Universidad de Barcelona, España

Dr. Eugenio Raúl Zaffaroni
Universidad de Buenos Aires, Argentina

Dra. Blanca Estela Zardel Jacobo
Universidad Nacional Autónoma de México, México

Comité Científico Internacional

Mg. Paola Aceituno
Universidad Tecnológica Metropolitana, Chile

Ph. D. María José Aguilar Idañez
Universidad Castilla-La Mancha, España

Dra. Elian Araujo
Universidad de Mackenzie, Brasil

Mg. Rumyana Atanasova Popova
Universidad Suroeste Neofit Rilski, Bulgaria

Dra. Ana Bénard da Costa
Instituto Universitario de Lisboa, Portugal
Centro de Estudios Africanos, Portugal

Dra. Alina Bestard Revilla
Universidad de Ciencias de la Cultura Física y el Deporte, Cuba

Dra. Noemí Brenta
Universidad de Buenos Aires, Argentina

Ph. D. Juan R. Coca
Universidad de Valladolid, España

Dr. Antonio Colomer Vialdel
Universidad Politécnica de Valencia, España

Dr. Christian Daniel Cwik
Universidad de Colonia, Alemania

Dr. Eric de Léséulec
INS HEA, Francia

Dr. Andrés Di Masso Tarditti
Universidad de Barcelona, España

Ph. D. Mauricio Dimant
Universidad Hebrea de Jerusalén, Israel

Dr. Jorge Enrique Elías Caro
Universidad de Magdalena, Colombia

Dra. Claudia Lorena Fonseca
Universidad Federal de Pelotas, Brasil

Dra. Ada Gallegos Ruiz Conejo
Universidad Nacional Mayor de San Marcos, Perú

Dra. Carmen González y González de Mesa
Universidad de Oviedo, España

Ph. D. Valentin Kitanov
Universidad Suroeste Neofit Rilski, Bulgaria

Mg. Luis Oporto Ordóñez
Universidad Mayor San Andrés, Bolivia

Dr. Patricio Quiroga
Universidad de Valparaíso, Chile

Dr. Gino Ríos Patio
Universidad de San Martín de Porres, Perú

Dr. Carlos Manuel Rodríguez Arrechavaleta
Universidad Iberoamericana Ciudad de México, México

Dra. Vivian Romeu
Universidad Iberoamericana Ciudad de México, México

REVISTA
INCLUSIONES M.R.
REVISTA DE HUMANIDADES
Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA
EDITORIAL

Dra. María Laura Salinas
Universidad Nacional del Nordeste, Argentina

Dr. Stefano Santasilia
Universidad della Calabria, Italia

Mg. Silvia Laura Vargas López
Universidad Autónoma del Estado de Morelos, México

Dra. Jaqueline Vassallo
Universidad Nacional de Córdoba, Argentina

Dr. Evandro Viera Ouriques
Universidad Federal de Río de Janeiro, Brasil

Dra. María Luisa Zagalaz Sánchez
Universidad de Jaén, España

Dra. Maja Zawierzeniec
Universidad Wszechnica Polska, Polonia

Editorial Cuadernos de Sofía
Santiago – Chile
OBU – C HILE

Indización, Repositorios y Bases de Datos Académicas

Revista Inclusiones, se encuentra indizada en:

BIBLIOTECA UNIVERSIDAD DE CONCEPCIÓN

REVISTA INCLUSIONES M.R.
REVISTA DE HUMANIDADES Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA EDITORIAL

ISSN 0719-4706 - Volumen 7 / Número Especial / Octubre – Diciembre 2020 pp. 12-23

PROSPECTS FOR DIGITALIZATION OF ART EDUCATION

Dr. M. V. Pereverzeva
Russian State Social University, Russia
ORCID: 0000-0003-4992-2738
melissasea@mail.ru
Dr. E. I. Grigorieva
Russian State Social University, Russia
ORCID: 0000-0002-2034-6602
grigorev_tmb@list.ru
Ph. D. (c) E. E. Grushina
Moscow State Institute of Music name after A.G. Schnittke, Russia
ORCID: 0000-0002-2855-3606
el.grushina@gmail.com
Ph. D. (c) M. G. Kruglova
Russian State Social University, Russia
ORCID: 0000-0001-5820-3378
marisha.krug@mail.ru
Ph. D. (c) V. A. Ovsyannikova
Russian State Social University, Russia
ORCID: 0000-0002-5386-6559
ovsyannikova.va@gmail.com

