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DEVELOPING BASIC LITERACY AMONG CHINESE SCHOOLCHILDREN THROUGH ARTS EDUCATION INTEGRATION: A QUARTER-CENTURY REVIEW

Object. *The aim of this study is to review the outcomes of the educational policy implemented by the People's Republic of China in the 21st century, aimed at fostering basic literacy among the younger generation within the framework of the compulsory nine-year education system, particularly through the integration of arts education.*

Methods. *The research methodology is based on the analysis and comparison of a wide range of sources, including regulatory state documents governing the functioning of the education system in the People's Republic of China—documents from the State Council, the Central People's Government, and the Ministry of Education of the PRC; various generations of Chinese educational standards, including those focused on the arts (2001, 2011, 2022); materials from international organizations such as UNESCO, OECD, and The World Bank; statistical data from the National Bureau of Statistics of China and the Global Economic Monitor; results from international educational assessments (PISA) and rankings (World University Rankings); the global scientific ranking Nature Index; content from scientometric platforms such as Nature and Web of Science; publications in scientific and pedagogical journals from China and Ukraine; and content from specialized websites. To analyze, compare, and synthesize the extensive statistical data, research findings, and rankings, the authors also created analytical tables and diagrams.*

Results. *A comparison of recent Nature Index data reveals that among the top twenty leading countries, only the People's Republic of China demonstrates consistent growth in the influence of its scientific publication activity, which serves as an indicator of the effectiveness of the country's research efforts. A comparison of the 2024 and 2025 indicators shows that the pace of this growth is accelerating. Analysis of the results from the PISA international educational assessment and the World University Rankings over several years supports the conclusion that the course adopted by the PRC at the beginning of the 21st century to reform compulsory nine-year education through integration has proven to be fully justified. Moreover, today's young scientists and students – those who are securing high positions for Chinese science and education in international rankings are – precisely the individuals who have passed through this renewed and reformed Chinese school system.*

Conclusions. *The study confirms that the broad integration of the arts into school education has contributed to the cultivation of a new generation of the country's intellectual elite. For instance, science as a pursuit of new knowledge about the world is impossible without creativity, the courage to innovate, openness to diverse perspectives, attentiveness and focus, determination in achieving results, overcoming obstacles, and solving problems. It is precisely these essential personal qualities that are nurtured through engagement with the arts and artistic activities, which the younger generation of Chinese citizens has been exposed to from early childhood in various integrated forms.*

Keywords: *People's Republic of China, education, integrative approach, science, ranking, research, arts*

Problem statement and its connection to important scientific or practical tasks. When the globally renowned academic publishing company Springer Nature released its latest annual Nature Index 2025 in June 2025 (Crew, 2025; Plackett, 2025; Springer Nature, 2025), the data had the effect of a bombshell. Scientific institutions and universities, ministries and think tanks, social media platforms, and science bloggers examined the ranking almost under a microscope, analyzing and commenting on it (see, for example: *Опубліковано Nature Index 2025* (2025); Harle & Zinin, 2025; *Nature Index 2025*, 2025; *The Economist*, 2025). According to the Nature Index 2025, for the second consecutive year, China holds the top position in the global ranking of scientific contributions by researchers from various countries and territories – by a staggering margin.

The fact of China's rapid socio-economic and scientific growth is particularly striking when one considers the complex path the country has traversed over its 75-year history. At the same time, China's success story along this challenging path may serve as an example for Ukraine's post-war recovery. In particular, the success of the PRC in building its education system – and, on its foundation, a robust scientific sector – should become the subject of in-depth critical study and creative application in the process of rebuilding and developing Ukraine's educational system and scientific infrastructure after the war.

Analysis of the main studies and publications. As early as 2002, UNESCO, in its programmatic document «Learning to be: A holistic and integrated approach to values education for human development ... toward international understanding and a culture of peace» (UNESCO, 2002), placed on the agenda the need for fundamental changes in educational methodology, theory, and practice, recognizing certain flaws in the development of human civilization as a whole. The primary focus was on shifting from the formation of a purely utilitarian worldview to fostering a holistic worldview in children and youth (UNESCO, 2002), particularly through the means of art.

The exceptional role of art in shaping personal qualities relevant to the modern world has been recognized and widely utilized not only by school educators. Many HR professionals, business

leaders, and personal development coaches highly value artistic experience as a pathway to acquiring leadership qualities (Acharya, 2021; Albrecht, 2018; The benefits of social-emotional learning through the arts, 2018; Bonnici, 2023; McCann, 2016; Odinga-Svanteson & Galma, 2023; Springborg, 2010; What business can learn from art, 2012, etc.).

