

## **BRICS IN CREATING DIGITAL EDUCATIONAL ENVIRONMENTS: SOCIAL AND LEGAL ASPECTS OF 'A NEW NORMAL'**

TATIANA PLETYAGO,

University of Tyumen (Tyumen, Russia)

SVETLANA ANTONOVA,

University of Tyumen (Tyumen, Russia)

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*The global challenges brought about by the recent pandemic outbreak of COVID-19 have forced many countries to seek out effective digital tools for supporting higher education. The issue of not only the technological complexity of the digitalization of education but also the necessity to develop and standardize the social and legal frameworks of E-education in the BRICS countries has become acute. This article examines how the BRICS countries regulate the digital transformation of higher education and discusses the changes that need to be made to social and legal regulation in order to accommodate the process of digital transformation. The authors' research leads them to the conclusion that the process of social and legal modification of higher education in the aspect of its digital transformation is patchy. On the one hand, it is forced by unpredictable global challenges like the pandemic outbreak. In this aspect, the digital transformation across the BRICS countries tends to be rather international. On the other hand, the absence of common settings and digital standards within the BRICS countries could intensify the digital stratification among universities and lead to a decrease in the quality of higher education. The authors propose the establishment of a set of common digital standards that comprise a unified ecosystem of digital tools and services, a common model for a "digital university," unified standards of digital competences and educational services, frameworks and standards of technical modernization as the basis of digital transformation and the creation of a common technical landscape.*

**Keywords:** *E-education; BRICS countries; distance education; digital transformation; emergency remote teaching; conditions; standards; digital sovereignty.*

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## Introduction

Before the pandemic, the process of digital transformation of different aspects of social life appeared to be more or less evolutionary. Nowadays, it is quickly becoming a challenging reality. It is increasingly evident that higher education is also rapidly changing. The main strategic point of this change is the transformation of a traditional, physically-based learning model into an online one with the help of breakthrough digital smart technologies.

The term “digital transformation”<sup>1</sup> comprises changes in various economic, cultural, social and technological aspects, as well as in educational processes and their outcomes. It does this by investing efforts in improving the standard of living and general living conditions of citizens through excellence in education, which prepares specialists with a high level of competence and the skills needed to work in a constantly evolving digital environment. At the same time, we are noticing a certain imbalance in certain public spheres, which manifests itself in as a lag in not only the updated managerial, methodological and expert systems but also in the relevant legislative framework due to the advanced changes taking place in the world. The educational cluster is among the challenges that trigger the need for joint efforts and require multilateral solutions. Taking into consideration the needs of today’s digital native students, who spend

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<sup>1</sup> What Is Digital Transformation? Complex Guide for 2022, Netguru (Mar. 2, 2023), available at <https://www.netguru.com/glossary/digital-transformation>.

much of their time on the Internet and get nearly all of their information from online platforms, it is necessary to unite the existing international experiences, practices and achievements to implement digitalization into education and to outline its legal norms, rules and ways of developing and reinforcing it.

According to "The Strategy for BRICS Economic Partnership 2025,"<sup>2</sup> digital transformation is considered one of the main areas for partnership. It has been declared that the BRICS countries acknowledge the importance of eliminating the digital divide and developing digital literacy. Deepening partnership cooperation and drawing on all of the collective experience of the BRICS countries creates an innovative impulse to boost the sustainable development of significant areas, including education, with the means of digital technologies.

The necessity to develop technology-enhanced teaching and learning in the BRICS area was confirmed in the Cape Town Declaration on Education and Training during the 6<sup>th</sup> BRICS education ministers meeting of 10 July 2018. The initiative proposed by the Republic of India to improve E-education and its policy was supported at this meeting and sealed in the common decision "to promote a transformative education agenda that actively addresses twenty first century challenges and opportunities, especially regarding the technological changes commonly known as the fourth industrial revolution."<sup>3</sup> This plan would include a comparative study of digital learning (E-learning) across universities in the BRICS member states and the implementation of the best practices in online university-level courses. There is no doubt that the key trends in higher education modernization are a result of advances in communication and interconnection.

The policy of E-learning in the BRICS countries is based on multiple trends and thus meets various needs that range from providing access to higher education for less privileged areas as in Brazil, India and South Africa to promoting national education on an international level as in China and Russia. Despite their existing socio-economic and geopolitical differences, the BRICS countries are striving to improve their national digital education by means of a global transformation.

E-learning is at the center of scientific interest for many researchers. It is being widely studied from the viewpoints of pedagogy, psychology, education management and some others (Zhang et al.,<sup>4</sup> Gerasimova et al.<sup>5</sup>). However, this issue

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<sup>2</sup> BRICS Russia 2020, *Strategy for BRICS Economic Partnership 2025* (November 2020) (Mar. 2, 2023), available at <http://www.brics.utoronto.ca/docs/2020-strategy-1148155.pdf>.

<sup>3</sup> The 6<sup>th</sup> BRICS Education Ministers Meeting, Cape Town Declaration on Education and Training, 10 July 2018 (Mar. 2, 2023), available at [http://nu-brics.ru/media/uploads/filestorage/documents/final\\_declaration\\_10\\_july\\_2018\\_approved\\_by\\_ministers.pdf](http://nu-brics.ru/media/uploads/filestorage/documents/final_declaration_10_july_2018_approved_by_ministers.pdf).

<sup>4</sup> Xiaolei Zhang et al., *The New Historical Divide of Online Education: Dialogues with Key Leaders During the Epidemic*, 3(4) ECNU Review of Education 755 (2020).

<sup>5</sup> Гeрасимова В., Меламуд М., Тутаева Д., Романова Ю., Женова Н. Внедрение технологии электронного обучения на факультете дистанционного обучения Российского экономического универ-

has not been sufficiently studied as far as its social and legal aspects are concerned. A comparative study of E-education in different countries also reveals numerous scientific gaps. Our analysis of previous work conducted in the aforementioned sphere within the framework of the BRICS organization revealed the importance and timeliness of the provided scientific investigation.

In the present paper, we have researched the experience of the BRICS countries in regulating digital transformation in higher education. The overall strategy of our research is aimed at defining the main social trends and challenges of digital transformation in higher education in the BRICS countries as well as the legal regulations in this field. Therefore, the research tasks were as follows:

- to identify the main global and national settings and trends in digital higher education within the BRICS countries;
- to determine the main features of the social and legal regulation of digital higher education in the BRICS countries;
- to analyze the feasibility of common digital conditions in higher education.

Comparative analysis and case study methods are used in our research to help us determine the main features of the digital transformation at the tertiary education level in the BRICS countries.