Fecha de Recepción: 11 de mayo de 2020 – **Fecha Revisión**: 23 de mayo de 2020

Fecha de Aceptación: 26 de septiembre 2020 – **Fecha de Publicación**: 01 de octubre de 2020

Abstract

The relevance of the study is due to the fact that in the framework of the state program of digitalization of all spheres of the life of Russians, the learning process in higher education institutions of art and culture has acquired a digital format. In this regard, this study is aimed at assessing the digitalization results of a modern university (using the example of the Higher School of Music of A. Schnittke (Institute) of the Russian State Social University and the trends in this process. The analysis of the results allows concluding that in Russia, the digitalization of higher education leads to an increase in the level of its quality, an increase in the level of mastery of programs by students, an expansion of the range of competencies and opportunities for them to obtain quality education for a wider circle of people.

Keywords

Digitalization – Higher education – e-learning – Online courses – Information education environment

Para Citar este Artículo:

Pereverzeva, M. V.; Grigorieva, E. I.; Grushina, E. E.; Kruglova, M. G. y Ovsyannikova, V. A. Prospects for digitalization of art education. Revista Inclusiones Vol: 7 num Especial (2020): 12-23.

Licencia Creative Commons Atributtion Nom-Comercial 3.0 Unported
(CC BY-NC 3.0)
Licencia Internacional

Introduction

In the realities of the development of the modern world and the conditions of the information society, digitalization is becoming a natural stage in the development of the education system, including art[1]. In modern conservatories, musical and pedagogical institutes, universities of art and culture, an electronic environment is created that encompasses all participants in the process – from the rector to the graduate of the university, and all stages – from the reception of applicants to the qualitative improvement of training programs[2]. At the same time, digitalization does not deprive art education of its individual, personal, and practice-oriented approaches (individual lessons, independent creativity, rehearsals, etc.). In 2016, the government launched a federal project "Modern Digital Educational Environment in the Russian Federation" as part of the implementation of the state program "Development of Education"[3]. The time has come to sum up the results of the first stage of digitalization of universities in Russia. There is no unanimity in assessing the significance of digitalization by Russian and foreign scientific opinions.

O. Ahel and K. Lingenau are sure that "digitalization could be the key to enlarge the scale of students getting access to Education for Sustainable Development"[4]. S.I. Ashmarina, E.A. Kandrashina, A.M. Izmailov, and N.G. Mirzayev study "the main aspects of economy digitalization as well as the impact of economy digitalization on gaps in the system of higher education in Russia, connected with such a phenomenon as gaps in socio-economic systems"[5]. J. Xiao, studying the role of digitalization in the strategic development plans of 75 leading Chinese universities, notes that "digitalization features modernization and innovations in teaching and learning, positive online ethos, but on the other hand, there seems to be not use digital technologies to build technology-enhanced research capacity and also not develop open, flexible, distributed, and disaggregated learning"[6]. According to T. Kovaleva and others, their analysis of the opinions of students in European universities shows that "digitalization is not only considered an efficient way for diffusing information, but also renders the work of the student more flexible and increases collaboration possibilities among students".

The disadvantage is "a lack of social interaction that holds back the development of essential social skills has been identified as the principal potential drawback"[7].

---

[1] V. Meleshko, Glavnyi trend rossiiskogo obrazovaniia – tsifrovizatsiia. Uchitelskaia Gazeta vol. 27 (2019). Retrieved from: http://www.ug.ru/article/1029

[2] Issledovanie rossiiskogo rynka onlain-obrazovaniia i obrazovatelnykh tekhnologii. Retrieved from: https://edmarket.digital

[3] Postanovlenie N 1642 Ob utverzhdenii gosudarstvennoi programmy Rossiiskoi Federatsii «Razvitie obrazovaniia», 26 December 2017. Retrieved from: http://docs.cntd.ru/document/556183093

[4] O. Ahel y K. Lingenau, Opportunities and Challenges of Digitalization to Improve Access to Education for Sustainable Development in Higher Education. World Sustainability Series (Bremen: University of Bremen, 2020)

[5] S. I. Ashmarina; E. A. Kandrashina; A. M. Izmailov y N. G. Mirzayev, "Gaps in the system of higher education in Russia in terms of digitalization", Advances in Intelligent Systems and Computing Vol: 908 (2020): 437–443.