In Ukrainian education, integration processes began with interdisciplinary connections, primarily as a manifestation of intra-sectoral integration. In the field of natural sciences, for example, these included interdisciplinary links between mathematics and physics, physics and astronomy, biology and chemistry, and later mathematics and computer science. In the arts, interdisciplinary connections were implemented between music and visual arts, literature and music, literature and visual arts, and others. The next step involved the development and dissemination of integrated academic subjects, one example being the integrated course “Art.”

In Ukraine, the inspiration and active driver of integration in school arts education was L. Masol, who, in our view, essentially led this movement (Масол, 2019; 2020; Masol, 2020).

Comparative studies by Ukrainian scholars introduced domestic educators to the experience of arts integration in foreign countries. For instance, L. Masol (Масол, 2019, p. 8) found that in Belgium's six-year primary school, as part of a broad implementation of integrated arts education, traditional single-subject blocks such as music, drawing, dance, and drama are combined. Polish school curricula not only merge music and visual arts into a single integrated course but also establish broad cross-sectoral links between the arts and language, natural sciences, and even physical education. In the United States, schools in many states are moving toward combining individual single-subject arts courses under an integrated “aesthetic umbrella” (Чжао Бейбей, 2023, p. 70).

Of course, we are aware that the issue of educational integration research cannot be limited to the arts sector alone. We have previously attempted to outline the most relevant directions of integration in Ukrainian education (Чжао Бейбей, 2023, p. 70): practice-oriented developments on integrating sustainable development ideas into the educational process of the New Ukrainian

School (Байдаченко, 2021); integration in school science education (Засекіна, 2020); preparing future teachers for integrated teaching (Поберецька, 2021); forming a holistic worldview in students through integrated learning (Попова, 2021a); using innovative teaching tools based on interdisciplinary integration (Попова, 2021b); intra-subject integration in language and literature classes (Ціко, 2021); and developing mathematical competence in literature lessons (Щербатюк, 2021).

Together with our co-authors – doctoral students from China who are also instructors of arts disciplines at Chinese colleges (Го Цзянь, Чжан Хао, et al., 2020) – we have previously analyzed the regulatory documents governing the functioning of the education sector in the PRC. We concluded that there is a clear trend toward large-scale integration in contemporary Chinese arts education. The article by K. Yuryeva (Юр'єва, 2021), as well as the work by Zhao Beibei (Чжао Бейбей, 2023), focuses on interdisciplinarity and complexity as key methodological foundations for the development of Chinese education. This thesis is supported by the latest version of the Compulsory Education: Art Curriculum Standards (hereinafter referred to as the Standards), adopted by the Ministry of Education of the PRC in 2022 (中华人民共和国教育部 [Chinese Ministry of Education], 2022).

The purpose of this article is to review the outcomes of the educational policy implemented by the People's Republic of China in the 21st century, aimed at developing basic literacy among the younger generation within the framework of the compulsory nine-year education system, particularly through the integration of arts education.

Викладосного матеріалу. The emergence of the term “basic literacy” in official documents of the People's Republic of China regulating the functioning of the national education system, along with the formulation of the corresponding concept, became a kind of culmination of the development of compulsory education during the years that scholars of Sinology and experts in Chinese history most often refer to as the period of reform and opening-up. This period began in December 1978, when the Central Committee of the Communist Party of China, at its Third Plenary

Session of the 11th Central Committee, adopted what can justifiably be called a historic decision. After a decade of the infamous Cultural Revolution (无产阶级文化大革命, Wuchan jieji wenhua dageming, 1966–1976), the country launched the Policy of Reform and Opening-Up.

As a result of steadfast adherence to this course over the next 45 years, China experienced rapid economic growth. According to the United Nations Statistics Division (UNSD), the country's GDP per capita rose from 171st to 70th place globally, and its share in the world economy, according to the World Bank, increased from 3.05% in 1978 to 31.53% in 2016 (see Yuan Zhenguo, 2018, p. 5). Since 2010, the People's Republic of China has held the position of the world's second-largest economy. According to the Global Economic Monitor by the World Bank (<https://databank.worldbank.org/source/global-economic-monitor>), by the end of 2024, China's gross domestic product (GDP) reached \$18.73 trillion, second only to the United States with a GDP of \$29.18 trillion.

A crucial component –and equally important driver – of this unprecedented rise in global history has been the education system. Chen Baosheng, Minister of Education of the PRC from 2016 to 2020, in a statement marking the 40th anniversary of the Reform and Opening-Up Policy (Chen Baosheng, 2018), cited figures from 1978 that, when compared with current statistics from the National Bureau of Statistics of China (2025), are striking: in 1978, only 60% of primary school graduates continued to secondary education, whereas today the coverage of compulsory nine-year education stands at 95.5%. In the same year, the total number of higher education students was 856,000, with only 10,000 graduate students nationwide (Chen Baosheng, 2018). In 2024, Chinese universities enrolled 4.095 million master's and PhD students, along with 38.913 million undergraduate students (National Bureau of Statistics of China, 2025).