The first part of the paper is devoted to the main issues surrounding the digital transformation of higher education and such key terms as digital transformation, common digital conditions, digital divide and digital sovereignty. Next, we deal with the experience of the BRICS countries in developing digital transformation. In order to identify the best practices, we compare the social challenges and legal tools of digital education across the BRICS countries and investigate how successfully the tools are implemented and challenges resolved. In this regard, we have analyzed some data from the United Nations Education, Scientific and Cultural Organization (UNESCO) and other documents related to the BRICS countries. The sources of information used in our research include UNESCO and OECD documents, declarations by the BRICS Ministers of Education and laws on education.

## **1. The Digital Transformation of Higher Education: Challenges and Perspectives**

The analysis of the current situation of higher education in the world shows that despite the diversity of contextual settings, conditions and experiences, there are large-scale mutually influencing trends that have become common in many countries. These emerging trends are shaping a new teaching-learning ecosystem, such as more effective ways of knowledge transfer and acquisition, tools and services

for digital assessment, the organization of practices, internships for students, and upskilling.

The establishment of the BRICS Network University in 2014 is a good example of one of these large-scale trends. It is stated that the Network University is an educational project aimed at (a) integrating advanced educational systems into teaching-learning management in order to develop high-quality educational programs and (b) facilitating joint research on the process and outcomes of the fourth industrial revolution in the BRICS countries. The digitalization of the BRICS Network University activities is widely supported by all of the BRICS member states, according to the Declaration of the 7<sup>th</sup> Meeting of BRICS Ministers of Education of 21 October 2020. It was noted that the digital transformation of higher education has great significance for the promotion of the Fourth Industrial Revolution. In addition, the creation of National Research and Education Networks (NRENs) helped in the development of international learning standards and systems, which are primarily associated with the provision of Internet service.<sup>6</sup>

The use of digital and online educational technologies has resulted in a large number of students who have been presented with an excellent opportunity to overcome various obstacles and limitations in order to complete their courses with maximum convenience regarding the choice of place, time and pace of studying. These advances have made many universities massive and inclusive. Lately, an increasing number of universities have begun to offer free online courses in a wide variety of disciplines, which attracts new students and makes the educational process more accessible and comprehensive. According to the UNESCO Institute for Statistics,<sup>7</sup> the Federative Republic of Brazil, the Republic of India and the People's Republic of China are the leaders in this trend. Nevertheless, a growing gap is observed between mass (mainstream) and elite universities. This is specifically true for China, which tends to invest money in elite universities. The same cannot be said about South Africa, a country that tries to develop the available educational opportunities for the poor districts of the country.

The major challenge and strategic driver in the higher education industry is the use of emerging technologies, the development of online courses and engaging with online student enrollments. These variables help with a number of issues, from the accessibility of higher education through reducing its cost to global social, economic, political and other benefits. The development of free educational resources, such as Massive Open Online Courses (MOOCs), is at the forefront of the modernization of

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<sup>6</sup> Declaration of the 7<sup>th</sup> Meeting of BRICS Ministers of Education, 21 October 2020 (Mar. 2, 2023), available at [http://conf.rudn.ru/conf/nu\\_br/2020%20Russia%20online%29.pdf](http://conf.rudn.ru/conf/nu_br/2020%20Russia%20online%29.pdf).

<sup>7</sup> Paulo A. Meyer M. Nascimento, *Some Trends in Higher Education and Research in BRICS Countries* (Mar. 2, 2023), available at [https://nkibrics.ru/system/asset\\_docs/data/54cf/749e/6272/690a/8b22/0000/original/Some\\_trends\\_in\\_higher\\_education\\_and\\_research\\_in\\_BRICS\\_countries.pdf?1422881950](https://nkibrics.ru/system/asset_docs/data/54cf/749e/6272/690a/8b22/0000/original/Some_trends_in_higher_education_and_research_in_BRICS_countries.pdf?1422881950).

higher education. An analysis of the official documents relating to MOOCs<sup>8</sup> shows that China ranked number one among the BRICS countries in terms of top providers of MOOCs. Overall, there seems to be some evidence to indicate that the main digital transformations of higher education in the BRICS countries are connected with the introduction of online courses and the development of national digital platforms. Such an approach not only promotes national education on an international level, such as in China and Russia, but also brings about cross-cultural recognition of the qualifications of the graduates and the excellence of the universities. Moreover, it helps Brazil, India and South Africa open access to higher education to less privileged social classes, enabling them to become beneficiaries of the modern transformational trends in education.

The BRICS countries focused on issues of digitalization for the first time within the framework of the Meeting of Ministers of Communications in 2015. As a result, the problem of the digital transformation of higher education ranks among other such aspects as the digital divide, digital sovereignty, digital transformation, digital educational platforms etc. Furthermore, this leads to an urgent necessity to fill the existing legal gap and carefully develop a substantial set of legal norms, acts and other fundamental regulations that define both E-education and open online courseware within the framework of the BRICS countries. The issue remains complicated due to numerous collateral legal handicaps, such as online security, cybersecurity, information security, personal data protection, copyright protection, proctoring, integrated management and others. In the near future, higher education management will potentially face the inevitability of solving legislative and education delivery mechanism problems that are especially complicated in the context of online instruction.

In October 2019, the United Nations Educational, Scientific and Cultural Organization (UNESCO) held a conference, during which the governments agreed to define, certify or license, and promote the standards related to the legal and technical specifications for online teaching and open educational course materials.<sup>9</sup> This initiative came about very timely in the context of the unforeseen COVID-19 pandemic, and it works for the common interest of getting the future of higher education on the right trajectory. Currently, a transformational paradigm of various scenarios for the development of higher education, including online education, is being carried out in each country.

The necessity to develop and introduce common digital standards and conditions is supported by many researchers all over the world as “the establishment of

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<sup>8</sup> Class Central (Mar. 2, 2023), available at <https://www.classcentral.com/>.

<sup>9</sup> Malcolm Brown et al., *2020 EDUCAUSE Horizon Report: Teaching and Learning Edition* (2020) (Mar. 2, 2023), available at [https://library.educause.edu/-/media/files/library/2020/3/2020\\_horizon\\_report\\_pdf.pdf?la=en&hash=08A92C17998E8113BCB15DCA7BA1F467F303BA80](https://library.educause.edu/-/media/files/library/2020/3/2020_horizon_report_pdf.pdf?la=en&hash=08A92C17998E8113BCB15DCA7BA1F467F303BA80).

standardized practice in higher education.”<sup>10</sup> According to the EDUCAUSE Horizon Report 2020, the implementation of educational technology must be based on open educational standards.<sup>11</sup>

Generic, structured conditions are connected with the quality of education, which becomes a major challenge from the digital perspective. Many countries including BRICS have to work out their own standards to provide quality education.<sup>12</sup>

The outbreak of the pandemic forced the global community to intensify the necessity of introducing generic structured conditions and to introduce the so-called “emergency remote education”<sup>13</sup> alongside other associated terms with it such as “disrupted classes,” “undisrupted learning.”<sup>14</sup> The Ministries of Science and Education of a number of countries strongly recommended that universities switch to a remote form of work with students. Distant learning encompassed academic and scientific activity as well as the management of the educational process. As the situation progressed, it became apparent that many universities were methodologically and technically not ready for distance teaching. Both professors and students experienced different difficulties in attempting to engage in the digital space of online education. There were both subjective and objective reasons for this, ranging from the students’ as well as professors’ computer illiteracy and their inadequate digital knowledge in general to the lack of the universities’ own technical incapacity to transfer education online. In this period of digital transformation not only of the educational sphere but also of society as a whole, providing opportunities for distance learning is becoming a new area of responsibility for universities. Since a person immersed in an electronic device is an integral, distinguishing feature of the present time, education is committed to empowering the generation of digital talent.