[6] J. Xiao, "Digital transformation in higher education: critiquing the five-year development plans (2016–2020) of 75 Chinese universities", Distance Education Vol: 40 (2019): 515-533.

[7] T. Kovaleva; A. Bosten; M. Brandão y B. T. Forgacs, The future of universities in a digitalized world from a STEM students' perspective. Budapest: SEFI 47th Annual Conference: Varietas Delectat: Complexity is the New Normality. 2020.

At one of the platforms for discussing the digitalization of education, the rector of the Higher School of Economics Yaroslav Kuzminov noted: “As for the school, we can say with confidence: here we have made very serious progress, which is expressed in significant advancement of Russia’s positions in the studies of PISA, PIRLS, TIMSS, ICCS, and so on, with regard to successes in WorldSkills international competitions, here we also “rushed”, but “in terms of the development of professional education”, Kuzminov believes, “we have a noticeable failure”[8]. At the same time, digitalized universities in Russia give more reasons for optimism, since 20-30 institutions are able to provide high-quality education and compete with foreign universities, which means Russian population will participate in high-tech production, effectively use the latest high-tech achievements, create new knowledge, etc.[9].

Methods

To study the trends and results of digitalization of a modern university, the prospects for their interaction and mutual influence, the general methods of scientific research were applied: systemic, instrumental, and functional approaches, dialectic and comparative analysis. Special research methods were sociological (method of expert evaluation, observation, and analysis of educational practice, survey and testing of participants in educational relations, a survey of employers) and statistical (analysis and evaluation of statistical data – digital indicators of class attendance and student performance, research results). The methods used allowed us to evaluate practical results and scientifically characterize the potential of digitalization of the process of art education at the RSSU (Russian State Social University). The study was based on the Higher School of Music of A. Schnittke (Institute) of the RSSU.

Results

At the Higher School of Music of A. Schnittke (Institute) digitalized the process of teaching in the areas: “Pedagogical Studies (Music Education)”, “Folk Arts”, “Cultural Studies”, “Design”, and “Sociocultural Activities”. The entire document flow relating to students is carried out in the 1C system, the learning outcomes of each student are presented in an electronic portfolio, electronic grade books, electronic journals and sheets, and the entire educational process is recorded in the distance learning system (DLS) (electronic information and educational system). The latter deserves special attention, since it has proven undoubtedly effective.

DLS is an electronic educational information resource of the university, combining an educational portal with a connection to information resources, a management system, and telecommunications. An information resource is hypercollections of educational content (media, video, audio, library, photos, graphics, animations, presentations), information data arrays, educational portals, and Internet sites. The management system is based on user authorization, content development, testing, ratings, and personal and collective information space. All this is aimed at creating conditions for systematic quality improvement and expanding the educational potential of the university. The availability of online education makes it possible to organize blended learning, building individual

[8] V. Meleshko, Glavnyi trend rossiiskogo obrazovaniia – tsifrovizatsiia. Uchitelskaia Gazeta vol. 27 (2019). Retrieved from: http://www.ug.ru/article/1029

[9] A. A. Aksyukhin; A. A. Vitsen y J. V. Meksheneva, “Informatsionnye tekhnologii v obrazovanii i nauke”, Sovremennye naukoemkie tekhnologii Vol: 11 (2009): 50-52.

learning paths, including for students with disabilities, self-education, which in turn transforms the social paradigm of people's livelihoods – it opens up opportunities for obtaining and improving knowledge, broadening one's horizons, and retraining at any time in one's life.