Statistical data from various official sources –including the Ministry of Education of the PRC and the National Bureau of Statistics of China indicate that during the implementation of the Reform and Opening-Up Policy, China experienced an exceptionally rapid increase in educational coverage across all levels (see: Yuan Zhenguo, 2018, pp. 5–6; Ministry of Education, 2023; National Bureau of Statistics of China, 2025).

Table 1

Achievements of the PRC education system

Indicators	1981*	2016*	2022**	2024***
Preschool education coverage	12,62%	77,4%	89,7%	data is missing
Coverage of compulsory nine-year education	з 1986 р.	93,4%	95,5%	95,9%
Upper secondary education coverage	39,56%	87,5%	91,6%	92,0%
Higher education coverage	1,6%	42,7%	59,6%	data is missing

Created by the authors based on: * – Yuan Zhenguo, 2018;
 ** – Ministry of Education, 2023;
 *** – National Bureau of Statistics of China, 2025

The curriculum for compulsory nine-year education in the People’s Republic of China (a rough equivalent of basic general secondary education in Ukraine) defines educational goals, content, and core learning requirements. It reflects the will of the state and plays a key role in fostering morality and the holistic development of the individual. The Experimental Program for the Development of General Education Curricula, published in 2001 (中华人民共和国教育部 [Ministry of Education of the People’s Republic of China], 2001), clearly stated: “Change the curriculum structure that places excessive emphasis on subjects, includes too many subjects, or lacks integration,” and proposed the “creation of comprehensive courses” (中华人民共和国教育部 [Ministry of Education of the People’s Republic of China], 2001). Thus, we can conclude that in the new millennium, Chinese education embarked on a path of deep integration of educational content and a comprehensive approach to structuring academic disciplines.

The next step was the publication of a document highly relevant to our study: Notice on the National School Arts Education Development Plan (2001–2010) (中华人民共和国教育部 [Ministry of Education of the People’s Republic of China], 2002). We have every reason to assert that from this point onward, the development of arts education in Chinese schools has remained a consistent focus of national leadership. This is evidenced, in particular, by our in-depth analysis of legislative

and regulatory documents issued by the highest authorities of the People’s Republic of China in subsequent years (Го Ицзян, Чжан Хао, et al., 2020; Юр’ева, 2021).

When the trial period for implementing the new curriculum structure and content concluded, the Outline of China’s National Plan for Medium- and Long-Term Education Reform and Development (2010–2020) was released in July 2010 (中华人民共和国中央政府 [The Central People’s Government of the People’s Republic of China], 2010). This document contained more specific provisions regarding curriculum integration. From the perspective of integration, it outlined three key requirements:

1. To clarify and integrate curriculum objectives for each subject, focusing on the overall development of primary and secondary school students, ensuring a solid foundation for lifelong learning, and laying the groundwork for innovation and creativity;

2. Schools were expected to establish comprehensive courses. For example, some schools were to develop integrated arts courses that systematically combined two disciplines – visual arts and music;

3. The document emphasized interdisciplinary teaching methods, including self-directed learning, collaborative learning, and inquiry-based learning (中华人民共和国中央政府 [The Central People’s Government of the People’s Republic of China]).

The Curriculum Standards for Compulsory Education: Chinese and Other Subjects (2011 Edition), published in 2011 (中华人民共和国教育部 [Ministry of Education of the People's Republic of China], 2011), adhered to the previously chosen direction of reform, implemented advanced educational concepts, and made a positive contribution to improving the quality of compulsory education. The widespread promotion of compulsory education shifted the public demand from “access to education” to “access to quality education.” The developers of the standards called for further clarification of “what to teach, how to teach, and why to teach.”

In 2014, the Ministry of Education of the PRC, in its document Opinions of the Ministry of Education on Comprehensively Deepening Curriculum Reform and Implementing the Fundamental Task of Establishing Virtue in People, for the first time introduced the concept of a basic literacy system (中华人民共和国教育部 [Ministry of Education of the People's Republic of China], 2014).

With a certain degree of approximation, basic literacy can be considered equivalent to the concept of competence as defined in Clause 1.5, Article 1 of the Law of Ukraine “On Education”: “Competence is a dynamic combination of knowledge, skills, abilities, modes of thinking, views, values, and other personal qualities that determine a person's ability to successfully socialize, engage in professional and/or further educational activities” (Про освіту, 2017). Moreover, basic literacy may be defined as a key or integral life competence of an individual.