Cross-cutting digitalization and adoption of digital technologies in education started before the COVID-19 outbreak, but the pandemic accelerated the process greatly. We suppose that the COVID-19 crisis period faced the transformation of such core higher education values<sup>15</sup> as equitable access and institutional autonomy.

<sup>10</sup> Victoria I. Marín et al., *A Comparative Study of National Infrastructures for Digital (Open) Educational Resources in Higher Education*, 12(2) *Open Praxis* 241 (2020).

<sup>11</sup> Brown et al., *supra* note 9.

<sup>12</sup> Клягин А.В. и др. Шторм первых недель: как высшее образование шагнуло в реальность пандемии [Alexander V. Klyagin *The Storm of the First Weeks: How Higher Education Stepped into the Reality of a Pandemic*] (2020).

<sup>13</sup> Aras Bozkurt et al., *A Global Outlook to the Interruption of Education Due to COVID-19 Pandemic: Navigating in a Time of Uncertainty and Crisis*, 15(1) *Asian J. Distance Educ.* 1 (2020).

<sup>14</sup> UNESCO Institute for Information Technologies in Education, *Online and Open Education in Shanghai: Emergency Response and Innovative Practice during COVID-19 Pandemic* (June 2020) (Mar. 2, 2023), available at <https://unesdoc.unesco.org/ark:/48223/pf0000373891/PDF/373891eng.pdf.multi>.

<sup>15</sup> Scholars at Risk, *Promoting Higher Education Values: A Guide for Discussion* (December 2017) (Mar. 2, 2023), available at [https://www.scholarsatrisk.org/wp-content/uploads/2018/08/SAR\\_Promoting-Higher-Education-Values-Guide.pdf](https://www.scholarsatrisk.org/wp-content/uploads/2018/08/SAR_Promoting-Higher-Education-Values-Guide.pdf).

It is necessary to point out that digitalization can have both positive and negative effects in the educational spheres of the BRICS countries. On the one hand, digital technologies play a pivotal role in improving the overall quality of education. As a result, students from impoverished regions can have access to a better education. On the other hand, the digital divide can aggravate social inequality between students from elite and provincial universities.

The necessity to transform education by digital means during the COVID-19 pandemic and post-pandemic period was recognized as an urgent one. One of the ways to establish common frameworks for digital security is through the development of joint or collaborative programs in the fields of computer science and information security. The timeliness of addressing this issue was confirmed in the Declaration of the 7<sup>th</sup> Meeting of BRICS Ministers of Education on 21 October 2020.

In our opinion, the issue of a technical standard refers to a standard of conditions. The elaboration of mutual technical standards became strictly necessary during the pandemic period, causing an urgently required sudden shift towards remote education.

Before the COVID-19 pandemic period, the main focus was on the harmonization of educational quality assurance standards, rather than on the advancement of technology. We argue that the adoption of common norm settings and principles of emergency remote education should be based on generally valid common digital standards and values.

The participants of the twelfth BRICS Academic Forum to the Leaders confirmed the crucial importance of “a comprehensive and a balanced approach” to the development of information and communications technologies as a means of both technical and security advancement.<sup>16</sup> It was further emphasized that during the pandemic, distance or blended learning became an important tool and an indicator of high-quality education.

Common digital standards are closely associated with a certain standard of security. The essential role of standards of security in the development of advanced technologies is recognized in all spheres of cooperation among the BRICS countries.<sup>17</sup>

One common issue for all of the BRICS countries is that the pandemic crisis aggravated the problem of the digital divide, the digital literacy of the teaching staff and students and the lack of students’ responsibility and motivation. The digital divide is associated with inequalities in access to information technologies.<sup>18</sup> The digital

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<sup>16</sup> BRICS Russia 2020, Academic Forum, *Recommendations of the 12<sup>th</sup> BRICS Academic Forum to the Leaders: BRICS New Vision for a Better World* (October 2020) (Mar. 2, 2023), available at <https://brics-russia2020.ru/images/106/14/1061406.pdf>.

<sup>17</sup> Форум БРИКС по инновационным сетям будущего // НКИ БРИКС, Россия. 1 ноября 2020 г. [BRICS Forum on Innovative Networks of the Future, BRICS National Research Committee, Russia, 1 November 2020] (Mar. 2, 2023), available at [c/posts/show/5fad582a62726945d5760000](https://c/posts/show/5fad582a62726945d5760000).

<sup>18</sup> Massimo Ragnedda & Glenn W. Muschert (eds.). *The Digital Divide: The Internet and Social Inequality in International Perspective* 344 (2013).

divide can be described as “the gap between individuals, households, businesses and geographic areas regarding their opportunities to access information and communication technologies and their use of the Internet for a wide variety of activities.”<sup>19</sup> According to the 2021 EDUCAUSE Horizon report,<sup>20</sup> the digital divide remains one of the most important social problems that only widens during times of pandemic. It is acknowledged that the pandemic has exposed the problem of the digital divide, uncovering its negative impact in a great number of countries.

The problem of the digital divide is a concern that affects all of the BRICS countries. According to the World Bank, the challenges of both the COVID and post-COVID periods can be classified into two categories: short-term and long-term.<sup>21</sup> It is worth noting that educational inequality is a warning sign for the short and long-term consequences of the world’s deepening economic crisis, the stagnation of all kinds of internal and international cooperation and so-called “technical debt.”<sup>22</sup>

Like other countries, the BRICS countries launched emergency remote education<sup>23</sup> in an attempt to cope with the COVID-19 pandemic. As a result, the pandemic necessitated the development of new kinds of literacies, such as “lockdown literacies” to deal with teaching at a physical distance from students, namely, distance learning.<sup>24</sup>

According to the 2021 EDUCAUSE Horizon report, the issue of providing quality online learning will have a significant impact on the future of higher education all over the world.