It is known that learning music requires personal contact of the teacher-musician with the student during individual lessons. Digitalization of instruction does not deprive students of this contact, but, on the contrary, frees them from unnecessary time spent on preparing for group lessons in favor of a live playing the instrument. A student in the DLS system, without having to do a long search on their own, can quickly master the theoretical material prepared by the teacher, visit the digital library, get acquainted with the musical text and sound recordings of the studied composition, receive the teacher's recommendations remotely, while spending free time on practical exercises. The practice of online courses and blended learning creates a field of unlimited educational opportunities, which improves the quality of education for each person, regardless of place of residence and skills, but in accordance with their interests and capabilities. Students can choose courses according to need, authority of the teacher, popularity, interest, etc.

Digital technologies are becoming an effective mechanism for the versatile development of the university itself. They provide a quick exchange of the latest developments, experience, and knowledge, including unique ones, improving online learning, expanding digital libraries, enhancing academic mobility, and increasing joint research, integration into international scientific and educational space, while allowing the university to adapt to modern sociocultural and economic conditions and maintain its unique qualities and competitive advantages[10][11][12].

The entire educational process is then automated into a single base. The management of digitalization in the educational environment is carried out using digital marketing, aimed at organizing interaction with educational support personnel, research and teaching staff, applicants, students, and graduates using a range of digital communication channels, monitoring of changes in the formation of a positive image of the university, and development of persona leading marketing materials for target audiences.

The undoubted advantages of digitalization of art education include:

1. Openness and objectivity of the educational process, universal accessibility and equality of students, personalization of education and its variability. The dean of the faculty, the teacher, the student themself, their parents, and potential employers can see the student's real path to the heights of excellence, and their academic achievements will receive an objective assessment of the professional community.

2. Instant remote access to the student's personal file, which allows university staff to grant scholarships, provide financial assistance, attract them to projects, send them to

[10] G. A. Mavlyutova, "Tsifrovizatsiia v sovremennom vysshem uchebnom zavedenii", Ekonomicheskaia bezopasnost i kachestvo: nauchno-prakticheskii zhurnal Vol: 3 num 32 (2018): 5-7.

[11] Prioritetnyi proekt v oblasti obrazovaniia «Sovremennaia tsifrovaia obrazovatelnaia sreda v Rossiiskoi Federatsii». Retrieved from: http://neorusedu.ru/about

[12] Tsifrovizatsiia obrazovaniia v Rossii i mire. Akkreditatsiia v obrazovanii: Informatsionno-analiticheskii zhurnal Vol: 98 (2017). Retrieved from: https://akvobr.ru/cifrovizaciya_obrazovaniya_v_rossii_i_mire.html

potential employers, inform about useful events, etc. The electronic portfolio reflects the best scientific and creative achievements of the student – published diplomas and certificates of participants in contests and festivals, published articles, audio and video recordings of stage performances, etc.

3. Ease of management and control of the university. The university administration has operational information on the level of attendance and academic performance of students, academic and financial debts, etc., and makes appropriate management decisions.

4. The prevalence of interactive and problem teaching methods for students. The passive perception of information in lectures is replaced by personal involvement of students in the educational process by problem tasks, cases, and other forms of teaching in a digital educational environment. Today, there is a serious gap in the intellectual abilities of university students, and the use of the latest teaching methods introduced through digitalization allows, if not to level out academic performance, then noticeably increase it among those who have received poor results. Due to digitalization, higher education is becoming widespread.

5. Increasing the degree of independence and responsibility of students during assignments. Content in the DLS of the RSSU contains a practical task and boundary control for each section, contributing to greater independence and depth of development of the material. DLS motivates students to work with their minds, expressing personal opinions, applying their own talents, and applying an individual approach to solving a learning problem.

6. Students mastering modern digital and educational technologies. The DLS allows downloading assignments for students in a variety of formats, from cases and problem assignments in the form of a Word document to an mpeg4 video file with a recording of a musical dictation, a backing track for a variety vocalist, choral work studied by students of the faculty, etc. The educational process in this way creates additional values for students.