In September 2015, Article 8 of the document Opinions of the General Office of the State Council on Comprehensively Strengthening and Improving School Aesthetic Education (国务院办公厅 [Office of the State Council], 2015) stated the need to “strengthen the penetration and integration of aesthetic education.” The authors of the document aimed to actively explore and vigorously incorporate artistic resources into various disciplines and social-practical activities, to identify existing progressive resources and develop new ones for teaching interdisciplinary arts courses, and to integrate aesthetic education into nearly all subjects of the compulsory education curriculum. The goal of such integration is to foster, through art and artistic activities, the best

personal qualities in children and youth – those traits commonly referred to as soft skills.

This heightened attention by the Chinese state to the development of soft skills among its citizens is driven by the need to stimulate innovation and creativity across all sectors of society, including science, technology, and industry, in order to advance the ambitious goal of becoming the world's largest economy by 2050.

It is no coincidence that art has been chosen as perhaps the most important tool for cultivating innovation, creativity, and the full range of soft skills – qualities essential for the country's forward-looking development. Artistic activities such as drawing, making music, writing poetry, dancing, and dramatization provide individuals with:

- The courage to create new, even imperfect things;
- Openness to diverse perspectives;
- Creativity that aids in problem-solving;
- Attentiveness and the ability to concentrate on the process;
- Determination in achieving results, overcoming obstacles, and solving problems;
- And ultimately, a joy for life (Albrecht, 2018).

In today's world, science and technology are advancing daily, new internet media are rapidly gaining popularity, and people's lifestyles, learning, and work are constantly evolving. The environment in which children and adolescents grow up is undergoing profound changes, and the training of qualified professionals faces new challenges. Therefore, compulsory education curricula must keep pace with the times, be regularly reviewed, and continuously improved.

Today, interdisciplinarity and comprehensiveness have become key trends in the development of education in the People's Republic of China. This is particularly emphasized in the document Compulsory Education: Art Curriculum Standards, approved by the Ministry of Education of the PRC in 2022 (中华人民共和国教育部 [Chinese Ministry of Education], 2022).

In line with its innovation-oriented approach, the Standards both inherit the successful national experience of curriculum development and incorporate advanced international educational concepts to further deepen curriculum reform. The Standards enhance the comprehensiveness

and practicality of the curriculum, promote the reform of teaching methods for children and youth, and focus on the development of students' basic literacy. Special attention is given to addressing students' individual learning needs and diversifying the content and methods of instruction in arts education.

The Standards define that the study of arts courses within compulsory education contributes to the achievement of the following learning outcomes by students:

1. The ability to perceive, discover, feel, and appreciate the beauty of art, nature, life, and society – that is, the capacity for aesthetic perception.

2. The ability to use media, technology, and unique artistic language for expression and communication, to demonstrate rich imagination and figurative thinking in creating works of art – artistic expression.

3. Developed innovative thinking, active participation in artistic activities such as creation, performance, presentation, production, etc., the ability to identify and solve problems – creative practice.

4. Understanding the profound cultural heritage of one's own country, inheriting the high traditional culture of China, cultural self-confidence, and a sense of unity within the Chinese nation.

5. Understanding the history and cultural traditions of different regions, nations, and countries; recognizing the connection between culture and the building of an international community with a shared future for humanity; and demonstrating respect, understanding, and tolerance for cultural diversity (中华人民共和国教育部 [Chinese Ministry of Education], 2022).

In accordance with the developmental patterns of children's physiological and psychological growth, as well as the principles of arts pedagogy and creativity education, the Standards introduce compulsory arts courses in stages:

- Stage 1 (Grades 1–2): Primarily synthetic artistic activities that ensure a smooth transition from the integrated arts experiences of kindergarten to subject-based courses in primary school.

- Stage 2 (Grades 3–7): Focuses on music (singing and instrumental) and visual arts, organically integrated with related art forms (e.g.,

basic design), laying the foundation for acquiring more complex basic knowledge and skills in the arts.

- Stage 3 (Grades 8–9): Offers an integrated arts course that includes compulsory subjects such as music, visual arts, dance, drama (including opera), film, and television (including digital media arts).

The organization of arts education throughout the school years enables students to master one or two artistic specializations, ensuring a smooth transition to higher education, where modular arts education is mandatory for all majors without exception.

Thus, arts education in contemporary Chinese schools is currently implemented through integration at multiple levels:

1. integration of arts courses;
2. integration of the arts with other academic disciplines;
3. integration of classroom-based and extracurricular or out-of-school artistic activities.

Art and artistic activity are regarded as exceptionally powerful tools for developing an individual's basic literacy – a set of qualities, traits, and abilities that are highly relevant in today's society.

The effectiveness of efforts to modernize national education at all levels – particularly through an integrative approach that actively incorporates the educational and developmental potential of arts disciplines and artistic activities – is evidenced by the results of international educational assessments and rankings.