The researchers offer to make a distinction between so called “weak sovereignty” and “strong” sovereignty. Weak sovereignty refers to the protection of digital rights by private companies, whereas strong sovereignty means having the protection provided by the government. Brazil, India and South Africa tend to base their policies on weak sovereignty, whereas Russia and China have put into practice a policy of strong sovereignty. According to the experts, the authorities of a country with strong sovereignty can further exacerbate the digital isolation of that country.<sup>25</sup>

<sup>19</sup> OECD, *Understanding of the Digital Divide* (2011), at 5 (Mar. 2, 2023), available at <https://www.oecd.org/sti/1888451.pdf>.

<sup>20</sup> Kathe Pelletier et al., *2021 EDUCAUSE Horizon Report: Teaching and Learning Edition* (2021) (Mar. 2, 2023), available at <https://library.educause.edu/-/media/files/library/2021/4/2021hrteachinglearning.pdf?#page=4&la=en&hash=64CACBDA4DAC0F6158951941AD2A8952A9A81100>.

<sup>21</sup> World Bank, *The COVID-19 Crisis Response: Supporting Tertiary Education for Continuity Adaptation and Innovation* (2020) (Mar. 2, 2023), available at <https://documents1.worldbank.org/curated/en/621991586463915490/The-COVID-19-Crisis-Response-Supporting-Tertiary-Education-for-Continuity-Adaptation-and-Innovation.pdf>.

<sup>22</sup> *Id.*

<sup>23</sup> UNESCO, *Extraordinary Session of the Global Education Meeting, Education Post-COVID-19: 2020 Global Education Meeting Declaration*, ED/ADG/2020/03 (2020) (Mar. 2, 2023), available at <https://unesdoc.unesco.org/ark:/48223/pf0000374704>.

<sup>24</sup> Ben Williamson et al., *Covid-19 Controversies and Critical Research in Digital Education*, 46(2) *Learn. Media Tech.* 117 (2021).

<sup>25</sup> Кутюр С., Топин С. Что означает понятие «суверенитет» в цифровом мире? // Вестник международных организаций. 2020. Т. 15. № 4. С. 48–69 [Stephane Couture & Sophie Toupin, *What Does the Notion of “Sovereignty” Mean When Referring to the Digital?*, 15(4) *Bull. Int’l Organizations* 48 (2020)].

The main hindrances to the digital transformation of higher education are largely connected with a lack of digital infrastructure, the digital divide and poor digital skills.

Thus, this section has discussed the primary issues concerning the digital transformation. In general, therefore, it appears that digital trends modeling a new educational ecosystem all over the world determine both the challenges and future perspectives of higher education establishments. What follows is a detailed consideration of the empirical evidence reshaping the educational landscape in the BRICS countries.

## **2. Higher Educational Systems of the BRICS Countries in the Digital Era**

### **2.1. Brazil: the National Policy in the Digitalization of Education**

According to the Brazilian Digital Strategy, education is included as one of the national goals for ensuring digital development.<sup>26</sup> In 2007, the National Program of Educational Technology was established by the Ministry of Education in Brazil. This program initiates the implementation of information technology (IT) in educational establishments. As a result, the vast majority of universities have focused their efforts on the significant enhancement of educational technologies and infrastructure with the help of digital transformation.

During the COVID-19 pandemic, distance education highlighted the concerns surrounding the digital divide, especially among the underprivileged.<sup>27</sup> One of the possible explanations for the rapid growth of the digital divide in Brazil is the decentralized nature of its educational system. Consequently, Brazil is seeking effective tools to bridge the social and digital gaps “between regions and institutions in terms of access, quality, and funding of education.”<sup>28</sup>

Brazil has also developed national free online platforms such as UNESP Aberta (<https://unespaberta.ead.unesp.br>), UNICAMP (<https://moocs.ggte.unicamp.br>) and FGV (<https://portal.fgv.br>) as part of their efforts to offer greater opportunities for education and training through online learning. One of the most distinctive features of these platforms is that they were established by separate universities and are specialized in teaching law, business, education, and science courses among others. The independence of Brazilian universities is fully guaranteed by Article 207 of the Brazilian Constitution, which grants autonomy to the universities.<sup>29</sup>

<sup>26</sup> Ioannis Lianos & Alexey Ivanov, *Digital Era Competition: A BRICS View*, Report by the BRICS Competition Law and Policy Centre, HSE-Skolkovo Institute for Law and Development (2019), at 101 (Mar. 2, 2023), available at <https://publications.hse.ru/mirror/pubs/share/direct/321442173.pdf>.

<sup>27</sup> Carlos Monroy et al., *Education in Brazil*, World Education News and Reviews, 14 November 2019 (Mar. 2, 2023), available at <https://wenr.wes.org/2019/11/education-in-brazil>.

<sup>28</sup> OECD, *Education Policy Outlook in Brazil: With a Focus on International Policies* (2021) (Mar. 2, 2023), available at [https://www.oecd-ilibrary.org/education/education-policy-outlook-in-brazil\\_e97e4f72-en](https://www.oecd-ilibrary.org/education/education-policy-outlook-in-brazil_e97e4f72-en).

<sup>29</sup> Ewelina K. Niemczyk & Jan de Groof, *Brazilian Education System: Aims, Achievements and Alignment with the BRICS Organisation*, in Deon Vos et al. (eds.), *A New Dawn* 149, 170 (2020).

The growing popularity of E-learning among Brazilians can be attributed to the increasing number of people who wish to get enrolled in higher education but either live in distant rural territories or cannot afford it because of low income. The information technology and Internet facilities are more than adequate in Brazil to offer online courses in higher education.

Brazil tends to focus on developing the standard of online education offered on a national level. However, one of the reasons for the country to ignore the promotion of online courses on an international level is the lack of legal regulation of E-education represented by foreign investors. According to Ambient Insight, Brazil is strongly against the expansion of foreign providers of E-education.<sup>30</sup> This finding confirms that Brazil recognizes the strategic necessity of establishing and defending its digital sovereignty.

Article 206 of the Brazilian Constitution provides for the guarantee of standards of quality.<sup>31</sup> Despite this, there is little consideration given to the issue of creating common digital standards.

## **2.2. Russia: Digital Transformation in Education**

In recent years, Russia has been paying great attention to supporting research and development in the field of artificial intelligence and creating programs for online learning. The pandemic has compelled us to move along this path more actively than was previously the case.