7. Opportunity for social partners – future employers, as well as grantors, ministries, departments, and scholarship funds of talented youth and young scientists – to trace the path of becoming a student in their chosen field, and also, if necessary, help the student solve personal development problems. Fixing the student's personal development path allows the future employer to see a clear portrait of their potential employee.

8. Improving the level of educational services and the competitiveness of the university. This advantage is due to the above advantages of the digital educational environment, management and control of the educational process, as well as the expansion of opportunities to receive a decent and high-quality education for a wide range of people, regardless of their pre-university training and abilities. Digitalization and modern communication technologies increase the university's adaptation to the target audience and competitiveness in the educational services market.

The RSSU uses open online resources, ranging from individual tasks, tests to full-scale courses (modules) to form the necessary competencies. The main criteria for the positive impact of digitalization on the educational process are increasing student achievement, especially correspondence students, intensifying project activities and

independent scientific and creative work of students, and increasing interest in specialized disciplines. If at first, the electronic educational environment caused a cautious attitude among some students, and the outflow of students did not exceed average values (about 13% in 2013-2017), then in the second and third years of the active phase of the work of the DLS (2018 and 2019), the number of expelled correspondence students RSSU decreased to 9%. The statistics allow us to speak about the dynamics of the level of mastering the programs for preparing artistic and creative directions. The number of academic arrears, unsatisfactory grades and failures has markedly decreased, but most importantly, academic performance has increased. If in 2013-2017 the average student score was 77 out of 100 (which corresponds to the grade 4.16), then in the last two years, the numbers grew to 81 out of 100 (which corresponds to an estimate of 4.39)[13].

Factors that determine the increase in student achievement are as follows: innovations guide students towards continuous development, improving their knowledge, skills, competencies, mastering new types of activities; digital educational resources require a student to be creative, shape the ability to think critically and evaluate information; digitalization generates the availability of information in its various forms – text, sound, visual, which reduces the search for relevant and interesting content, increasing the speed of its processing; Digitalization expands the range of technologies mastered by students, including mobile learning, and the growing availability of online courses makes it possible to study at any convenient time. The inclusion of students in an independent search and selection of information, participation in project activities forms the competences of the 21st century among students.

In the conditions of the postindustrial world, the world of total synthesis, globalization, and a rapid flow of information, modern young people are poorly developing analytical thinking. A.P. Krainov considers clip thinking to be a phenomenon of the information society and, as a result, a decrease in the level of critical perception of information and analytical abilities: “A person ceases to think globally and analyze large volumes of important information. The effect of clip thinking is especially clearly visible in the education system, using students as examples, who have lost the ability to meaningfully retell a scientific text”[14]. A.A. Konstantinov and N.S. Tarasenko noted that in the current situation “the brain does not try to catch certain information, which leads to the fact that it is difficult for such specialists to analyze, isolate the essence, and make based on this decision”[15]. Due to the need to perceive a lot of information, a new, informational generation is incapable of formulating problems and finding their solutions. However, the digital environment forces the student to organize data resources, orient in the flow of digital information, fruitfully evaluate and use information, process and integrate it into new technology. T.V. Nikulina emphasizes that “the most important feature of a person adequate to the digital economy is that this person owns digital technologies and applies them in professional activities”[16].

[13] Russian State Social University. Retrieved from: https://en.rgsu.net/

[14] A. L. Krainov, “Klipovoe myshlenie v kontekste obrazovatelnykh praktik: sotsialno-filosofskii analiz”, Izvestiia Saratovskogo universiteta. Novaia seriia. Seriia: Filosofiia. Psikhologiia. Pedagogika Vol: 19 num 3 (2019): 262-266.

[15] A. A. Konstantinov y N. S. Tarasenko, “Vliianie informatsionnykh sistem na formirovanie klipovogo myshleniia u molodezhi”, Aktualnye problemy aviatsii i kosmonavtiki Vol: 3 num 3 (2017): 1117–1119.

[16] T. V. Nikulina y E. B. Starichenko, “Informatizatsiia i tsifrovizatsiia obrazovaniia: poniatiia, tekhnologii, upravlenie”, Pedagogicheskoe obrazovanie v Rossii Vol: 8 (2018): 107-113.