Chinese schoolchildren consistently demonstrate high performance in the Programme for International Student Assessment (PISA). Conducted every three years since 2000 by the Organisation for Economic Co-operation and Development (OECD), PISA assesses the ability of 15-year-old students to apply knowledge and skills in three core subjects: mathematics, science, and reading.

The PRC made its debut in PISA in 2009, with students from Shanghai participating. These first-time participants not only achieved outstanding results – surpassing those of all other countries – but repeated their success in 2012.

In 2015, students from Beijing and the provinces of Jiangsu and Guangdong joined their peers

from Shanghai. In the 2018 assessment, students from Zhejiang replaced those from Guangdong. The B-S-J-Z (Beijing–Shanghai–Jiangsu–Zhejiang) China team once again outperformed all other participating regions in mathematics and science, with only Singapore achieving comparable results in reading (Ministry of Education, 2019).

In recent years, Chinese universities have also ranked highly in the World University Rankings. Our analysis of data from the 2021 to 2025 editions is presented in Table 2 (see). Notably, in 2021, Tsinghua University became the first Asian university to enter the global top 20 under the current ranking methodology, which was introduced in 2011.

It is worth noting that over the past five years, the rankings have included between 1,500 and over 2,000 of the world’s top universities each year:

- 2021 – over 1,500 universities from 93 countries and regions;
- 2022 – over 1,600 universities from 99 countries and regions;
- 2023 – 1,799 universities from 104 countries and regions;
- 2024 – 1,907 universities from 108 countries and regions;
- 2025 – over 2,000 institutions from 155 countries and territories (World University Rankings 2021, 2022, 2023, 2024, 2025).

Table 2

Dynamics of leading universities in the PRC rankings in the world rankings from 2021 to 2025 *

University	Location	World university rankings				
		2021	2022	2023	2024	2025
Tsinghua University	Beijing	20	16	16	12	12
Peking University	Beijing	23	16	17	14	13
Fudan University	Shanghai	70	60	51	44	36
Zhejiang University	Hangzhou, Zhejiang	94	75	67	55	47
Shanghai Jiao Tong University	Shanghai	100	84	52	43	52
University of Science and Technology of China	Hefei, Anhui	87	88	74	57	53
Nanjing University	Nanjing, Jiangsu	111	105	95	73	65
Wuhan University	Wuhan, Hubei	301–350	157	173	164	134
Beijing Normal University	Beijing	301–350	251–300	251–300	177	146
Harbin Institute of Technology	Harbin	401–500	501–600	351–400	168	152

* Created by the authors based on World university rankings 2021, 2022, 2023, 2024, 2025, and Best universities in China 2025

Yuan Zhenguo (2018) draws a well-founded conclusion that the development of education has led to significant changes in the structure of the country's human resources: the average years of schooling among the population aged 16 to 59 increased from less than 5 years in 1981 to 10.35 years in 2016. In parallel, according to the National Bureau of Statistics of China, the proportion of the population with higher education rose from 0.58% in 1982 to 12.44% in 2015. In 1990, the expected years of schooling for Chinese citizens was 8.8 years, ranking 119th globally. By 2015, this figure had increased by 1.5 times to 13.5 years, raising China's position to 83rd in the global ranking (see Yuan Zhenguo, 2018).

Ultimately, this year's Nature Index 2025 (Crew, 2025; Plackett, 2025; Springer Nature, 2025) has demonstrated, among other things, the creativity and professionalism of young Chinese researchers. These are precisely the individuals who were educated in the reformed Chinese school system of the 21st century and who now staff laboratories, research institutes, and university research departments, actively contributing to scientific publishing.

The Nature Index has a ten-year history. Its methodology involves calculating the contributions of researchers from different countries and institutions to articles published during the calendar year in 145 of the world's most prestigious journals in the natural sciences and medicine. Independent experts in these fields compile and regularly update the list of journals to ensure objectivity. The first Nature Index was published in 2016. At that time, the top ten institutions were predominantly from the United States and Europe, with only two institutions from other regions: the University of Tokyo (Japan) and the Chinese Academy of Sciences (CAS).

However, the situation has changed dramatically over time. According to Nature Index 2025, only three Western institutions remain in the top ten: Harvard University, the French Centre National de la Recherche Scientifique (CNRS), and the Max Planck Society (Germany). Eight of the top ten positions are now held by Chinese institutions and organizations. Phys.org editor Sadie Harle and columnist Andrew Zinin (Harle & Zinin, 2025) quote the editor-in-chief Nature Index, Simon Baker: "The data reflect a profound shift in the

global research landscape. China's continued investment in science and technology is translating into rapid, sustained growth in high-quality research output, which, in areas such as physical sciences and chemistry, is now far outstripping previously dominant Western nations, including the US." (Harle & Zinin, 2025).