According to the Decree on National Objectives for Russia's Development up to 2030, digital transformation is considered to be one of the main national goals of the Russian Federation's development. As a result, the Ministry of Science and Higher Education of the Russian Federation passed "The Strategy of Digital Transformation of Science and Higher Education" in 2021. The purpose of the strategy is the development of "digital sophistication (maturity)" in higher education as an important criterion of digital transformation. Digital transformation should be understood as referring to a meaningful change and enhancement of activities based on new models, approaches and means of communication brought about by digital technologies.<sup>32</sup>

According to Article 16 of the Federal Law on Education (2012), E-learning in Russia is considered to be an organization (an arrangement) of educational activities with

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<sup>30</sup> Tony Bates, *A Survey of Distance Education in Brazil*, Online Learning and Distance Education Resources, 4 November 2016 (Mar. 2, 2023), available at <https://tonybates.wpengine.com/2016/11/04/a-survey-of-distance-education-in-brazil/>.

<sup>31</sup> Niemczyk & de Groof 2020.

<sup>32</sup> Стратегия цифровой трансформации отрасли науки и высшего образования (утв. Минобрнауки России) [Strategy of Digital Transformation of Science and Higher Education (approved by the Ministry of Education and Science of Russia)] (Mar. 2, 2023), available at <https://minobrnauki.gov.ru/upload/iblock/e16/dv6edzmr0og5dm57dtm0wyllr6uwttjw.pdf>.

the help of databases and information technologies.<sup>33</sup> The term “electronic education” is used in the Russian laws pertaining to education. However, the variety of online resources available compels Russian legislators to regulate the online education field, creating a need to introduce the legal status of “Internet education.”

New amendments in Article 16 of the Federal Law on Education describe the legitimacy and binding character of E-education in cases of emergency. Russian legislation codifies the circumstances in which E-learning must be used in emergency situations. It is necessary to mention that part 3 of Article 16<sup>34</sup> speaks about the necessity to create conditions for E-learning that include “electronic learning resources, information technology, relevant technological tools that provide complete learning ...” Nevertheless, the digital standards are not prescribed in spite of the fact that “in the near future, investing in technology to support learning beyond the school borders will be required both for schools and their students.”<sup>35</sup>

Due to the widespread availability of IT technologies and Internet facilities to Russians, as well as the huge distances between educational institutions and students, the market for online education in Russia is developing dynamically every year. In comparison with traditional forms of education, online education stands out for its mobility, relevance and cost of services provided. Based on modern technology, an increasing number of Russian universities are beginning to promote modern educational formats, primarily to improve the quality of education. The process is governed by the Ministry of Science and Higher Education of the Russian Federation and by the national priority project “Modern Digital Educational Environment in the Russian Federation.”

The Russian educational platforms offer online courses in the basic subjects studied at Russian universities. For instance, the platform Openedu.ru was created in 2015 by the Association “National Platform for Open Education,” established by leading Russian universities. All of the courses are developed in accordance with the requirements of federal and state educational standards; all of the courses meet the requirements for learning outcomes of educational programs implemented in universities; and special attention is paid to the effectiveness and quality of online courses as well as to the procedures for evaluating learning outcomes. Currently, more than 480,000 people are trained at the platform Universarium (390,000 through the portal [www.universarium.org](http://www.universarium.org) and approximately 90,000 using mobile apps).

<sup>33</sup> Федеральный закон от 29 декабря 2012 г. № 273-ФЗ «Об образовании в Российской Федерации» // СПС «КонсультантПлюс» [Federal Law No. 273-FZ of 29 December 2012. On Education in the Russian Federation, SPS “ConsultantPlus”] (Mar. 2, 2023), available at [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_140174/](https://www.consultant.ru/document/cons_doc_LAW_140174/).

<sup>34</sup> *Id.*

<sup>35</sup> Pierre Gouédard et al., *Education Responses to COVID-19: Implementing a Way Forward*, OECD Education Working Papers No. 224 (2020) (Mar. 2, 2023), available at [https://www.oecd-ilibrary.org/education/education-responses-to-covid-19-implementing-a-way-forward\\_8e95f977-en](https://www.oecd-ilibrary.org/education/education-responses-to-covid-19-implementing-a-way-forward_8e95f977-en).

Twenty-four percent of users are citizens of other countries (the Republic of Belarus, Kazakhstan, Ukraine, etc.). The Universarium platform hosts more than eighty different courses from thirty top Russian universities, successful companies and business coaches. The courses are targeted at a wide audience, including secondary and high school students, college and university students, recent graduates and those seeking any kind of professional training.

According to the passport of the project “The Modern Educational Digital Environment in the Russian Federation,”<sup>36</sup> by 2025, more than 11 million students will have taken online courses. The number of online courses available is predicted to be no less than 4000. The benefits of using online courses are obvious, including the following: increasing the attractiveness and variability of educational programs; optimizing expenses; flexibility and individualization of education; objective and independent control of students’ knowledge; engaging top professors and affording professors release time for research and scientific work.

### **2.3. India: The Specific Challenges of Digital Education**

According to India’s National Educational Policy 2020, digital education is considered a means of giving disadvantaged students the opportunity to have access to higher education and providing the possibilities for lifelong learning.<sup>37</sup>

According to the “National Mission of Education through Information and Communication Technology,” E-learning is considered “an effort multiplier for providing access, quality and equality in the sphere of providing education to every learner in the country.”<sup>38</sup> It is necessary to highlight that the Indian government strictly regulates the promotion of E-learning in higher education and treats it as a major source of “import” rather than “export.”<sup>39</sup> That is why the National Education Policy adopted in India in July 2020 comprises special conditions for foreign universities, namely to set up their foreign campuses in India using ICT.<sup>40</sup>

<sup>36</sup> Постановление Правительства Российской Федерации от 15 апреля 2014 г. № 295 «Об утверждении государственной программы Российской Федерации «Развитие образования» на 2013–2020 годы» // СПС «КонсультантПлюс» [Decree of the Government of the Russian Federation No. 295 of 15 April 2014. On Approval of the State Program of the Russian Federation “Development of Education” for 2013–2020, SPS “ConsultantPlus”] (Mar. 2, 2023), available at [https://www.consultant.ru/document/cons\\_doc\\_LAW\\_162182/](https://www.consultant.ru/document/cons_doc_LAW_162182/).

<sup>37</sup> Ministry of Human Resource Development, Government of India, *National Education Policy 2020* (Mar. 2, 2023), available at [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf).

<sup>38</sup> Declaration of the 7<sup>th</sup> Meeting of BRICS Ministers of Education, *supra* note 6.

<sup>39</sup> Mary Bold et al., *BRICS and Clicks*, 12(1) J. Asynchronous Learning Networks 5 (2020).

<sup>40</sup> Shuriah Niazi & Yojana Sharma, *New policy highlights university autonomy, internationalisation*, University World News, 7 August 2020 (Mar. 2, 2023), available at <https://www.universityworldnews.com/post.php?story=20200807160631529>.