Moreover, for the new generation, working with information resources is a natural way of life, hence the need for a modern person to have an information culture as an element of the 21st-century culture and a condition for a comfortable existence in society[17]. The formation of a digital society is becoming the most important task of the education system. Digital resources of the educational process provides the opportunity to educate citizens according to an individual curriculum throughout life at any time and anywhere (life-long-learning), allows to meet the needs of a person who is mastering new types of labor, include all sections of the population in the educational process, and provide them with the opportunity to manage their own learning outcomes and build their own learning path (advanced-learning-technologies), "overcoming the barriers of the traditional – the rate of development of the program, the choice of the teacher, forms and methods of teaching"[18].

The introduction of digital technologies affects not only innovations in equipping the educational process of the university (development of educational software resources, educational websites, teaching and didactic materials, including music and educational programs, computer experiments with virtual models), but also the modernization of research activities necessary in the context of globalization of the modern scientific world[19]. Thus, M.R. Safiullin and E.M. Akhmetshin[20] are convinced that "due to the rapid development and widespread use of digital technology, universities have gained new perspectives and opportunities to improve the quality and convenience of the educational process. Due to the proliferation and widespread use of massive open online courses, universities have become able to compete globally. Digital transformation is becoming a key mechanism for creating a university's competitive advantage in the global educational space".

According to the results of the research activities of the university for 2016-2020, the level of publishing (especially in the journals of the Scopus and Web of Science databases) and grant activity has significantly increased[21].

Discussion

The development and testing of educational and methodological complexes, simulators, virtual laboratories for in-depth study of the material of specialized disciplines, an increase in the share of the online segment of educational services in the field of professional or additional education, radically change the traditional system[22]. The re-equipment of IT resources and the expansion of human potential due to the digitalization of the educational process determines the optimization of all internal processes of the educational institution and an increase in the efficiency of interaction between all departments, and not only internal.

---

[17] D. K. Schwab, Chetvertaia promyshlennaia revoliutsiia. Retrieved from: https://mybook.ru/author/klaus-shvab/chetvertaya-promyshlennsya-revolyuciya/read

[18] T.V. Nikulina, E.B. Starichenko, "Informatizatsiia i tsifrovizatsiia…

[19] Meniaisia ili ukhodi, TSifrovoe obrazovanie brosaet vyzov prepodavateliam vuzov. Retrieved from: http://www.poisknews.ru/theme/edu/31969

[20] M. R. Safiullin y E. M. Akhmetshin, "Digital Transformation of Educational, Research and Business Activity of A University", International Journal of Engineering and Advanced Technology Vol: 9 num 1 (2019): 7391-7394.

[21] Russian State Social University. Retrieved from: https://en.rgsu.net/

[22] Tsifrovizatsiia shkoly: riski i perspektivy. Retrieved from: https://mob-edu.ru/cifrovizaciya-shkoly-riski-i-perspektivy/

A modern university today can save costs and time by analyzing the results of the learning process and assessing the degree of satisfaction of students with the educational process and employers with the level of professionalism of graduates.

At one time, K. Schwab predicted the fourth digital industrial revolution in connection with the ubiquitous and mobile Internet and the development of artificial intelligence. This is due to the fact that the real and virtual worlds are interdependent, their merging forms a hybrid world, through which vital actions of the real world are performed using the virtual one. E.G. Repina, O.V. Bakanach, and N.V. Proskurina[23] evaluate "the electronic information and educational environment of the university as an innovative component of the competence approach under the digital transformation of the economy and defines its relationship with the formation of information and communication competence of students". Digital technologies are fast becoming a part of human economic, political and sociocultural life. The paradigm of communication and interaction of people with each other and society has changed. Digitalization offers a comprehensive solution for processing information of an infrastructural, managerial, behavioral, and cultural nature.