The Economist (2025) emphasizes the economic basis of China's scientific success and notes:

The shift reflects a real and rapid improvement in China's research capabilities. Over the past decade the country has increased its spending on research and development by roughly 9% annually in real terms. In 2023, adjusting for purchasing power, China outspent both America and the European Union on combined government and higher-education R&D. The country has also drawn back many Chinese researchers who were once based abroad, a cohort known as haigui (sea turtles), a homophone for "returning from across the sea".

All this has paid off. The country now publishes more high-impact papers (those in the most-highly cited 1%) than either America or Europe. In fields like chemistry, engineering and materials science the country is now considered a world leader. China also produces a huge volume of high-quality computer-science research. Zhejiang University, fourth in the 2025 index, was the alma mater of Liang Wenfeng, the founder of DeepSeek, China's cutting-edge artificial-intelligence (AI) company. (The Economist, 2025).

K. Yuryeva (2023) previously encountered a similar situation while conducting a statistical analysis of publications dedicated to the issue of artificial intelligence in education. For this analysis, the researcher selected publications from 2020 to 2023 that were indexed in one of the most authoritative bibliometric databases – Web of Science. We have now summarized the results obtained at that time in Figure 1.

The results of Nature Index for 2024 and 2025 have also been visualized in diagrams (fig. 2 & fig. 3). As a basis, we used the adjusted shares of the top twenty countries in the ranking. A country's adjusted share in the Nature Index reflects its contribution to scientific publications included in the Nature database. This indicator accounts not only for the absolute number of publications but also for factors such as the size of the scientific community, research funding, and others. It enables a more accurate comparison of scientific productivity across countries, regardless of their size or number of researchers.

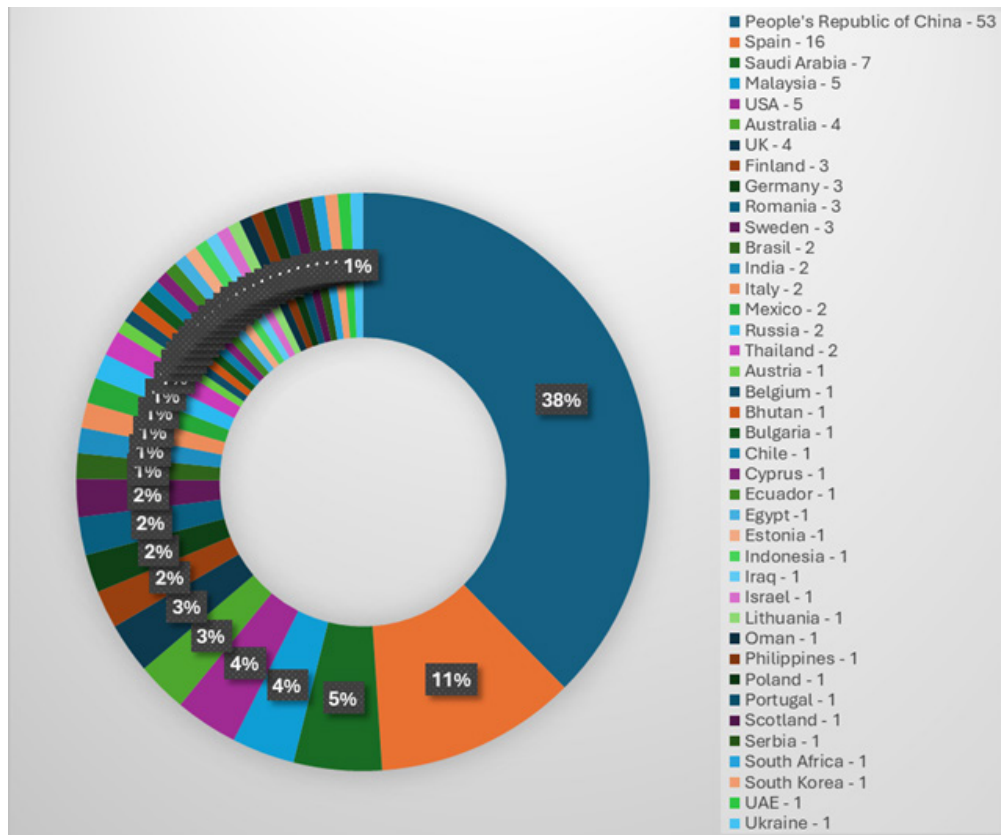


Fig. 1. The number of open access articles on the issue of artificial intelligence in education on the Web of Science platform (2020–2023) by country
 Created by the authors based on K. Yuryeva (2023)