COVID-19 has forced many countries to rethink the role of IT in modern society. Many countries have launched special guidelines for digital education. India introduced advisory guidelines in an effort to improve both synchronous and asynchronous education. Moreover, in May 2020, India introduced a program for multimode access to digital and online education<sup>41</sup> that is intended to help overcome the digital divide at the educational level.<sup>42</sup> The implementation of this program resulted in the development of a new digital educational platform known as DIKSHA (Digital Infrastructure for Knowledge Sharing) that will support and promote the national sovereignty of India under the slogan "One Nation, One Digital Platform." In addition, the Department of Higher Education developed the system of private coaching to bridge the divide. We believe that the development of this unified digital platform will help to solve the problem of "a severely fragmented higher educational ecosystem."<sup>43</sup>

In India, the specific challenges of digital education are focused on "raising digital literacy through broader access to digital devices."<sup>44</sup> According to the "PM eVidya Programme,"<sup>45</sup> initiated by the Indian government during the spring 2020 coronavirus lockdown, the top 100 universities of the National Institutional Ranking Framework are now allowed to offer fully online degree programs. This not only meets the expectations of a fifty percent increase in students' enrollment over the next fifteen years, but it also makes India one of the fastest-growing online education markets.

Thus, we can conclude that the strategy for the development of digital education in India is most closely connected with the necessity to expand the domestic digital market, which helps safeguard the national security of the country. The strategy of the PM eVidya Programme motivates Indian universities to use both their own and foreign online programs. As for foreign online programs, India tends to use the online education models of the United Kingdom and the United States.<sup>46</sup> Moreover, online education in India intensifies the country's association "with equity with

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<sup>41</sup> Department of School Education & Literacy, Ministry of Human Resource Development, Government of India, *PRAGYATA Guidelines for Digital Education*, at 39 (Mar. 2, 2023), available at [https://www.mhrd.gov.in/sites/upload\\_files/mhrd/files/pragyata-guidelines\\_0.pdf](https://www.mhrd.gov.in/sites/upload_files/mhrd/files/pragyata-guidelines_0.pdf).

<sup>42</sup> *Id.*

<sup>43</sup> National Education Policy 2020, *supra* note 37.

<sup>44</sup> OECD, *Economic Outlook for Southeast Asia, China and India: Rethinking Education for the Digital Era* (2020), at 101 (Mar. 2, 2023), available at <https://www.oecd-ilibrary.org/docserver/1ba6cde0-en.pdf?expires=1688999811&id=id&accname=guest&checksum=61AAC2502008D1A9B3518DC0369A6EE0>.

<sup>45</sup> PM eVidya – One Nation, One Digital Platform (Mar. 2, 2023), available at [https://pmmodiyojana.in/pm-evidya/#About\\_PM\\_eVidya\\_One\\_Nation\\_One\\_Digital\\_Platform](https://pmmodiyojana.in/pm-evidya/#About_PM_eVidya_One_Nation_One_Digital_Platform).

<sup>46</sup> *Online Higher Education in India during the COVID-19 pandemic*, ORF, 26 May 2020 (Mar. 2, 2023), available at <https://www.orfonline.org/research/online-higher-education-in-india-during-the-covid-19-pandemic-66768/>.

infrastructure, finance, and social standing present in the country.”<sup>47</sup> It is necessary to emphasize that the productive potential of online education needs reimagining, as it is currently seen only as an “emergency remote teaching” option. The “Digital India” campaign is aimed at improving digital literacy while also bringing about other obvious global reach benefits, such as expanding, liberalizing and inclusive access to higher education; time, money and physical infrastructure cost savings; environmental friendliness (no paper books or examinations, thereby preserving trees); flexibility in learning schedules; the development of intrinsic motivation; and the reduction or elimination of corruption, favoritism and bureaucracy.<sup>48</sup>

India, in terms of its number of online national platforms such as SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds) and NPTEL (The National Programme on Technology Enhanced Learning) ranks second among the BRICS countries. The process of developing such platforms was initiated by the government of India. SWAYAM and NPTEL were designed by the Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs) under the supervision of the Ministry of Human Resource Development (MHRD) and the All India Council for Technical Education (AICTE) to achieve the key goals of national education policy, namely to make education accessible, equitable, and of high quality. Both the aforementioned Indian online platforms are completely free of charge and offer over 2500 engineering, science, and humanity courses in fields such as architecture and planning; engineering and technology; management and commerce; math and sciences; humanities and the arts; law; education and others.

The rise in demand for E-education in India is a result of the government’s endeavors to implement an educational project to combat the struggle with illiteracy in vast rural areas with the help of digital technologies.<sup>49</sup> Traditional education in India is becoming increasingly expensive and, as a result, less accessible to the low-income population. Online education is a good complement and alternative to traditional education, as it makes acquiring knowledge easier, less expensive and more affordable. The launch of national Massive Online Open Courses (MOOCs) in India raised enrollments in higher education by thirty percent in 2021. The digitalization of education will provide India with a larger number of educated people, qualified specialists and professionals, thereby contributing to the social and economic growth of the country and achieving the government’s national goals.

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<sup>47</sup> Department of School Education and Literacy, Ministry of Human Resource Development, Government of India, *India Report – Digital Education* (June 2020) (Mar. 2, 2023), available at [https://mhrd.gov.in/sites/upload\\_files/mhrd/files/India\\_Report\\_Digital\\_Education\\_0.pdf](https://mhrd.gov.in/sites/upload_files/mhrd/files/India_Report_Digital_Education_0.pdf).

<sup>48</sup> Ivanov & Lianos, *supra* note 26.

<sup>49</sup> Technavio, *Distance Learning Market in India 2016–2020* (October 2016) (Mar. 2, 2023), available at <https://www.technavio.com/report/india-k12-and-higher-education-distance-learning-market-india-2016-2020>.

#### **2.4. China: The National Informatization Development Strategy**

China plans to become the world leader in higher education by 2050.<sup>50</sup> One of the means to achieve this goal is digital transformation. National digital education standards and guidelines in this country are developed by the Chinese E-Learning Technology Standardization Committee (CELTSC) under the sponsorship of the Chinese government.

China tends to use the term “Informatization” of education.<sup>51</sup> According to the Outline of the National Informatization Development Strategy, the informatization of education is aimed at “innovating public services, guaranteeing and improving people’s livelihood.”<sup>52</sup>

The National Long-Term Educational Reform and Development Plan 2010–2020, states that “all levels of digital education service systems shall be available in urban and rural basic schools, promoting the educational content, teaching methods and methods of modernization.”<sup>53</sup> All measures of E-learning development are connected with national interests and Chinese sovereignty.<sup>54</sup> According to the OECD Development Centre,<sup>55</sup> China’s greatest digital education challenge is primarily associated with “bridging the digital talent gap between demand and supply.”<sup>56</sup>

The promotion of digital sovereignty in China is also supported by the development of national repositories and centralized online platforms.