Other researchers come to similar conclusions. E.A. Mitrofanova, M.V. Simonova, and V.V Tarasenko[24] substantiate "the potential of the education system Russia in training for the digital economy and determine the leading role of managerial staff of the educational organization in its updating". N.V. Speshilova, V.N. Shepel, and M.V. Kitaeva[25] note that digitalization improves education system governance, requiring "substantiation of decisions made based on the wide use of modeling of training processes, optimization of planning, and organization of distribution of educational resources according to the criterion of cost minimization, as well as the use of modern information technologies. Combinatory and morphological analysis and synthesis should be used in an optimal allocation of training time, taking into account curricula. Information technology control and self-learning material will improve feedback in the system, which will positively affect the quality of control".

Conclusion

The main trend in education is associated with the digital revolution, which will lead to a radical change in the labor market, the emergence of new competencies, improved cooperation, increased responsibility of citizens, and their ability to make independent decisions. This, in turn, will serve as a reason for the subsequent reorganization of the educational process, largely based on the use of artificial intelligence technologies. For example, it is clear that over the next 5-10 years, such systems of automatic translation of texts and speech from any language will be developed that will allow the use of electronic resources, libraries of leading universities of the world and lectures of the best teachers will be available to every student, and not just those who speak a foreign language. All this will lead to a complete restructuring of the educational process, a rethinking of the role of

[23] E. G. Repina; O. V. Bakanach y N. V. Proskurina, "Digitalization of Education as a Basis for the Competence Approach", Lecture Notes in Networks and Systems Vol: 84 (2020): 441–447.

[24] E. A. Mitrofanova; M. V. Simonova y V. V. Tarasenko, "Potential of the education system in Russia in training staff for the digital economy", Advances in Intelligent Systems and Computing Vol: 908 (2020): 463-472

[25] N. V. Speshilova; V. N. Shepel y M. V. Kitaeva, "Optimization of Higher Education in Economics Digitalization", Lecture Notes in Networks and Systems Vol: 84 (2020): 448–457.

the teacher, who now will not have to explain the material, but help to find the source of this material and understand it. All this, as a result, leads to a single end-to-end process of transformation of society.

A radical revolution expects a teaching methodology, a system for testing the quality of knowledge. Now the teacher sets the same tasks from year to year, the answers to which the student can easily get using the Internet. It is necessary to develop individual educational trajectories and prepare for each student their own unique set of tasks, the answer to which will require a creative approach, the ability to compare, weigh, analyze, filter out unnecessary, communicate, and so on. The teacher can help to cope with a similar task all the same artificial intelligence. We can expect the development of two more trends in the educational process – project activities and training in the game. Games will help children and adults to master new knowledge and skills in a fun and unobtrusive way, and projects can provide an opportunity for each person to open up, based on their abilities and preferences.

The digitalization of art education in the modern world is irreversible; therefore, it requires close attention of the professional community and further improvement. Despite the inevitable disadvantages of the system, the use of the digital educational environment in the universities of art and culture has proved its effectiveness; therefore, it opens up new prospects for the development of higher art education in Russia and allows bringing Russian education to a completely new level. The development of digital technologies in the field of art and culture, innovative activities in the field of art education, the integration of Russian universities in the international scientific and educational space will contribute to the development of Russia as a world power.

References

Ahel, O. y Lingenau, K. “Opportunities and Challenges of Digitalization to Improve Access to Education for Sustainable Development in Higher Education”. World Sustainability Series. Bremen: University of Bremen. 2020.

Aksyukhin, A. A.; Vitsen, A. A. y Meksheneva, J. V. “Informatsionnye tekhnologii v obrazovanii i nauke”. Sovremennye naukoemkie tekhnologii Vol: 11 (2009): 50-52.

Ashmarina, S. I.; Kandrashina, E. A.; Izmailov, A. M. y Mirzayev, N. G. “Gaps in the system of higher education in Russia in terms of digitalization”. Advances in Intelligent Systems and Computing Vol: 908 (2020): 437–443.

Issledovanie rossiiskogo rynka onlain-obrazovaniia i obrazovatelnykh tekhnologii. Retrieved from: https://edmarket.digital

Kovaleva, T.; Bosten, A.; Brandão, M. y Forgacs, B. T. The future of universities in a digitalized world from a STEM students' perspective. Budapest: SEFI 47th Annual Conference: Varietas Delectat: Complexity is the New Normality. 2020.