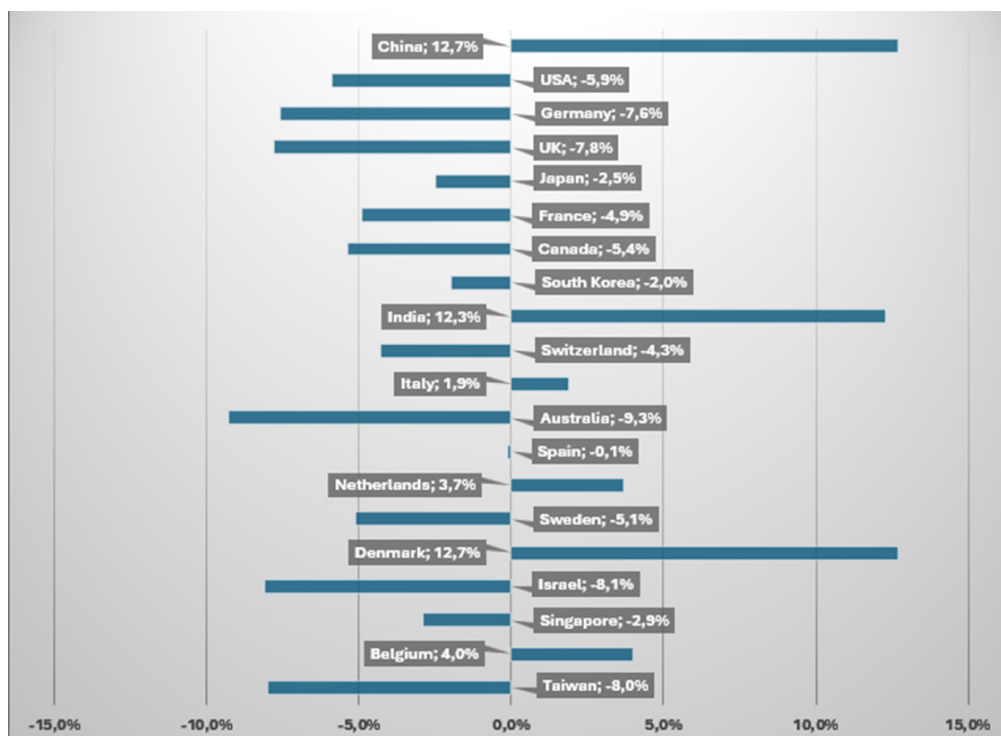


Fig. 2. Adjusted country shares in the Nature Index 2024
 Created by the authors based on B. Plackett (2024) & Springer Nature (2024)

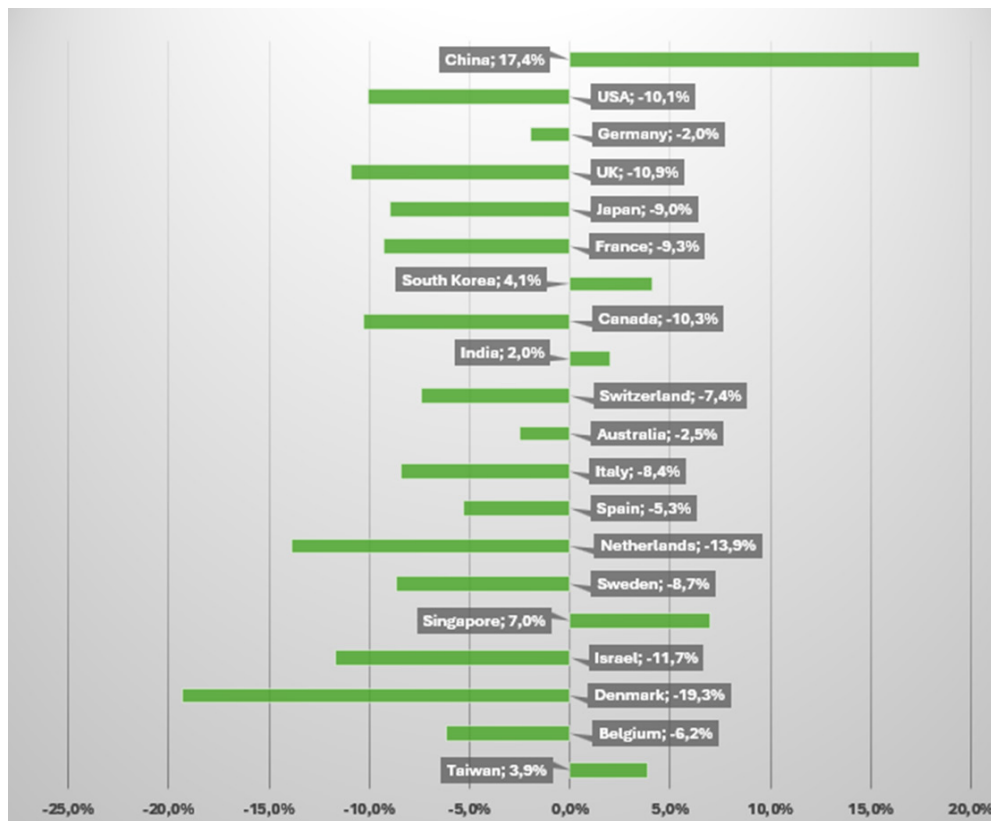


Fig. 3. Adjusted country shares in the Nature Index 2025
Created by the authors based on B. Plackett (2025) & Springer Nature (2025)

Conclusions. A comparison of the presented data indicates that only the People's Republic of China has demonstrated consistent growth in the influence of its scientific publication activity in recent years – an indicator of the effectiveness of the country's research efforts. Moreover, the pace of this growth continues to accelerate.