The necessity to initiate E-education in China is supported by the government plan that provides the conditions for universities both to reform China’s traditional, “cramming” teaching mode and to advance to the top in the international rankings. The process is regulated and supervised by the Ministry of Education according to the National MOOC Recognition Program. Within the framework of the national plan for middle and long-term state reforms and development, prestigious universities

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<sup>50</sup> Mashkina O.A. Страны БРИКС: стратегии развития высшего образования // Вестник Московского университета. Серия 20: Педагогическое образование. № 2. С. 40–48 [Olga A. Mashkina, *BRICS: Development Strategies for Higher Education*, 20(2) Bull. Moscow U. Series 20: Tchr. Educ. (2017)].

<sup>51</sup> Lih-Ching C. Wang et al., *The E-learning Experience: General Truths and the Chinese E-learning Experience*, 38(3) Int’l J. Instructional Media 225 (2011).

<sup>52</sup> *Outline of the National Informatization Development Strategy*, China Copyright and Media, 27 July 2016 (Mar. 2, 2023), available at <https://chinacopyrightandmedia.wordpress.com/2016/07/27/outline-of-the-national-informatization-development-strategy/>.

<sup>53</sup> Chunyan Wang & Guodong Zhao, *Open Educational Resources in the People’s Republic of China: Achievements, Challenges and Prospects for Development*, UNESCO Institute for Information Technologies in Education (2011) (Mar. 2, 2023), available at <https://iite.unesco.org/pics/publications/en/files/3214700.pdf>.

<sup>54</sup> Mini Gu et al., *Education in China*, WENR, 17 December 2019 (2019) (Mar. 2, 2023), available at <https://wenr.wes.org/2019/12/education-in-china-3>.

<sup>55</sup> OECD, *supra* note 28.

<sup>56</sup> OECD, *supra* note 44, at 101.

are financed to develop MOOCs. The Open University of China, initiated and directed by the Ministry of Education, is one illustration of this concept: the educational process combines face-to-face sessions and online learning. The total amount of the country's MOOC funding currently equals fourteen million dollars.

China possesses all of the necessary conditions for digital transformation, including the necessary IT and Internet infrastructure and capabilities, well-developed national MOOC platforms, the full support of the government, legislative norms and E-education regulations. Furthermore, China is determined to promote its education on international online platforms like EdX, Coursera and FutureLearn. As a result, the experts predict that the Chinese market will significantly transform in the near future.<sup>57</sup>

### **2.5. South Africa: the Potential of the Digital Learning**

Emergency education in South Africa has been mostly connected with television and radio. The educators point out that the utilization of radio and television is considered a short-term emergency solution. As a result, educators have to review and provide for the completion of the curriculum.<sup>58</sup> The long-term emergency solution should instead be connected with the development of the necessary infrastructure for online learning.<sup>59</sup>

The universities of South Africa were advised to make use of their "emergency break" to explore the potential of digital learning.<sup>60</sup> In order to accomplish this purpose, a remote education policy is under implementation. This project addresses crucial issues such as digital structure, development of teachers' digital skills and the digital transformation of education.

There are a number of licensed software platforms used (Learning Management Systems (LMS), Course Management Systems (CMS) and other virtual learning environments), although there is only one national online educational platform (MOOC SA (<https://moocs.org.za>)). Several universities (for instance, the University of South Africa (UNISA), the University of Cape Town, the University of Witwatersrand, the University of Kwazulu Natal and the University of Johannesburg) successfully use the software platforms to administer teaching, which may be a transitional step on the way to online education. In addition, the Massive Open Online College is a groundbreaking educational and training project for South Africa. The MOOC SA

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<sup>57</sup> Joseph Crawford et al., *COVID-19: 20 Countries' Higher Education Intra-Period Digital Pedagogy Responses*, 3(1) J. Appl. Learn. Teach. 9 (2020).

<sup>58</sup> Department of Basic Education, *2020 Draft Framework for Curriculum Recovery Post COVID-19* (2020) (Mar. 2, 2023), available at <https://www.sirpierre.co.za/wp-content/uploads/2020/04/Curriculum-Recovery-Plan-Final-Draft-6-April-2020.pdf>.

<sup>59</sup> Williamson et al. 2021.

<sup>60</sup> Crawford et al. 2020.

has become a sub-mainstream MOOC platform that hosts free courses created by domestic and foreign professionals.

## Conclusion

According to Article 60 of the 10<sup>th</sup> BRICS Summit Johannesburg Declaration held in Johannesburg, South Africa on 26 July 2018,<sup>61</sup> it was stated “to develop effective policies to bridge the digital divides, including through supporting people to learn and by adopting new technologies and ensure effective mechanisms for transfer of relevant technologies.” It is necessary to emphasize the importance of equal access to the Internet as one of the ways to gap and eliminate the digital divide. Article 56 of the BRICS Leaders Xiamen Declaration confirms the necessity for all states to “participate on an equal footing in the evolution and functioning of the Internet.”<sup>62</sup>

However, all of the BRICS countries are facing the acute problem of so-called “digital sovereignty.” There is no doubt that the expansion of cyberspace due to advancements in Internet technologies necessitates consideration of the issue of digital sovereignty. In the academic literature, we are able to find an integral part of it, namely, “data sovereignty,” which is characterized as “a spectrum of approaches adopted by different states to control data generated in or passing through national internet infrastructure.”<sup>63</sup> In the field of digital education, however, the notion of “digital sovereignty” is most commonly associated, in our opinion, with the right to education in global cyberspace and freedom from the digital divide, both of which promote the interests of national security. For example, a two-month campaign to protect students’ rights in cyberspace was launched by the Cyberspace Administration of China in 2020.<sup>64</sup> It was aimed at improving the quality of online courses. Moreover, the breakthrough of digital learning in pandemic times necessitated the introduction of a draft regulation requiring foreign teachers to comply with the requirements of Chinese laws and regulations while developing the contents of courses that

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<sup>61</sup> BRICS in Africa: Collaboration for Inclusive Growth and Shared Prosperity in the 4<sup>th</sup> Industrial Revolution, 10<sup>th</sup> BRICS Summit Johannesburg Declaration, Johannesburg, South Africa, 26 July 2018, BRICS Information Centre (Mar. 2, 2023), available at <http://www.brics.utoronto.ca/docs/180726-johannesburg.html>.

<sup>62</sup> BRICS Leaders Xiamen Declaration, Xiamen, China, 4 September 2017, BRICS Information Centre (Mar. 2, 2023), available at <http://www.brics.utoronto.ca/docs/170904-xiamen.htm>.

<sup>63</sup> Dana Polatin-Reuben & Joss Wright, *An Internet with BRICS Characteristics: Data Sovereignty and the Balkanisation of the Internet*, 7 July 2014 (Mar. 2, 2023), available at <https://www.usenix.org/system/files/conference/foci14/foci14-polatin-reuben.pdf>.