Konstantinov, A. A. y Tarasenko, N. S. “Vliianie informatsionnykh sistem na formirovanie klipovogo myshleniia u molodezhi”. Aktualnye problemy aviatsii i kosmonavtiki Vol: 3 num 3 (2017): 1117–1119.

Krainov, A. L. “Klipovoe myshlenie v kontekste obrazovatelnykh praktik: sotsialno-filosofskii analiz. Izvestiia Saratovskogo universiteta”. Novaia seriia. Seriia: Filosofiia. Psikhologiia. Pedagogika Vol: 19 num 3 (2019): 262-266.

Mavlyutova, G. A. “Tsifrovizatsiia v sovremennom vysshem uchebnom zavedenii”. Ekonomicheskaia bezopasnost i kachestvo: nauchno-prakticheskii zhurnal Vol: 3 num 32 (2018): 5-7.

Meleshko, V. Glavnyi trend rossiiskogo obrazovaniia – tsifrovizatsiia. Uchitelskaia Gazeta Vol: 27 (2019). Retrieved from: http://www.ug.ru/article/1029

Meniaisia ili ukhodi. TSifrovoe obrazovanie brosaet vyzov prepodavateliam vuzov. Retrieved from: http://www.poisknews.ru/theme/edu/31969

Mitrofanova, E. A.; Simonova, M. V. y Tarasenko, V. V. “Potential of the education system in Russia in training staff for the digital economy”. Advances in Intelligent Systems and Computing Vol 908 (2020): 463-472.

Nikulina, T. V. y Starichenko, E. B. “Informatizatsiia i tsifrovizatsiia obrazovaniia: poniatiia, tekhnologii, upravlenie”. Pedagogicheskoe obrazovanie v Rossii Vol: 8 (2018): 107-113.

Postanovlenie N 1642 Ob utverzhdenii gosudarstvennoi programmy Rossiiskoi Federatsii «Razvitie obrazovaniia», 26 December 2017. Retrieved from: http://docs.cntd.ru/document/556183093

Prioritetnyi proekt v oblasti obrazovaniia «Sovremennaia tsifrovaia obrazovatelnaia sreda v Rossiiskoi Federatsii». Retrieved from: http://neorusedu.ru/about

Repina, E. G.; Bakanach, O. V. y Proskurina, N. V. “Digitalization of Education as a Basis for the Competence Approach”. Lecture Notes in Networks and Systems Vol: 84 (2020): 441–447.

Safiullin, M. R. y Akhmetshin, E. M. “Digital Transformation of Educational, Research and Business Activity of A University”. International Journal of Engineering and Advanced Technology Vol: 9 num 1 (2019): 7391-7394.

Schwab, D. K. Chetvertaia promyshlennaia revoliutsiia. Retrieved from: https://mybook.ru/author/klaus-shvab/chetvertaya-promyshlennsya-revolyuciya/read

Speshilova, N. V.; Shepel, V. N. y Kitaeva, M. V. “Optimization of Higher Education in Economics Digitalization”. Lecture Notes in Networks and Systems Vol: 84 (2020): 448–457.

Tsifrovizatsiia obrazovaniia v Rossii i mire. Akkreditatsiia v obrazovanii: Informatsionno-analiticheskii zhurnal Vol 98 (2017). Retrieved from: https://akvobr.ru/cifrovizaciya_obrazovaniya_v_rossii_i_mire.html

Tsifrovizatsiia shkoly: riski i perspektivy. Retrieved from: https://mob-edu.ru/cifrovizaciya-shkoly-riski-i-perspektivy/

Xiao, J. “Digital transformation in higher education: critiquing the five-year development plans (2016–2020) of 75 Chinese universities”. Distance Education Vol: 40 (2019): 515-533.

REVISTA INCLUSIONES M.R.
REVISTA DE HUMANIDADES Y CIENCIAS SOCIALES

CUADERNOS DE SOFÍA EDITORIAL

Las opiniones, análisis y conclusiones del autor son de su responsabilidad y no necesariamente reflejan el pensamiento de **Revista Inclusiones**.

La reproducción parcial y/o total de este artículo debe hacerse con permiso de **Revista Inclusiones.**