Taking into account the results of international educational assessments (PISA) and global university rankings, we have grounds to conclude that the course adopted by the PRC at the beginning of the 21st century – to reform compulsory nine-year education on the basis of integration – has proven to be fully justified. Today's young scientists and students are precisely those who have passed through this renewed and reformed Chinese school system. Furthermore, the broad integration of the arts into school education has also contributed to

the formation of a new generation of the country's intellectual elite.

After all, science – as a pursuit of new knowledge about the world – is impossible without creativity, the courage to innovate, openness to diverse perspectives, attentiveness and concentration, determination in achieving results, overcoming obstacles, and solving problems. It is precisely these essential personal qualities that are nurtured through art and artistic activity, which the younger generation of Chinese citizens has been engaged in since early childhood through various integrated forms.

The prospects for further research lie in identifying trends in the expansion of directions, methods, and forms of integrating the arts into the educational and scientific spheres of Chinese society.

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ФОРМУВАННЯ БАЗОВОЇ ГРАМОТНОСТІ КИТАЙСЬКИХ ШКОЛЯРІВ НА ЗАСАДАХ ОСВІТНЬОЇ ІНТЕГРАЦІЇ МИСТЕЦТВ: ОГЛЯД ДОСЯГНЕНЬ ЗА ЧВЕРТЬ СТОЛІТТЯ

Мета дослідження полягає в огляді результатів реалізації освітньої політики Китайської Народної Республіки в XXI столітті, спрямованої на формування в молодого покоління базової грамотності в системі обов'язкової дев'ятирічної освіти, зокрема на основі освітньої інтеграції мистецтва.

Методи. В основу методології дослідження покладено аналіз і зіставлення численних джерел різного характеру: нормативних державних документів, що регламентують функціонування системи освіти Китайської Народної Республіки – документів Державної Ради, Центрального народного уряду і Міністерства Освіти КНР, освітніх стандартів КНР різних поколінь, зокрема й мистецького спрямування, (2001, 2011, 2022); міжнародних організацій – UNESCO, OECD, The World Bank; статистичних даних від Національного бюро статистики Китаю (National Bureau of Statistics of China), Global Economic Monitor; результатів міжнародних освітніх досліджень (PISA) і рейтингів (World university rankings); світового наукового рейтингу Nature Index; контенту наукометричних платформ Nature та Web of Science; публікацій у науково-педагогічній пресі КНР і України; контенту профільних сайтів. Для аналізу, зіставлення та узагальнення численних статистичних даних і результатів досліджень та рейтингів автори, з-поміж іншого, створили аналітичні таблиці та діаграми.

Результати. Здійснене порівняння даних Nature Index останніх років свідчить, що серед двадцяти країн-лідерів лише Китайська Народна Республіка демонструє стійке зростання впливовості науково-публікаційної активності як показника ефективності науково-дослідної роботи країни. Зіставлення показників 2024 і 2025 років засвідчило, що темпи такого зростання лише підвищуються. Аналіз результатів міжнародного освітнього дослідження PISA і World university rankings за декілька років надав підстави для висновку, що обраний Китайською Народною Республікою на початку XXI століття курс на реформування обов'язкової дев'ятирічної освіти на засадах інтеграції цілком виправдав себе. Більше того, сьогоденні молоді вчені і студенти, які забезпечують високі позиції китайської науки та освіти в міжнародних рейтингах, – це саме ті, хто пройшов через цю оновлену й реформовану китайську школу.

Висновки. Дослідження довело, що широка інтеграція мистецтва в шкільну освіту зробила свій внесок у виховання нової генерації інтелектуальної еліти країни. Наука як пошук нових знань про світ неможлива без креативності, сміливості створювати нове, відкритості до різних точок зору, уважності й концентрації, цілеспрямованості у досягненні результату, подоланні перешкод, розв'язанні проблем. Вихованню цих важливих особистісних рис сприяє мистецтво і мистецька діяльність, до яких молоде покоління громадян Китаю залучають з самого дитинства у різноманітних інтегрованих формах.

Ключові слова: Китайська Народна Республіка, освіта, інтегративний підхід, наука, рейтинг, дослідження, мистецтво