<sup>64</sup> *China launches campaign to improve online courses for minors*, Xinhua, 7 August 2020 (Mar. 2, 2023), available at [http://english.www.gov.cn/statecouncil/ministries/202008/07/content\\_WS5f2d542-fc6d029c1c26376b2.html](http://english.www.gov.cn/statecouncil/ministries/202008/07/content_WS5f2d542-fc6d029c1c26376b2.html).

“should not undermine Chinese sovereignty, security, honorable reputation and public interest.”<sup>65</sup>

Consequently, we examined the available research data on MOOCs and online platforms in the BRICS countries that is available from Class Central Aggregator and found some interesting tendencies. The results showed that China, India and Russia are developing their national online platforms and introducing their courses both on the international and national levels, whereas Brazil and South Africa are not sufficiently represented on the international level when we take into consideration international platforms such as EdX (<https://www.edx.org>), Coursera (<https://www.coursera.org>) and FutureLearn (<https://www.futurelearn.com>). Furthermore, judging by this ranking, China and India dominate the majority of key positions. Additionally, we found that the number of English courses offered by Brazilian online platforms is quite limited.

The evaluation of the results of the study as well as a comparative analysis of the findings revealed that the potential benefits of global strategies for the digitalization of education become possible only with the consideration and application of modern achievements, including the areas of IT development, a strong legal framework and the readiness of universities for this kind of transformation.

As we can see, higher education in the BRICS countries, like any other country in the world, is subjected to the influence of the digital revolution. The research showed that China, India and Russia are trying to promote their representation on the international level by launching MOOCs on platforms such as EdX, Coursera and FutureLearn. Brazil and South Africa, on the other hand, are developing more MOOC systems on the national level.

As a means to achieving prosperity and digital development for the BRICS countries, the creation of a unified online BRICS platform might be proposed and initiated within the framework of the Network University. We think that the indicators relating to the promotion of MOOCs and their inclusion in popular online platforms will also be included in various university rankings in the near future.

The analysis of the definition of digital learning and related notions shows that there is no common term for it, even in such BRICS documents as the declarations of the BRICS Network University. Unlike Russia and China, the terms “distance education,” “open learning” and “online education” are used<sup>66</sup> in legal documents in India. It is possible that the term “distance education” might be the generic term for all of its forms, such as online learning, E-learning and digital education.<sup>67</sup> According

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<sup>65</sup> *China solicits public opinion on foreign teacher regulation*, Xinhua, 22 July 2020 (Mar. 2, 2023), available at [http://english.www.gov.cn/statecouncil/ministries/202007/22/content\\_WS5f17923fc6d029-c1c2636756.html](http://english.www.gov.cn/statecouncil/ministries/202007/22/content_WS5f17923fc6d029-c1c2636756.html).

<sup>66</sup> Technavio, *supra* note 49.

<sup>67</sup> Bozkurt et al. 2020.

to UNESCO, distance education is any “educational process in which all or most of the teaching is conducted by someone removed in space and/or time from the learner, with the effect that all or most of the communication between teachers and learners is through an artificial medium, either electronic or print.”<sup>68</sup> In this aspect, we agree with the opinion about the necessity to harmonize the education system’s terminology.<sup>69</sup> It becomes especially important in the field of online education.

We found that the challenges of digital transformation are primarily connected with the digital divide, digital national sovereignty and the absence of common digital standards in the BRICS countries. All of the BRICS countries are committed to diminishing and eliminating the digital divide. The necessity of developing digital skills as a common digital standard for the successful digitalization of education is recognized in the BRICS countries. In this respect, Russia offered to establish a BRICS school of digital literacies.<sup>70</sup>

Within the framework of the BRICS National Research Committee, extensive preparations are being made to hold a championship devoted to the description and development of BRICS future skills and certification system in the digitally related industrial fields.<sup>71</sup> Consequently, this should stimulate interest in the methodological approaches to acquiring digital literacy.

It is necessary to mention that the legal regulation of digital education, particularly during the pandemic period, is exercised on the local (Brazil, India and China) and national (Russia and South Africa) levels.

Some successful attempts at introducing international online platforms (China, India and Russia) and establishing the Network University were made to enhance the education systems of the BRICS countries and eliminate possible cyberspace risks.

At the ninth BRICS Education Ministers Meeting,<sup>72</sup> special efforts were made to comply with the new requirements of the digital transformation of BRICS higher education, including the acknowledgment of the necessity of common digital standards. As a result, the BRICS countries agreed to share best practices in online educational courses on national platforms. Nevertheless, the creation of a common cross-platform has not been under consideration yet.

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<sup>68</sup> Mariana Patru & Evgueni Khvilon, *Open and Distance Learning: Trends, Policy and Strategy Consideration*, UNESCO, ED.2003/WS/50 (2002) (Mar. 2, 2023), available at <https://unesdoc.unesco.org/ark:/48223/pf0000128463>.

<sup>69</sup> Diana Yampolskaya et al., *Harmonization Problems of the Education Systems Indicators in the BRICS Countries*, 6(1) BRICS L.J. 5 (2019).

<sup>70</sup> Alexandra Morozkina, *Regional Perspective of Digitalization in BRICS*, 15(4) Int’l Organisations Res. J. 70 (2020).

<sup>71</sup> *BRICS Future Skills Challenge Launches Its First Events*, BRICS Information Portal, 25 May 2022 (Mar. 2, 2023), available at <http://infobrics.org/post/35781>.

<sup>72</sup> The 9<sup>th</sup> BRICS Education Ministers Meeting Was Held Online, BRICS Information Portal, 31 May 2022 (Mar. 2, 2023), available at <http://infobrics.org/post/35819>.

As a common digital standard, the establishment of a BRICS digital educational cross-platform might become an absolute necessity in times of challenges such as international digital transformations and national digital sovereignty. A certain balance between global digital transformation and digital sovereignty could be achieved on the basis of such a unified BRICS cross-platform. The BRICS alliance intends to strengthen cooperation in this sphere in subsequent years.

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### Information about the authors

**Tatiana Pletyago (Tyumen, Russia)** – Associate Professor, Department of the English Language, Institute of Social Sciences and Humanities, University of Tyumen (23 Lenina St., Tyumen, 625000, Russia; e-mail: [t.y.pletyago@utmn.ru](mailto:t.y.pletyago@utmn.ru)).

**Svetlana Antonova (Tyumen, Russia)** – Associate Professor, Department of the English Language, Institute of Social Sciences and Humanities, University of Tyumen (23 Lenina St., Tyumen, 625000, Russia; e-mail: [s.n.antonova@utmn.ru](mailto:s.n.antonova@utmn.ru)).